

Bt Cotton Evaluation Report (2025-26)

South Zone



The Director

All India Coordinated Research Project on Cotton
ICAR-Central Institute for Cotton Research, Nagpur
www.cicr.org.in | www.aiccr.cicr.org.in

Bt Cotton Evaluation Report

South Zone

2025-26



The Director
ICAR-Central Institute for Cotton Research,
Nagpur, Maharashtra
2026

Citation Waghmare, V.N., Behere, G.T., Manickam, S., Sankaranarayanan, K., Kumar, R., Sain, S.K., Raja, A.S.M., Debashis, P., and Mhatre, P.H. (2026). Bt Cotton Evaluation Report South Zone, ICAR-AICRP on Cotton, ICAR-CICR, Nagpur, pp. 535

Published by Dr. V. N. Waghmare,
Director, ICAR - Central Institute for Cotton Research, Nagpur

Compiled and Edited by Dr. V. N. Waghmare, Director
Dr. G. T. Behere, Nodal Officer, AICRP on Cotton
Dr. S. Manickam, Principal Investigator (Breeding)
Dr. K. Sankaranarayanan, Principal Investigator (Agronomy)
Dr. Rishi Kumar, Principal Investigator (Entomology)
Dr. S. K. Sain, Principal Investigator (Plant Pathology)
Dr. A. S. M. Raja, Principal Investigator (Fibre Technology)
Dr. Debashis Paul, Scientist (Seed Science and Technology)
Dr. Priyank Hanuman Mhatre, Sr. Scientist (Nematology)

Omissions and errors, if any, are not deliberate and are regretted.

Released in the Annual Group Meeting of ICAR-AICRP on Cotton held during 02-03 April, 2026 at Nagpur, Maharashtra.

Bt Cotton Evaluation Report: South Zone (2025-26)

INDEX

S. No.	Trial Name	Page Number
Irrigated Trials		
1.	Initial Evaluation Trial of Intra-Hirsutum Bt Cotton Hybrids	01
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	18
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	35
2.	Advanced Evaluation Trial - I of Intra-Hirsutum Bt Cotton Hybrids	53
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	62
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	72
3.	Advanced Evaluation Trial - II of Intra-Hirsutum Bt Cotton Hybrids	83
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	100
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	110
	<i>Agronomic Evaluation</i>	122
4.	Initial Evaluation Trial of Compact Intra-Hirsutum Bt Cotton Hybrids	128
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	133
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	138
5.	Advanced Evaluation Trial-I of Compact Intra-Hirsutum Bt Cotton Hybrids	143
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	148
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	153
	<i>Agronomic Evaluation</i>	158
6.	Combined Evaluation Trial of Hirsutum x Barbadense Hybrids	159
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	168
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	177
7.	Initial Evaluation Trial of Hirsutum Varieties	184
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	194
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	211
8.	Advanced Evaluation Trial –I of Hirsutum Varieties	227
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	234
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	240
9.	Advanced Evaluation Trial –II of Hirsutum Varieties	247
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	253
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	259
	<i>Agronomic Evaluation</i>	266
10.	Initial Evaluation Trial of Compact Hirsutum Varieties	269
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	276
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	282

Rainfed Trials

9.	Initial Evaluation Trial of Intra-Hirsutum Bt Cotton Hybrids	289
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	298
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	307
10.	Advanced Evaluation Trial - I of Intra-Hirsutum Bt Cotton Hybrids	315
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	324
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	333
11.	Advanced Evaluation Trial - II of Intra-Hirsutum Bt Cotton Hybrids	342
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	359
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	368
	• <i>Agronomic Evaluation</i>	377
12.	Initial Evaluation Trial of Compact Intra-Hirsutum Bt Cotton Hybrids	386
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	403
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	412
13.	Advanced Evaluation Trial-I of Compact Intra-Hirsutum Bt Cotton Hybrids	422
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	432
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	438
	• <i>Agronomic Evaluation</i>	445
14.	Initial Evaluation Trial of Hirsutum Varieties	449
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	459
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	468
15.	Advanced Evaluation Trial - I of Hirsutum Varieties	476
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	482
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	487
16.	Initial Evaluation Trial of Compact Hirsutum Varieties	492
	• <i>Evaluation under Protected Condition for Insect pests & Diseases incidences</i>	507
	• <i>Evaluation under Unprotected Condition for Insect pests & Diseases incidences</i>	523

Initial Evaluation Trial of Intra-Hirsutum Bt Hybrids in South Zone - Irrigated

Constitution of Trial

The trial was constituted with 23 Bt cotton hybrids containing MON 15985 event sponsored by various organization along with two different check hybrids as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	11	55001	RCH1196BGII	Rasi Seeds Private Limited
2	2	55002	Core 106 BGII	Coregenes Seed Research India Pvt Ltd
3	25	55003	NCS 9775 Bt2	Nuziveedu Seeds Limited
4	3	55004	RCH1199BGII	Rasi Seeds Private Limited
5	12	55005	KCH9266 BGII	Kaveri Seed Company Ltd.
6	19	55006	C9333 BG-II	Mahyco Private Limited
7	6	55007	US 722 BGII	SeedWorks International Limited
8	17	55008	VPCH-456 BG II	Vanapamula Seeds Private Limited
9	1	55009	PCH 4996 Bt2	Prabhat Agri Biotech Limited
10	20	55010	ARCH 6677 BGII	Ankur Seeds Pvt. Limited
11	5	55011	Super-112 BGII	Super Seeds Pvt Ltd
12	4	55012	NBC 1821 BGII (ZC 1)	
13	15	55013	KSP 5328 BG II	Kalash Seeds Pvt. Ltd.
14	8	55014	VSCH 369 BGII (ZC 2)	
15	21	55015	RAHH 1002 BGII	UAS, Raichur
16	16	55016	DC5107 BGII	Rallis India Limited
17	14	55018	US 723 BGII	SeedWorks International Limited
18	7	55019	KCH9265 BGII	Kaveri Seed Company Ltd.
19	10	55019	GCH 1107 BGII	Geenex Seeds India pvt ltd
20	23	55020	8811-9 BGII	SRI RAMA AGRI GENETICS
21	9	55021	RAHH 1004 BGII	UAS, Raichur
22	18	55022	ECH 999 BG II	Eldorado Agritech Pvt. Ltd.
23	24	55023	KCH9264 BGII	Kaveri Seed Company Ltd.
24	13	55024	DGHH- 4854 BGII	Dhanlaxmi Crop Science Limited
25	22	55025	PRCH 7992 Bt2	Pravardhan Seeds (P) Limited

The trial was conducted in ten locations viz., Warangal, Lam, Raichur, B'Gudi*, Coimbatore, Hyderabad (Kaveri), Warangal (Ankur), Siddipet (Seed works)**, Medchal (Rallis) and Kareemnagar (Eldorado).

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

**Trial was vitiated due to excessive rainfall and data was not submitted.

Spacing: Recommended spacing for the hybrid has been followed.

Number of rows: 4 rows of 6 meters per entry with three replications

Data recorded:**Biometric evaluation****Table: Plant height (cm) at harvest in H X H hybrids**

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	109.8	138.6	128.0	112.9	135.0	126.0	152.9	158.3	132.7
2	Core 106 BGII	135.1	167.6	155.2	133.3	141.3	145.7	167.3	171.7	152.2
3	NCS 9775 Bt2	120.3	156.4	135.8	114.5	127.3	138.7	153.7	148.9	137.0
4	RCH1199BGII	104.1	119.0	123.9	108.5	123.7	122.7	135.5	146.0	122.9
5	KCH9266 BGII	118.3	133.1	133.8	104.5	124.3	133.7	151.8	153.5	131.6
6	C9333 BG-II	127.7	146.1	144.6	107.3	123.7	149.0	161.9	152.8	139.1
7	US 722 BGII	127.2	161.3	138.0	108.3	126.0	136.3	161.4	147.2	138.2
8	VPCH-456 BG II	143.5	174.0	148.6	111.9	132.7	142.3	154.1	155.8	145.4
9	PCH 4996 Bt2	125.3	148.3	146.0	121.2	129.3	148.7	163.4	168.9	143.9
10	ARCH 6677 BGII	110.3	125.9	120.3	110.0	129.3	142.3	151.5	151.1	130.1
11	Super-112 BGII	133.1	138.3	133.1	119.6	131.7	140.3	173.7	163.3	141.6
12	NBC 1821 BGII (ZC 1)	110.1	106.4	142.5	110.7	123.7	129.3	153.4	147.5	128.0
13	KSP 5328 BG II	113.2	143.6	139.0	111.7	118.7	137.0	149.1	171.7	135.5
14	VSCH 369 BGII (ZC 2)	121.9	115.0	136.7	111.9	132.0	143.0	167.7	160.7	136.1
15	RAHH 1002 BGII	115.3	143.7	128.1	103.8	130.3	134.0	160.5	146.0	132.7
16	DC5107 BGII	99.5	142.1	127.9	98.7	132.7	127.0	143.4	166.1	129.7
17	US 723 BGII	123.9	152.2	141.3	129.6	131.3	142.7	159.7	153.1	141.7
18	KCH9265 BGII	131.6	187.9	141.5	117.9	119.7	134.3	161.4	150.9	143.2
19	GCH 1107 BGII	124.0	156.1	151.4	115.5	130.3	137.3	150.7	153.2	139.8
20	8811-9 BGII	129.2	162.5	145.6	113.6	124.3	132.7	163.0	155.8	140.8
21	RAHH 1004 BGII	111.8	125.3	133.5	95.7	118.0	130.7	145.3	151.5	126.5
22	ECH 999 BG II	129.6	143.3	148.5	114.7	122.0	141.7	171.7	164.9	142.1
23	KCH9264 BGII	142.1	133.8	147.3	106.9	126.0	135.3	150.7	163.0	138.1
24	DGHH- 4854 BGII	131.5	147.6	138.7	105.4	120.7	142.7	151.9	154.5	136.6
25	PRCH 7992 Bt2	140.5	142.4	163.8	113.1	126.3	134.3	171.7	149.1	142.7
	CD @ 5%	16.7	26.1	12.7	10.8		3.32	12.2	17.9	
	CV %	8.3	11.0	9.6	5.9		7.47	4.7	7.0	

Table: Number of monopodia in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	1.4	1.8	1.5	0.8	2.4	2.0	1.6	2.5	1.8
2	Core 106 BGII	0.6	1.1	1.3	0.2	2.3	1.9	0.9	1.6	1.2
3	NCS 9775 Bt2	0.4	0.7	1.8	0.4	2.2	2.1	0.9	0.9	1.2
4	RCH1199BGII	0.8	2.1	1.8	0.7	2.0	2.1	1.2	1.1	1.5
5	KCH9266 BGII	0.9	0.8	1.9	0.3	2.0	2.4	1.2	2.7	1.5
6	C9333 BG-II	0.2	0.8	1.5	0.3	1.9	1.1	0.8	1.5	1.0
7	US 722 BGII	0.9	1.4	1.9	0.3	2.2	2.6	1.4	2.1	1.6
8	VPCH-456 BG II	1.6	2.3	2.3	0.5	2.4	2.4	1.3	2.9	2.0
9	PCH 4996 Bt2	0.9	1.3	1.9	1.1	1.8	1.8	1.1	2.1	1.5
10	ARCH 6677 BGII	0.3	1.3	1.7	0.4	1.9	2.6	1.2	2.7	1.5
11	Super-112 BGII	0.5	1.2	1.7	0.9	1.6	1.3	1.5	2.5	1.4
12	NBC 1821 BGII (ZC 1)	0.5	0.5	2.1	0.4	1.9	1.8	1.1	1.3	1.2
13	KSP 5328 BG II	0.8	1.3	2.1	0.6	1.7	1.7	1.2	2.2	1.5
14	VSCH 369 BGII (ZC 2)	0.3	1.0	1.7	0.5	1.4	1.6	1.0	2.9	1.3
15	RAHH 1002 BGII	0.7	1.2	2.1	0.7	1.7	1.8	1.8	1.1	1.4
16	DC5107 BGII	0.1	0.8	2.2	0.2	1.5	2.1	0.9	2.1	1.2
17	US 723 BGII	0.7	0.8	1.9	0.5	2.1	1.8	0.8	2.7	1.4
18	KCH9265 BGII	0.5	2.3	1.9	0.5	2.0	1.9	1.1	2.7	1.6
19	GCH 1107 BGII	0.8	1.9	1.9	0.2	1.8	2.1	1.3	1.8	1.5
20	8811-9 BGII	0.7	1.6	2.2	0.9	1.9	1.3	2.3	2.0	1.6
21	RAHH 1004 BGII	0.7	0.8	1.5	0.3	1.8	2.1	0.9	2.1	1.3
22	ECH 999 BG II	0.5	1.7	2.5	0.5	2.0	1.2	1.5	1.7	1.5
23	KCH9264 BGII	0.7	0.3	1.8	0.4	1.9	1.7	1.2	1.1	1.1
24	DGHH- 4854 BGII	0.7	1.1	1.3	0.5	1.7	1.3	0.5	1.6	1.1
25	PRCH 7992 Bt2	0.8	0.7	1.7	0.1	1.9	2.0	1.0	0.9	1.1
	CD @ 5%	NS	0.2	0.3	0.4		19.43	0.5	0.7	
	CV %	78.1	10.7	19.5	41.1		0.59	26.8	22.5	

Table: Number of sympodia in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	15.1	16.6	16.7	13.4	20.2	13.5	17.0	24.3	17.1
2	Core 106 BGII	17.9	21.1	22.1	16.7	20.9	14.6	16.5	22.6	19.1
3	NCS 9775 Bt2	15.7	15.5	18.1	12.3	19.1	13.4	15.5	20.1	16.2
4	RCH1199BGII	14.3	14.9	16.9	15.7	18.3	15.3	15.4	21.8	16.6
5	KCH9266 BGII	16.7	12.6	19.1	14.5	18.9	16.7	17.4	21.3	17.2
6	C9333 BG-II	18.0	16.5	19.5	13.0	18.2	17.1	17.3	20.3	17.5
7	US 722 BGII	16.4	17.5	20.2	13.8	19.1	14.3	16.1	21.9	17.4
8	VPCH-456 BG II	16.9	22.6	21.6	13.5	17.9	13.2	16.7	20.3	17.8
9	PCH 4996 Bt2	17.0	20.6	20.6	14.2	19.3	15.6	17.2	21.0	18.2
10	ARCH 6677 BGII	16.5	17.4	16.2	13.4	20.7	14.5	16.4	23.4	17.3
11	Super-112 BGII	18.8	17.9	17.2	14.7	20.5	16.4	17.7	20.3	17.9
12	NBC 1821 BGII (ZC 1)	15.8	16.3	19.3	14.0	17.8	13.9	15.6	20.9	16.7
13	KSP 5328 BG II	15.4	20.2	19.2	13.6	18.4	14.0	15.0	21.3	17.1
14	VSCH 369 BGII (ZC 2)	14.7	21.4	16.5	13.4	19.0	14.7	16.5	22.8	17.4
15	RAHH 1002 BGII	15.7	20.5	17.5	13.5	19.7	15.4	15.9	20.9	17.4
16	DC5107 BGII	15.9	21.2	17.5	12.5	21.7	13.6	14.9	22.1	17.4
17	US 723 BGII	15.7	19.9	19.3	15.3	19.9	16.8	17.1	22.3	18.3
18	KCH9265 BGII	16.2	19.7	20.2	13.1	17.8	14.7	16.5	20.6	17.4
19	GCH 1107 BGII	16.8	20.3	21.9	14.5	20.9	14.2	15.5	19.9	18.0
20	8811-9 BGII	18.0	21.3	19.6	13.5	18.4	14.8	17.9	21.8	18.2
21	RAHH 1004 BGII	14.2	21.7	18.3	13.9	18.5	14.5	16.3	21.3	17.3
22	ECH 999 BG II	18.5	21.0	21.7	14.1	18.4	16.5	16.7	23.5	18.8
23	KCH9264 BGII	17.9	14.3	21.4	13.2	17.5	14.0	15.9	20.7	16.9
24	DGHH- 4854 BGII	15.5	18.2	19.1	12.5	17.9	15.0	16.1	21.4	17.0
25	PRCH 7992 Bt2	18.6	18.4	24.7	13.5	18.0	14.3	16.9	21.9	18.3
	CD @ 5%	2.7	3.2	2.1	2.0		4.83	1.5	3.1	
	CV %	9.9	10.5	11.5	8.7		1.18	5.5	8.9	

Table: Boll weight (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	4.8	5.6	6.3	6.2	4.5	5.1	5.3	5.5	5.4
2	Core 106 BGII	5.1	6.2	6.2	5.9	4.7	4.9	5.3	5.7	5.5
3	NCS 9775 Bt2	5.4	4.5	7.9	7.8	5.5	6.9	5.8	5.8	6.2
4	RCH1199BGII	4.4	4.3	5.8	5.5	4.3	4.8	4.9	5.6	5.0
5	KCH9266 BGII	5.6	4.6	6.9	6.0	5.2	6.4	5.8	5.6	5.8
6	C9333 BG-II	5.7	5.1	7.8	6.7	5.3	6.4	6.4	6.0	6.2
7	US 722 BGII	5.4	6.2	7.2	6.4	4.6	5.9	5.9	5.8	5.9
8	VPCH-456 BG II	4.4	6.1	6.3	5.4	4.6	4.9	4.9	5.1	5.2
9	PCH 4996 Bt2	5.7	6.1	7.5	7.7	5.7	6.1	5.9	6.0	6.3
10	ARCH 6677 BGII	5.1	5.5	7.1	6.3	5.2	5.6	5.6	5.6	5.8
11	Super-112 BGII	4.8	4.9	6.4	5.8	4.6	5.6	5.5	5.5	5.4
12	NBC 1821 BGII (ZC 1)	5.0	4.9	6.9	6.5	4.7	6.2	5.9	5.4	5.7
13	KSP 5328 BG II	5.1	5.8	6.8	6.5	5.3	5.8	5.6	5.7	5.8
14	VSCH 369 BGII (ZC 2)	5.1	5.6	6.3	6.0	4.9	5.3	5.4	5.4	5.5
15	RAHH 1002 BGII	4.8	5.9	7.2	6.2	4.7	5.3	5.4	5.5	5.6
16	DC5107 BGII	5.5	5.7	7.8	6.8	5.1	5.8	6.1	6.0	6.1
17	US 723 BGII	4.5	5.7	5.8	5.7	4.1	5.4	5.1	5.5	5.2
18	KCH9265 BGII	5.7	5.4	7.5	6.4	5.3	5.8	6.3	5.9	6.0
19	GCH 1107 BGII	5.3	5.1	7.2	6.7	4.9	6.1	6.0	5.5	5.9
20	8811-9 BGII	4.9	5.1	6.6	6.3	4.8	5.5	5.7	5.6	5.6
21	RAHH 1004 BGII	5.7	5.3	7.4	6.4	5.3	5.9	6.3	5.5	6.0
22	ECH 999 BG II	5.3	6.3	7.2	6.3	5.5	5.8	5.4	5.9	6.0
23	KCH9264 BGII	5.6	5.4	6.8	6.2	5.2	6.2	5.9	5.7	5.9
24	DGHH- 4854 BGII	5.3	5.7	7.8	6.3	5.0	5.8	6.1	5.7	6.0
25	PRCH 7992 Bt2	5.4	5.3	7.5	7.0	4.9	6.3	5.6	5.7	6.0
	CD @ 5%	0.5	0.6	0.5	0.4		5.15	0.4	0.5	
	CV %	5.9	7.1	7.8	4.1		0.49	4.8	5.0	

Table: Number of bolls / plant in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	23.7	46.7	31.0	21.1	27.5	37.7	46.7	55.1	36.2
2	Core 106 BGII	26.3	63.9	43.3	28.1	28.9	37.7	48.9	55.9	41.6
3	NCS 9775 Bt2	19.1	35.3	37.7	22.1	25.6	37.3	41.7	44.3	32.9
4	RCH1199BGII	21.0	26.5	38.3	21.3	27.8	33.7	37.9	39.7	30.8
5	KCH9266 BGII	23.2	38.0	44.7	20.5	26.1	42.7	45.3	55.6	37.0
6	C9333 BG-II	21.4	22.4	32.0	17.7	22.3	37.0	41.5	45.4	30.0
7	US 722 BGII	21.1	42.3	41.0	16.7	25.5	35.7	47.2	51.7	35.2
8	VPCH-456 BG II	26.8	27.4	38.3	20.0	27.0	37.0	42.9	52.5	34.0
9	PCH 4996 Bt2	22.4	48.9	36.7	21.4	26.1	34.7	40.1	51.4	35.2
10	ARCH 6677 BGII	24.6	24.2	32.3	22.1	32.2	42.3	47.9	54.8	35.1
11	Super-112 BGII	26.2	30.1	38.3	22.5	27.3	37.3	47.3	32.7	32.7
12	NBC 1821 BGII (ZC 1)	17.6	40.1	39.0	17.2	22.8	32.7	40.2	36.6	30.8
13	KSP 5328 BG II	20.1	53.3	38.7	20.1	25.9	39.0	38.7	38.6	34.3
14	VSCH 369 BGII (ZC 2)	15.6	57.9	35.7	23.5	24.3	38.7	43.3	58.1	37.1
15	RAHH 1002 BGII	22.0	58.1	36.7	20.1	28.4	36.7	42.5	49.0	36.7
16	DC5107 BGII	18.3	56.1	38.3	16.7	24.0	40.3	42.8	53.5	36.3
17	US 723 BGII	21.7	55.7	38.0	25.3	30.9	46.7	48.0	54.3	40.1
18	KCH9265 BGII	17.7	52.8	38.0	24.0	22.1	39.0	41.5	52.0	35.9
19	GCH 1107 BGII	22.3	59.1	34.0	20.7	20.5	35.7	40.5	33.7	33.3
20	8811-9 BGII	21.0	58.9	36.0	19.9	27.3	40.7	46.1	53.6	37.9
21	RAHH 1004 BGII	14.6	50.4	38.3	21.7	24.7	33.7	36.2	40.7	32.5
22	ECH 999 BG II	23.9	63.5	45.0	21.8	25.9	39.0	46.2	53.7	39.9
23	KCH9264 BGII	18.5	55.0	39.3	21.9	24.5	42.0	41.5	47.8	36.3
24	DGHH- 4854 BGII	13.3	53.5	34.0	19.9	20.5	35.7	41.9	45.1	33.0
25	PRCH 7992 Bt2	20.9	53.1	29.0	22.3	23.7	37.3	45.5	36.7	33.6
	CD @ 5%	5.9	11.3	4.7	NS		5.98	3.7	7.0	
	CV %	17.0	14.7	13.1	17.1		3.73	5.2	8.9	

Table: Number of bolls / sq.m. in H X H hybrids

S. No.	Entries	Lam	Coimbatore	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	93.1	52.0	52.3	64.9	87.5	70.0
2	Core 106 BGII	127.4	69.3	52.3	68.0	88.8	81.2
3	NCS 9775 Bt2	70.3	54.7	51.9	58.0	70.3	61.0
4	RCH1199BGII	52.5	52.5	46.8	52.7	63.0	53.5
5	KCH9266 BGII	77.7	50.7	59.3	62.9	88.3	67.8
6	C9333 BG-II	45.1	43.6	51.4	57.7	72.1	54.0
7	US 722 BGII	85.0	41.3	49.5	65.6	82.1	64.7
8	VPCH-456 BG II	54.6	49.4	51.4	59.5	83.4	59.7
9	PCH 4996 Bt2	98.6	52.8	48.1	55.6	81.6	67.3
10	ARCH 6677 BGII	49.0	54.7	58.8	66.5	87.0	63.2
11	Super-112 BGII	60.0	55.6	51.9	65.7	51.9	57.0
12	NBC 1821 BGII (ZC 1)	80.0	42.5	45.4	55.8	58.1	56.4
13	KSP 5328 BG II	105.9	49.7	54.2	53.8	61.3	65.0
14	VSCH 369 BGII (ZC 2)	115.1	57.9	53.7	60.2	92.3	75.8
15	RAHH 1002 BGII	115.5	49.5	50.9	59.1	77.8	70.6
16	DC5107 BGII	112.8	41.2	56.0	59.4	85.0	70.9
17	US 723 BGII	111.7	62.6	64.8	66.7	86.1	78.4
18	KCH9265 BGII	104.7	59.3	54.2	57.7	82.5	71.7
19	GCH 1107 BGII	118.5	51.0	49.5	56.2	53.5	65.7
20	8811-9 BGII	117.3	49.1	56.5	64.0	85.1	74.4
21	RAHH 1004 BGII	100.9	53.7	46.8	50.3	64.7	63.3
22	ECH 999 BG II	127.4	53.8	54.2	64.2	85.2	77.0
23	KCH9264 BGII	110.6	54.0	58.3	57.7	75.9	71.3
24	DGHH- 4854 BGII	107.1	49.1	49.5	58.2	71.5	67.1
25	PRCH 7992 Bt2	105.2	55.0	51.9	63.2	58.3	66.7
	CD @ 5%	21.9	NS	5.98	5.1	11.1	
	CV %	14.2	17.1	5.18	5.2	8.9	

Table: Lint Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	4.9	5.9	6.2	6.9	5.3	4.8	5.7	5.6	5.7
2	Core 106 BGII	6.3	7.2	6.8	7.5	5.8	5.8	6.5	6.2	6.5
3	NCS 9775 Bt2	6.0	5.7	7.0	8.4	5.5	5.8	6.8	5.9	6.4
4	RCH1199BGII	5.0	5.6	6.1	6.9	5.3	4.9	5.9	5.3	5.6
5	KCH9266 BGII	5.5	5.7	6.4	7.5	5.7	6.2	6.8	5.5	6.2
6	C9333 BG-II	5.8	5.0	7.8	8.2	6.5	5.5	7.3	5.5	6.5
7	US 722 BGII	4.9	4.8	5.9	6.8	4.6	5.3	6.6	5.7	5.6
8	VPCH-456 BG II	5.7	5.6	6.1	7.1	5.2	6.1	6.0	5.9	6.0
9	PCH 4996 Bt2	5.8	6.2	7.0	8.5	6.0	6.7	7.0	6.2	6.7
10	ARCH 6677 BGII	6.2	5.3	6.7	8.1	6.0	5.6	6.2	6.2	6.3
11	Super-112 BGII	5.1	5.6	5.6	6.5	5.0	5.1	5.5	5.7	5.5
12	NBC 1821 BGII (ZC 1)	5.4	5.8	6.4	7.5	4.7	5.3	5.7	6.0	5.9
13	KSP 5328 BG II	5.1	6.7	6.1	7.4	5.3	5.7	5.5	5.9	6.0
14	VSCH 369 BGII (ZC 2)	6.1	6.2	7.1	8.2	6.2	6.6	6.9	6.5	6.7
15	RAHH 1002 BGII	5.0	5.9	5.7	6.6	5.4	5.6	5.9	5.2	5.7
16	DC5107 BGII	5.4	6.4	6.0	7.1	5.3	5.1	6.6	6.6	6.1
17	US 723 BGII	4.8	6.2	5.0	6.3	4.6	5.4	5.2	5.1	5.3
18	KCH9265 BGII	5.9	5.9	6.9	7.9	5.9	6.0	7.8	6.4	6.6
19	GCH 1107 BGII	5.1	6.4	6.1	7.0	5.4	5.3	6.0	5.4	5.8
20	8811-9 BGII	4.9	6.3	5.9	6.3	5.1	5.0	6.2	5.0	5.6
21	RAHH 1004 BGII	5.9	6.1	6.9	7.9	5.1	5.9	5.7	5.7	6.2
22	ECH 999 BG II	5.5	7.0	6.4	6.7	5.6	5.2	6.3	6.4	6.1
23	KCH9264 BGII	5.7	6.0	6.3	7.2	5.3	5.8	6.3	5.8	6.1
24	DGHH- 4854 BGII	4.9	5.8	7.2	7.1	5.5	4.9	5.7	5.6	5.8
25	PRCH 7992 Bt2	4.9	6.0	6.5	7.3	5.1	5.7	6.2	5.5	5.9
	CD @ 5%	0.7	NS	0.4	0.6		5.14	0.7	0.8	
	CV %	7.4	12.9	6.7	5.1		0.47	6.6	8.8	

Table: Seed Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	11.0	11.3	12.3	12.8	9.7	9.2	11.3	11.3	11.1
2	Core 106 BGII	11.1	12.2	10.6	11.6	9.4	9.1	11.0	10.7	10.7
3	NCS 9775 Bt2	12.6	12.1	12.8	13.9	9.9	10.2	11.7	11.0	11.8
4	RCH1199BGII	10.6	11.7	11.5	12.2	9.7	9.8	11.3	11.3	11.0
5	KCH9266 BGII	10.2	11.1	9.9	11.2	9.2	9.4	10.7	9.3	10.1
6	C9333 BG-II	12.7	11.4	13.4	14.2	11.1	9.9	13.0	11.0	12.1
7	US 722 BGII	11.2	11.0	10.9	12.4	8.6	9.1	11.3	10.7	10.7
8	VPCH-456 BG II	11.0	10.9	11.1	11.5	9.0	9.9	10.7	10.3	10.6
9	PCH 4996 Bt2	11.4	12.0	12.3	13.9	10.0	10.9	11.7	11.3	11.7
10	ARCH 6677 BGII	11.4	11.5	11.3	12.7	9.5	9.7	11.3	10.3	11.0
11	Super-112 BGII	11.4	11.9	11.6	12.3	9.6	9.7	11.3	11.7	11.2
12	NBC 1821 BGII (ZC 1)	12.1	12.2	12.8	13.5	9.2	9.5	11.3	11.3	11.5
13	KSP 5328 BG II	11.1	12.2	11.9	13.3	10.1	9.9	11.3	11.7	11.4
14	VSCH 369 BGII (ZC 2)	9.8	10.5	9.9	11.1	10.3	9.1	10.0	9.7	10.1
15	RAHH 1002 BGII	11.2	10.6	11.7	12.6	10.2	10.1	11.7	11.3	11.2
16	DC5107 BGII	11.2	11.5	11.5	12.3	9.7	9.7	12.0	12.3	11.3
17	US 723 BGII	10.3	10.4	9.8	11.7	9.8	9.3	9.7	10.0	10.1
18	KCH9265 BGII	12.9	10.5	12.9	13.6	10.5	10.1	13.0	12.0	11.9
19	GCH 1107 BGII	11.8	11.6	12.3	13.5	9.2	10.2	11.7	11.3	11.5
20	8811-9 BGII	10.8	11.9	12.1	12.9	10.0	9.5	12.3	10.7	11.3
21	RAHH 1004 BGII	11.9	11.5	12.2	13.4	9.6	10.2	11.0	11.0	11.4
22	ECH 999 BG II	12.4	12.0	13.6	13.1	8.0	9.7	11.3	11.0	11.4
23	KCH9264 BGII	12.0	11.5	11.7	11.9	9.2	9.8	11.7	11.7	11.2
24	DGHH- 4854 BGII	10.8	10.4	13.0	12.5	9.5	9.7	11.3	11.0	11.0
25	PRCH 7992 Bt2	12.1	11.6	13.6	14.2	8.9	10.0	12.0	11.7	11.8
	CD @ 5%	1.3	NS	0.5	0.9		4.28	1.1	1.2	
	CV %	7.1	9.9	4.2	4.4		0.68	5.8	6.6	

Table: Ginning outturn (%) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	30.7	34.3	33.7	35.0	35.5	34.4	33.6	32.9	33.8
2	Core 106 BGII	36.1	37.3	38.9	39.4	38.0	39.1	37.1	36.7	37.8
3	NCS 9775 Bt2	32.2	32.3	35.4	37.6	35.5	36.4	36.8	34.7	35.1
4	RCH1199BGII	31.8	32.8	34.6	36.2	35.2	33.4	34.1	31.8	33.7
5	KCH9266 BGII	35.2	34.1	39.2	40.0	38.3	39.6	38.9	36.9	37.8
6	C9333 BG-II	31.5	30.5	36.8	36.5	37.1	35.5	35.9	33.3	34.6
7	US 722 BGII	30.2	30.9	35.1	35.6	34.9	36.9	36.7	34.9	34.4
8	VPCH-456 BG II	34.2	34.6	35.6	38.3	36.6	38.0	35.9	36.4	36.2
9	PCH 4996 Bt2	33.5	34.3	36.3	37.8	37.6	38.1	37.6	35.4	36.3
10	ARCH 6677 BGII	35.5	31.7	37.3	38.8	38.6	36.7	35.2	37.7	36.4
11	Super-112 BGII	30.7	32.2	32.5	34.4	34.2	34.2	32.5	32.9	33.0
12	NBC 1821 BGII (ZC 1)	30.6	32.4	33.3	35.5	34.1	35.7	33.4	34.6	33.7
13	KSP 5328 BG II	31.6	35.3	33.9	35.8	34.5	36.6	32.9	33.6	34.3
14	VSCH 369 BGII (ZC 2)	38.4	36.9	41.9	42.5	37.6	42.1	40.8	40.2	40.1
15	RAHH 1002 BGII	30.6	35.9	33.0	34.3	34.8	35.4	33.5	31.3	33.6
16	DC5107 BGII	32.5	35.6	34.5	36.5	34.8	34.4	35.5	35.0	34.9
17	US 723 BGII	31.7	37.2	33.9	34.9	36.5	36.7	35.2	33.8	35.0
18	KCH9265 BGII	31.4	35.9	34.8	36.9	35.9	37.3	37.6	34.7	35.6
19	GCH 1107 BGII	30.3	35.2	33.1	34.4	37.1	34.4	33.8	32.2	33.8
20	8811-9 BGII	31.0	34.8	32.7	33.0	34.1	34.4	33.6	32.1	33.2
21	RAHH 1004 BGII	33.0	34.7	36.2	37.2	34.6	36.8	34.1	34.2	35.1
22	ECH 999 BG II	30.7	36.8	32.0	33.9	36.6	34.8	35.6	36.6	34.6
23	KCH9264 BGII	32.1	34.0	35.0	37.7	36.8	37.1	35.2	33.3	35.2
24	DGHH- 4854 BGII	31.7	35.6	35.7	36.4	36.8	33.6	33.6	33.5	34.6
25	PRCH 7992 Bt2	28.9	33.9	32.2	33.8	36.5	36.4	34.1	31.8	33.5
	CD @ 5%	2.5	NS	1.0	1.9		2.01	1.9	1.8	
	CV %	4.6	11.5	3.0	3.2		1.20	3.4	3.3	

Table: Upper Half Mean Length (mm) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	30.0	31.5	33.1	31.8	29.5	30.4	30.1	31.6	31.0
2	Core 106 BGII	27.4	28.2	28.9	28.6	26.1	27.2	27.0	28.2	27.7
3	NCS 9775 Bt2	32.2	32.5	32.3	32.5	28.9	32.0	30.9	32.0	31.7
4	RCH1199BGII	28.6	30.2	31.4	32.2	27.3	29.5	28.4	32.0	30.0
5	KCH9266 BGII	28.4	30.0	29.6	30.8	26.9	27.9	28.6	30.8	29.1
6	C9333 BG-II	29.4	30.0	29.9	30.1	28.0	31.2	29.0	29.1	29.6
7	US 722 BGII	28.9	29.2	30.8	30.0	26.9	28.7	28.9	29.0	29.1
8	VPCH-456 BG II	26.3	28.4	28.5	28.0	25.7	26.9	26.3	29.6	27.5
9	PCH 4996 Bt2	29.4	31.5	31.2	31.3	27.7	29.1	28.9	31.6	30.1
10	ARCH 6677 BGII	28.0	28.3	27.3	28.0	28.1	28.2	27.6	28.8	28.0
11	Super-112 BGII	31.5	32.9	33.2	32.4	29.9	32.0	30.4	32.8	31.9
12	NBC 1821 BGII (ZC 1)	28.9	30.6	30.5	30.8	26.4	29.6	28.7	30.3	29.5
13	KSP 5328 BG II	28.4	30.8	30.1	31.2	27.4	29.1	28.8	31.7	29.7
14	VSCH 369 BGII (ZC 2)	25.7	27.0	26.5	26.7	24.7	25.6	26.1	27.3	26.2
15	RAHH 1002 BGII	31.7	32.9	33.5	33.2	29.6	32.7	29.6	32.8	32.0
16	DC5107 BGII	30.2	29.8	30.0	30.1	27.5	30.5	28.9	31.1	29.8
17	US 723 BGII	26.7	28.0	27.3	28.9	25.6	26.6	26.5	28.4	27.3
18	KCH9265 BGII	29.6	30.6	31.5	31.3	27.8	31.5	28.7	32.3	30.4
19	GCH 1107 BGII	28.6	30.4	31.1	30.1	27.7	30.4	30.6	30.6	29.9
20	8811-9 BGII	29.8	31.0	32.7	31.6	29.0	31.0	30.7	32.6	31.1
21	RAHH 1004 BGII	29.1	30.0	31.0	29.0	27.4	29.4	28.8	30.2	29.4
22	ECH 999 BG II	30.0	30.9	32.9	31.2	28.4	31.2	31.1	32.3	31.0
23	KCH9264 BGII	28.1	30.1	29.2	29.0	27.9	28.1	26.9	30.7	28.8
24	DGHH- 4854 BGII	28.1	30.1	30.9	30.6	27.7	28.9	27.4	29.5	29.2
25	PRCH 7992 Bt2	29.2	31.5	30.2	30.9	27.8	30.3	28.8	30.3	29.9

Table: Uniformity index under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	83.0	86.0	86.0	86.4	83.3	85.0	84.0	83.0	84.6
2	Core 106 BGII	84.0	86.0	85.0	85.9	83.4	85.0	84.0	84.0	84.7
3	NCS 9775 Bt2	85.0	86.0	85.0	85.3	82.4	85.0	83.0	84.0	84.5
4	RCH1199BGII	84.0	84.0	86.0	84.4	82.8	84.0	84.0	86.0	84.4
5	KCH9266 BGII	83.0	86.0	86.0	84.9	83.0	84.0	85.0	85.0	84.6
6	C9333 BG-II	84.0	84.0	86.0	85.3	83.6	86.0	85.0	84.0	84.7
7	US 722 BGII	85.0	85.0	87.0	85.9	84.0	85.0	85.0	85.0	85.2
8	VPCH-456 BG II	81.0	85.0	85.0	85.7	82.9	83.0	83.0	85.0	83.8
9	PCH 4996 Bt2	84.0	86.0	86.0	85.4	82.7	84.0	84.0	86.0	84.8
10	ARCH 6677 BGII	84.0	85.0	84.0	84.7	82.1	84.0	83.0	85.0	84.0
11	Super-112 BGII	84.0	86.0	86.0	85.6	82.8	85.0	82.0	86.0	84.7
12	NBC 1821 BGII (ZC 1)	84.0	87.0	86.0	86.3	83.1	85.0	84.0	85.0	85.1
13	KSP 5328 BG II	82.0	86.0	86.0	86.0	83.4	85.0	82.0	86.0	84.6
14	VSCH 369 BGII (ZC 2)	82.0	84.0	84.0	85.1	82.7	83.0	83.0	82.0	83.2
15	RAHH 1002 BGII	84.0	86.0	88.0	85.5	83.1	83.0	83.0	85.0	84.7
16	DC5107 BGII	85.0	84.0	84.0	84.6	82.5	84.0	83.0	84.0	83.9
17	US 723 BGII	85.0	85.0	84.0	86.0	82.6	85.0	84.0	85.0	84.6
18	KCH9265 BGII	85.0	85.0	86.0	86.9	83.2	87.0	84.0	87.0	85.5
19	GCH 1107 BGII	84.0	86.0	85.0	84.4	82.9	84.0	86.0	85.0	84.7
20	8811-9 BGII	83.0	86.0	87.0	84.3	83.4	86.0	85.0	87.0	85.2
21	RAHH 1004 BGII	84.0	85.0	86.0	84.1	83.0	85.0	84.0	85.0	84.5
22	ECH 999 BG II	83.0	84.0	86.0	84.8	83.5	86.0	85.0	84.0	84.5
23	KCH9264 BGII	82.0	85.0	85.0	83.9	83.7	84.0	83.0	86.0	84.1
24	DGHH- 4854 BGII	82.0	84.0	86.0	85.2	83.2	83.0	82.0	81.0	83.3
25	PRCH 7992 Bt2	83.0	86.0	86.0	85.5	83.1	85.0	84.0	83.0	84.5

Table: Micronaire under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	4.3	4.5	4.3	4.8	4.6	3.9	4.4	4.3	4.4
2	Core 106 BGII	5.2	4.8	4.9	5.1	4.9	4.1	5.0	5.0	4.9
3	NCS 9775 Bt2	4.8	4.8	4.9	4.8	4.8	3.8	4.4	3.7	4.5
4	RCH1199BGII	4.3	4.6	4.6	4.2	4.5	3.8	3.9	4.3	4.3
5	KCH9266 BGII	4.9	4.5	4.8	4.6	4.6	3.8	4.0	3.8	4.4
6	C9333 BG-II	4.4	4.4	4.5	4.1	4.1	3.1	3.9	3.3	4.0
7	US 722 BGII	5.1	5.3	5.1	5.4	5.4	4.2	4.8	4.9	5.0
8	VPCH-456 BG II	5.6	5.7	5.9	5.8	5.8	5.4	5.4	5.6	5.7
9	PCH 4996 Bt2	5.0	4.8	4.8	5.0	5.0	4.1	4.2	4.5	4.7
10	ARCH 6677 BGII	5.0	5.0	4.9	4.7	5.0	4.1	4.4	4.7	4.7
11	Super-112 BGII	4.4	4.7	4.5	4.7	4.5	3.8	4.1	4.8	4.4
12	NBC 1821 BGII (ZC 1)	4.5	4.4	4.5	4.3	4.6	3.6	3.7	4.2	4.2
13	KSP 5328 BG II	4.2	4.6	4.1	4.3	4.7	3.5	3.8	4.2	4.2
14	VSCH 369 BGII (ZC 2)	5.4	5.2	5.8	5.7	5.7	4.9	5.3	5.3	5.4
15	RAHH 1002 BGII	4.5	4.5	4.6	4.6	4.5	3.8	4.1	4.4	4.4
16	DC5107 BGII	4.3	4.0	4.0	3.9	4.1	3.2	3.7	4.0	3.9
17	US 723 BGII	5.0	4.9	5.0	4.9	4.7	3.8	4.6	4.8	4.7
18	KCH9265 BGII	5.2	5.0	5.6	5.4	5.3	4.2	5.0	5.1	5.1
19	GCH 1107 BGII	4.3	4.2	4.2	3.9	4.4	3.2	3.9	3.4	3.9
20	8811-9 BGII	4.6	4.6	4.2	4.4	4.6	3.8	4.1	4.2	4.3
21	RAHH 1004 BGII	5.1	4.9	5.1	5.0	5.3	4.1	4.4	4.8	4.8
22	ECH 999 BG II	4.4	4.7	4.3	4.4	4.8	4.0	4.2	3.5	4.3
23	KCH9264 BGII	4.8	4.8	4.7	4.6	4.8	3.7	4.2	4.5	4.5
24	DGHH- 4854 BGII	4.3	4.2	5.1	4.8	4.7	3.5	4.1	4.3	4.4
25	PRCH 7992 Bt2	4.4	4.9	4.6	4.6	4.8	3.7	4.5	3.6	4.4

Table: Tenacity under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	31.7	33.5	30.2	31.0	31.3	28.5	28.6	28.9	30.5
2	Core 106 BGII	29.7	30.6	29.7	26.8	28.9	26.0	26.9	28.3	28.4
3	NCS 9775 Bt2	32.0	31.2	30.4	29.9	29.6	27.7	28.9	30.3	30.0
4	RCH1199BGII	31.4	33.2	30.9	33.2	30.5	31.3	28.4	30.7	31.2
5	KCH9266 BGII	30.8	33.7	30.6	29.8	31.2	27.5	29.5	31.5	30.6
6	C9333 BG-II	32.0	32.7	32.7	30.5	33.8	32.9	30.4	32.3	32.2
7	US 722 BGII	29.8	31.7	30.6	28.3	32.2	27.7	29.8	31.3	30.2
8	VPCH-456 BG II	28.1	31.1	29.6	26.4	29.1	25.8	28.2	31.3	28.7
9	PCH 4996 Bt2	32.2	32.8	30.3	29.9	30.6	27.8	28.4	33.2	30.7
10	ARCH 6677 BGII	30.6	31.0	29.3	27.5	30.7	27.5	27.9	30.4	29.4
11	Super-112 BGII	32.9	32.1	30.9	29.8	31.2	29.1	29.3	30.7	30.8
12	NBC 1821 BGII (ZC 1)	29.7	33.1	31.2	30.6	31.6	28.5	29.9	33.0	31.0
13	KSP 5328 BG II	31.1	33.6	31.9	28.9	31.5	29.1	29.2	33.0	31.0
14	VSCH 369 BGII (ZC 2)	27.6	27.8	26.2	25.4	28.2	25.2	25.8	28.2	26.8
15	RAHH 1002 BGII	32.3	31.8	31.2	30.2	31.1	28.1	31.0	30.9	30.8
16	DC5107 BGII	30.9	30.3	28.9	29.5	29.5	28.2	29.3	31.8	29.8
17	US 723 BGII	28.6	30.4	30.5	28.5	30.7	28.3	28.5	31.9	29.7
18	KCH9265 BGII	31.7	34.2	32.1	28.5	29.4	29.5	28.2	33.8	30.9
19	GCH 1107 BGII	30.8	30.7	29.3	29.9	30.4	28.0	29.2	30.8	29.9
20	8811-9 BGII	31.8	34.5	32.9	29.5	31.3	29.4	30.3	33.3	31.6
21	RAHH 1004 BGII	30.9	30.6	30.5	27.6	29.7	27.0	28.0	31.1	29.4
22	ECH 999 BG II	31.9	33.9	31.5	30.0	30.7	30.1	30.8	30.5	31.2
23	KCH9264 BGII	30.4	31.2	28.6	29.0	31.8	27.1	28.7	30.3	29.6
24	DGHH- 4854 BGII	31.0	30.0	32.2	28.6	29.7	26.8	27.0	27.9	29.2
25	PRCH 7992 Bt2	31.5	31.4	31.2	28.9	30.1	28.8	27.5	30.0	29.9

Table: Seed Cotton Yield at 140 DAS (q/ha) at 140 DAS in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	5.76	18.33	22.68	14.18	19.33	12.71	16.44	15.63
2	Core 106 BGII	6.17	22.94	27.05	13.03	19.84	14.88	15.46	17.05
3	NCS 9775 Bt2	5.20	17.22	20.93	10.95	22.45	13.55	14.30	14.94
4	RCH1199BGII	5.03	16.67	20.43	9.49	17.92	9.99	14.24	13.40
5	KCH9266 BGII	7.31	17.30	23.48	13.17	24.09	13.31	15.69	16.34
6	C9333 BG-II	5.97	17.14	22.51	11.61	19.16	13.50	13.75	14.81
7	US 722 BGII	5.98	14.84	18.74	13.09	20.64	14.25	16.08	14.80
8	VPCH-456 BG II	5.49	13.33	19.39	14.39	21.01	14.46	10.95	14.15
9	PCH 4996 Bt2	6.08	17.86	26.88	13.40	21.20	12.81	14.11	16.05
10	ARCH 6677 BGII	4.79	17.50	23.01	15.74	24.25	13.92	14.33	16.22
11	Super-112 BGII	7.12	16.83	25.60	11.59	19.18	12.31	10.36	14.71
12	NBC 1821 BGII (ZC 1)	3.86	16.59	18.01	10.13	18.52	11.18	11.95	12.89
13	KSP 5328 BG II	4.57	20.87	21.39	10.21	23.36	10.14	13.97	14.93
14	VSCH 369 BGII (ZC 2)	4.23	19.52	22.08	9.31	21.82	12.21	18.19	15.34
15	RAHH 1002 BGII	4.97	19.52	16.58	12.00	18.83	10.35	14.56	13.83
16	DC5107 BGII	5.35	20.56	23.72	10.67	21.99	14.66	16.96	16.27
17	US 723 BGII	6.61	18.89	31.23	15.02	22.87	14.10	14.19	17.56
18	KCH9265 BGII	4.74	18.97	22.28	11.35	21.61	13.24	16.19	15.48
19	GCH 1107 BGII	4.31	19.52	24.49	10.59	19.67	11.35	10.60	14.36
20	8811-9 BGII	7.62	20.48	17.41	11.33	21.76	13.69	15.52	15.40
21	RAHH 1004 BGII	4.29	18.97	18.98	9.86	18.92	10.85	12.15	13.43
22	ECH 999 BG II	5.61	23.10	20.95	11.82	21.92	14.70	16.94	16.43
23	KCH9264 BGII	7.25	20.16	24.40	11.96	23.69	12.72	14.07	16.32
24	DGHH- 4854 BGII	4.10	18.65	18.40	10.90	15.73	11.77	15.32	13.55
25	PRCH 7992 Bt2	5.19	19.44	23.78	6.89	19.19	14.57	11.96	14.43
	CD @ 5%	1.93	4.29	4.40		5.22	1.80	2.23	
	CV %	21.24	14.01	11.97		1.78	8.52	9.47	

Table: Seed Cotton Yield at 165 DAS (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean
1	RCH1196BGII	6.20	12.22	8.15	2.11	5.61	8.87	8.86	7.43
2	Core 106 BGII	8.34	15.29	15.14	1.85	6.04	8.26	9.78	9.24
3	NCS 9775 Bt2	6.23	11.48	13.83	1.77	5.16	8.06	7.87	7.77
4	RCH1199BGII	6.13	11.11	7.70	1.78	4.76	6.03	7.02	6.36
5	KCH9266 BGII	8.88	11.53	10.00	2.88	8.63	8.89	8.58	8.48
6	C9333 BG-II	6.10	11.43	9.59	2.06	5.24	7.47	8.70	7.23
7	US 722 BGII	7.09	9.89	10.66	1.94	5.57	8.43	8.90	7.50
8	VPCH-456 BG II	8.19	8.89	14.44	1.91	5.07	5.95	12.10	8.08
9	PCH 4996 Bt2	8.95	11.90	12.02	1.70	4.86	6.93	10.73	8.16
10	ARCH 6677 BGII	7.57	11.67	6.42	2.51	8.65	7.14	11.26	7.89
11	Super-112 BGII	5.80	11.22	9.09	2.55	7.35	6.79	7.71	7.22
12	NBC 1821 BGII (ZC 1)	5.47	11.06	9.34	1.98	5.26	7.91	6.83	6.84
13	KSP 5328 BG II	4.28	13.92	9.51	2.34	4.88	6.97	6.55	6.92
14	VSCH 369 BGII (ZC 2)	4.06	13.02	13.83	2.34	6.22	8.85	6.76	7.87
15	RAHH 1002 BGII	6.21	13.02	12.76	2.70	5.11	6.74	8.51	7.86
16	DC5107 BGII	8.34	13.70	5.14	2.08	7.18	8.79	8.28	7.64
17	US 723 BGII	8.30	12.59	8.40	2.89	8.92	9.71	10.82	8.80
18	KCH9265 BGII	6.28	12.65	15.60	1.57	5.02	8.95	8.31	8.34
19	GCH 1107 BGII	6.04	13.02	10.49	2.00	5.77	6.81	7.79	7.42
20	8811-9 BGII	5.31	13.65	11.73	2.37	7.29	8.81	8.03	8.17
21	RAHH 1004 BGII	3.70	12.65	9.51	2.41	4.90	6.60	8.88	6.95
22	ECH 999 BG II	6.77	15.40	14.36	2.97	5.51	8.99	8.24	8.89
23	KCH9264 BGII	6.54	13.44	4.36	3.02	8.96	9.30	9.40	7.86
24	DGHH- 4854 BGII	4.20	12.43	8.27	1.78	7.19	8.03	7.39	7.04
25	PRCH 7992 Bt2	6.54	12.96	14.94	2.55	7.25	8.24	8.92	8.77
	CD @ 5%	2.21	2.84	3.40		20.22	1.26	1.38	
	CV %	20.79	13.92	20.13		2.08	9.74	9.75	

Table: Total Seed Cotton Yield (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Warangal (Ankur)	Hyderabad (Kaveri)	Medchal (Rallis)	Kareem Nagar (Eldorado)	Mean	Rank	% Inc over best check
1	RCH1196BGII	11.97	30.56	25.82	30.83	16.24	24.94	21.58	25.30	23.41	18	-6.0
2	Core 106 BGII	14.52	38.23	35.16	42.19	15.06	25.87	23.14	25.23	27.43	1	10.1
3	NCS 9775 Bt2	11.42	28.70	32.40	34.75	13.40	27.61	21.61	22.17	24.01	14	-3.6
4	RCH1199BGII	11.16	27.78	28.24	28.13	11.34	22.68	16.02	21.26	20.83	25	-16.4
5	KCH9266 BGII	16.19	28.84	37.14	33.48	16.07	32.72	22.21	24.28	26.37	4	5.9
6	C9333 BG-II	12.07	28.57	28.78	32.10	13.99	24.40	20.97	22.45	22.92	21	-8.0
7	US 722 BGII	13.07	24.74	38.02	29.40	12.93	26.21	22.68	24.99	24.01	15	-3.6
8	VPCH-456 BG II	13.68	22.22	38.29	33.83	17.45	26.09	20.40	23.06	24.38	13	-2.1
9	PCH 4996 Bt2	15.02	29.76	39.18	38.90	14.43	26.06	19.74	24.83	25.99	5	4.4
10	ARCH 6677 BGII	12.36	29.17	35.00	29.43	19.02	32.90	21.06	25.59	25.57	8	2.7
11	Super-112 BGII	12.92	28.04	36.42	34.69	14.55	26.53	19.10	18.07	23.79	16	-4.5
12	NBC 1821 BGII (ZC 1)	9.33	27.65	36.10	27.35	11.63	23.78	19.09	18.78	21.71	23	-12.8
13	KSP 5328 BG II	8.85	34.79	36.20	30.89	13.22	28.23	17.11	20.52	23.73	17	-4.7
14	VSCH 369 BGII (ZC 2)	8.29	32.54	36.76	35.91	11.68	28.04	21.06	24.95	24.90	11	0.0
15	RAHH 1002 BGII	11.18	32.54	33.79	29.34	13.73	23.94	17.09	23.06	23.08	19	-7.3
16	DC5107 BGII	13.69	34.26	36.42	28.86	11.16	29.17	23.45	25.24	25.28	9	1.5
17	US 723 BGII	14.92	31.48	31.64	39.62	17.69	31.79	23.81	25.01	27.00	2	8.4
18	KCH9265 BGII	11.02	31.61	37.41	37.88	14.53	26.63	22.19	24.50	25.72	7	3.3
19	GCH 1107 BGII	10.35	32.54	32.06	34.98	12.12	25.44	18.16	18.39	23.01	20	-7.6
20	8811-9 BGII	12.93	34.13	32.73	29.14	14.17	29.05	22.50	23.54	24.77	12	-0.5
21	RAHH 1004 BGII	7.99	31.61	38.96	28.49	12.63	23.82	17.46	21.03	22.75	22	-8.6
22	ECH 999 BG II	12.38	38.49	37.53	35.32	14.74	27.43	23.69	25.18	26.85	3	7.8
23	KCH9264 BGII	13.78	33.60	35.47	28.76	16.33	32.66	22.02	23.47	25.76	6	3.5
24	DGHH- 4854 BGII	8.30	31.08	29.94	26.67	12.19	22.92	19.80	22.71	21.70	24	-12.8
25	PRCH 7992 Bt2	11.73	32.41	33.91	38.72	12.85	26.44	22.81	20.88	24.97	10	0.3
	CD @ 5%	3.06	7.11	3.19	4.90	2.57	6.18	2.70	2.73			
	CV %	15.53	13.93	9.73	9.07	11.17	2.74	7.92	7.23			

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Initial H X H trial in South Zone under Protected Conditions –Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.70	1.31	2.54	6.33	2.72	BETL
55002	1.03	1.17	3.08	4.68	2.49	BETL
55003	1.40	1.07	2.64	5.84	2.74	BETL
55004	0.87	1.01	2.81	5.13	2.45	BETL
55005	1.13	1.26	2.75	4.73	2.47	BETL
55006	0.63	0.86	3.61	5.51	2.65	BETL
55007	1.50	1.17	1.56	5.93	2.54	BETL
55008	1.20	1.70	2.27	5.40	2.64	BETL
55009	1.23	1.62	1.98	5.96	2.70	BETL
55010	0.87	1.74	3.24	6.31	3.04	BETL
55011	0.77	0.82	2.88	5.09	2.39	BETL
55012	1.40	1.14	1.91	4.89	2.34	BETL
55013	2.10	1.13	3.24	5.11	2.90	BETL
55014	1.20	1.80	2.57	5.58	2.79	BETL
55015	1.27	1.44	2.81	4.76	2.57	BETL
55016	1.37	1.08	2.93	5.48	2.71	BETL
55017	0.73	0.97	3.86	5.20	2.69	BETL
55018	1.43	1.04	3.24	5.33	2.76	BETL
55019	1.03	1.18	3.60	5.44	2.81	BETL
55020	1.37	1.38	2.79	4.18	2.43	BETL
55021	1.33	1.02	2.50	5.44	2.57	BETL
55022	0.33	1.23	3.21	4.07	2.21	BETL
55023	1.70	1.38	1.63	4.91	2.40	BETL
55024	0.97	1.47	1.74	6.16	2.58	BETL
55025	1.50	2.14	2.67	5.47	2.95	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Initial H X H trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	1.23	0.62	0.84	1.60	1.08	BETL
55002	2.63	0.77	0.96	1.78	1.53	BETL
55003	2.40	1.10	1.36	2.04	1.73	BETL
55004	1.93	0.97	1.16	2.69	1.69	BETL
55005	2.53	1.32	0.87	2.33	1.76	BETL
55006	2.03	0.62	1.73	2.09	1.62	BETL
55007	2.73	0.44	0.96	2.00	1.53	BETL
55008	2.13	0.51	0.87	2.18	1.42	BETL
55009	2.40	0.49	0.98	1.87	1.43	BETL
55010	2.23	0.41	1.33	2.18	1.54	BETL
55011	1.83	0.78	1.58	2.00	1.55	BETL
55012	2.67	0.39	0.69	2.13	1.47	BETL
55013	1.93	1.09	0.93	1.89	1.46	BETL
55014	2.20	0.42	1.38	2.44	1.61	BETL
55015	2.50	0.64	1.20	1.91	1.56	BETL
55016	2.70	0.84	0.67	2.20	1.60	BETL
55017	2.87	0.82	1.00	2.04	1.68	BETL
55018	2.40	0.98	0.58	1.84	1.45	BETL
55019	2.90	1.26	0.96	1.93	1.76	BETL
55020	2.80	0.99	1.44	1.91	1.79	BETL
55021	3.03	1.13	1.16	2.27	1.90	BETL
55022	2.57	0.97	1.36	2.00	1.72	BETL
55023	2.40	0.56	1.24	2.04	1.56	BETL
55024	2.70	0.99	0.98	2.11	1.69	BETL
55025	2.60	0.69	0.64	2.20	1.53	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55001	I	I	I	I	I	
55002	I	I	I	I	I	
55003	II	I	I	I	I	
55004	I	I	I	I	I	
55005	I	I	I	I	I	
55006	II	I	I	I	I	
55007	I	I	I	I	I	
55008	I	I	I	II	I	
55009	I	I	I	I	I	
55010	I	I	I	I	I	
55011	II	I	I	I	I	
55012	I	I	I	I	I	
55013	I	I	I	I	I	
55014	I	I	I	I	I	
55015	I	I	I	I	I	
55016	I	I	I	I	I	
55017	I	I	I	I	I	
55018	I	I	I	II	I	
55019	II	I	I	II	II	
55020	II	I	I	I	I	
55021	II	I	I	II	II	
55022	I	I	I	I	I	
55023	I	I	I	I	I	
55024	I	I	I	I	I	
55025	I	I	I	I	I	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	4.67	4.03	2.29	10.29	5.32	BETL
55002	2.83	4.03	1.09	11.44	4.85	BETL
55003	3.57	3.67	0.89	11.47	4.90	BETL
55004	4.60	4.89	2.13	11.20	5.71	BETL
55005	3.23	4.53	1.78	10.53	5.02	BETL
55006	3.10	4.96	2.02	11.73	5.45	BETL
55007	3.63	3.56	1.69	12.38	5.32	BETL
55008	4.10	3.96	1.91	12.16	5.53	BETL
55009	3.07	3.06	1.89	10.54	4.64	BETL
55010	3.93	4.46	1.53	10.67	5.15	BETL
55011	3.53	4.51	3.27	10.00	5.33	BETL
55012	5.33	3.83	2.27	11.78	5.80	BETL
55013	3.30	2.76	1.96	12.00	5.00	BETL
55014	3.03	4.63	2.16	8.76	4.64	BETL
55015	3.57	4.97	1.62	10.82	5.25	BETL
55016	3.80	3.49	1.89	9.91	4.77	BETL
55017	4.37	3.36	1.80	10.53	5.02	BETL
55018	2.87	4.36	2.29	9.73	4.81	BETL
55019	3.47	3.29	1.58	11.98	5.08	BETL
55020	3.60	3.83	1.56	9.49	4.62	BETL
55021	2.83	3.43	1.40	10.38	4.51	BETL
55022	3.30	3.43	1.51	9.24	4.37	BETL
55023	3.57	4.09	1.64	9.76	4.77	BETL
55024	2.93	4.63	2.60	11.20	5.34	BETL
55025	3.30	3.83	2.07	12.19	5.35	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.07	0.13	0.48	1.82	0.63	BETL
55002	0.03	0.20	0.82	1.93	0.75	BETL
55003	0.23	0.16	0.61	1.53	0.63	BETL
55004	0.10	0.00	0.82	1.67	0.65	BETL
55005	0.03	0.03	0.58	1.76	0.60	BETL
55006	0.10	0.00	0.73	1.82	0.66	BETL
55007	0.00	0.02	0.79	1.91	0.68	BETL
55008	0.13	0.16	0.62	1.91	0.71	BETL
55009	0.00	0.22	0.75	2.01	0.75	BETL
55010	0.07	0.01	0.41	2.22	0.68	BETL
55011	0.03	0.03	0.76	1.73	0.64	BETL
55012	0.00	0.02	0.70	1.87	0.65	BETL
55013	0.07	0.04	0.47	1.51	0.52	BETL
55014	0.13	0.07	0.59	1.80	0.65	BETL
55015	0.00	0.21	0.72	1.87	0.70	BETL
55016	0.03	0.17	0.72	2.06	0.74	BETL
55017	0.00	0.07	0.64	2.16	0.72	BETL
55018	0.00	0.00	0.70	1.78	0.62	BETL
55019	0.07	0.04	0.83	1.71	0.66	BETL
55020	0.03	0.08	0.71	1.93	0.69	BETL
55021	0.00	0.08	0.53	1.51	0.53	BETL
55022	0.07	0.11	0.50	1.49	0.54	BETL
55023	0.00	0.02	0.59	1.62	0.56	BETL
55024	0.03	0.14	0.47	1.69	0.59	BETL
55025	0.10	0.06	0.84	1.49	0.62	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.27	1.26	0.04	0.12	0.42	
55002	0.00	0.64	0.04	0.13	0.20	
55003	0.00	0.63	0.00	0.18	0.20	
55004	0.10	0.83	0.09	0.11	0.28	
55005	0.17	1.04	0.02	0.11	0.34	
55006	0.03	0.62	0.02	0.18	0.21	
55007	0.07	1.24	0.09	0.29	0.42	
55008	0.03	2.61	0.07	0.16	0.72	
55009	0.13	1.27	0.00	0.16	0.39	
55010	0.10	1.04	0.04	0.40	0.40	
55011	0.00	0.62	0.04	0.09	0.19	
55012	0.10	1.44	0.02	0.02	0.40	
55013	0.17	0.62	0.04	0.18	0.25	
55014	0.10	0.62	0.16	0.11	0.25	
55015	0.07	0.64	0.07	0.00	0.19	
55016	0.17	1.46	0.04	0.13	0.45	
55017	0.03	0.62	0.04	0.16	0.21	
55018	0.00	0.62	0.02	0.20	0.21	
55019	0.07	0.84	0.04	0.11	0.26	
55020	0.00	1.45	0.02	0.11	0.40	
55021	0.17	1.25	0.07	0.16	0.41	
55022	0.03	0.63	0.04	0.18	0.22	
55023	0.00	0.62	0.00	0.22	0.21	
55024	0.10	0.85	0.00	0.16	0.28	
55025	0.07	0.78	0.02	0.22	0.27	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.00	0.00	0.00	0.00	0.00	BETL
55002	0.00	0.00	0.00	0.00	0.00	BETL
55003	0.00	0.00	0.00	0.00	0.00	BETL
55004	0.00	0.00	0.00	0.00	0.00	BETL
55005	0.00	0.00	0.00	0.00	0.00	BETL
55006	0.00	0.00	0.00	0.00	0.00	BETL
55007	0.00	0.00	0.00	0.00	0.00	BETL
55008	0.00	0.00	0.00	0.00	0.00	BETL
55009	0.00	0.00	0.00	0.00	0.00	BETL
55010	0.00	0.00	0.00	0.00	0.00	BETL
55011	0.00	0.00	0.00	0.00	0.00	BETL
55012	0.00	0.00	0.00	0.00	0.00	BETL
55013	0.00	0.00	0.00	0.00	0.00	BETL
55014	0.00	0.00	0.00	0.00	0.00	BETL
55015	0.00	0.00	0.00	0.00	0.00	BETL
55016	0.00	0.00	0.00	0.00	0.00	BETL
55017	0.00	0.00	0.00	0.00	0.00	BETL
55018	0.00	0.00	0.00	0.00	0.00	BETL
55019	0.00	0.00	0.00	0.00	0.00	BETL
55020	0.00	0.00	0.00	0.00	0.00	BETL
55021	0.00	0.00	0.00	0.00	0.00	BETL
55022	0.00	0.00	0.00	0.00	0.00	BETL
55023	0.00	0.00	0.00	0.00	0.00	BETL
55024	0.00	0.00	0.00	0.00	0.00	BETL
55025	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Initial H X H trial in South Zone under Protected Conditions –Spotted/
Spiny Bollworms**

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.00	0.00	0.00	0.00	0.00	BETL
55002	0.00	0.00	0.00	0.00	0.00	BETL
55003	0.00	0.00	0.00	0.00	0.00	BETL
55004	0.00	0.00	0.00	0.00	0.00	BETL
55005	0.00	0.00	0.00	0.00	0.00	BETL
55006	0.00	0.00	0.00	0.00	0.00	BETL
55007	0.00	0.00	0.00	0.00	0.00	BETL
55008	0.00	0.00	0.00	0.00	0.00	BETL
55009	0.00	0.00	0.00	0.00	0.00	BETL
55010	0.00	0.00	0.00	0.00	0.00	BETL
55011	0.00	0.00	0.00	0.00	0.00	BETL
55012	0.00	0.00	0.00	0.00	0.00	BETL
55013	0.00	0.00	0.00	0.00	0.00	BETL
55014	0.00	0.00	0.00	0.00	0.00	BETL
55015	0.00	0.00	0.00	0.00	0.00	BETL
55016	0.00	0.00	0.00	0.00	0.00	BETL
55017	0.00	0.00	0.00	0.00	0.00	BETL
55018	0.00	0.00	0.00	0.00	0.00	BETL
55019	0.00	0.00	0.00	0.00	0.00	BETL
55020	0.00	0.00	0.00	0.00	0.00	BETL
55021	0.00	0.00	0.00	0.00	0.00	BETL
55022	0.00	0.00	0.00	0.00	0.00	BETL
55023	0.00	0.00	0.00	0.00	0.00	BETL
55024	0.00	0.00	0.00	0.00	0.00	BETL
55025	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.07	0.00	0.00	0.00	0.02	BETL
55002	0.17	0.00	0.00	0.00	0.04	BETL
55003	0.03	0.00	0.00	0.00	0.01	BETL
55004	0.00	0.00	0.00	0.00	0.00	BETL
55005	0.13	0.00	0.00	0.00	0.03	BETL
55006	0.07	0.00	0.00	0.00	0.02	BETL
55007	0.00	0.00	0.00	0.00	0.00	BETL
55008	0.03	0.00	0.00	0.00	0.01	BETL
55009	0.10	0.00	0.00	0.00	0.03	BETL
55010	0.00	0.00	0.00	0.00	0.00	BETL
55011	0.07	0.00	0.00	0.00	0.02	BETL
55012	0.23	0.00	0.00	0.00	0.06	BETL
55013	0.07	0.00	0.00	0.00	0.02	BETL
55014	0.03	0.00	0.00	0.00	0.01	BETL
55015	0.10	0.00	0.00	0.00	0.03	BETL
55016	0.07	0.00	0.00	0.00	0.02	BETL
55017	0.00	0.00	0.00	0.00	0.00	BETL
55018	0.13	0.00	0.00	0.00	0.03	BETL
55019	0.03	0.00	0.00	0.00	0.01	BETL
55020	0.00	0.00	0.00	0.00	0.00	BETL
55021	0.07	0.00	0.00	0.00	0.02	BETL
55022	0.00	0.00	0.00	0.00	0.00	BETL
55023	0.13	0.00	0.00	0.00	0.03	BETL
55024	0.03	0.00	0.00	0.00	0.01	BETL
55025	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Initial H X H trial in South Zone under Protected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.83	0.22	0.56	1.00	0.65	BETL
55002	0.67	0.45	0.22	1.00	0.58	BETL
55003	1.00	0.11	0.22	1.22	0.64	BETL
55004	0.67	0.34	0.00	1.11	0.53	BETL
55005	0.67	0.22	0.22	1.11	0.56	BETL
55006	0.50	0.22	0.22	1.00	0.49	BETL
55007	0.33	0.22	0.11	0.78	0.36	BETL
55008	0.83	0.34	0.22	1.56	0.74	BETL
55009	0.67	0.45	0.00	1.56	0.67	BETL
55010	1.00	0.34	0.22	2.00	0.89	BETL
55011	1.00	0.34	0.00	1.11	0.61	BETL
55012	0.83	0.34	0.11	2.00	0.82	BETL
55013	1.17	0.45	0.11	1.67	0.85	BETL
55014	0.33	0.34	0.00	1.56	0.56	BETL
55015	0.33	0.34	0.00	1.56	0.56	BETL
55016	0.50	0.22	0.33	1.33	0.60	BETL
55017	0.50	0.22	0.22	0.89	0.46	BETL
55018	0.33	0.22	0.22	1.67	0.61	BETL
55019	1.00	0.22	0.00	1.22	0.61	BETL
55020	1.00	0.34	0.11	1.44	0.72	BETL
55021	0.67	2.02	0.22	2.51	1.35	AETL
55022	0.50	0.78	0.22	1.44	0.74	BETL
55023	0.33	0.11	0.11	1.00	0.39	BETL
55024	1.50	0.34	0.33	1.33	0.88	BETL
55025	1.17	0.22	0.56	1.89	0.96	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55001	0.00	0.00	0.00	0.00	0.00	BETL
55002	0.00	0.00	0.00	0.00	0.00	BETL
55003	0.00	0.00	0.00	0.00	0.00	BETL
55004	0.00	0.00	0.00	0.00	0.00	BETL
55005	0.00	0.00	0.00	0.00	0.00	BETL
55006	0.00	0.00	0.00	0.00	0.00	BETL
55007	0.00	0.00	0.00	0.00	0.00	BETL
55008	0.00	0.00	0.00	0.00	0.00	BETL
55009	0.00	0.00	0.00	0.00	0.00	BETL
55010	0.00	0.00	0.00	0.00	0.00	BETL
55011	0.00	0.00	0.00	0.00	0.00	BETL
55012	0.00	0.00	0.00	0.00	0.00	BETL
55013	0.00	0.00	0.00	0.00	0.00	BETL
55014	0.00	0.00	0.00	0.00	0.00	BETL
55015	0.00	0.00	0.00	0.00	0.00	BETL
55016	0.00	0.00	0.00	0.00	0.00	BETL
55017	0.00	0.00	0.00	0.00	0.00	BETL
55018	0.00	0.00	0.00	0.00	0.00	BETL
55019	0.00	0.00	0.00	0.00	0.00	BETL
55020	0.00	0.00	0.00	0.00	0.00	BETL
55021	0.00	0.00	0.00	0.00	0.00	BETL
55022	0.00	0.00	0.00	0.00	0.00	BETL
55023	0.00	0.00	0.00	0.00	0.00	BETL
55024	0.00	0.00	0.00	0.00	0.00	BETL
55025	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%)/ 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55001	6.67	1.26	6.67	7.78	5.59	BETL
55002	8.33	1.18	13.33	10.00	8.21	BETL
55003	8.33	0.59	8.33	10.00	6.81	BETL
55004	3.33	0.55	8.33	10.00	5.55	BETL
55005	8.33	0.55	11.67	7.78	7.08	BETL
55006	6.67	1.93	6.67	7.78	5.76	BETL
55007	3.33	0.76	1.67	7.78	3.38	BETL
55008	8.33	0.59	1.67	11.11	5.42	BETL
55009	3.33	0.97	1.67	8.89	3.71	BETL
55010	6.67	0.80	8.33	14.44	7.56	BETL
55011	6.67	0.63	1.67	8.89	4.46	BETL
55012	5.00	0.63	5.00	14.44	6.27	BETL
55013	6.67	0.59	3.33	14.44	6.26	BETL
55014	8.33	0.55	3.33	12.22	6.11	BETL
55015	6.67	1.05	3.33	11.22	5.57	BETL
55016	5.00	0.55	8.33	10.00	5.97	BETL
55017	6.67	0.76	8.33	6.67	5.61	BETL
55018	6.67	0.59	1.67	10.00	4.73	BETL
55019	8.33	0.59	0.00	10.00	4.73	BETL
55020	8.33	0.80	5.00	12.22	6.59	BETL
55021	6.67	0.55	11.67	10.00	7.22	BETL
55022	5.00	1.18	1.67	8.89	4.18	BETL
55023	3.33	0.97	3.33	6.67	3.57	BETL
55024	8.33	1.26	5.00	8.89	5.87	BETL
55025	6.67	0.59	5.00	12.22	6.12	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55001	7.82	3.98	6.95	26.67	11.35	
55002	4.95	4.23	5.89	20.00	8.77	
55003	6.82	4.50	5.37	25.00	10.42	
55004	6.26	4.33	4.28	28.33	10.80	
55005	7.61	4.33	5.97	25.00	10.73	
55006	5.53	3.16	9.96	21.67	10.08	
55007	7.21	4.33	8.25	26.67	11.61	
55008	9.17	4.50	3.35	18.33	8.84	
55009	9.10	3.54	5.37	21.67	9.92	
55010	6.36	4.61	4.43	26.67	10.52	
55011	4.97	4.67	5.31	30.00	11.24	
55012	5.77	4.67	2.94	25.00	9.60	
55013	7.76	4.50	5.73	20.00	9.50	
55014	9.15	4.33	5.42	21.67	10.14	
55015	5.90	4.38	5.24	11.67	6.80	
55016	8.29	4.33	4.03	20.00	9.16	
55017	5.70	4.33	8.28	25.00	10.83	
55018	8.70	4.50	4.88	16.67	8.69	
55019	7.13	4.50	6.18	13.33	7.79	
55020	5.71	3.76	8.76	15.00	8.31	
55021	4.96	4.33	8.05	18.33	8.92	
55022	8.43	4.21	6.03	18.33	9.25	
55023	5.19	4.33	6.85	20.00	9.09	
55024	7.27	3.94	6.31	18.33	8.96	
55025	8.17	4.50	7.57	21.67	10.48	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55001	3.75	2.52	3.00	9.03	4.57	
55002	3.47	2.77	2.37	10.59	4.80	
55003	3.65	3.04	2.12	12.90	5.43	
55004	4.62	2.87	1.44	9.84	4.69	
55005	3.28	2.87	2.18	10.66	4.75	
55006	3.40	1.70	3.54	8.02	4.16	
55007	3.64	2.87	3.28	11.81	5.40	
55008	6.47	3.04	0.97	9.97	5.11	
55009	3.69	2.08	1.74	9.92	4.36	
55010	2.77	3.15	1.44	11.02	4.59	
55011	2.49	3.21	2.39	10.34	4.61	
55012	3.26	3.21	1.09	11.56	4.78	
55013	4.90	3.04	1.73	9.87	4.89	
55014	4.00	2.87	2.17	14.10	5.78	
55015	3.84	2.92	1.98	15.47	6.05	
55016	3.76	2.87	2.06	11.26	4.99	
55017	2.65	2.87	2.98	12.62	5.28	
55018	5.74	3.04	1.90	10.17	5.21	
55019	3.28	3.04	2.67	12.44	5.36	
55020	2.17	2.30	3.29	12.16	4.98	
55021	2.93	2.87	3.32	15.23	6.09	
55022	2.69	2.75	2.32	13.20	5.24	
55023	3.00	2.87	2.58	12.82	5.32	
55024	4.16	2.48	2.90	7.28	4.21	
55025	3.95	3.04	3.46	12.75	5.80	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Initial H X H trial in South Zone under Protected Conditions – No. of Sprays for Insect-Pests

Name of Entry	Number of sprays for Insect-pests					Remark
	GU	RA	CBE	WR	Mean	
55001	5.00	4.00	4.00	5.00	4.50	
55002	5.00	4.00	4.00	5.00	4.50	
55003	5.00	4.00	4.00	5.00	4.50	
55004	5.00	4.00	4.00	5.00	4.50	
55005	5.00	4.00	4.00	5.00	4.50	
55006	5.00	4.00	4.00	5.00	4.50	
55007	5.00	4.00	4.00	5.00	4.50	
55008	5.00	4.00	4.00	5.00	4.50	
55009	5.00	4.00	4.00	5.00	4.50	
55010	5.00	4.00	4.00	5.00	4.50	
55011	5.00	4.00	4.00	5.00	4.50	
55012	5.00	4.00	4.00	5.00	4.50	
55013	5.00	4.00	4.00	5.00	4.50	
55014	5.00	4.00	4.00	5.00	4.50	
55015	5.00	4.00	4.00	5.00	4.50	
55016	5.00	4.00	4.00	5.00	4.50	
55017	5.00	4.00	4.00	5.00	4.50	
55018	5.00	4.00	4.00	5.00	4.50	
55019	5.00	4.00	4.00	5.00	4.50	
55020	5.00	4.00	4.00	5.00	4.50	
55021	5.00	4.00	4.00	5.00	4.50	
55022	5.00	4.00	4.00	5.00	4.50	
55023	5.00	4.00	4.00	5.00	4.50	
55024	5.00	4.00	4.00	5.00	4.50	
55025	5.00	4.00	4.00	5.00	4.50	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Waranga

Reaction to Diseases

Table 1 (a) Initial Evaluation Trial of Intra-Hirsutum Hybrids – Irrigated (IET-Hybrids IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions															
			RARS, Warangal										LAM ,Guntur					
			ALS		CoLS		GM		RUST		TSV		CoLS		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
11	55001	RCH1196BGII	3.7	R	5.0	R	12.0	R	26.2	MR	2.0	R	26.7	MR	30.3	MR	26.5	MR
2	55002	Core 106 BGII	2.8	R	2.3	R	10.8	R	27.2	MR	3.7	R	11.3	R	11.3	R	28.1	MR
25	55003	NCS 9775 Bt2	3.5	R	3.7	R	10.7	R	27.8	MR	1.9	R	10.8	R	30.6	MR	27.8	MR
3	55004	RCH1199BGII	4.8	R	3.8	R	11.7	R	27.0	MR	0.5	R	27.0	MR	26.5	MR	26.0	MR
12	55005	KCH9266 BGII	3.0	R	3.7	R	12.7	R	27.7	MR	1.1	R	10.2	R	12.0	R	15.5	R
19	55006	C9333 BG-II	2.8	R	4.0	R	12.3	R	27.8	MR	2.0	R	28.5	MR	11.3	R	28.2	MR
6	55007	US 722 BGII	2.7	R	3.0	R	12.8	R	27.0	MR	1.5	R	10.2	R	28.8	MR	27.5	MR
17	55008	VPCH-456 BG II	3.5	R	4.5	R	14.3	R	26.3	MR	0.3	R	26.2	MR	33.5	MR	25.8	MR
1	55009	PCH 4996 Bt2	3.2	R	3.7	R	14.0	R	27.8	MR	0.7	R	26.1	MR	38.5	MR	10.1	R
20	55010	ARCH 6677 BGII	3.0	R	3.2	R	12.2	R	28.8	MR	1.4	R	33.5	MR	29.7	MR	14.3	R
5	55011	Super-112 BGII	3.3	R	3.7	R	12.5	R	27.0	MR	2.4	R	28.3	MR	31.3	MR	28.8	MR
4	55012	NBC 1821 BGII (ZC 1)	2.8	R	3.2	R	11.7	R	27.8	MR	3.5	R	28.0	MR	23.8	R	29.5	MR
15	55013	KSP 5328 BG II	3.3	R	3.3	R	11.7	R	27.0	MR	2.8	R	10.3	R	26.8	MR	28.8	MR
8	55014	VSCH 369 BGII (ZC 2)	2.7	R	4.2	R	12.3	R	27.8	MR	3.0	R	29.8	MR	30.0	MR	27.8	MR
21	55015	RAHH 1002 BGII	3.5	R	5.0	R	12.5	R	27.8	MR	2.3	R	24.2	R	27.3	MR	27.3	MR
16	55016	DC5107 BGII	3.2	R	3.8	R	12.2	R	27.5	MR	0.4	R	11.2	R	11.5	R	30.5	MR
14	55018	US 723 BGII	2.5	R	3.2	R	12.0	R	27.3	MR	0.6	R	8.8	R	28.3	MR	11.0	R
7	55019	KCH9265 BGII	2.3	R	3.3	R	12.3	R	28.5	MR	2.2	R	7.3	R	27.8	MR	28.5	MR
10	55019	GCH 1107 BGII	2.8	R	4.5	R	12.7	R	27.8	MR	2.7	R	20.5	R	14.5	R	13.4	R
23	55020	8811-9 BGII	2.8	R	5.5	R	12.7	R	26.7	MR	2.0	R	28.8	MR	30.5	MR	29.5	MR
9	55021	RAHH 1004 BGII	3.2	R	4.0	R	13.5	R	27.3	MR	2.0	R	26.5	MR	27.0	MR	20.3	R
18	55022	ECH 999 BG II	3.8	R	5.8	R	13.8	R	28.3	MR	1.7	R	28.5	MR	26.8	MR	28.5	MR
24	55023	KCH9264 BGII	3.0	R	3.8	R	12.5	R	29.0	MR	3.0	R	7.8	R	28.3	MR	27.5	MR
13	55024	DGHH- 4854 BGII	2.5	R	3.2	R	11.3	R	29.0	MR	4.1	R	26.5	MR	30.3	MR	29.5	MR
22	55025	PRCH 7992 Bt2	3.7	R	4.3	R	12.2	R	27.8	MR	3.9	R	29.3	MR	26.5	MR	28.3	MR

Table 1 (b): Initial Evaluation Trial of Intra-Hirsutum Hybrids – Irrigated (IET-Hybrids IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions									
			CICR RS, Coimbatore									
			ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
11	55001	RCH1196BGII	5.3	R	0.0	DF	1.0	R	1.8	R	7.3	R
2	55002	Core 106 BGII	6.5	R	0.0	DF	0.0	DF	1.8	R	6.3	R
25	55003	NCS 9775 Bt2	5.5	R	0.0	DF	0.0	DF	0.0	DF	8.3	R
3	55004	RCH1199BGII	4.7	R	0.0	DF	0.0	DF	0.0	DF	6.5	R
12	55005	KCH9266 BGII	5.0	R	0.0	DF	1.2	R	1.9	R	5.5	R
19	55006	C9333 BG-II	3.8	R	0.0	DF	1.2	R	1.1	R	5.3	R
6	55007	US 722 BGII	5.0	R	0.0	DF	0.0	DF	0.0	DF	5.8	R
17	55008	VPCH-456 BG II	6.5	R	0.0	DF	0.0	DF	1.1	R	9.2	R
1	55009	PCH 4996 Bt2	4.8	R	0.0	DF	0.5	R	1.7	R	6.8	R
20	55010	ARCH 6677 BGII	6.8	R	0.0	DF	1.5	R	2.7	R	5.8	R
5	55011	Super-112 BGII	4.2	R	0.0	DF	0.0	DF	0.0	DF	8.5	R
4	55012	NBC 1821 BGII (ZC 1)	6.5	R	0.0	DF	0.0	DF	1.8	R	7.0	R
15	55013	KSP 5328 BG II	4.9	R	0.0	DF	1.0	R	0.8	R	7.3	R
8	55014	VSCH 369 BGII (ZC 2)	7.2	R	0.0	DF	0.7	R	0.0	DF	6.8	R
21	55015	RAHH 1002 BGII	4.5	R	0.0	DF	1.3	R	0.0	DF	8.0	R
16	55016	DC5107 BGII	5.5	R	0.0	DF	0.0	DF	1.8	R	6.5	R
14	55018	US 723 BGII	5.3	R	0.0	DF	0.0	DF	0.0	DF	5.7	R
7	55019	KCH9265 BGII	6.5	R	0.0	DF	0.0	DF	0.0	DF	8.2	R
10	55019	GCH 1107 BGII	6.2	R	0.0	DF	1.7	R	0.0	DF	6.7	R
23	55020	8811-9 BGII	5.2	R	0.0	DF	0.3	R	0.7	R	7.2	R
9	55021	RAHH 1004 BGII	6.2	R	0.0	DF	0.3	R	4.7	R	7.2	R
18	55022	ECH 999 BG II	4.2	R	0.0	DF	0.3	R	0.0	DF	8.0	R
24	55023	KCH9264 BGII	5.8	R	0.0	DF	1.2	R	4.4	R	6.2	R
13	55024	DGHH- 4854 BGII	4.2	R	0.0	DF	0.5	R	3.4	R	6.0	R
22	55025	PRCH 7992 Bt2	4.7	R	0.0	DF	0.5	R	0.0	DF	7.2	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pest

Table: Initial H X H trial in South Zone under Unprotected Conditions –Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	4.67	2.20	6.96	8.80	5.66	BETL
55002	6.40	2.20	6.02	7.33	5.49	BETL
55003	5.43	2.34	6.16	7.40	5.33	BETL
55004	6.27	2.20	5.69	8.40	5.64	BETL
55005	5.23	1.95	8.07	7.13	5.60	BETL
55006	5.97	2.10	5.58	7.53	5.30	BETL
55007	6.23	2.37	5.44	8.60	5.66	BETL
55008	5.70	2.57	8.42	7.73	6.11	BETL
55009	5.27	3.77	7.67	7.73	6.11	BETL
55010	5.57	2.57	9.36	7.33	6.21	BETL
55011	7.00	1.96	7.56	8.73	6.31	BETL
55012	5.50	2.40	8.02	9.13	6.26	BETL
55013	8.57	2.23	6.56	8.20	6.39	BETL
55014	5.07	3.31	10.07	10.33	7.19	AETL
55015	5.97	2.42	11.29	8.00	6.92	AETL
55016	5.50	2.18	7.87	8.20	5.94	BETL
55017	5.77	2.18	5.58	7.80	5.33	BETL
55018	6.80	2.10	7.93	7.93	6.19	BETL
55019	6.93	2.39	7.84	7.67	6.21	BETL
55020	5.47	2.65	10.60	8.40	6.78	BETL
55021	6.30	2.36	7.82	7.13	5.90	BETL
55022	7.60	2.40	7.40	7.87	6.32	BETL
55023	5.60	2.74	9.53	7.67	6.38	BETL
55024	5.37	2.73	9.69	9.20	6.75	BETL
55025	7.23	3.57	10.60	8.53	7.48	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	7.50	3.59	0.47	3.60	3.79	BETL
55002	8.33	8.52	1.07	2.73	5.16	BETL
55003	9.30	6.63	0.53	4.53	5.25	BETL
55004	8.80	5.82	0.93	4.40	4.99	BETL
55005	9.63	7.40	0.93	3.80	5.44	BETL
55006	10.93	7.51	1.20	3.67	5.83	BETL
55007	10.53	7.25	1.40	3.73	5.73	BETL
55008	8.00	5.24	1.07	2.60	4.23	BETL
55009	9.40	5.70	0.53	4.27	4.97	BETL
55010	9.50	13.90	0.33	3.93	6.92	AETL
55011	10.77	4.38	1.53	3.20	4.97	BETL
55012	9.17	4.59	1.07	4.33	4.79	BETL
55013	8.47	7.50	1.60	4.00	5.39	BETL
55014	9.20	7.39	2.13	4.40	5.78	BETL
55015	10.17	3.41	2.80	3.73	5.03	BETL
55016	9.20	7.74	4.80	4.27	6.50	AETL
55017	8.97	7.47	3.20	5.07	6.18	AETL
55018	9.97	7.39	2.53	4.73	6.16	AETL
55019	9.33	7.75	1.73	5.07	5.97	BETL
55020	10.53	6.52	2.80	3.87	5.93	BETL
55021	9.47	10.22	7.47	3.73	7.72	AETL
55022	9.07	7.06	5.27	4.07	6.37	AETL
55023	9.37	10.26	4.40	4.33	7.09	AETL
55024	8.23	7.77	2.53	4.80	5.83	BETL
55025	11.33	8.52	4.80	5.00	7.41	AETL

*GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55001	I	II	I	I	I	
55002	II	II	I	II	II	
55003	III	II	I	II	II	
55004	II	II	I	II	II	
55005	III	II	I	II	II	
55006	IV	II	I	II	II	
55007	IV	II	I	II	II	
55008	III	II	I	III	II	
55009	III	II	I	II	II	
55010	III	II	I	II	II	
55011	IV	I	I	II	II	
55012	III	II	I	III	II	
55013	III	II	I	II	II	
55014	III	II	I	II	II	
55015	IV	II	I	II	II	
55016	III	I	I	II	II	
55017	II	III	I	II	II	
55018	III	II	I	III	II	
55019	III	II	I	III	II	
55020	IV	II	I	II	II	
55021	IV	III	I	II	III	
55022	III	III	I	III	III	
55023	III	II	I	II	II	
55024	III	II	I	III	II	
55025	IV	III	I	II	III	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	6.43	4.88	3.04	13.60	6.99	BETL
55002	7.33	5.72	1.76	11.87	6.67	BETL
55003	8.47	4.20	0.80	12.53	6.50	BETL
55004	8.33	4.50	2.11	14.13	7.27	BETL
55005	7.97	5.11	2.22	17.73	8.26	BETL
55006	6.80	4.36	2.60	20.07	8.46	BETL
55007	8.57	5.88	2.31	15.73	8.12	BETL
55008	6.17	5.90	2.76	16.27	7.77	BETL
55009	7.90	4.23	1.36	13.53	6.75	BETL
55010	8.00	7.75	2.76	13.40	7.98	BETL
55011	9.10	9.00	2.20	17.67	9.49	BETL
55012	8.57	6.32	0.87	19.53	8.82	BETL
55013	7.37	6.34	2.31	19.87	8.97	BETL
55014	7.43	4.69	1.82	14.67	7.15	BETL
55015	9.13	7.35	2.51	15.67	8.67	BETL
55016	8.07	4.67	3.13	15.87	7.94	BETL
55017	8.93	7.05	2.11	15.33	8.36	BETL
55018	9.27	5.09	2.49	14.80	7.91	BETL
55019	8.90	6.28	2.16	19.67	9.25	BETL
55020	8.80	5.04	2.49	16.33	8.16	BETL
55021	9.50	5.93	1.60	14.47	7.87	BETL
55022	8.53	6.10	1.60	13.33	7.39	BETL
55023	7.93	5.42	1.56	15.00	7.48	BETL
55024	9.27	7.78	3.82	23.87	11.18	BETL
55025	8.57	5.80	2.58	15.20	8.04	BETL

*GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.33	0.96	2.20	0.47	0.99	BETL
55002	0.93	0.69	1.60	0.60	0.96	BETL
55003	1.00	1.12	0.20	0.93	0.81	BETL
55004	1.20	0.69	0.40	0.87	0.79	BETL
55005	1.07	1.48	0.67	0.93	1.04	BETL
55006	0.47	0.79	0.47	0.87	0.65	BETL
55007	1.23	0.99	1.07	0.93	1.06	BETL
55008	1.03	1.37	0.60	0.73	0.93	BETL
55009	0.53	1.34	0.87	0.53	0.82	BETL
55010	0.93	1.64	0.93	0.53	1.01	BETL
55011	0.73	0.76	0.80	0.73	0.76	BETL
55012	1.13	0.69	1.07	0.60	0.87	BETL
55013	0.97	0.96	0.93	0.53	0.85	BETL
55014	1.50	1.23	0.80	0.80	1.08	BETL
55015	1.17	0.92	1.07	0.67	0.95	BETL
55016	1.07	0.72	2.27	0.73	1.20	BETL
55017	1.30	1.25	2.47	1.00	1.50	BETL
55018	0.77	0.89	3.20	0.80	1.42	BETL
55019	0.80	0.69	1.73	1.40	1.16	BETL
55020	0.73	0.83	1.93	0.47	0.99	BETL
55021	0.43	1.14	1.67	0.73	0.99	BETL
55022	1.43	1.43	1.87	0.67	1.35	BETL
55023	1.10	0.85	0.67	0.73	0.84	BETL
55024	1.10	1.32	0.33	0.87	0.90	BETL
55025	0.67	0.85	0.40	0.73	0.66	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions –Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.37	1.68	0.07	0.07	0.54	
55002	0.23	1.12	0.00	0.07	0.36	
55003	0.00	0.90	0.07	0.27	0.31	
55004	0.07	1.22	0.13	0.13	0.39	
55005	0.17	1.57	0.00	0.13	0.47	
55006	0.23	1.00	0.13	0.20	0.39	
55007	0.03	2.12	0.00	0.07	0.56	
55008	0.17	1.40	0.00	0.07	0.41	
55009	0.07	1.68	0.00	0.13	0.47	
55010	0.10	1.57	0.00	0.07	0.43	
55011	0.10	0.84	0.00	0.13	0.27	
55012	0.17	1.79	0.13	0.13	0.56	
55013	0.27	0.90	0.00	0.20	0.34	
55014	0.17	1.07	0.07	0.27	0.39	
55015	0.00	1.40	0.00	0.27	0.42	
55016	0.20	1.84	0.00	0.00	0.51	
55017	0.03	1.12	0.00	0.40	0.39	
55018	0.27	1.34	0.07	0.20	0.47	
55019	0.13	1.07	0.27	0.33	0.45	
55020	0.03	1.23	0.00	0.07	0.33	
55021	0.30	1.45	0.13	0.13	0.51	
55022	0.20	1.01	0.00	0.13	0.34	
55023	0.20	0.62	0.00	0.13	0.24	
55024	0.17	1.51	0.13	0.27	0.52	
55025	0.17	0.84	0.00	0.20	0.30	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.00	0.11	0.00	0.00	0.03	BETL
55002	0.00	0.00	0.00	0.00	0.00	BETL
55003	0.00	0.11	0.00	0.00	0.03	BETL
55004	0.00	0.11	0.00	0.00	0.03	BETL
55005	0.00	0.22	0.00	0.00	0.06	BETL
55006	0.00	0.11	0.00	0.00	0.03	BETL
55007	0.00	0.11	0.00	0.00	0.03	BETL
55008	0.00	0.00	0.00	0.00	0.00	BETL
55009	0.00	0.22	0.00	0.00	0.06	BETL
55010	0.00	0.00	0.00	0.00	0.00	BETL
55011	0.00	0.11	0.00	0.00	0.03	BETL
55012	0.00	0.22	0.00	0.00	0.06	BETL
55013	0.00	0.11	0.00	0.00	0.03	BETL
55014	0.00	0.11	0.00	0.00	0.03	BETL
55015	0.00	0.11	0.00	0.00	0.03	BETL
55016	0.00	0.22	0.00	0.00	0.06	BETL
55017	0.00	0.00	0.00	0.00	0.00	BETL
55018	0.00	0.11	0.00	0.00	0.03	BETL
55019	0.00	0.11	0.00	0.00	0.03	BETL
55020	0.00	0.11	0.00	0.00	0.03	BETL
55021	0.00	0.11	0.00	0.00	0.03	BETL
55022	0.00	0.11	0.00	0.00	0.03	BETL
55023	0.00	0.11	0.00	0.00	0.03	BETL
55024	0.00	0.11	0.00	0.00	0.03	BETL
55025	0.00	0.11	0.00	0.00	0.03	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.00	0.00	0.00	0.00	0.00	BETL
55002	0.00	0.00	0.00	0.00	0.00	BETL
55003	0.00	0.00	0.00	0.00	0.00	BETL
55004	0.00	0.00	0.00	0.00	0.00	BETL
55005	0.00	0.00	0.00	0.00	0.00	BETL
55006	0.00	0.00	0.00	0.00	0.00	BETL
55007	0.00	0.00	0.00	0.00	0.00	BETL
55008	0.00	0.00	0.00	0.00	0.00	BETL
55009	0.00	0.00	0.00	0.00	0.00	BETL
55010	0.00	0.00	0.00	0.00	0.00	BETL
55011	0.00	0.00	0.00	0.00	0.00	BETL
55012	0.00	0.00	0.00	0.00	0.00	BETL
55013	0.00	0.00	0.00	0.00	0.00	BETL
55014	0.00	0.00	0.00	0.00	0.00	BETL
55015	0.00	0.00	0.00	0.00	0.00	BETL
55016	0.00	0.00	0.00	0.00	0.00	BETL
55017	0.00	0.00	0.00	0.00	0.00	BETL
55018	0.00	0.00	0.00	0.00	0.00	BETL
55019	0.00	0.00	0.00	0.00	0.00	BETL
55020	0.00	0.00	0.00	0.00	0.00	BETL
55021	0.00	0.00	0.00	0.00	0.00	BETL
55022	0.00	0.00	0.00	0.00	0.00	BETL
55023	0.00	0.00	0.00	0.00	0.00	BETL
55024	0.00	0.00	0.00	0.00	0.00	BETL
55025	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55001	0.20	0.56	0.00	0.00	0.19	BETL
55002	0.67	0.44	0.00	0.00	0.28	BETL
55003	0.57	0.67	0.00	0.00	0.31	BETL
55004	0.70	0.78	0.00	0.00	0.37	BETL
55005	0.47	0.56	0.00	0.00	0.26	BETL
55006	0.63	0.89	0.00	0.00	0.38	BETL
55007	0.63	1.00	0.00	0.00	0.41	BETL
55008	0.10	1.11	0.00	0.00	0.30	BETL
55009	0.63	1.22	0.00	0.00	0.46	BETL
55010	0.57	1.22	0.00	0.00	0.45	BETL
55011	0.60	1.00	0.00	0.00	0.40	BETL
55012	0.90	0.78	0.00	0.00	0.42	BETL
55013	0.70	0.78	0.00	0.00	0.37	BETL
55014	0.67	1.00	0.00	0.00	0.42	BETL
55015	0.00	0.56	0.00	0.00	0.14	BETL
55016	0.80	1.00	0.00	0.00	0.45	BETL
55017	0.00	1.00	0.00	0.00	0.25	BETL
55018	0.93	0.44	0.00	0.00	0.34	BETL
55019	0.53	0.67	0.00	0.00	0.30	BETL
55020	0.20	0.78	0.00	0.00	0.24	BETL
55021	0.50	0.56	0.00	0.00	0.26	BETL
55022	0.00	1.22	0.00	0.00	0.31	BETL
55023	0.53	1.33	0.00	0.00	0.47	BETL
55024	0.80	1.00	0.00	0.00	0.45	BETL
55025	0.27	0.78	0.00	0.00	0.26	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55001	3.83	2.50	1.33	5.00	3.17	AETL
55002	3.67	2.28	1.00	8.00	3.74	AETL
55003	4.00	1.83	0.33	7.00	3.29	AETL
55004	5.67	2.06	1.00	4.00	3.18	AETL
55005	3.00	1.94	0.33	6.33	2.90	AETL
55006	4.33	2.06	0.33	8.33	3.76	AETL
55007	3.17	1.94	0.33	6.33	2.94	AETL
55008	5.00	1.54	0.00	6.67	3.30	AETL
55009	4.00	1.28	0.33	5.33	2.74	AETL
55010	4.00	1.72	0.00	5.00	2.68	AETL
55011	2.67	1.28	0.00	5.00	2.24	AETL
55012	4.00	2.28	0.67	8.67	3.90	AETL
55013	5.00	1.28	1.00	6.33	3.40	AETL
55014	5.17	1.50	0.33	2.67	2.42	AETL
55015	3.17	1.50	1.00	6.33	3.00	AETL
55016	4.33	2.28	0.00	5.67	3.07	AETL
55017	3.00	1.50	0.00	5.67	2.54	AETL
55018	3.17	1.83	1.00	7.33	3.33	AETL
55019	5.00	2.28	0.33	9.00	4.15	AETL
55020	4.67	2.06	0.33	6.00	3.26	AETL
55021	3.67	2.06	0.00	7.67	3.35	AETL
55022	3.67	1.50	0.33	7.67	3.29	AETL
55023	3.00	2.72	0.00	7.67	3.35	AETL
55024	4.67	1.94	0.00	7.00	3.40	AETL
55025	4.00	2.50	0.00	6.00	3.13	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Initial H X H trial in South Zone under Unprotected Conditions – Green Boll
Damage due to ABW/SBW/TC**

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55001	0.00	0.11	0.00	0.00	0.03	BETL
55002	0.00	0.22	0.00	0.00	0.06	BETL
55003	0.00	0.33	0.00	0.00	0.08	BETL
55004	0.00	0.22	0.00	0.00	0.06	BETL
55005	0.00	0.22	0.00	0.00	0.06	BETL
55006	0.00	0.33	0.00	0.00	0.08	BETL
55007	0.00	0.44	0.00	0.00	0.11	BETL
55008	0.00	0.56	0.00	0.00	0.14	BETL
55009	0.00	0.56	0.00	0.00	0.14	BETL
55010	0.00	0.67	0.00	0.00	0.17	BETL
55011	0.00	0.44	0.00	0.00	0.11	BETL
55012	0.00	0.22	0.00	0.00	0.06	BETL
55013	0.00	0.33	0.00	0.00	0.08	BETL
55014	0.00	0.44	0.00	0.00	0.11	BETL
55015	0.00	0.22	0.00	0.00	0.06	BETL
55016	0.00	0.33	0.00	0.00	0.08	BETL
55017	0.00	0.56	0.00	0.00	0.14	BETL
55018	0.00	0.11	0.00	0.00	0.03	BETL
55019	0.00	0.22	0.00	0.00	0.06	BETL
55020	0.00	0.33	0.00	0.00	0.08	BETL
55021	0.00	0.22	0.00	0.00	0.06	BETL
55022	0.00	0.56	0.00	0.00	0.14	BETL
55023	0.00	0.67	0.00	0.00	0.17	BETL
55024	0.00	0.44	0.00	0.00	0.11	BETL
55025	0.00	0.22	0.00	0.00	0.06	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55001	40.00	5.34	15.00	46.67	26.75	AETL
55002	31.67	5.04	15.00	60.00	27.93	AETL
55003	38.33	4.02	15.00	40.00	24.34	AETL
55004	40.00	4.63	10.00	30.00	21.16	AETL
55005	26.67	4.29	10.00	43.33	21.07	AETL
55006	40.00	4.99	5.00	46.67	24.16	AETL
55007	28.33	3.69	5.00	40.00	19.26	AETL
55008	41.67	3.41	20.00	50.00	28.77	AETL
55009	33.33	4.74	10.00	43.33	22.85	AETL
55010	31.67	4.02	5.00	23.33	16.00	AETL
55011	33.33	4.07	10.00	36.67	21.02	AETL
55012	35.00	4.13	15.00	56.67	27.70	AETL
55013	33.33	3.96	20.00	43.33	25.16	AETL
55014	36.67	3.85	10.00	40.00	22.63	AETL
55015	28.33	4.96	10.00	30.00	18.32	AETL
55016	30.00	5.35	10.00	46.67	23.00	AETL
55017	25.00	4.79	10.00	46.67	21.62	AETL
55018	20.00	4.01	5.00	43.33	18.09	AETL
55019	33.33	3.68	15.00	53.33	26.34	AETL
55020	35.00	4.76	5.00	50.00	23.69	AETL
55021	35.00	4.73	5.00	53.33	24.52	AETL
55022	33.33	4.68	0.00	53.33	22.84	AETL
55023	25.00	3.84	0.00	60.00	22.21	AETL
55024	36.67	4.62	10.00	60.00	27.82	AETL
55025	30.00	3.84	5.00	50.00	22.21	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55001	51.36	11.81	21.85	60.00	36.26	
55002	44.78	11.43	22.27	75.00	38.37	
55003	56.34	8.74	13.81	65.00	35.97	
55004	58.91	11.43	17.89	50.00	34.56	
55005	44.62	9.58	13.10	75.00	35.58	
55006	60.25	8.24	15.81	60.00	36.07	
55007	45.81	8.10	11.25	65.00	32.54	
55008	51.37	7.90	10.60	65.00	33.72	
55009	49.85	10.42	22.60	75.00	39.47	
55010	63.17	8.32	24.03	55.00	37.63	
55011	41.20	8.49	18.09	70.00	34.44	
55012	46.17	8.32	15.76	60.00	32.56	
55013	39.88	8.15	20.92	40.00	27.24	
55014	43.51	7.98	14.72	50.00	29.05	
55015	50.15	11.17	14.30	45.00	30.15	
55016	62.74	12.52	21.39	65.00	40.41	
55017	66.85	10.84	10.17	70.00	39.47	
55018	57.25	8.13	18.37	50.00	33.44	
55019	44.83	8.13	17.21	75.00	36.29	
55020	50.51	11.83	15.84	60.00	34.54	
55021	49.63	12.16	10.54	65.00	34.33	
55022	40.87	9.47	12.29	60.00	30.66	
55023	42.66	8.13	8.46	50.00	27.31	
55024	52.88	9.14	8.40	60.00	32.61	
55025	47.21	8.13	5.07	70.00	32.60	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55001	22.85	9.17	7.12	25.25	16.10	
55002	22.36	8.79	10.18	38.00	19.83	
55003	30.57	6.10	6.46	27.18	17.58	
55004	29.51	8.79	6.14	18.09	15.63	
55005	33.11	6.94	6.04	29.85	18.98	
55006	40.25	5.59	7.73	29.81	20.85	
55007	20.86	5.46	4.01	28.02	14.59	
55008	24.36	5.26	5.49	23.02	14.53	
55009	22.98	7.78	12.37	24.62	16.94	
55010	39.74	5.68	11.07	26.26	20.69	
55011	22.54	5.85	9.56	21.18	14.78	
55012	30.25	5.68	6.81	20.20	15.73	
55013	22.71	5.51	9.99	15.84	13.51	
55014	26.54	5.34	7.50	21.05	15.11	
55015	20.26	8.53	6.18	21.00	13.99	
55016	33.67	9.88	11.34	24.14	19.76	
55017	30.78	8.20	3.66	23.65	16.57	
55018	29.51	5.49	6.39	19.59	15.24	
55019	21.87	5.49	13.78	27.36	17.12	
55020	25.97	9.18	6.30	22.34	15.95	
55021	20.11	9.52	4.84	19.90	13.59	
55022	21.53	6.83	5.09	21.80	13.81	
55023	20.68	5.49	3.58	21.00	12.69	
55024	26.74	6.50	2.77	23.23	14.81	
55025	19.33	9.49	2.10	25.87	14.20	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 1 (c) Initial Evaluation Trial of Intra-Hirsutum Hybrids – Irrigated (IET-Hybrids IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions															
			RARS, Warangal										Lam, Guntur					
			ALS		CoLS		GM		Rust		TSV		CoLS		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
11	55001	RCH1196BGII	6.0	R	5.5	R	27.0	MR	45.5	MR	6.3	R	29.2	MR	34.5	MR	28.3	MR
2	55002	Core 106 BGII	6.5	R	8.0	R	20.0	R	41.5	MR	15.0	R	15.8	R	15.0	R	29.5	MR
25	55003	NCS 9775 Bt2	6.0	R	6.5	R	18.0	R	41.5	MR	10.0	R	11.6	R	33.8	MR	28.3	MR
3	55004	RCH1199BGII	6.0	R	7.0	R	16.0	R	48.5	MR	7.5	R	29.0	MR	28.3	MR	29.0	MR
12	55005	KCH9266 BGII	5.0	R	6.0	R	12.0	R	17.0	R	8.8	R	13.6	R	15.3	R	17.3	R
19	55006	C9333 BG-II	3.5	R	4.5	R	13.5	R	36.0	MR	10.0	R	30.5	MR	12.5	R	31.5	MR
6	55007	US 722 BGII	6.0	R	6.0	R	15.0	R	25.5	MR	8.8	R	11.0	R	29.0	MR	28.0	MR
17	55008	VPCH-456 BG II	16.5	R	13.0	R	12.5	R	17.5	R	13.8	R	32.0	MR	35.0	MR	26.5	MR
1	55009	PCH 4996 Bt2	5.5	R	7.0	R	13.0	R	17.5	R	12.5	R	26.8	MR	40.3	MR	12.0	R
20	55010	ARCH 6677 BGII	5.5	R	7.0	R	16.0	R	34.0	MR	7.5	R	35.8	MR	30.3	MR	17.5	R
5	55011	Super-112 BGII	6.0	R	7.0	R	15.5	R	42.5	MR	10.0	R	30.0	MR	34.0	MR	36.0	MR
4	55012	NBC 1821 BGII (ZC 1)	6.0	R	7.5	R	12.5	R	36.5	MR	17.5	R	27.2	MR	26.8	MR	31.3	MR
15	55013	KSP 5328 BG II	7.5	R	7.0	R	16.0	R	31.0	MR	16.3	R	12.8	R	27.8	MR	29.3	MR
8	55014	VSCH 369 BGII (ZC 2)	6.5	R	7.0	R	14.5	R	36.0	MR	18.8	R	30.8	MR	30.5	MR	28.3	MR
21	55015	RAHH 1002 BGII	6.0	R	7.0	R	13.0	R	39.0	MR	6.3	R	26.8	MR	28.5	MR	29.2	MR
16	55016	DC5107 BGII	6.5	R	8.0	R	14.0	R	32.0	MR	5.0	R	12.5	R	12.8	R	33.0	MR
14	55018	US 723 BGII	8.0	R	5.5	R	14.0	R	25.0	R	6.3	R	9.5	R	31.5	MR	13.0	R
7	55019	KCH9265 BGII	9.5	R	10.0	R	20.0	R	31.0	MR	13.8	R	8.0	R	29.8	MR	26.8	MR
10	55019	GCH 1107 BGII	9.5	R	9.0	R	12.0	R	32.5	MR	18.8	R	22.0	R	16.5	R	15.5	R
23	55020	8811-9 BGII	8.0	R	10.0	R	12.5	R	33.0	MR	11.3	R	30.3	MR	34.8	MR	31.3	MR
9	55021	RAHH 1004 BGII	6.0	R	6.0	R	12.0	R	32.0	MR	8.8	R	29.3	MR	28.0	MR	27.0	MR
18	55022	ECH 999 BG II	6.5	R	7.0	R	13.0	R	29.0	MR	13.8	R	31.3	MR	28.8	MR	30.5	MR
24	55023	KCH9264 BGII	6.0	R	7.0	R	12.0	R	15.5	R	10.0	R	9.62	R	30.5	MR	28.5	MR
13	55024	DGHH- 4854 BGII	6.0	R	7.5	R	14.0	R	24.0	R	6.3	R	29.5	MR	33.5	MR	28.5	MR
22	55025	PRCH 7992 Bt2	7.0	R	6.5	R	13.0	R	29.0	MR	13.8	R	30.3	MR	24.5	MR	29.3	MR

Table 1 (d) Initial Evaluation Trial of Intra-Hirsutum Hybrids – Irrigated (IET-Hybrids IRR) under unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions									
			CICR RS Coimbatore									
			ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
11	55001	RCH1196BGII	7.0	R	0.0	DF	2.5	R	3.4	R	8.0	R
2	55002	Core 106 BGII	5.5	R	0.0	DF	0.0	DF	0.0	DF	6.0	R
25	55003	NCS 9775 Bt2	4.5	R	0.0	DF	3.0	R	0.0	DF	3.0	R
3	55004	RCH1199BGII	6.5	R	0.0	DF	1.5	R	0.0	DF	4.0	R
12	55005	KCH9266 BGII	4.5	R	0.0	DF	0.0	DF	0.0	DF	4.5	R
19	55006	C9333 BG-II	5.0	R	0.0	DF	3.0	R	0.0	DF	3.5	R
6	55007	US 722 BGII	4.5	R	0.0	DF	0.0	DF	0.0	DF	5.0	R
17	55008	VPCH-456 BG II	5.0	R	0.0	DF	3.0	R	0.5	R	6.5	R
1	55009	PCH 4996 Bt2	6.5	R	0.0	DF	2.5	R	0.0	DF	8.5	R
20	55010	ARCH 6677 BGII	7.5	R	0.0	DF	0.0	DF	0.0	DF	8.0	R
5	55011	Super-112 BGII	4.5	R	0.0	DF	1.5	R	0.0	DF	7.0	R
4	55012	NBC 1821 BGII (ZC 1)	6.6	R	0.0	DF	2.0	R	0.0	DF	8.0	R
15	55013	KSP 5328 BG II	6.0	R	0.0	DF	2.0	R	3.2	R	7.0	R
8	55014	VSCH 369 BGII (ZC 2)	4.0	R	0.0	DF	0.0	DF	4.5	R	7.0	R
21	55015	RAHH 1002 BGII	4.5	R	0.0	DF	2.0	R	0.0	DF	4.5	R
16	55016	DC5107 BGII	6.0	R	0.0	DF	3.0	R	0.0	DF	5.0	R
14	55018	US 723 BGII	6.5	R	0.0	DF	0.0	DF	0.0	DF	7.5	R
7	55019	KCH9265 BGII	5.5	R	0.0	DF	1.5	R	0.0	DF	8.5	R
10	55019	GCH 1107 BGII	4.0	R	0.0	DF	2.5	R	0.5	R	5.0	R
23	55020	8811-9 BGII	5.0	R	0.0	DF	0.0	DF	0.0	DF	6.0	R
9	55021	RAHH 1004 BGII	6.0	R	0.0	DF	2.0	R	0.0	DF	4.5	R
18	55022	ECH 999 BG II	4.5	R	0.0	DF	0.0	DF	2.1	R	7.5	R
24	55023	KCH9264 BGII	6.0	R	0.0	DF	1.5	R	0.0	DF	5.0	R
13	55024	DGHH- 4854 BGII	5.5	R	0.0	DF	3.0	R	0.6	R	6.5	R
22	55025	PRCH 7992 Bt2	6.0	R	0.0	DF	1.5	R	0.0	DF	6.0	R

Table 1 (e) Initial Evaluation Trial of Intra-Hirsutum Hybrids – Irrigated (IET-Hybrids IRR) under Protected and Unprotected conditions

Co de -I	Code- II	Entries	Average PDI & Disease Reaction (DR): Protected conditions												Average PDI & Disease Reaction (DR): Unprotected conditions							
			Ankur, Warangal				Kaveri, Hyderabad								Kaveri, Hyderabad							
			TSV		HLS		GM		ALS		TSV		BLB		GM		ALS		TSV		BLB	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
11	55001	RCH1196BGII	8.9	R	14.4	R	4.4	R	10.4	R	1.1	R	4.8	R	11.3	R	13.8	R	4.9	R	8.0	R
2	55002	Core 106 BGII	8.7	R	10.6	R	6.9	R	9.4	R	2.4	R	5.9	R	15.0	R	16.0	R	6.8	R	10.5	R
25	55003	NCS 9775 Bt2	13.5	R	17.9	R	6.0	R	9.3	R	2.6	R	5.6	R	13.8	R	14.5	R	7.0	R	11.4	R
3	55004	RCH1199BGII	16.0	R	27.0	MR	4.8	R	9.3	R	2.6	R	4.1	R	13.8	R	15.8	R	6.3	R	10.2	R
12	55005	KCH9266 BGII	15.0	R	13.4	R	5.0	R	6.9	R	0.6	R	2.8	R	12.3	R	13.5	R	4.5	R	7.8	R
19	55006	C9333 BG-II	18.3	R	17.1	R	9.5	R	8.9	R	3.4	R	5.0	R	15.0	R	15.3	R	6.8	R	9.6	R
6	55007	US 722 BGII	22.6	R	16.6	R	6.3	R	10.6	R	1.7	R	5.8	R	14.1	R	17.5	R	5.3	R	10.5	R
17	55008	VPCH-456 BG II	22.9	R	11.4	R	8.9	R	9.7	R	1.9	R	4.9	R	16.0	R	13.5	R	6.3	R	9.9	R
1	55009	PCH 4996 Bt2	16.3	R	16.5	R	10.3	R	9.6	R	2.2	R	4.1	R	17.0	R	16.3	R	6.1	R	8.8	R
20	55010	ARCH 6677 BGII	2.9	R	6.4	R	7.4	R	10.1	R	3.2	R	5.8	R	15.0	R	17.4	R	6.8	R	11.8	R
5	55011	Super-112 BGII	16.3	R	30.9	MR	8.2	R	11.5	R	1.8	R	7.3	R	15.0	R	18.3	R	6.3	R	12.8	R
4	55012	NBC 1821 BGII (ZC 1)	29.3	MR	17.2	R	9.2	R	10.5	R	3.1	R	6.6	R	13.5	R	17.0	R	7.0	R	11.0	R
15	55013	KSP 5328 BG II	24.2	R	14.3	R	10.5	R	10.8	R	1.9	R	6.4	R	17.5	R	17.5	R	6.8	R	12.3	R
8	55014	VSCH 369 BGII (ZC 2)	19.3	R	6.8	R	7.7	R	10.6	R	2.1	R	5.4	R	13.8	R	16.3	R	5.7	R	12.0	R
21	55015	RAHH 1002 BGII	14	R	13.9	R	7.2	R	6.7	R	2.9	R	2.4	R	13.8	R	15.5	R	6.3	R	10.2	R
16	55016	DC5107 BGII	2.7	R	30.3	MR	9.7	R	10.9	R	3.1	R	5.4	R	15.0	R	16.3	R	7.0	R	10.0	R
14	55018	US 723 BGII	5.7	R	13.0	R	4.8	R	7.0	R	0.9	R	2.8	R	12.3	R	12.5	R	4.5	R	7.5	R
7	55019	KCH9265 BGII	16.4	R	16.7	R	9.0	R	11.7	R	3.9	R	3.4	R	16.3	R	15.8	R	7.5	R	9.5	R
10	55019	GCH 1107 BGII	28.7	MR	19.5	R	5.4	R	8.4	R	1.2	R	4.4	R	11.8	R	12.5	R	5.5	R	10.0	R
23	55020	8811-9 BGII	19.6	R	31.6	MR	6.6	R	10.1	R	2.1	R	5.5	R	14.5	R	17.3	R	6.0	R	12.0	R
9	55021	RAHH 1004 BGII	22.2	R	16.6	R	9.6	R	11.7	R	3.2	R	7.2	R	13.5	R	15.5	R	7.3	R	10.5	R
18	55022	ECH 999 BG II	22.5	R	25.3	MR	9.2	R	12.7	R	1.1	R	3.4	R	16.5	R	16.3	R	5.5	R	10.0	R
24	55023	KCH9264 BGII	18.6	R	29.6	MR	4.6	R	7.2	R	0.8	R	2.9	R	11.3	R	13.0	R	4.8	R	7.3	R
13	55024	DGHH- 4854 BGII	18.2	R	29.5	MR	7.9	R	7.0	R	2.6	R	5.1	R	14.3	R	16.5	R	7.5	R	11.0	R
22	55025	PRCH 7992 Bt2	15.3	R	15.4	R	7.9	R	10.3	R	3.6	R	4.8	R	15.5	R	17.3	R	7.4	R	10.8	R

Table 1 (f) Initial Evaluation Trial of Intra-Hirsutum Hybrids – Irrigated (IET-Hybrids IRR) under Protected and Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions								Average PDI & Disease Reaction (DR): Unprotected conditions							
			Eldorado Agritech Ltd. Karimnagar						Rallis India Ltd. Medchal		Eldorado Agritech Ltd. Karimnagar						Rallis India Ltd. Medchal	
			ALS		GM		TSV		ALB		ALS		GM		TSV		ALB	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
11	55001	RCH1196BGII	0.4	R	9.0	R	5.0	R	5.3	R	12.5	R	12.0	R	7.00	R	9.5	R
2	55002	Core 106 BGII	0.5	R	11.7	R	1.0	R	10.2	R	17.5	R	16.0	R	4.00	R	14.5	R
25	55003	NCS 9775 Bt2	0.6	R	16.5	R	0.0	R	12.7	R	25.5	MR	27.0	MR	0.00	DF	24.5	R
3	55004	RCH1199BGII	1.1	R	24.7	R	1.0	R	24.0	R	38.0	MR	33.0	MR	5.00	R	28.0	MR
12	55005	KCH9266 BGII	0.6	R	14.7	R	5.0	R	12.3	R	15.5	R	26.5	MR	9.00	R	12.5	R
19	55006	C9333 BG-II	1.1	R	23.6	R	3.0	R	23.2	R	36.7	MR	25.2	MR	5.00	R	30.7	MR
6	55007	US 722 BGII	0.5	R	12.3	R	1.0	R	9.0	R	19.5	R	16.5	R	3.00	R	18.5	R
17	55008	VPCH-456 BG II	1.2	R	20.2	R	4.0	R	25.3	MR	38.5	MR	25.5	MR	4.00	R	32.8	MR
1	55009	PCH 4996 Bt2	0.7	R	11.8	R	0.0	R	16.0	R	28.0	MR	15.0	R	3.00	R	24.0	R
20	55010	ARCH 6677 BGII	0.4	R	9.5	R	0.0	R	6.3	R	14.0	R	16.0	R	0.00	DF	10.0	R
5	55011	Super-112 BGII	1.2	R	25.0	R	2.0	R	26.1	MR	36.5	MR	30.5	MR	5.00	R	35.8	MR
4	55012	NBC 1821 BGII (ZC 1)	0.7	R	17.8	R	2.0	R	16.5	R	27.5	MR	21.0	R	5.00	R	25.5	MR
15	55013	KSP 5328 BG II	0.6	R	14.7	R	3.0	R	13.3	R	25.5	MR	28.0	MR	7.00	R	15.5	R
8	55014	VSCH 369 BGII (ZC 2)	0.8	R	18.3	R	0.7	R	17.3	R	29.5	MR	25.5	MR	5.50	R	22.5	R
21	55015	RAHH 1002 BGII	0.7	R	13.8	R	1.0	R	14.5	R	26.5	MR	23.0	R	5.00	R	22.5	R
16	55016	DC5107 BGII	0.4	R	7.5	R	0.0	R	7.2	R	11.5	R	10.5	R	0.00	DF	8.5	R
14	55018	US 723 BGII	0.5	R	8.7	R	4.0	R	9.3	R	14.0	R	15.0	R	7.00	R	11.0	R
7	55019	KCH9265 BGII	0.5	R	13.3	R	1.0	R	8.3	R	15.5	R	19.0	R	5.00	R	14.5	R
10	55019	GCH 1107 BGII	1.2	R	28.5	MR	4.7	R	27.3	MR	40.5	MR	38.5	MR	8.50	R	37.5	MR
23	55020	8811-9 BGII	0.9	R	19.8	R	3.7	R	13.0	R	20.5	R	21.0	R	5.67	R	15.5	R
9	55021	RAHH 1004 BGII	1.2	R	26.2	MR	4.0	R	28.2	MR	39.0	MR	35.0	MR	7.00	R	35.5	MR
18	55022	ECH 999 BG II	0.3	R	9.3	R	0.0	R	4.5	R	10.5	R	12.5	R	0.00	DF	7.5	R
24	55023	KCH9264 BGII	0.6	R	17.5	R	0.0	R	6.5	R	25.5	MR	18.0	R	3.00	R	12.5	R
13	55024	DGHH- 4854 BGII	1.1	R	24.0	R	0.0	R	22.5	R	33.0	MR	27.0	MR	3.00	R	25.5	MR
22	55025	PRCH 7992 Bt2	1.2	R	29.7	MR	4.0	R	15.0	R	36.5	MR	38.0	MR	8.00	R	19.5	R

Advanced Evaluation Trial of Intra-Hirsutum Bt Hybrids (I) - Irrigated

Constitution of Trial

The trial was constituted with eight Bt cotton hybrids containing MON 15985 event sponsored by various organization along with two different check hybrids as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	8	55041	NBCH 639	Navbharat Seed
2	2	55042	US 720 BGII	Seedworks
3	11	55043	VSCH 248 BGII	Veda Seed Sciences Pvt Ltd
4	5	55044	ECH 189 BGII	Eldorado
5	13	55045	KCH 9261 BGII	Kaveri Seed Co Ltd
6	4	55046	KCH 9252 BGII	Kaveri Seed Co Ltd
7	1	55047	Core 104 BGII	Coregenes Seed Research India Pvt Ltd
8	6	55048	GBCH 1718 BGII	Green Gold Seeds
9	10	55049	KCH 9234 BGII	Kaveri Seed Co Ltd
10	7	55050	NBC 1821 BGII (ZC 1)	
11	3	55051	VSCH 369 BGII (ZC 2)	
12	9	55052	VSCH 423 BGII	Veda Seed Sciences Pvt Ltd
13	12	55053	C 9341 BG-II	Mahyco

The trial was conducted in nine locations viz., Warangal, Lam, Raichur, B'Gudi, Coimbatore, Hyderabad (Kaveri), Warangal (Core Seeds)*, Siddipet (Seed works)**, and Kareemnagar (Eldorado).

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

**Trial vitiated due to excessive rainfall

Spacing: Recommended spacing for the hybrid has been followed.

Number of rows: 4 rows of 6 meters per entry with three replications

Data recorded:**Biometric evaluation****Table: Plant height (cm) at harvest in H X H hybrids**

S. No.	Entries	116.9	121.4	142.3	90.0	123.7	142.7	122.8
1	NBCH 639	116.9	121.4	142.3	90.0	123.7	142.7	122.8
2	US 720 BGII	130.6	123.5	157.9	101.7	131.0	147.2	132.0
3	VSCH 248 BGII	138.3	144.3	152.7	95.9	127.0	141.3	133.3
4	ECH 189 BGII	137.7	126.4	144.0	112.3	134.0	146.2	133.4
5	KCH 9261 BGII	127.1	140.0	154.3	95.8	132.0	151.2	133.4
6	KCH 9252 BGII	137.3	138.9	159.6	125.5	133.0	138.5	138.8
7	Core 104 BGII	158.2	146.9	155.0	113.2	144.3	141.9	143.3
8	GBCH 1718 BGII	135.1	121.0	172.3	98.3	137.7	157.3	137.0
9	KCH 9234 BGII	136.9	122.0	163.0	111.0	135.0	151.3	136.5
10	NBC 1821 BGII (ZC 1)	121.7	125.5	138.3	97.3	123.3	142.5	124.8
11	VSCH 369 BGII (ZC 2)	143.4	121.7	139.0	104.5	133.7	143.6	131.0
12	VSCH 423 BGII	160.9	136.6	163.3	100.5	138.7	159.3	143.2
13	C 9341 BG-II	136.2	130.9	156.0	100.5	133.3	168.7	137.6
	CD @ 5%	17.8	NS	7.4	15.1	3.7	15.7	
	CV %	7.7	11.7	4.9	8.6	8.3	6.3	

Table: Number of monopodia in H X H hybrids

S. No.	Entries	1.1	1.3	1.5	0.7	1.4	1.6	1.3
1	NBCH 639	1.1	1.3	1.5	0.7	1.4	1.6	1.3
2	US 720 BGII	1.0	1.0	1.2	0.1	1.6	1.4	1.1
3	VSCH 248 BGII	1.1	1.3	0.9	0.0	1.2	1.9	1.1
4	ECH 189 BGII	1.0	0.8	1.1	0.1	1.1	2.0	1.0
5	KCH 9261 BGII	0.8	1.5	1.3	0.1	2.3	1.7	1.3
6	KCH 9252 BGII	0.9	0.7	1.4	0.1	1.4	1.7	1.0
7	Core 104 BGII	1.3	1.3	0.5	0.1	1.9	1.5	1.1
8	GBCH 1718 BGII	0.6	0.6	0.7	0.2	1.2	1.1	0.7
9	KCH 9234 BGII	1.1	0.5	1.2	0.1	2.2	1.7	1.1
10	NBC 1821 BGII (ZC 1)	1.2	0.9	1.4	0.3	1.6	1.4	1.1
11	VSCH 369 BGII (ZC 2)	1.1	0.9	0.5	0.3	1.7	1.7	1.0
12	VSCH 423 BGII	1.9	0.6	1.5	0.8	2.4	1.6	1.5
13	C 9341 BG-II	0.9	1.3	1.3	0.2	2.4	1.6	1.3
	CD @ 5%	NS	0.2	0.3	NS	19.8	0.4	
	CV %	49.2	13.1	19.1	39.0	0.6	16.6	

Table: Number of sympodia in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	17.0	21.1	20.7	14.5	14.6	23.0	18.5
2	US 720 BGII	19.1	17.9	23.0	15.1	14.5	22.1	18.6
3	VSCH 248 BGII	15.5	22.6	21.7	13.7	13.2	22.9	18.3
4	ECH 189 BGII	19.8	22.4	18.3	15.4	13.6	22.9	18.7
5	KCH 9261 BGII	19.1	16.2	22.3	14.7	14.8	23.9	18.5
6	KCH 9252 BGII	18.7	17.7	22.0	16.5	16.0	23.3	19.0
7	Core 104 BGII	20.9	24.5	20.7	15.7	15.8	23.0	20.1
8	GBCH 1718 BGII	18.0	19.3	22.3	14.6	14.8	22.6	18.6
9	KCH 9234 BGII	18.5	17.1	21.7	16.3	15.9	22.7	18.7
10	NBC 1821 BGII (ZC 1)	16.1	17.3	18.7	14.9	13.5	22.2	17.1
11	VSCH 369 BGII (ZC 2)	18.0	17.9	17.7	15.5	14.8	23.1	17.8
12	VSCH 423 BGII	20.1	19.9	22.3	14.8	14.4	22.1	18.9
13	C 9341 BG-II	18.7	18.3	23.3	15.6	15.4	23.0	19.1
	CD @ 5%	3.0	4.3	2.4	NS	5.3	2.5	
	CV %	9.8	13.2	11.7	9.1	1.3	6.5	

Table: Boll weight (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	5.7	5.8	6.7	5.5	5.8	5.6	5.9
2	US 720 BGII	5.7	4.7	6.7	5.8	5.8	5.8	5.8
3	VSCH 248 BGII	6.4	5.8	8.2	7.1	6.1	5.6	6.5
4	ECH 189 BGII	6.0	6.8	7.4	6.6	6.2	5.8	6.5
5	KCH 9261 BGII	5.7	5.8	6.6	5.8	6.0	5.8	6.0
6	KCH 9252 BGII	5.2	4.7	6.3	5.5	5.3	5.5	5.4
7	Core 104 BGII	5.3	6.7	6.4	5.6	5.2	5.7	5.8
8	GBCH 1718 BGII	5.7	5.6	7.3	5.9	5.9	5.5	6.0
9	KCH 9234 BGII	4.7	5.4	5.8	5.5	5.4	5.5	5.4
10	NBC 1821 BGII (ZC 1)	5.4	5.8	6.6	6.6	5.5	5.4	5.9
11	VSCH 369 BGII (ZC 2)	5.0	5.8	6.1	5.4	5.5	5.8	5.6
12	VSCH 423 BGII	4.7	5.7	5.9	5.2	5.0	5.3	5.3
13	C 9341 BG-II	5.6	5.8	7.2	6.2	5.7	5.8	6.1
	CD @ 5%	0.7	NS	0.4	0.4	5.5	0.5	
	CV %	7.6	13.9	6.5	4.4	0.5	5.5	

Table: Number of bolls / plant in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	22.7	46.7	33.0	21.0	33.7	40.4	32.9
2	US 720 BGII	27.7	28.3	36.7	19.5	37.3	48.5	33.0
3	VSCH 248 BGII	21.9	47.7	42.1	20.2	40.3	41.1	35.6
4	ECH 189 BGII	28.3	68.5	36.0	23.5	33.0	46.3	39.3
5	KCH 9261 BGII	38.7	40.1	40.7	21.3	40.0	48.8	38.3
6	KCH 9252 BGII	34.5	29.5	38.3	26.5	39.7	50.1	36.4
7	Core 104 BGII	38.1	68.2	40.7	27.0	38.3	48.3	43.4
8	GBCH 1718 BGII	31.5	38.3	38.0	19.7	36.7	46.1	35.1
9	KCH 9234 BGII	33.7	45.4	37.0	25.8	40.3	45.6	38.0
10	NBC 1821 BGII (ZC 1)	22.9	45.1	32.0	19.4	32.0	35.8	31.2
11	VSCH 369 BGII (ZC 2)	25.6	49.3	38.0	27.3	39.7	37.7	36.3
12	VSCH 423 BGII	37.3	51.3	38.0	24.7	32.0	48.7	38.7
13	C 9341 BG-II	36.5	47.2	32.7	24.6	38.3	45.6	37.5
	CD @ 5%	NS	10.6	3.1	5.2	8.1	6.5	
	CV %	27.7	13.4	8.6	13.3	5.0	8.5	

Table: Number of bolls / sq.m. in H X H hybrids

S. No.	Entries	Lam	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	95.0	51.9	46.8	64.1	64.5
2	US 720 BGII	57.6	48.1	51.9	77.0	58.7
3	VSCH 248 BGII	96.9	49.9	56.0	65.2	67.0
4	ECH 189 BGII	139.2	58.1	45.8	73.4	79.1
5	KCH 9261 BGII	81.3	52.5	55.6	77.5	66.7
6	KCH 9252 BGII	60.1	65.3	55.1	79.6	65.0
7	Core 104 BGII	138.5	66.7	53.2	76.6	83.8
8	GBCH 1718 BGII	77.6	48.7	50.9	73.1	62.6
9	KCH 9234 BGII	92.1	63.7	56.0	72.3	71.0
10	NBC 1821 BGII (ZC 1)	91.8	47.9	44.4	56.8	60.2
11	VSCH 369 BGII (ZC 2)	100.5	67.3	55.1	59.8	70.7
12	VSCH 423 BGII	104.8	61.1	44.4	77.3	71.9
13	C 9341 BG-II	96.1	60.7	53.2	72.4	70.6
	CD @ 5%	22.1	12.8	8.1	10.2	
	CV %	13.8	13.3	7.0	8.5	

Table: Lint Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	5.2	6.2	6.3	6.7	5.1	5.1	5.8
2	US 720 BGII	5.4	4.3	6.0	6.5	5.4	5.8	5.6
3	VSCH 248 BGII	6.1	5.4	7.3	8.0	5.9	6.0	6.5
4	ECH 189 BGII	6.6	6.8	6.9	7.6	6.0	6.4	6.7
5	KCH 9261 BGII	5.9	5.7	6.4	7.4	5.8	6.6	6.3
6	KCH 9252 BGII	5.0	4.8	5.6	5.8	4.8	5.1	5.2
7	Core 104 BGII	6.2	6.3	7.1	7.3	6.3	6.2	6.6
8	GBCH 1718 BGII	5.7	5.7	6.0	6.8	5.9	5.0	5.9
9	KCH 9234 BGII	4.7	5.9	5.3	6.0	5.0	5.2	5.4
10	NBC 1821 BGII (ZC 1)	5.1	5.9	6.4	7.1	4.7	4.8	5.7
11	VSCH 369 BGII (ZC 2)	6.3	5.4	7.3	8.2	6.4	6.4	6.7
12	VSCH 423 BGII	6.0	6.5	6.8	7.2	5.9	5.5	6.3
13	C 9341 BG-II	5.3	4.8	6.4	6.8	5.5	5.7	5.8
	CD @ 5%	0.5	1.2	0.3	0.5	4.5	0.8	
	CV %	5.0	12.7	4.7	4.4	0.4	8.0	

Table: Seed Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	11.8	11.4	11.7	12.2	9.6	10.3	11.2
2	US 720 BGII	11.7	9.9	11.0	12.1	9.3	10.7	10.8
3	VSCH 248 BGII	12.0	10.8	12.6	13.2	9.8	11.0	11.6
4	ECH 189 BGII	12.4	11.1	11.9	12.5	10.2	11.0	11.5
5	KCH 9261 BGII	10.5	11.7	10.2	11.1	8.7	11.0	10.5
6	KCH 9252 BGII	10.2	11.0	10.0	11.0	8.3	10.7	10.2
7	Core 104 BGII	11.1	10.4	11.1	11.4	9.7	11.0	10.8
8	GBCH 1718 BGII	12.3	11.9	12.1	12.5	10.4	10.3	11.6
9	KCH 9234 BGII	9.3	11.5	9.8	11.1	8.7	10.3	10.1
10	NBC 1821 BGII (ZC 1)	11.4	10.8	12.1	12.6	9.0	10.0	11.0
11	VSCH 369 BGII (ZC 2)	10.3	12.2	9.7	10.8	8.7	10.0	10.3
12	VSCH 423 BGII	11.2	11.0	11.2	11.6	9.3	10.0	10.7
13	C 9341 BG-II	11.6	10.9	12.5	13.3	9.8	11.7	11.6
	CD @ 5%	1.0	NS	0.3	1.1	3.7	1.2	
	CV %	5.1	12.1	3.0	5.5	0.6	6.7	

Table: Ginning outturn (%) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	30.6	35.2	35.1	35.2	34.7	32.9	34.0
2	US 720 BGII	31.4	30.0	35.4	35.1	36.6	35.2	34.0
3	VSCH 248 BGII	33.8	33.9	36.7	37.7	37.3	35.3	35.8
4	ECH 189 BGII	34.5	38.1	36.7	37.7	37.2	36.9	36.9
5	KCH 9261 BGII	36.0	33.0	38.7	40.1	39.9	37.6	37.6
6	KCH 9252 BGII	32.6	30.1	35.9	34.7	36.6	32.4	33.7
7	Core 104 BGII	36.0	38.1	39.1	38.8	39.4	36.2	37.9
8	GBCH 1718 BGII	31.7	32.3	36.3	35.1	36.0	32.8	34.0
9	KCH 9234 BGII	33.5	34.0	34.8	35.2	36.7	33.6	34.6
10	NBC 1821 BGII (ZC 1)	30.9	35.3	34.8	35.9	34.4	32.7	34.0
11	VSCH 369 BGII (ZC 2)	37.9	31.0	43.1	43.1	42.4	39.0	39.4
12	VSCH 423 BGII	34.8	37.3	37.6	38.2	38.9	35.6	37.1
13	C 9341 BG-II	31.3	30.7	33.8	33.7	35.7	32.7	33.0
	CD @ 5%	1.7	NS	1.0	1.8	1.6	1.5	
	CV %	3.0	12.9	2.7	3.0	1.0	2.6	

Table: Upper Half Mean Length (mm) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	27.7	30.0	31.0	30.2	29.9	29.1	29.7
2	US 720 BGII	29.1	29.1	28.6	30.8	29.0	29.8	29.4
3	VSCH 248 BGII	28.2	29.5	31.5	31.1	29.4	30.9	30.1
4	ECH 189 BGII	28.5	28.6	29.3	30.7	29.6	30.6	29.6
5	KCH 9261 BGII	29.6	30.5	30.1	29.1	29.4	31.0	30.0
6	KCH 9252 BGII	27.4	28.8	29.1	28.7	26.4	28.2	28.1
7	Core 104 BGII	27.9	28.5	28.5	28.4	27.8	29.5	28.4
8	GBCH 1718 BGII	30.5	31.7	32.4	31.6	30.9	31.9	31.5
9	KCH 9234 BGII	27.5	27.2	26.6	26.9	26.1	28.0	27.1
10	NBC 1821 BGII (ZC 1)	28.1	30.6	31.3	30.5	29.0	30.6	30.0
11	VSCH 369 BGII (ZC 2)	26.8	26.7	25.8	26.6	26.1	27.1	26.5
12	VSCH 423 BGII	27.9	28.1	30.9	27.9	25.8	29.2	28.3
13	C 9341 BG-II	28.6	29.5	29.6	28.7	27.6	29.1	28.9

Table: Uniformity index under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	82.0	86.0	87.0	84.9	85.0	83.0	84.7
2	US 720 BGII	84.0	86.0	84.0	84.9	84.0	85.0	84.7
3	VSCH 248 BGII	83.0	84.0	85.0	85.1	84.0	85.0	84.4
4	ECH 189 BGII	82.0	85.0	86.0	85.6	86.0	86.0	85.1
5	KCH 9261 BGII	84.0	86.0	86.0	85.4	85.0	85.0	85.2
6	KCH 9252 BGII	85.0	86.0	84.0	84.4	84.0	87.0	85.1
7	Core 104 BGII	84.0	84.0	86.0	85.6	85.0	86.0	85.1
8	GBCH 1718 BGII	84.0	85.0	87.0	86.8	85.0	85.0	85.5
9	KCH 9234 BGII	85.0	84.0	84.0	85.9	85.0	86.0	85.0
10	NBC 1821 BGII (ZC 1)	81.0	86.0	86.0	85.0	85.0	85.0	84.7
11	VSCH 369 BGII (ZC 2)	84.0	85.0	83.0	84.8	83.0	86.0	84.3
12	VSCH 423 BGII	83.0	85.0	87.0	84.8	85.0	86.0	85.1
13	C 9341 BG-II	85.0	86.0	86.0	85.1	86.0	87.0	85.9

Table: Micronaire under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	4.2	4.4	4.2	3.9	3.7	3.7	4.0
2	US 720 BGII	4.9	5.5	5.9	4.8	4.6	4.8	5.1
3	VSCH 248 BGII	4.8	5.0	5.1	4.8	4.0	4.8	4.8
4	ECH 189 BGII	4.7	5.0	4.8	4.4	3.9	4.0	4.5
5	KCH 9261 BGII	4.7	4.6	5.0	4.5	4.2	4.2	4.5
6	KCH 9252 BGII	4.7	5.4	4.9	4.7	3.6	4.6	4.7
7	Core 104 BGII	4.8	5.2	5.2	5.2	4.2	4.8	4.9
8	GBCH 1718 BGII	4.4	5.0	4.6	4.3	4.0	4.0	4.4
9	KCH 9234 BGII	5.0	5.2	5.0	4.9	4.2	4.7	4.8
10	NBC 1821 BGII (ZC 1)	4.6	4.8	4.5	4.5	3.5	4.1	4.3
11	VSCH 369 BGII (ZC 2)	5.4	5.9	5.4	5.4	5.1	5.4	5.4
12	VSCH 423 BGII	5.4	5.9	5.1	5.8	5.0	5.7	5.5
13	C 9341 BG-II	4.4	4.5	4.8	4.7	4.4	4.6	4.6

Table: Tenacity under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	29.7	32.2	30.4	29.5	28.5	29.9	30.0
2	US 720 BGII	31.8	33.0	27.4	28.6	28.6	31.6	30.2
3	VSCH 248 BGII	30.8	30.6	30.9	28.9	26.3	31.3	29.8
4	ECH 189 BGII	30.9	31.2	30.6	29.4	30.2	30.0	30.4
5	KCH 9261 BGII	30.9	32.8	30.9	29.3	27.9	32.2	30.7
6	KCH 9252 BGII	29.3	30.5	30.0	29.0	28.3	30.5	29.6
7	Core 104 BGII	29.6	30.4	27.7	27.1	27.8	29.7	28.7
8	GBCH 1718 BGII	30.8	33.2	30.2	28.9	27.0	29.0	29.9
9	KCH 9234 BGII	29.3	29.1	29.5	28.7	27.9	29.8	29.1
10	NBC 1821 BGII (ZC 1)	31.0	33.2	29.9	30.3	29.0	32.4	31.0
11	VSCH 369 BGII (ZC 2)	28.4	28.4	26.2	26.3	25.0	27.4	27.0
12	VSCH 423 BGII	30.3	31.1	29.6	26.2	24.2	31.6	28.8
13	C 9341 BG-II	30.6	31.5	32.4	29.8	28.4	30.2	30.5

Table: Seed Cotton Yield at 140 DAS (q/ha) at 140 DAS in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	6.71	14.52	19.15	23.51	10.77	14.93
2	US 720 BGII	8.16	15.95	17.53	23.63	13.97	15.85
3	VSCH 248 BGII	13.59	19.05	26.17	27.80	12.82	19.89
4	ECH 189 BGII	11.12	22.93	25.72	22.97	13.06	19.16
5	KCH 9261 BGII	13.83	12.38	20.74	26.88	14.60	17.69
6	KCH 9252 BGII	12.53	15.56	28.54	26.37	13.12	19.22
7	Core 104 BGII	12.68	22.30	29.32	25.03	13.53	20.57
8	GBCH 1718 BGII	8.69	17.22	21.45	22.82	11.89	16.41
9	KCH 9234 BGII	9.31	18.33	30.18	25.26	11.30	18.88
10	NBC 1821 BGII (ZC 1)	6.15	17.86	24.27	22.52	10.99	16.36
11	VSCH 369 BGII (ZC 2)	7.53	18.97	22.97	24.45	11.90	17.16
12	VSCH 423 BGII	10.05	18.89	16.90	22.30	13.61	16.35
13	C 9341 BG-II	11.75	18.73	22.76	23.77	12.67	17.94
	CD @ 5%	3.43	4.17	5.40	4.70	3.44	
	CV %	19.88	13.96	13.54	1.94	16.18	

Table: Seed Cotton Yield at 165 DAS (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	NBCH 639	5.84	9.68	10.33	4.29	7.13	7.45
2	US 720 BGII	9.65	10.63	10.45	5.05	8.23	8.80
3	VSCH 248 BGII	10.46	12.70	5.84	6.43	5.45	8.18
4	ECH 189 BGII	8.02	15.29	10.00	6.39	9.25	9.79
5	KCH 9261 BGII	11.08	8.25	9.79	7.31	7.94	8.87
6	KCH 9252 BGII	10.85	10.37	5.39	7.20	8.89	8.54
7	Core 104 BGII	8.88	14.87	10.99	4.10	8.40	9.45
8	GBCH 1718 BGII	9.43	11.48	7.94	6.68	8.19	8.74
9	KCH 9234 BGII	10.82	12.22	5.80	7.60	9.96	9.28
10	NBC 1821 BGII (ZC 1)	6.34	11.90	8.27	5.01	6.14	7.53
11	VSCH 369 BGII (ZC 2)	5.69	12.65	12.96	6.89	5.41	8.72
12	VSCH 423 BGII	10.80	12.59	14.49	5.97	8.13	10.40
13	C 9341 BG-II	10.92	12.49	13.99	6.85	8.36	10.52
	CD @ 5%	2.62	2.75	4.80	14.79	1.87	
	CV %	16.90	13.81	29.08	1.53	14.23	

Table: Total Seed Cotton Yield (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean	Rank	% Inc over best check
1	NBCH 639	12.55	24.21	35.99	29.48	27.80	17.90	24.66	13	-12.8
2	US 720 BGII	17.81	26.59	37.39	27.98	28.68	22.20	26.78	11	-5.4
3	VSCH 248 BGII	24.04	31.75	43.26	32.02	34.23	18.27	30.60	2	8.1
4	ECH 189 BGII	19.14	38.22	34.34	35.72	29.36	22.30	29.85	3	5.5
5	KCH 9261 BGII	24.91	20.63	43.38	30.53	34.19	22.53	29.36	7	3.8
6	KCH 9252 BGII	23.38	25.93	38.66	33.93	33.58	22.01	29.58	5	4.6
7	Core 104 BGII	21.56	37.17	43.13	40.31	29.13	21.93	32.21	1	13.8
8	GBCH 1718 BGII	18.12	28.70	41.03	29.39	29.50	20.08	27.80	10	-1.7
9	KCH 9234 BGII	20.12	30.56	35.42	35.99	32.85	21.26	29.37	6	3.8
10	NBC 1821 BGII (ZC 1)	12.49	29.76	34.45	32.55	27.53	17.13	25.65	12	-9.3
11	VSCH 369 BGII (ZC 2)	13.22	31.61	40.34	35.94	31.34	17.31	28.29	9	0.0
12	VSCH 423 BGII	20.86	31.48	40.75	31.39	28.28	21.74	29.08	8	2.8
13	C 9341 BG-II	22.67	31.22	35.37	36.75	30.61	21.03	29.61	4	4.7
	CD @ 5%	5.41	6.92	2.88	5.90	4.52	2.54			
	CV %	16.53	13.89	7.64	10.55	2.33	7.38			

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Advanced H X H trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	1.03	1.01	3.30	3.82	2.29	BETL
55042	0.97	0.66	3.39	4.56	2.39	BETL
55043	1.43	0.88	4.19	4.36	2.71	BETL
55044	0.80	1.01	3.33	4.27	2.35	BETL
55045	0.63	1.12	3.93	4.18	2.47	BETL
55046	1.07	2.13	4.87	4.67	3.18	BETL
55047	1.13	0.86	3.76	4.33	2.52	BETL
55048	1.07	0.81	4.01	4.24	2.53	BETL
55049	1.87	1.63	4.66	3.73	2.97	BETL
55050	0.90	1.10	3.23	4.20	2.36	BETL
55051	1.37	0.83	4.04	4.40	2.66	BETL
55052	1.50	0.61	4.19	4.82	2.78	BETL
55053	1.43	0.72	4.01	3.98	2.54	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Advanced H X H trial in South Zone under Protected Conditions –
Leafhopper**

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	1.87	0.11	1.58	1.98	1.38	BETL
55042	1.60	0.02	2.11	2.42	1.54	BETL
55043	2.00	0.18	1.87	1.84	1.47	BETL
55044	1.97	0.12	1.82	2.13	1.51	BETL
55045	1.43	0.04	1.40	2.29	1.29	BETL
55046	2.00	0.02	1.67	2.49	1.54	BETL
55047	1.97	0.07	1.58	2.11	1.43	BETL
55048	2.23	0.04	1.69	2.09	1.51	BETL
55049	2.37	0.09	1.00	2.29	1.44	BETL
55050	2.13	0.02	1.13	2.04	1.33	BETL
55051	1.80	0.07	1.84	2.60	1.58	BETL
55052	2.03	0.07	0.98	2.02	1.28	BETL
55053	1.93	0.04	1.64	2.22	1.46	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55041	I	I	I	I	I	
55042	I	I	I	II	I	
55043	I	I	I	I	I	
55044	II	I	I	I	I	
55045	I	I	I	I	I	
55046	I	I	I	I	I	
55047	I	I	I	I	I	
55048	I	I	I	I	I	
55049	I	I	I	I	I	
55050	I	I	I	I	I	
55051	I	I	I	II	I	
55052	II	I	I	II	II	
55053	I	I	I	I	I	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	4.33	3.79	2.11	8.04	4.57	BETL
55042	3.67	3.29	2.04	7.96	4.24	BETL
55043	3.47	3.29	2.13	8.04	4.23	BETL
55044	3.93	3.99	1.64	8.80	4.59	BETL
55045	2.80	4.49	2.13	8.36	4.44	BETL
55046	2.70	3.59	2.64	8.20	4.28	BETL
55047	3.03	3.59	2.31	8.02	4.24	BETL
55048	3.30	4.79	2.16	8.29	4.63	BETL
55049	2.87	4.39	2.24	9.02	4.63	BETL
55050	3.70	4.99	1.67	9.53	4.97	BETL
55051	4.53	3.19	2.36	7.71	4.45	BETL
55052	3.53	3.19	2.24	9.64	4.65	BETL
55053	4.23	4.19	1.93	9.60	4.99	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.03	0.02	0.96	1.09	0.53	BETL
55042	0.00	0.02	1.03	1.20	0.56	BETL
55043	0.03	0.04	0.99	1.00	0.52	BETL
55044	0.00	0.07	1.10	1.02	0.55	BETL
55045	0.03	0.02	1.03	1.20	0.57	BETL
55046	0.10	0.04	1.11	1.20	0.61	BETL
55047	0.07	0.06	0.93	1.13	0.55	BETL
55048	0.03	0.01	0.67	1.09	0.45	BETL
55049	0.00	0.07	0.95	0.78	0.45	BETL
55050	0.03	0.07	0.68	0.78	0.39	BETL
55051	0.10	0.04	0.96	1.13	0.56	BETL
55052	0.07	0.06	1.21	1.27	0.65	BETL
55053	0.03	0.02	1.04	1.17	0.56	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.17	0.45	0.16	0.07	0.21	
55042	0.07	0.34	0.11	0.09	0.15	
55043	0.03	0.78	0.16	0.11	0.27	
55044	0.00	0.90	0.18	0.09	0.29	
55045	0.10	1.34	0.22	0.11	0.44	
55046	0.20	0.90	0.11	0.09	0.32	
55047	0.00	0.56	0.13	0.13	0.21	
55048	0.10	1.12	0.18	0.07	0.37	
55049	0.07	1.34	0.11	0.09	0.40	
55050	0.10	1.68	0.20	0.18	0.54	
55051	0.03	0.90	0.18	0.07	0.29	
55052	0.17	0.78	0.09	0.11	0.29	
55053	0.00	0.34	0.22	0.13	0.17	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.00	0.00	0.00	0.00	0.00	BETL
55042	0.00	0.00	0.00	0.00	0.00	BETL
55043	0.00	0.00	0.00	0.00	0.00	BETL
55044	0.00	0.00	0.00	0.00	0.00	BETL
55045	0.00	0.00	0.00	0.00	0.00	BETL
55046	0.00	0.00	0.00	0.00	0.00	BETL
55047	0.00	0.00	0.00	0.00	0.00	BETL
55048	0.00	0.00	0.00	0.00	0.00	BETL
55049	0.00	0.00	0.00	0.00	0.00	BETL
55050	0.00	0.00	0.00	0.00	0.00	BETL
55051	0.00	0.00	0.00	0.00	0.00	BETL
55052	0.00	0.00	0.00	0.00	0.00	BETL
55053	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – Spotted/
Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.00	0.00	0.00	0.00	0.00	BETL
55042	0.00	0.00	0.00	0.00	0.00	BETL
55043	0.00	0.00	0.00	0.00	0.00	BETL
55044	0.00	0.00	0.00	0.00	0.00	BETL
55045	0.00	0.00	0.00	0.00	0.00	BETL
55046	0.00	0.00	0.00	0.00	0.00	BETL
55047	0.00	0.00	0.00	0.00	0.00	BETL
55048	0.00	0.00	0.00	0.00	0.00	BETL
55049	0.00	0.00	0.00	0.00	0.00	BETL
55050	0.00	0.00	0.00	0.00	0.00	BETL
55051	0.00	0.00	0.00	0.00	0.00	BETL
55052	0.00	0.00	0.00	0.00	0.00	BETL
55053	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



**Table: Advanced H X H trial in South Zone under Protected Conditions –
*Spodoptera litura***

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.07	0.00	0.00	0.00	0.02	BETL
55042	0.00	0.00	0.00	0.00	0.00	BETL
55043	0.03	0.00	0.00	0.00	0.01	BETL
55044	0.13	0.00	0.00	0.00	0.03	BETL
55045	0.00	0.00	0.00	0.00	0.00	BETL
55046	0.00	0.00	0.00	0.00	0.00	BETL
55047	0.10	0.00	0.00	0.00	0.03	BETL
55048	0.03	0.00	0.00	0.00	0.01	BETL
55049	0.13	0.00	0.00	0.00	0.03	BETL
55050	0.00	0.00	0.00	0.00	0.00	BETL
55051	0.07	0.00	0.00	0.00	0.02	BETL
55052	0.03	0.00	0.00	0.00	0.01	BETL
55053	0.10	0.00	0.00	0.00	0.03	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Advanced H X H trial in South Zone under Protected Conditions –Pink
Bollworm**

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.83	0.25	0.11	1.89	0.77	BETL
55042	0.67	0.25	0.11	1.33	0.59	BETL
55043	0.33	0.08	0.00	2.00	0.60	BETL
55044	1.00	0.25	0.11	1.89	0.81	BETL
55045	0.83	0.25	0.00	1.33	0.60	BETL
55046	1.17	0.25	0.22	1.11	0.69	BETL
55047	0.50	0.17	0.00	1.78	0.61	BETL
55048	0.83	0.25	0.00	1.67	0.69	BETL
55049	1.00	0.25	0.11	1.56	0.73	BETL
55050	0.83	0.17	0.89	1.00	0.72	BETL
55051	0.67	0.17	0.44	1.22	0.63	BETL
55052	0.83	0.09	0.22	2.11	0.81	BETL
55053	0.83	0.25	0.22	1.11	0.60	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55041	0.00	0.00	0.00	0.00	0.00	BETL
55042	0.00	0.00	0.00	0.00	0.00	BETL
55043	0.00	0.00	0.00	0.00	0.00	BETL
55044	0.00	0.00	0.00	0.00	0.00	BETL
55045	0.00	0.00	0.00	0.00	0.00	BETL
55046	0.00	0.00	0.00	0.00	0.00	BETL
55047	0.00	0.00	0.00	0.00	0.00	BETL
55048	0.00	0.00	0.00	0.00	0.00	BETL
55049	0.00	0.00	0.00	0.00	0.00	BETL
55050	0.00	0.00	0.00	0.00	0.00	BETL
55051	0.00	0.00	0.00	0.00	0.00	BETL
55052	0.00	0.00	0.00	0.00	0.00	BETL
55053	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – Green Boll Damage due to (Pink Bollworm)

Name of Entry	Green Boll Damage (%)/ 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55041	10.00	2.52	11.67	14.44	9.66	BETL
55042	6.67	2.55	6.67	10.00	6.47	BETL
55043	5.00	3.39	13.33	9.33	7.76	BETL
55044	8.33	2.55	8.33	12.22	7.86	BETL
55045	6.67	3.39	8.33	12.22	7.65	BETL
55046	8.33	2.63	6.67	10.00	6.91	BETL
55047	6.67	2.46	3.33	12.22	6.17	BETL
55048	8.33	3.39	5.00	10.00	6.68	BETL
55049	8.33	2.76	3.33	10.00	6.11	BETL
55050	6.67	2.97	5.00	10.00	6.16	BETL
55051	6.67	2.63	8.33	7.78	6.35	BETL
55052	8.33	3.46	6.67	12.22	7.67	BETL
55053	6.67	2.63	5.00	7.78	5.52	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55041	10.10	4.14	6.36	15.00	8.90	
55042	9.55	4.19	5.33	23.33	10.60	
55043	8.61	4.12	3.52	15.00	7.81	
55044	7.89	4.19	6.09	21.67	9.96	
55045	9.54	3.95	4.30	23.33	10.28	
55046	7.96	4.36	2.87	18.33	8.38	
55047	11.25	4.02	2.09	25.00	10.59	
55048	8.51	4.69	4.21	26.67	11.02	
55049	9.26	4.62	3.14	21.67	9.67	
55050	8.93	3.95	3.34	13.33	7.39	
55051	8.17	4.36	1.99	30.00	11.13	
55052	9.00	4.68	4.59	20.00	9.57	
55053	7.78	4.36	3.79	26.67	10.65	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55041	6.24	3.09	1.37	9.05	4.94	
55042	4.55	3.14	1.38	6.43	3.88	
55043	4.21	3.07	0.88	9.05	4.30	
55044	2.48	3.14	1.52	8.06	3.80	
55045	4.00	2.90	1.07	6.85	3.71	
55046	2.17	3.31	0.82	9.05	3.84	
55047	6.28	2.97	0.52	9.71	4.87	
55048	2.96	3.64	1.14	7.54	3.82	
55049	4.03	3.57	0.83	8.76	4.30	
55050	4.56	2.90	0.83	9.63	4.48	
55051	3.92	3.31	0.76	11.61	4.90	
55052	6.21	3.63	1.22	10.96	5.50	
55053	5.01	3.31	1.00	9.24	4.64	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – No. of Sprays for Insect-Pests

Name of Entry	Number of sprays for Insect-pests					Remark
	GU	RA	CBE	WR	Mean	
55041	5.00	4.00	4.00	5.00	4.50	
55042	5.00	4.00	4.00	5.00	4.50	
55043	5.00	4.00	4.00	5.00	4.50	
55044	5.00	4.00	4.00	5.00	4.50	
55045	5.00	4.00	4.00	5.00	4.50	
55046	5.00	4.00	4.00	5.00	4.50	
55047	5.00	4.00	4.00	5.00	4.50	
55048	5.00	4.00	4.00	5.00	4.50	
55049	5.00	4.00	4.00	5.00	4.50	
55050	5.00	4.00	4.00	5.00	4.50	
55051	5.00	4.00	4.00	5.00	4.50	
55052	5.00	4.00	4.00	5.00	4.50	
55053	5.00	4.00	4.00	5.00	4.50	

*GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 2 (a) Advanced Evaluation Trial-I of Intra-hirsutum Hybrids – Irrigated (AET-I Hybrids IRR under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions															
			LAM, Guntur						CICR RS Coimbatore									
			CoLS		GM		Rust		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
8	55041	NBCH 639	37.2	MR	27.3	MR	26.3	MR	5.0	R	0.0	DF	0.7	R	0.0	DF	5.3	R
2	55042	US 720 BGII	27.5	MR	16.5	R	28.8	MR	5.3	R	0.0	DF	0.8	R	0.8	R	7.5	R
11	55043	VSCH 248 BGII	30.8	MR	9.8	R	12.8	R	6.5	R	0.0	DF	0.7	R	0.0	DF	7.3	R
5	55044	ECH 189 BGII	28.5	MR	31.3	MR	23.5	R	6.0	R	0.0	DF	1.3	R	0.4	R	7.8	R
13	55045	KCH 9261 BGII	27.8	MR	13.8	R	14.2	R	6.7	R	0.0	DF	1.8	R	0.7	R	8.3	R
4	55046	KCH 9252 BGII	21.5	R	28.5	MR	28.0	MR	6.2	R	0.0	DF	1.3	R	0.9	R	6.0	R
1	55047	Core 104 BGII	27.2	MR	29.8	MR	26.8	MR	7.5	R	0.0	DF	0.0	DF	0.0	DF	7.5	R
6	55048	GBCH 1718 BGII	27.0	MR	32.3	MR	30.3	MR	5.0	R	0.0	DF	0.0	DF	2.4	R	7.8	R
10	55049	KCH 9234 BGII	10.3	R	30.1	MR	27.3	MR	6.0	R	0.0	DF	0.8	R	0.0	DF	7.0	R
7	55050	NBC 1821 BGII (ZC 1)	26.5	MR	9.8	R	25.8	MR	5.5	R	0.0	DF	2.0	R	0.0	DF	7.8	R
3	55051	VSCH 369 BGII (ZC 2)	27.2	MR	26.3	MR	26.8	MR	7.0	R	0.0	DF	0.8	R	0.0	DF	8.8	R
9	55052	VSCH 423 BGII	20.3	R	27.8	MR	27.3	MR	5.8	R	0.0	DF	1.7	R	0.5	R	6.8	R
12	55053	C 9341 BG-II	27.0	MR	28.0	MR	25.8	MR	5.3	R	0.0	DF	0.0	DF	0.0	DF	8.5	R

Table 2 (b) Advanced Evaluation Trial-I of Intra-hirsutum Hybrids – Irrigated (AET-I Hybrids IRR) under protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions									
			RARS, Warangal									
			ALS		CoLS		GM		Rust		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
8	55041	NBCH 639	2.7	R	3.5	R	12.0	R	26.5	MR	3.8	R
2	55042	US 720 BGII	2.5	R	3.3	R	12.3	R	27.5	MR	1.0	R
11	55043	VSCH 248 BGII	1.7	R	2.8	R	11.7	R	28.5	MR	2.1	R
5	55044	ECH 189 BGII	2.3	R	3.0	R	11.3	R	27.5	MR	1.7	R
13	55045	KCH 9261 BGII	2.3	R	3.3	R	13.2	R	27.5	MR	1.7	R
4	55046	KCH 9252 BGII	2.0	R	3.0	R	12.7	R	28.0	MR	0.0	DF
1	55047	Core 104 BGII	2.5	R	3.8	R	12.5	R	26.8	MR	1.7	R
6	55048	GBCH 1718 BGII	2.7	R	3.7	R	13.2	R	27.5	MR	1.3	R
10	55049	KCH 9234 BGII	2.7	R	3.5	R	12.2	R	27.5	MR	0.0	DF
7	55050	NBC 1821 BGII (ZC 1)	2.7	R	3.2	R	12.0	R	27.8	MR	2.4	R
3	55051	VSCH 369 BGII (ZC 2)	3.2	R	4.7	R	12.3	R	27.8	MR	2.3	R
9	55052	VSCH 423 BGII	2.5	R	4.2	R	11.0	R	27.3	MR	1.9	R
12	55053	C 9341 BG-II	2.2	R	3.3	R	12.8	R	27.8	MR	0.4	R

Evaluation under Unprotected Condition for Insect pests

Reaction to Insect Pest

(

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	5.30	3.38	9.13	8.40	6.55	BETL
55042	6.30	2.27	11.96	9.73	7.56	BETL
55043	5.73	4.51	8.78	8.53	6.89	BETL
55044	3.40	3.05	13.58	10.80	7.71	BETL
55045	7.87	1.24	9.38	9.53	7.00	BETL
55046	5.37	2.27	7.27	10.13	6.26	BETL
55047	8.13	2.17	10.04	11.47	7.95	BETL
55048	4.30	3.62	11.40	9.47	7.20	BETL
55049	5.03	2.75	9.53	10.80	7.03	BETL
55050	6.33	2.50	8.00	8.60	6.36	BETL
55051	5.80	2.72	9.51	7.73	6.44	BETL
55052	7.17	2.11	8.69	7.47	6.36	BETL
55053	4.83	2.07	11.29	8.20	6.60	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions –Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	9.60	2.61	1.93	4.80	4.74	BETL
55042	8.27	6.54	2.07	4.73	5.40	BETL
55043	11.60	3.49	1.73	3.87	5.17	BETL
55044	10.83	4.18	2.00	4.53	5.39	BETL
55045	9.97	4.24	1.53	4.27	5.00	BETL
55046	8.43	4.94	2.00	3.60	4.74	BETL
55047	9.43	3.52	1.60	4.60	4.79	BETL
55048	8.80	3.45	2.07	4.47	4.70	BETL
55049	8.50	3.95	1.93	5.27	4.91	BETL
55050	9.87	7.78	1.13	4.53	5.83	BETL
55051	9.47	3.66	2.00	4.47	4.90	BETL
55052	10.13	2.47	0.93	5.00	4.63	BETL
55053	8.07	3.44	1.93	4.07	4.38	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55041	III	I	I	III	II	
55042	III	I	I	II	II	
55043	IV	I	I	II	II	
55044	IV	II	I	III	III	
55045	III	II	I	II	II	
55046	II	II	I	II	II	
55047	III	II	I	II	II	
55048	III	II	I	II	II	
55049	II	II	I	II	II	
55050	III	II	I	III	II	
55051	III	II	I	II	II	
55052	III	II	I	II	II	
55053	III	II	I	II	II	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	8.10	4.13	2.80	17.00	8.01	BETL
55042	7.10	4.47	2.27	13.00	6.71	BETL
55043	6.47	7.08	2.27	15.87	7.92	BETL
55044	5.40	5.08	2.18	15.60	7.07	BETL
55045	7.80	6.12	2.18	12.27	7.09	BETL
55046	8.03	4.90	2.36	12.53	6.96	BETL
55047	8.83	7.42	2.24	12.07	7.64	BETL
55048	7.73	4.84	1.78	10.73	6.27	BETL
55049	5.90	6.43	2.78	13.93	7.26	BETL
55050	9.07	6.42	1.64	11.67	7.20	BETL
55051	8.13	6.82	1.80	13.73	7.62	BETL
55052	7.13	6.20	2.44	12.93	7.18	BETL
55053	7.83	6.26	2.51	12.47	7.27	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.33	2.43	2.33	0.47	1.39	BETL
55042	1.47	0.68	0.73	0.87	0.94	BETL
55043	1.13	1.57	1.40	0.47	1.14	BETL
55044	0.47	1.44	1.27	0.93	1.03	BETL
55045	1.50	1.44	2.20	0.80	1.48	BETL
55046	0.60	0.59	2.07	0.67	0.98	BETL
55047	0.53	1.36	0.60	1.20	0.92	BETL
55048	1.30	1.90	1.00	0.80	1.25	BETL
55049	0.20	2.59	2.80	1.20	1.70	BETL
55050	1.83	0.93	2.07	0.87	1.42	BETL
55051	1.23	0.47	2.20	1.00	1.23	BETL
55052	1.30	1.41	0.67	0.80	1.04	BETL
55053	0.33	1.78	1.40	0.53	1.01	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.50	1.01	0.00	0.27	0.44	
55042	0.27	0.79	0.07	0.20	0.33	
55043	0.03	1.00	0.20	0.20	0.36	
55044	0.17	2.56	0.00	0.13	0.71	
55045	0.20	0.23	0.00	0.33	0.19	
55046	0.43	1.00	0.07	0.27	0.44	
55047	0.23	1.88	0.07	0.13	0.58	
55048	0.13	0.95	0.13	0.13	0.34	
55049	0.17	1.01	0.07	0.13	0.34	
55050	0.30	0.67	0.07	0.20	0.31	
55051	0.17	0.67	0.07	0.07	0.24	
55052	0.33	0.68	0.07	0.00	0.27	
55053	0.07	0.44	0.07	0.20	0.19	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.00	0.33	0.00	0.00	0.08	BETL
55042	0.00	0.11	0.00	0.00	0.03	BETL
55043	0.00	0.22	0.00	0.00	0.06	BETL
55044	0.00	0.33	0.00	0.00	0.08	BETL
55045	0.00	0.33	0.00	0.00	0.08	BETL
55046	0.00	0.33	0.00	0.00	0.08	BETL
55047	0.00	0.22	0.00	0.00	0.06	BETL
55048	0.00	0.22	0.00	0.00	0.06	BETL
55049	0.00	0.33	0.00	0.00	0.08	BETL
55050	0.00	0.11	0.00	0.00	0.03	BETL
55051	0.00	0.22	0.00	0.00	0.06	BETL
55052	0.00	0.44	0.00	0.00	0.11	BETL
55053	0.00	0.22	0.00	0.00	0.06	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Spotted/
Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.00	0.00	0.00	0.00	0.00	BETL
55042	0.00	0.00	0.00	0.00	0.00	BETL
55043	0.00	0.00	0.00	0.00	0.00	BETL
55044	0.00	0.00	0.00	0.00	0.00	BETL
55045	0.00	0.00	0.00	0.00	0.00	BETL
55046	0.00	0.00	0.00	0.00	0.00	BETL
55047	0.00	0.00	0.00	0.00	0.00	BETL
55048	0.00	0.00	0.00	0.00	0.00	BETL
55049	0.00	0.00	0.00	0.00	0.00	BETL
55050	0.00	0.00	0.00	0.00	0.00	BETL
55051	0.00	0.00	0.00	0.00	0.00	BETL
55052	0.00	0.00	0.00	0.00	0.00	BETL
55053	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55041	0.23	1.00	0.00	0.00	0.31	BETL
55042	0.67	0.22	0.00	0.00	0.22	BETL
55043	0.83	0.78	0.00	0.00	0.40	BETL
55044	0.00	0.67	0.00	0.00	0.17	BETL
55045	0.50	1.22	0.00	0.00	0.43	BETL
55046	0.53	0.78	0.00	0.00	0.33	BETL
55047	0.60	1.22	0.00	0.00	0.46	BETL
55048	0.00	0.56	0.00	0.00	0.14	BETL
55049	0.37	1.44	0.00	0.00	0.45	BETL
55050	0.03	0.78	0.00	0.00	0.20	BETL
55051	0.00	0.78	0.00	0.00	0.19	BETL
55052	0.73	0.67	0.00	0.00	0.35	BETL
55053	0.53	1.11	0.00	0.00	0.41	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55041	4.83	3.18	0.33	7.33	3.92	AETL
55042	3.50	3.06	0.67	9.00	4.06	AETL
55043	5.00	2.06	0.00	7.67	3.68	AETL
55044	4.00	2.73	0.33	11.00	4.52	AETL
55045	3.33	2.62	0.00	10.00	3.99	AETL
55046	3.17	3.29	0.33	10.67	4.36	AETL
55047	4.83	2.51	0.33	13.67	5.34	AETL
55048	5.50	2.42	0.33	8.67	4.23	AETL
55049	5.33	2.17	0.33	8.33	4.04	AETL
55050	4.00	2.35	1.33	10.33	4.51	AETL
55051	5.00	2.18	2.00	10.33	4.88	AETL
55052	4.67	2.84	1.67	7.67	4.21	AETL
55053	3.50	2.29	0.67	10.33	4.20	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55041	0.00	0.00	0.00	0.00	0.00	BETL
55042	0.00	0.00	0.00	0.00	0.00	BETL
55043	0.00	0.00	0.00	0.00	0.00	BETL
55044	0.00	0.00	0.00	0.00	0.00	BETL
55045	0.00	0.00	0.00	0.00	0.00	BETL
55046	0.00	0.00	0.00	0.00	0.00	BETL
55047	0.00	0.00	0.00	0.00	0.00	BETL
55048	0.00	0.00	0.00	0.00	0.00	BETL
55049	0.00	0.00	0.00	0.00	0.00	BETL
55050	0.00	0.00	0.00	0.00	0.00	BETL
55051	0.00	0.00	0.00	0.00	0.00	BETL
55052	0.00	0.00	0.00	0.00	0.00	BETL
55053	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Green Boll Damage due to (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55041	46.67	4.95	10.00	46.67	27.07	AETL
55042	30.00	6.44	30.00	53.33	29.94	AETL
55043	41.67	4.36	15.00	46.67	26.92	AETL
55044	36.67	4.00	10.00	60.00	27.67	AETL
55045	26.67	4.89	10.00	53.33	23.72	AETL
55046	23.33	5.48	10.00	60.00	24.70	AETL
55047	40.00	5.17	5.00	66.67	29.21	AETL
55048	48.33	5.98	5.00	53.33	28.16	AETL
55049	38.33	4.55	15.00	46.67	26.14	AETL
55050	31.67	4.59	20.00	53.33	27.40	AETL
55051	36.67	5.29	10.00	56.67	27.16	AETL
55052	36.67	5.64	10.00	43.33	23.91	AETL
55053	28.33	4.53	5.00	60.00	24.47	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55041	61.36	10.20	14.05	50.00	33.90	
55042	45.24	11.97	12.93	80.00	37.54	
55043	36.78	10.64	19.40	65.00	32.95	
55044	56.92	8.95	23.15	60.00	37.25	
55045	45.87	10.52	16.66	50.00	30.76	
55046	50.73	10.84	13.20	55.00	32.44	
55047	66.94	10.45	19.85	65.00	40.56	
55048	54.83	12.24	26.22	70.00	40.82	
55049	51.37	10.28	17.06	65.00	35.93	
55050	48.96	10.36	23.76	45.00	32.02	
55051	51.37	10.90	22.98	40.00	31.31	
55052	43.14	11.91	12.59	45.00	28.16	
55053	39.89	9.97	12.85	60.00	30.68	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55041	33.64	7.86	5.00	21.00	16.88	
55042	31.52	8.30	5.43	25.25	17.63	
55043	21.97	8.20	9.86	14.22	13.56	
55044	41.25	6.13	13.19	23.36	20.98	
55045	36.74	7.31	9.14	20.57	18.44	
55046	33.25	8.31	5.77	16.10	15.86	
55047	30.21	7.79	8.29	18.91	16.30	
55048	23.64	9.84	20.07	22.22	18.94	
55049	33.74	8.10	10.26	22.28	18.59	
55050	30.95	8.79	10.30	16.10	16.54	
55051	41.26	8.94	11.33	13.82	18.84	
55052	29.67	9.01	4.99	14.85	14.63	
55053	19.74	6.56	5.43	20.18	12.98	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 2 (c) Advanced Evaluation Trial-I of Intra-hirsutum Hybrids – Irrigated (AET-I Hybrids IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions															
			LAM, Guntur						CICR RS, Coimbatore									
			CoLS		GM		Rust		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
8	55041	NBCH 639	42.3	MR	28.0	MR	30.2	MR	6.0	R	0.0	DF	1.5	R	0.0	DF	4.5	R
2	55042	US 720 BGII	29.8	MR	19.0	R	29.3	MR	3.0	R	0.0	DF	0.0	DF	2.2	R	0.0	R
11	55043	VSCH 248 BGII	32.0	MR	11.8	R	17.0	R	4.5	R	0.0	DF	0.0	DF	0.0	DF	4.5	R
5	55044	ECH 189 BGII	30.3	MR	35.0	MR	26.8	MR	5.5	R	0.0	DF	2.0	R	0.0	DF	5.0	R
13	55045	KCH 9261 BGII	31.0	MR	15.0	R	17.3	R	5.0	R	0.0	DF	0.0	DF	0.0	DF	5.0	R
4	55046	KCH 9252 BGII	29.5	MR	30.5	MR	31.0	MR	5.5	R	0.0	DF	0.0	DF	0.0	DF	4.0	R
1	55047	Core 104 BGII	28.3	MR	27.8	MR	29.5	MR	5.0	R	0.0	DF	2.0	R	0.0	DF	4.5	R
6	55048	GBCH 1718 BGII	28.0	MR	35.0	MR	30.5	MR	5.5	R	0.0	DF	2.0	R	0.0	DF	4.0	R
10	55049	KCH 9234 BGII	13.8	R	31.0	MR	28.8	MR	4.5	R	0.0	DF	1.5	R	0.0	DF	4.5	R
7	55050	NBC 1821 BGII (ZC 1)	28.3	MR	10.5	R	26.8	MR	5.0	R	0.0	DF	3.0	R	2.5	R	6.5	R
3	55051	VSCH 369 BGII (ZC 2)	30.0	MR	27.0	MR	28.8	MR	6.5	R	0.0	DF	3.5	R	0.0	DF	8.0	R
9	55052	VSCH 423 BGII	28.0	MR	28.3	MR	26.8	MR	5.0	R	0.0	DF	2.0	R	0.0	DF	7.5	R
12	55053	C 9341 BG-II	28.0	MR	29.3	MR	26.5	MR	6.5	R	0.0	DF	2.5	R	0.0	DF	5.5	R

Table 2 (d) Advanced Evaluation Trial-I of Intra-hirsutum Hybrids – Irrigated (AET-I Hybrids IRR) under unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): unprotected conditions									
			RARS, Warangal									
			ALS		CoLS		GM		Rust		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
8	55041	NBCH 639	6.0	R	7.0	R	20.0	R	46.5	MR	10.0	R
2	55042	US 720 BGII	7.0	R	8.0	R	30.0	MR	39.0	MR	12.5	R
11	55043	VSCH 248 BGII	7.0	R	7.0	R	22.0	R	42.5	MR	8.8	R
5	55044	ECH 189 BGII	7.0	R	7.0	R	31.0	MR	30.0	MR	17.5	R
13	55045	KCH 9261 BGII	7.0	R	7.0	R	20.0	R	40.0	MR	5.0	R
4	55046	KCH 9252 BGII	6.5	R	6.0	R	16.5	R	41.0	MR	6.3	R
1	55047	Core 104 BGII	7.0	R	7.0	R	22.5	R	38.5	MR	8.8	R
6	55048	GBCH 1718 BGII	7.5	R	11.5	R	20.0	R	46.0	MR	11.3	R
10	55049	KCH 9234 BGII	7.0	R	7.0	R	19.0	R	50.0	MR	6.3	R
7	55050	NBC 1821 BGII (ZC 1)	6.5	R	10.0	R	20.5	R	51.0	MS	13.8	R
3	55051	VSCH 369 BGII (ZC 2)	5.0	R	8.0	R	24.5	R	43.5	MR	22.5	R
9	55052	VSCH 423 BGII	10.5	R	18.5	R	25.5	MR	48.5	MR	8.8	R
12	55053	C 9341 BG-II	4.5	R	9.0	R	24.5	R	41.0	MR	8.8	R

Table 2 (e) Advanced Evaluation Trial-I of Intra-hirsutum Hybrids – Irrigated (AET-I Hybrids IRR) under Protected and Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR):Protected conditions								Average PDI & Disease Reaction: Unprotected conditions							
			Kaveri, Hyderabad								Kaveri, Hyderabad							
			GM		ALS		TSV		BLB		GM		ALS		TSV		BLB	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
8	55041	NBCH 639	7.9	R	9.3	R	2.2	R	6.8	R	12.1	R	13.3	R	6.2	R	9.7	R
2	55042	US 720 BGII	7.6	R	6.8	R	2.4	R	4.8	R	13.8	R	13.5	R	4.0	R	8.8	R
11	55043	VSCH 248 BGII	7.1	R	9.2	R	3.0	R	5.5	R	12.0	R	14.5	R	5.2	R	8.9	R
5	55044	ECH 189 BGII	10.1	R	10.6	R	1.1	R	5.2	R	15.8	R	18.8	R	2.8	R	7.0	R
13	55045	KCH 9261 BGII	4.6	R	5.5	R	0.9	R	3.6	R	10.5	R	9.3	R	2.8	R	6.8	R
4	55046	KCH 9252 BGII	4.6	R	4.9	R	0.9	R	2.9	R	9.8	R	9.0	R	2.5	R	6.3	R
1	55047	Core 104 BGII	5.3	R	8.0	R	2.9	R	4.6	R	11.3	R	13.5	R	4.7	R	8.8	R
6	55048	GBCH 1718 BGII	11.6	R	4.9	R	2.7	R	5.1	R	18.3	R	9.5	R	4.2	R	8.4	R
10	55049	KCH 9234 BGII	4.3	R	3.3	R	0.8	R	3.2	R	10.0	R	9.8	R	2.4	R	7.0	R
7	55050	NBC 1821 BGII (ZC 1)	7.4	R	8.9	R	3.1	R	5.7	R	13.8	R	14.9	R	4.2	R	10.0	R
3	55051	VSCH 369 BGII (ZC 2)	4.5	R	10.3	R	2.2	R	3.6	R	9.8	R	16.9	R	3.8	R	7.7	R
9	55052	VSCH 423 BGII	6.1	R	6.3	R	3.4	R	5.2	R	11.8	R	11.6	R	6.2	R	9.3	R
12	55053	C 9341 BG-II	5.9	R	5.4	R	2.2	R	6.8	R	11.8	R	15.1	R	4.4	R	10.2	R

Table 2 (f) Advanced Evaluation Trial-I of Intra-hirsutum Hybrids – Irrigated (AET-I Hybrids IRR) under Protected and Unprotected conditions

Code-	Code-II	Entries	Average PDI & Disease Reaction (DR):Protected				Average PDI & Disease Reaction: Unprotected			

I			conditions						conditions					
			Eldorado Agritech Ltd. Karimnagar						Eldorado Agritech Ltd. Karimnagar					
			ALS		GM		TSV		ALS		GM		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
8	55041	NBCH 639	20.2	R	19.8	R	2.00	R	30.0	MR	32.5	MR	7.5	R
2	55042	US 720 BGII	7.0	R	6.0	R	0.00	R	12.5	R	12.0	R	0.0	DF
11	55043	VSCH 248 BGII	17.7	R	16.3	R	3.00	R	25.5	MR	26.5	MR	5.0	R
5	55044	ECH 189 BGII	10.5	R	7.7	R	0.00	R	14.5	R	14.5	R	0.0	DF
13	55045	KCH 9261 BGII	9.2	R	8.2	R	0.00	R	13.0	R	12.5	R	0.0	DF
4	55046	KCH 9252 BGII	9.3	R	15.7	R	3.00	R	17.0	R	21.0	R	9.5	R
1	55047	Core 104 BGII	8.7	R	7.0	R	2.00	R	11.0	R	15.5	R	7.0	R
6	55048	GBCH 1718 BGII	18.2	R	14.6	R	3.00	R	29.5	MR	20.2	R	10.5	R
10	55049	KCH 9234 BGII	9.5	R	14.2	R	0.00	R	18.5	R	23.0	R	3.5	R
7	55050	NBC 1821 BGII (ZC 1)	14.8	R	17.3	R	4.00	R	25.0	R	30.5	MR	12.5	R
3	55051	VSCH 369 BGII (ZC 2)	21.2	R	10.3	R	2.2	R	9.8	R	16.9	R	3.8	R
9	55052	VSCH 423 BGII	19.3	R	6.3	R	3.4	R	11.8	R	11.6	R	6.2	R
12	55053	C 9341 BG-II	15.8	R	5.4	R	2.2	R	11.8	R	15.1	R	4.4	R

Advanced Evaluation Trial of Intra-Hirsutum Bt Hybrids (II) - Irrigated

Constitution of Trial

The trial was constituted with 15 Bt cotton hybrids containing deregulated events along with two different check hybrids as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	9	55061	KCH 9221 BGII	Kaveri Seed Companay Ltd
2	16	55062	Core 102	Coregenes
3	1	55063	KCH 9225 BGII	Kaveri Seed Companay Ltd
4	7	55064	NBC 21 BGII	Nath Biogenes
5	17	55065	DC 5105 BGII	Rallis India Ltd
6	4	55066	KCH 9222 BGII	Kaveri Seed Companay Ltd
7	11	55067	C 9339 BGII	Mahyco Pvt Ltd
8	15	55068	VSCH 369 BGII (ZC 2)	
9	2	55069	KCH 9223 BGII	Kaveri Seed Companay Ltd
10	14	55070	SS 459 BG II	Eldorado Agritech Pvt. Ltd.
11	6	55071	VSCH 372 BGII	Veda Seed Sciences Pvt Ltd
12	13	55072	US 717 BGII	Seed Works International Pvt Ltd
13	3	55073	RCH 1016 BGII	Rasi Seed Pvt Ltd
14	10	55074	RCH 1026 BG II	Rasi Seed Pvt Ltd
15	5	55075	DLCH-9 Bt II	Dhanalakshmi
16	8	55076	NBC 1821 BGII (ZC 1)	
17	12	55077	25D181 BGII	Dhanlaxmi crop science ltd

The trial was conducted in nine locations viz., Warangal, Lam, Raichur, B'Gudi*, Coimbatore, Hyderabad (Kaveri), Siddipet (Seed works)**, Gadwal (Dhanlaxmi) and Kareemnagar (Eldorado).

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

**Trial vitiated due to excessive rainfall

Spacing: Recommended spacing for the hybrid has been followed.

Number of rows: 4 rows of 6 meters per entry with three replications

Data recorded:**Biometric evaluation****Table: Plant height (cm) at harvest in H X H hybrids**

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	117.4	150.4	145.7	103.2	138.0	158.3	158.0	138.7
2	Core 102	137.1	165.2	143.3	117.2	141.3	170.4	162.0	148.1
3	KCH 9225 BGII	131.6	143.9	145.0	104.7	135.3	175.1	152.0	141.1
4	NBC 21 BGII	114.9	150.3	126.7	97.2	127.3	165.7	148.0	132.9
5	DC 5105 BGII	143.8	152.8	138.7	95.0	146.7	169.0	146.0	141.7
6	KCH 9222 BGII	120.1	149.8	143.3	107.6	136.0	155.1	159.0	138.7
7	C 9339 BGII	111.0	150.3	134.0	91.8	119.0	154.9	146.0	129.6
8	VSCH 369 BGII (ZC 2)	134.0	153.5	136.7	102.3	134.3	168.2	150.0	139.9
9	KCH 9223 BGII	126.9	141.2	129.3	103.7	129.3	163.5	149.0	134.7
10	SS 459 BG II	135.5	135.5	124.3	90.3	129.3	153.0	148.0	130.8
11	VSCH 372 BGII	149.9	149.8	143.3	117.0	132.0	159.5	156.0	143.9
12	US 717 BGII	138.5	156.8	140.3	110.7	132.7	172.7	149.0	143.0
13	RCH 1016 BGII	110.0	151.4	125.7	102.7	127.3	147.8	172.0	133.8
14	RCH 1026 BG II	104.5	163.0	120.7	101.6	141.7	170.2	161.0	137.5
15	DLCH-9 Bt II	117.9	142.9	131.7	102.5	124.7	160.8	153.0	133.4
16	NBC 1821 BGII (ZC 1)	119.6	146.3	126.7	96.3	128.7	162.9	164.0	134.9
17	25D181 BGII	130.5	148.6	128.7	107.7	125.7	168.9	157.0	138.2
	CD @ 5%	19.8	NS	8.6	NS	2.3	18.0		
	CV %	9.4	10.7	6.6	9.8	5.1	6.6		

Table: Number of monopodia in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	0.3	1.6	1.6	0.3	1.7	2.3	2.1	1.4
2	Core 102	0.7	1.2	1.0	0.5	1.9	1.9	1.8	1.3
3	KCH 9225 BGII	0.2	1.2	1.7	0.3	1.6	2.0	2.0	1.3
4	NBC 21 BGII	1.2	1.4	1.9	0.5	2.7	2.3	1.9	1.7
5	DC 5105 BGII	0.3	0.6	1.2	0.2	1.5	1.2	1.6	0.9
6	KCH 9222 BGII	0.6	0.6	1.3	0.6	1.7	1.4	1.8	1.1
7	C 9339 BGII	0.3	1.3	1.7	0.9	2.4	2.2	2.2	1.6
8	VSCH 369 BGII (ZC 2)	0.2	0.2	1.5	0.4	2.1	1.2	1.6	1.0
9	KCH 9223 BGII	0.3	1.2	1.0	0.0	1.8	2.1	2.3	1.2
10	SS 459 BG II	0.7	1.3	1.5	0.4	1.7	1.6	2.1	1.3
11	VSCH 372 BGII	1.9	1.4	2.0	0.5	2.7	1.5	1.9	1.7
12	US 717 BGII	0.5	1.7	1.8	0.2	2.1	1.2	2.4	1.4
13	RCH 1016 BGII	1.0	1.2	1.9	0.6	2.2	1.9	1.7	1.5
14	RCH 1026 BG II	0.9	1.4	1.4	0.1	2.5	1.6	1.3	1.3
15	DLCH-9 Bt II	0.5	1.4	1.9	0.2	2.0	2.1	1.5	1.4
16	NBC 1821 BGII (ZC 1)	1.0	1.4	1.9	0.4	1.7	2.3	2.0	1.5
17	25D181 BGII	1.0	0.5	1.5	0.3	1.7	2.2	1.7	1.3
	CD @ 5%	0.7	0.2	0.3	NS	20.0	0.6		
	CV %	64.4	12.5	16.5	39.8	0.7	18.5		

Table: Number of sympodia in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	19.1	19.5	20.0	15.0	14.6	23.8	16.3	18.3
2	Core 102	17.7	22.6	18.0	16.2	15.5	23.5	17.2	18.7
3	KCH 9225 BGII	17.3	18.1	19.7	13.9	16.2	22.4	16.9	17.8
4	NBC 21 BGII	18.3	18.3	18.7	16.9	16.1	22.9	14.6	18.0
5	DC 5105 BGII	18.7	18.7	20.0	14.0	15.3	24.5	15.4	18.1
6	KCH 9222 BGII	16.6	19.2	19.0	13.0	15.9	24.5	16.7	17.8
7	C 9339 BGII	15.9	22.2	19.0	14.9	14.3	24.9	14.9	18.0
8	VSCH 369 BGII (ZC 2)	17.7	22.6	15.7	13.4	15.8	23.5	17.7	18.1
9	KCH 9223 BGII	18.5	22.2	19.0	13.7	14.1	23.3	15.2	18.0
10	SS 459 BG II	16.8	22.1	17.0	15.1	14.2	24.3	18.7	18.3
11	VSCH 372 BGII	18.3	20.7	20.7	17.2	13.7	21.5	16.3	18.3
12	US 717 BGII	18.3	21.0	19.7	18.1	15.0	23.1	16.9	18.9
13	RCH 1016 BGII	16.1	19.5	16.3	13.7	15.4	23.3	17.1	17.3
14	RCH 1026 BG II	15.7	19.3	16.3	15.6	14.5	22.8	18.3	17.5
15	DLCH-9 Bt II	18.2	21.3	19.5	16.2	13.8	24.2	18.5	18.8
16	NBC 1821 BGII (ZC 1)	16.1	21.7	16.0	15.0	14.8	22.9	17.3	17.7
17	25D181 BGII	16.9	12.0	16.7	15.3	14.1	22.7	15.9	16.2
	CD @ 5%	NS	4.4	1.7	NS	6.9	2.6		
	CV %	9.3	13.3	9.8	15.6	1.7	6.8		

Table: Boll weight (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	4.8	5.0	6.5	5.8	5.3	5.0	5.1	5.4
2	Core 102	5.1	6.2	6.6	5.4	5.3	6.0	4.9	5.6
3	KCH 9225 BGII	4.6	5.2	6.2	5.6	5.6	5.7	4.2	5.3
4	NBC 21 BGII	5.1	5.1	6.9	5.6	5.0	5.0	5.2	5.4
5	DC 5105 BGII	4.8	5.4	6.3	6.0	5.3	5.7	4.8	5.5
6	KCH 9222 BGII	4.9	5.7	6.5	5.6	5.4	5.6	4.3	5.4
7	C 9339 BGII	5.7	5.7	7.6	5.7	5.5	6.0	5.1	5.9
8	VSCH 369 BGII (ZC 2)	4.8	5.4	7.1	5.8	5.3	5.5	5.4	5.6
9	KCH 9223 BGII	5.2	5.3	6.7	5.7	5.7	5.4	5.3	5.6
10	SS 459 BG II	5.7	6.2	7.4	6.1	5.9	5.9	6.4	6.2
11	VSCH 372 BGII	4.4	5.5	6.0	5.5	5.0	5.4	5.7	5.4
12	US 717 BGII	5.5	5.5	7.6	6.4	5.8	6.0	6.3	6.2
13	RCH 1016 BGII	5.4	5.6	6.6	5.8	4.9	5.7	5.9	5.7
14	RCH 1026 BG II	4.6	5.4	6.4	6.0	5.3	5.7	5.2	5.5
15	DLCH-9 Bt II	5.1	6.2	7.6	6.5	5.7	5.6	5.5	6.0
16	NBC 1821 BGII (ZC 1)	5.2	5.5	7.5	6.8	5.9	5.3	6.3	6.1
17	25D181 BGII	5.4	5.3	7.8	6.2	6.1	5.4	4.8	5.9
	CD @ 5%	0.5	NS	0.3	0.5	5.6	0.6		
	CV %	6.1	10.3	4.8	5.3	0.5	6.2		

Table: Number of bolls / plant in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	22.5	49.4	43.7	23.3	40.3	42.4	31.0	36.1
2	Core 102	30.2	61.3	41.0	23.3	36.7	47.4	36.0	39.4
3	KCH 9225 BGII	23.7	51.8	38.3	20.3	42.7	48.3	41.0	38.0
4	NBC 21 BGII	29.9	56.6	45.0	21.5	38.0	45.8	37.0	39.1
5	DC 5105 BGII	23.1	51.3	35.0	23.5	36.0	51.7	41.0	37.4
6	KCH 9222 BGII	27.3	51.2	40.3	16.8	41.7	53.8	39.0	38.6
7	C 9339 BGII	22.1	49.8	43.7	14.9	41.0	47.2	37.0	36.5
8	VSCH 369 BGII (ZC 2)	22.9	50.5	42.7	22.7	35.7	52.0	33.0	37.1
9	KCH 9223 BGII	18.4	50.9	39.3	23.3	40.7	52.5	34.0	37.0
10	SS 459 BG II	17.7	60.5	40.7	19.5	32.3	51.2	48.0	38.6
11	VSCH 372 BGII	28.2	50.6	41.0	26.4	36.7	37.9	34.0	36.4
12	US 717 BGII	20.5	45.7	40.7	32.4	35.3	49.7	42.0	38.0
13	RCH 1016 BGII	26.9	50.4	37.0	23.0	40.0	44.3	38.0	37.1
14	RCH 1026 BG II	23.3	51.6	34.0	21.9	37.3	46.0	32.0	35.2
15	DLCH-9 Bt II	21.7	60.1	43.0	21.4	34.3	48.1	37.0	37.9
16	NBC 1821 BGII (ZC 1)	22.6	48.2	36.0	24.6	35.3	37.7	44.0	35.5
17	25D181 BGII	23.6	48.3	39.3	25.2	34.0	41.8	38.0	35.7
	CD @ 5%	NS	8.5	3.9	NS	5.6	9.5		
	CV %	20.1	9.7	10.1	21.3	3.5	12.2		

Table: Number of bolls / sq.m. in H X H hybrids

S. No.	Entries	Lam	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	98.9	57.4	56.0	67.4	58.4	67.6
2	Core 102	122.9	57.4	50.9	75.2	60.3	73.3
3	KCH 9225 BGII	103.4	50.0	59.3	76.6	69.3	71.7
4	NBC 21 BGII	113.3	53.2	52.8	72.8	65.5	71.5
5	DC 5105 BGII	102.4	58.1	50.0	82.0	73.9	73.3
6	KCH 9222 BGII	102.2	41.5	57.9	85.4	60.0	69.4
7	C 9339 BGII	99.6	36.9	56.9	74.9	66.9	67.0
8	VSCH 369 BGII (ZC 2)	100.8	56.0	49.5	82.5	58.1	69.4
9	KCH 9223 BGII	101.7	57.6	56.5	83.3	57.6	71.3
10	SS 459 BG II	120.9	48.1	44.9	81.2	85.9	76.2
11	VSCH 372 BGII	101.2	65.2	50.9	60.2	60.1	67.5
12	US 717 BGII	91.3	80.0	49.1	78.9	72.8	74.4
13	RCH 1016 BGII	101.1	56.8	55.6	70.4	61.3	69.0
14	RCH 1026 BG II	103.2	54.2	51.9	73.0	60.6	68.6
15	DLCH-9 Bt II	120.2	52.8	47.7	76.3	65.1	72.4
16	NBC 1821 BGII (ZC 1)	96.4	60.7	49.1	59.9	80.4	69.3
17	25D181 BGII	96.3	62.2	47.2	66.4	65.9	67.6
	CD @ 5%	17.3	NS	5.6	15.1		
	CV %	9.7	21.3	4.9	12.2		

Table: Lint Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	56.0	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	5.8	5.9	6.0	7.3	5.6	6.0	5.9	6.1
2	Core 102	6.5	7.2	6.9	7.3	5.9	6.5	5.7	6.6
3	KCH 9225 BGII	5.0	6.5	5.6	5.9	5.2	5.4	6.1	5.7
4	NBC 21 BGII	5.9	7.0	6.5	6.9	5.6	6.1	5.2	6.2
5	DC 5105 BGII	6.7	6.2	7.5	7.8	6.0	5.8	5.4	6.5
6	KCH 9222 BGII	5.1	6.1	5.0	5.7	5.0	5.5	6.3	5.5
7	C 9339 BGII	6.0	5.9	6.2	6.7	5.8	5.6	6.0	6.0
8	VSCH 369 BGII (ZC 2)	6.5	6.0	7.4	8.0	6.9	6.3	5.9	6.7
9	KCH 9223 BGII	5.4	6.1	5.9	6.9	5.7	6.3	6.2	6.1
10	SS 459 BG II	6.5	7.2	7.1	7.7	5.7	6.5	6.5	6.7
11	VSCH 372 BGII	5.5	6.1	6.3	7.5	5.7	5.7	5.5	6.0
12	US 717 BGII	6.3	5.4	7.2	7.6	6.5	6.4	6.2	6.5
13	RCH 1016 BGII	6.2	5.9	6.7	7.8	5.3	5.9	5.3	6.2
14	RCH 1026 BG II	6.5	6.3	7.0	8.1	6.2	5.8	5.7	6.5
15	DLCH-9 Bt II	5.5	7.2	7.1	6.4	5.5	6.1	5.9	6.2
16	NBC 1821 BGII (ZC 1)	5.5	5.6	6.2	7.1	5.3	5.8	6.4	6.0
17	25D181 BGII	5.9	5.8	6.8	7.0	5.3	5.9	5.6	6.0
	CD @ 5%	0.6	1.2	0.3	0.6	3.8	0.8		
	CV %	6.0	11.1	5.2	4.9	0.4	8.1		

Table: Seed Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	11.1	12.6	10.7	12.4	9.7	10.7	10.8	11.1
2	Core 102	11.4	12.0	11.3	11.5	9.0	11.0	11.2	11.1
3	KCH 9225 BGII	10.5	11.7	10.0	11.2	8.9	10.3	9.7	10.3
4	NBC 21 BGII	11.7	11.6	11.9	12.6	10.0	11.0	11.6	11.5
5	DC 5105 BGII	11.2	12.1	11.8	12.6	9.0	10.0	11.2	11.1
6	KCH 9222 BGII	10.5	12.2	10.0	11.2	8.8	10.7	10.3	10.5
7	C 9339 BGII	13.0	12.5	12.8	13.3	10.4	11.3	11.8	12.2
8	VSCH 369 BGII (ZC 2)	10.0	12.4	10.6	11.0	9.3	10.0	11.3	10.7
9	KCH 9223 BGII	11.0	12.2	10.9	12.5	9.8	11.3	10.7	11.2
10	SS 459 BG II	12.2	11.4	12.2	12.9	9.4	11.0	10.1	11.3
11	VSCH 372 BGII	9.9	12.3	11.3	12.6	9.8	9.7	11.5	11.0
12	US 717 BGII	12.2	12.6	13.6	13.8	10.7	11.3	10.3	12.1
13	RCH 1016 BGII	11.3	12.4	11.2	12.6	9.1	10.3	11.6	11.2
14	RCH 1026 BG II	11.0	12.0	11.4	12.5	9.4	10.7	10.9	11.1
15	DLCH-9 Bt II	11.6	11.4	12.5	13.5	10.3	11.0	11.8	11.7
16	NBC 1821 BGII (ZC 1)	11.9	12.6	12.1	13.2	9.9	11.7	10.2	11.7
17	25D181 BGII	11.6	12.6	12.9	12.4	9.1	11.7	11.5	11.7
	CD @ 5%	1.5	NS	0.5	0.7	4.1	1.2		
	CV %	7.7	10.8	4.6	3.5	0.7	6.6		

Table: Ginning outturn (%) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	34.4	32.1	35.7	37.2	36.7	36.2	36.4	35.5
2	Core 102	36.3	37.7	37.7	38.9	39.5	37.2	35.1	37.5
3	KCH 9225 BGII	32.5	35.9	36.0	34.7	36.6	34.5	38.5	35.5
4	NBC 21 BGII	33.9	37.8	35.4	35.4	35.7	35.9	36.9	35.9
5	DC 5105 BGII	37.3	33.8	38.8	38.3	40.0	36.7	35.7	37.2
6	KCH 9222 BGII	32.6	33.7	33.2	33.6	36.4	33.9	37.1	34.4
7	C 9339 BGII	31.6	32.0	32.5	33.4	35.7	33.2	34.9	33.3
8	VSCH 369 BGII (ZC 2)	39.4	32.6	41.1	42.2	42.5	38.8	36.1	39.0
9	KCH 9223 BGII	32.8	33.5	35.2	35.6	36.5	35.8	37.2	35.2
10	SS 459 BG II	34.9	38.5	36.8	37.5	37.9	37.1	39.9	37.5
11	VSCH 372 BGII	35.5	33.1	35.6	37.3	36.5	36.9	36.3	35.9
12	US 717 BGII	34.0	29.9	34.6	35.7	37.9	36.0	38.7	35.3
13	RCH 1016 BGII	35.3	32.3	37.5	38.1	36.9	36.3	36.4	36.1
14	RCH 1026 BG II	37.3	34.4	38.0	39.2	39.6	35.1	37.2	37.3
15	DLCH-9 Bt II	32.2	38.5	36.3	32.1	34.9	35.8	35.1	35.0
16	NBC 1821 BGII (ZC 1)	31.5	32.3	33.8	34.9	35.1	33.2	39.7	34.4
17	25D181 BGII	33.6	31.4	34.6	36.1	37.0	33.8	36.6	34.7
	CD @ 5%	2.2	4.7	0.7	1.3	1.4	2.3		
	CV %	3.9	8.3	2.0	2.1	0.9	3.8		

Table: Upper Half Mean Length (mm) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	KCH 9221 BGII	29.1	30.4	31.3	30.2	29.5	30.8	30.2
2	Core 102	27.9	29.8	28.9	28.4	28.2	29.0	28.7
3	KCH 9225 BGII	27.3	28.2	26.6	27.7	26.7	27.8	27.4
4	NBC 21 BGII	27.7	28.7	28.5	28.1	27.8	27.7	28.1
5	DC 5105 BGII	26.3	27.4	26.7	26.7	25.8	26.3	26.5
6	KCH 9222 BGII	26.8	27.6	27.0	27.8	26.6	28.1	27.3
7	C 9339 BGII	26.2	27.1	28.9	27.9	27.3	27.8	27.5
8	VSCH 369 BGII (ZC 2)	26.9	27.4	27.1	26.4	26.3	26.9	26.8
9	KCH 9223 BGII	28.3	29.7	29.8	29.9	29.2	29.9	29.5
10	SS 459 BG II	28.9	28.8	30.6	29.2	29.6	29.7	29.5
11	VSCH 372 BGII	27.5	28.5	28.3	28.2	27.8	28.9	28.2
12	US 717 BGII	29.3	30.4	30.6	31.1	30.8	31.6	30.6
13	RCH 1016 BGII	26.8	29.7	28.9	29.1	27.1	28.3	28.3
14	RCH 1026 BG II	26.2	28.2	28.2	27.8	25.5	26.6	27.1
15	DLCH-9 Bt II	30.0	32.0	30.9	32.2	30.0	30.2	30.9
16	NBC 1821 BGII (ZC 1)	29.7	30.4	30.6	31.5	30.6	31.5	30.7
17	25D181 BGII	28.5	29.9	30.2	30.1	29.3	30.2	29.7

Table: Uniformity index under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	KCH 9221 BGII	82.0	83.0	85.0	84.8	84.0	85.0	84.0
2	Core 102	84.0	86.0	86.0	85.0	85.0	86.0	85.3
3	KCH 9225 BGII	85.0	85.0	84.0	85.4	85.0	87.0	85.2
4	NBC 21 BGII	84.0	85.0	86.0	85.0	86.0	84.0	85.0
5	DC 5105 BGII	83.0	85.0	86.0	84.6	84.0	85.0	84.6
6	KCH 9222 BGII	85.0	86.0	84.0	85.3	84.0	86.0	85.1
7	C 9339 BGII	84.0	85.0	86.0	85.8	85.0	87.0	85.5
8	VSCH 369 BGII (ZC 2)	84.0	84.0	85.0	84.6	84.0	85.0	84.4
9	KCH 9223 BGII	83.0	85.0	86.0	86.5	85.0	85.0	85.1
10	SS 459 BG II	84.0	85.0	85.0	84.7	86.0	85.0	85.0
11	VSCH 372 BGII	83.0	85.0	84.0	84.6	85.0	85.0	84.4
12	US 717 BGII	83.0	86.0	87.0	87.2	87.0	86.0	86.0
13	RCH 1016 BGII	82.0	87.0	85.0	85.3	83.0	85.0	84.6
14	RCH 1026 BG II	84.0	85.0	86.0	84.6	85.0	84.0	84.8
15	DLCH-9 Bt II	84.0	82.0	87.0	85.5	86.0	87.0	85.3
16	NBC 1821 BGII (ZC 1)	84.0	85.0	86.0	87.3	87.0	87.0	86.1
17	25D181 BGII	84.0	85.0	86.0	86.3	85.0	85.0	85.2

Table: Micronaire under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	KCH 9221 BGII	5.2	5.4	5.4	5.4	4.8	5.3	5.3
2	Core 102	5.1	5.1	5.0	5.1	4.9	5.0	5.0
3	KCH 9225 BGII	5.0	4.8	4.9	4.9	4.3	4.6	4.8
4	NBC 21 BGII	5.2	5.2	5.2	4.9	4.7	4.8	5.0
5	DC 5105 BGII	4.9	4.9	5.3	4.9	4.2	4.6	4.8
6	KCH 9222 BGII	5.1	4.9	5.1	5.0	4.3	4.6	4.8
7	C 9339 BGII	4.9	4.7	5.4	4.9	4.6	4.7	4.9
8	VSCH 369 BGII (ZC 2)	6.0	5.5	5.8	5.8	5.1	5.5	5.6
9	KCH 9223 BGII	5.1	4.9	4.9	4.9	4.2	4.9	4.8
10	SS 459 BG II	5.1	5.2	5.4	5.0	4.4	4.9	5.0
11	VSCH 372 BGII	5.5	5.9	5.9	5.8	5.5	5.2	5.6
12	US 717 BGII	5.3	5.1	5.5	5.1	4.8	5.3	5.2
13	RCH 1016 BGII	5.0	5.2	5.4	5.1	5.1	5.1	5.2
14	RCH 1026 BG II	4.7	4.7	5.1	4.9	4.5	4.8	4.8
15	DLCH-9 Bt II	4.0	4.2	4.7	3.9	4.1	4.3	4.2
16	NBC 1821 BGII (ZC 1)	4.3	4.4	4.6	4.3	3.9	4.0	4.3
17	25D181 BGII	4.7	4.7	5.0	4.6	4.1	4.5	4.6

Table: Tenacity under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Mean
1	KCH 9221 BGII	32.0	31.2	32.6	28.9	30.2	32.8	31.3
2	Core 102	30.0	31.5	28.2	27.4	27.0	29.0	28.9
3	KCH 9225 BGII	29.5	30.4	30.5	29.1	28.7	30.4	29.8
4	NBC 21 BGII	30.1	29.9	32.0	28.3	27.2	29.2	29.5
5	DC 5105 BGII	27.9	28.5	29.1	26.5	26.0	28.3	27.7
6	KCH 9222 BGII	28.4	29.9	30.2	28.2	29.1	30.4	29.4
7	C 9339 BGII	27.6	27.4	29.0	27.9	26.9	28.2	27.8
8	VSCH 369 BGII (ZC 2)	28.8	29.2	26.4	26.0	24.2	27.4	27.0
9	KCH 9223 BGII	30.3	30.8	31.1	29.4	28.9	30.7	30.2
10	SS 459 BG II	31.9	29.3	30.9	28.3	28.1	29.5	29.7
11	VSCH 372 BGII	30.0	30.4	28.7	27.0	28.3	29.5	29.0
12	US 717 BGII	31.6	30.0	32.0	28.8	29.2	31.2	30.5
13	RCH 1016 BGII	28.3	30.4	32.2	28.7	29.2	29.8	29.8
14	RCH 1026 BG II	27.4	30.1	30.8	27.5	27.5	27.8	28.5
15	DLCH-9 Bt II	33.3	30.4	33.8	29.8	29.2	31.5	31.3
16	NBC 1821 BGII (ZC 1)	31.8	32.2	33.3	31.8	30.1	33.5	32.1
17	25D181 BGII	30.7	29.8	28.9	27.9	29.4	32.0	29.8

Table: Seed Cotton Yield at 140 DAS (q/ha) at 140 DAS in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	4.59	16.98	15.43	25.84	10.09	18.21	15.19
2	Core 102	7.22	22.54	22.72	22.90	15.45	19.14	18.33
3	KCH 9225 BGII	6.12	19.52	25.00	26.14	13.57	16.67	17.84
4	NBC 21 BGII	6.72	20.48	18.34	23.55	11.90	19.75	16.79
5	DC 5105 BGII	5.86	18.97	20.85	21.93	15.39	20.06	17.18
6	KCH 9222 BGII	7.18	18.81	20.81	25.14	15.87	19.17	17.83
7	C 9339 BGII	5.73	17.26	10.61	23.60	13.21	23.70	15.69
8	VSCH 369 BGII (ZC 2)	5.12	17.86	16.87	21.46	15.82	19.75	16.15
9	KCH 9223 BGII	5.60	18.77	23.62	25.02	15.80	18.21	17.84
10	SS 459 BG II	6.49	22.38	20.36	22.55	16.31	21.50	18.27
11	VSCH 372 BGII	7.30	18.41	18.16	23.30	11.22	16.98	15.90
12	US 717 BGII	5.62	15.79	19.56	22.53	14.47	19.75	16.29
13	RCH 1016 BGII	8.17	17.70	19.05	22.94	13.66	22.84	17.39
14	RCH 1026 BG II	8.48	19.05	22.45	23.61	13.95	23.46	18.50
15	DLCH-9 Bt II	7.16	22.38	24.84	21.59	11.94	20.06	18.00
16	NBC 1821 BGII (ZC 1)	4.75	15.79	19.85	22.76	11.99	20.37	15.92
17	25D181 BGII	6.71	16.51	17.78	20.90	12.99	15.12	15.00
	CD @ 5%	1.96	4.22	3.60	3.38	3.06		
	CV %	18.28	13.45	10.81	1.31	13.39		

Table: Seed Cotton Yield at 165 DAS (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean
1	KCH 9221 BGII	7.56	11.32	16.87	8.83	7.29	15.12	11.17
2	Core 102	8.15	15.03	10.70	4.88	8.48	9.57	9.47
3	KCH 9225 BGII	7.27	13.02	10.12	7.38	8.07	14.51	10.06
4	NBC 21 BGII	6.51	13.65	11.44	4.97	8.04	16.36	10.16
5	DC 5105 BGII	4.61	12.65	12.96	5.76	8.10	10.49	9.10
6	KCH 9222 BGII	7.73	12.54	6.21	7.29	8.15	9.50	8.57
7	C 9339 BGII	6.41	11.51	6.26	6.53	10.20	16.90	9.64
8	VSCH 369 BGII (ZC 2)	4.27	11.90	17.08	5.52	6.83	17.90	10.58
9	KCH 9223 BGII	3.40	12.51	8.52	7.18	6.55	16.05	9.04
10	SS 459 BG II	3.72	14.92	7.86	3.58	7.59	20.99	9.78
11	VSCH 372 BGII	7.43	12.28	20.91	4.59	6.72	8.95	10.15
12	US 717 BGII	6.28	10.53	21.07	4.92	9.22	19.14	11.86
13	RCH 1016 BGII	5.19	11.80	12.39	6.30	6.47	20.68	10.47
14	RCH 1026 BG II	5.17	12.70	11.36	5.65	6.84	18.21	9.99
15	DLCH-9 Bt II	7.44	14.92	15.43	3.79	9.13	13.27	10.66
16	NBC 1821 BGII (ZC 1)	6.17	10.53	14.24	3.99	6.51	15.74	9.53
17	25D181 BGII	5.10	11.01	13.17	5.32	6.76	13.58	9.16
	CD @ 5%	1.90	2.81	4.50	15.84	1.62		
	CV %	18.84	13.41	21.22	1.49	12.66		

Table: Total Seed Cotton Yield (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Hyderabad (Kaveri)	Karim Nagar (Eldorado)	Gadwal (Dhanlaxmi)	Mean	Rank	% Inc over best check
1	KCH 9221 BGII	12.16	28.31	35.70	32.31	34.67	17.38	33.33	27.69	14	-2.5
2	Core 102	15.37	37.57	42.90	33.42	27.78	23.93	28.70	29.95	4	5.4
3	KCH 9225 BGII	13.39	32.54	39.76	35.13	33.52	21.64	31.48	29.64	5	4.3
4	NBC 21 BGII	13.23	34.13	41.55	29.78	28.52	19.95	36.11	29.04	8	2.2
5	DC 5105 BGII	10.47	31.61	34.79	33.81	27.69	23.49	30.56	27.49	15	-3.2
6	KCH 9222 BGII	14.91	31.35	36.28	27.02	32.43	24.01	28.70	27.81	11	-2.1
7	C 9339 BGII	12.14	28.77	42.74	16.86	30.13	23.41	40.64	27.81	12	-2.1
8	VSCH 369 BGII (ZC 2)	9.38	29.76	38.42	33.95	26.97	22.65	37.72	28.41	9	0.0
9	KCH 9223 BGII	9.00	31.28	32.90	32.13	32.21	22.35	34.26	27.73	13	-2.4
10	SS 459 BG II	10.20	37.30	42.36	28.22	26.14	23.90	42.59	30.10	2	6.0
11	VSCH 372 BGII	14.73	30.69	42.23	39.07	27.89	17.94	25.93	28.35	10	-0.2
12	US 717 BGII	11.90	26.32	41.03	40.63	27.45	23.69	38.89	29.99	3	5.6
13	RCH 1016 BGII	13.36	29.50	37.60	31.44	29.24	20.13	43.52	29.26	7	3.0
14	RCH 1026 BG II	13.66	31.75	35.40	33.81	29.27	20.79	41.67	29.48	6	3.8
15	DLCH-9 Bt II	14.59	37.30	43.06	40.28	25.39	21.07	33.33	30.72	1	8.1
16	NBC 1821 BGII (ZC 1)	10.92	26.32	34.55	34.09	26.75	18.50	36.11	26.75	16	-5.8
17	25D181 BGII	11.81	27.51	39.96	30.95	26.21	19.75	28.70	26.41	17	-7.0
	CD @ 5%	3.14	7.03	2.87	6.00	3.87	3.17				
	CV %	15.14	13.45	7.68	11.18	1.86	8.89				

**Evaluation under Protected Condition for Insect pests
Reaction to Insect Pest**

Table: Advanced H X H trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.83	1.76	2.41	4.53	2.38	BETL
55062	1.40	3.47	0.87	5.11	2.71	BETL
55063	0.97	1.61	1.34	3.64	1.89	BETL
55064	1.17	1.82	1.45	4.24	2.17	BETL
55065	1.47	2.11	0.94	4.42	2.24	BETL
55066	2.07	2.51	0.99	4.27	2.46	BETL
55067	1.17	1.49	1.33	4.18	2.04	BETL
55068	1.33	1.96	0.78	5.09	2.29	BETL
55069	1.73	3.20	1.19	6.18	3.08	BETL
55070	1.00	3.24	1.09	5.29	2.66	BETL
55071	1.13	1.02	0.90	5.31	2.09	BETL
55072	0.83	1.87	1.19	5.44	2.33	BETL
55073	1.23	1.82	0.86	5.00	2.23	BETL
55074	1.70	2.31	1.52	3.80	2.33	BETL
55075	0.73	2.51	1.10	5.02	2.34	BETL
55076	1.43	2.00	0.76	5.40	2.40	BETL
55077	1.00	1.56	1.20	5.16	2.23	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	3.73	0.07	0.42	1.93	1.54	BETL
55062	3.20	0.22	1.45	2.04	1.73	BETL
55063	3.10	0.13	0.43	1.87	1.38	BETL
55064	2.13	0.24	1.31	1.51	1.30	BETL
55065	3.13	0.09	0.54	1.27	1.26	BETL
55066	3.60	0.07	0.88	1.73	1.57	BETL
55067	3.07	0.04	0.73	1.64	1.37	BETL
55068	5.07	0.22	0.84	1.91	2.01	BETL
55069	4.03	0.09	1.65	1.76	1.88	BETL
55070	3.03	0.22	1.78	1.64	1.67	BETL
55071	4.83	0.33	1.05	1.49	1.93	BETL
55072	3.37	0.27	0.91	1.11	1.41	BETL
55073	2.17	0.31	0.49	1.09	1.01	BETL
55074	2.40	0.51	0.24	0.91	1.02	BETL
55075	4.37	0.29	0.63	1.49	1.69	BETL
55076	4.90	0.33	1.00	1.60	1.96	BETL
55077	5.27	0.20	1.37	2.22	2.26	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55061	I	I	I	II	I	
55062	I	I	I	I	I	
55063	I	I	I	I	I	
55064	I	I	I	I	I	
55065	I	I	I	II	I	
55066	I	I	I	I	I	
55067	I	I	I	I	I	
55068	II	I	I	I	I	
55069	I	I	I	II	I	
55070	II	I	I	I	I	
55071	I	I	I	I	I	
55072	I	I	I	I	I	
55073	I	I	I	I	I	
55074	I	I	I	I	I	
55075	I	I	I	I	I	
55076	I	I	I	I	I	
55077	I	I	I	I	I	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	3.40	3.58	1.34	7.87	4.05	BETL
55062	3.60	3.52	0.91	7.31	3.84	BETL
55063	4.53	3.18	1.48	7.69	4.22	BETL
55064	2.20	3.38	1.94	6.78	3.58	BETL
55065	4.57	3.45	1.70	8.60	4.58	BETL
55066	2.87	3.92	2.49	7.18	4.11	BETL
55067	3.73	3.52	1.17	6.38	3.70	BETL
55068	2.90	2.25	1.65	20.89	6.92	BETL
55069	4.90	3.25	1.39	8.62	4.54	BETL
55070	3.83	3.32	1.33	7.36	3.96	BETL
55071	3.83	4.45	0.85	6.98	4.03	BETL
55072	2.33	2.85	0.70	7.56	3.36	BETL
55073	2.53	4.12	1.51	8.60	4.19	BETL
55074	2.67	3.30	1.20	7.24	3.60	BETL
55075	3.17	3.58	1.20	7.36	3.83	BETL
55076	4.33	2.98	0.62	7.60	3.88	BETL
55077	4.73	2.52	1.04	7.38	3.92	BETL

GU- Lam Guntur , RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.03	0.09	0.38	1.67	0.54	BETL
55062	0.00	0.11	0.41	1.53	0.51	BETL
55063	0.13	0.22	0.24	1.64	0.56	BETL
55064	0.03	0.00	0.21	1.78	0.51	BETL
55065	0.00	0.18	0.51	1.42	0.53	BETL
55066	0.07	0.00	0.84	1.71	0.65	BETL
55067	0.03	0.04	1.02	1.60	0.67	BETL
55068	0.00	0.04	1.11	1.87	0.76	BETL
55069	0.13	0.02	0.18	2.38	0.68	BETL
55070	0.03	0.12	0.39	1.93	0.62	BETL
55071	0.00	0.04	0.91	1.91	0.72	BETL
55072	0.07	0.00	0.81	2.02	0.72	BETL
55073	0.03	0.31	0.65	1.60	0.65	BETL
55074	0.00	0.09	0.76	1.27	0.53	BETL
55075	0.03	0.02	0.40	2.33	0.70	BETL
55076	0.17	0.16	1.02	2.18	0.88	BETL
55077	0.03	0.02	0.61	1.69	0.59	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.10	0.45	0.18	0.09	0.20	
55062	0.17	0.45	0.04	0.04	0.18	
55063	0.10	0.56	0.09	0.02	0.19	
55064	0.30	1.57	0.04	0.07	0.49	
55065	0.00	1.34	0.09	0.02	0.36	
55066	0.07	1.12	0.11	0.09	0.35	
55067	0.00	0.67	0.09	0.04	0.20	
55068	0.17	0.45	0.04	0.11	0.19	
55069	0.13	0.78	0.11	0.00	0.26	
55070	0.03	1.01	0.07	0.16	0.32	
55071	0.00	0.67	0.02	0.02	0.18	
55072	0.10	1.12	0.09	0.11	0.35	
55073	0.17	0.90	0.11	0.07	0.31	
55074	0.13	1.12	0.09	0.16	0.37	
55075	0.00	1.23	0.07	0.13	0.36	
55076	0.07	1.34	0.09	0.07	0.39	
55077	0.17	1.46	0.07	0.07	0.44	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions –
Helicoverpa armigera

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.00	0.00	0.00	0.00	0.00	BETL
55062	0.00	0.00	0.00	0.00	0.00	BETL
55063	0.00	0.00	0.00	0.00	0.00	BETL
55064	0.00	0.00	0.00	0.00	0.00	BETL
55065	0.00	0.00	0.00	0.00	0.00	BETL
55066	0.00	0.00	0.00	0.00	0.00	BETL
55067	0.00	0.00	0.00	0.00	0.00	BETL
55068	0.00	0.00	0.00	0.00	0.00	BETL
55069	0.00	0.00	0.00	0.00	0.00	BETL
55070	0.00	0.00	0.00	0.00	0.00	BETL
55071	0.00	0.00	0.00	0.00	0.00	BETL
55072	0.00	0.00	0.00	0.00	0.00	BETL
55073	0.00	0.00	0.00	0.00	0.00	BETL
55074	0.00	0.00	0.00	0.00	0.00	BETL
55075	0.00	0.00	0.00	0.00	0.00	BETL
55076	0.00	0.00	0.00	0.00	0.00	BETL
55077	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – Spotted/ Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.00	0.00	0.00	0.00	0.00	BETL
55062	0.00	0.00	0.00	0.00	0.00	BETL
55063	0.00	0.00	0.00	0.00	0.00	BETL
55064	0.00	0.00	0.00	0.00	0.00	BETL
55065	0.00	0.00	0.00	0.00	0.00	BETL
55066	0.00	0.00	0.00	0.00	0.00	BETL
55067	0.00	0.00	0.00	0.00	0.00	BETL
55068	0.00	0.00	0.00	0.00	0.00	BETL
55069	0.00	0.00	0.00	0.00	0.00	BETL
55070	0.00	0.00	0.00	0.00	0.00	BETL
55071	0.00	0.00	0.00	0.00	0.00	BETL
55072	0.00	0.00	0.00	0.00	0.00	BETL
55073	0.00	0.00	0.00	0.00	0.00	BETL
55074	0.00	0.00	0.00	0.00	0.00	BETL
55075	0.00	0.00	0.00	0.00	0.00	BETL
55076	0.00	0.00	0.00	0.00	0.00	BETL
55077	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.03	0.00	0.00	0.00	0.01	BETL
55062	0.10	0.00	0.00	0.00	0.03	BETL
55063	0.00	0.00	0.00	0.00	0.00	BETL
55064	0.07	0.00	0.00	0.00	0.02	BETL
55065	0.13	0.00	0.00	0.00	0.03	BETL
55066	0.00	0.00	0.00	0.00	0.00	BETL
55067	0.03	0.00	0.00	0.00	0.01	BETL
55068	0.07	0.00	0.00	0.00	0.02	BETL
55069	0.17	0.00	0.00	0.00	0.04	BETL
55070	0.03	0.00	0.00	0.00	0.01	BETL
55071	0.00	0.00	0.00	0.00	0.00	BETL
55072	0.10	0.00	0.00	0.00	0.03	BETL
55073	0.13	0.00	0.00	0.00	0.03	BETL
55074	0.20	0.00	0.00	0.00	0.05	BETL
55075	0.00	0.00	0.00	0.00	0.00	BETL
55076	0.13	0.00	0.00	0.00	0.03	BETL
55077	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.67	0.34	0.33	1.11	0.61	BETL
55062	0.83	0.34	0.56	1.67	0.85	BETL
55063	1.00	0.25	0.22	2.27	0.94	BETL
55064	0.50	0.34	0.11	1.89	0.71	BETL
55065	0.67	0.42	0.44	1.67	0.80	BETL
55066	0.33	0.34	0.00	2.11	0.70	BETL
55067	0.67	0.17	0.78	1.78	0.85	BETL
55068	0.67	0.17	0.44	2.33	0.90	BETL
55069	0.83	0.17	0.44	2.00	0.86	BETL
55070	0.83	0.42	0.44	1.44	0.79	BETL
55071	1.00	0.34	0.00	1.78	0.78	BETL
55072	0.83	0.25	0.33	1.78	0.80	BETL
55073	0.67	0.17	0.56	1.67	0.76	BETL
55074	0.83	0.42	0.11	1.56	0.73	BETL
55075	0.67	0.84	0.11	1.78	0.85	BETL
55076	0.83	1.27	0.89	2.00	1.25	BETL
55077	0.67	1.68	0.22	1.67	1.06	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55061	0.00	0.00	0.00	0.00	0.00	BETL
55062	0.00	0.00	0.00	0.00	0.00	BETL
55063	0.00	0.00	0.00	0.00	0.00	BETL
55064	0.00	0.00	0.00	0.00	0.00	BETL
55065	0.00	0.00	0.00	0.00	0.00	BETL
55066	0.00	0.00	0.00	0.00	0.00	BETL
55067	0.00	0.00	0.00	0.00	0.00	BETL
55068	0.00	0.00	0.00	0.00	0.00	BETL
55069	0.00	0.00	0.00	0.00	0.00	BETL
55070	0.00	0.00	0.00	0.00	0.00	BETL
55071	0.00	0.00	0.00	0.00	0.00	BETL
55072	0.00	0.00	0.00	0.00	0.00	BETL
55073	0.00	0.00	0.00	0.00	0.00	BETL
55074	0.00	0.00	0.00	0.00	0.00	BETL
55075	0.00	0.00	0.00	0.00	0.00	BETL
55076	0.00	0.00	0.00	0.00	0.00	BETL
55077	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55061	8.33	2.21	10.00	8.89	7.36	BETL
55062	10.00	2.85	11.67	11.11	8.91	BETL
55063	8.33	1.64	16.67	14.44	10.27	AETL
55064	6.67	1.51	13.33	13.33	8.71	BETL
55065	6.67	1.72	15.00	14.44	9.46	BETL
55066	5.00	1.51	1.67	15.56	5.93	BETL
55067	8.33	1.81	23.33	12.22	11.42	AETL
55068	3.33	1.64	13.33	12.22	7.63	BETL
55069	6.67	2.18	11.67	11.11	7.91	BETL
55070	8.33	1.68	6.67	8.89	6.39	BETL
55071	8.33	2.27	3.33	11.11	6.26	BETL
55072	6.67	1.89	15.00	11.11	8.67	BETL
55073	8.33	1.64	18.33	12.22	10.13	AETL
55074	8.33	2.02	10.00	10.00	7.59	BETL
55075	6.67	2.39	23.33	14.44	11.71	AETL
55076	6.67	2.86	11.67	11.11	8.08	BETL
55077	6.67	3.49	10.00	12.22	8.09	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage(%)					Remark
	GU	RA	CBE	WR	Mean	
55061	5.62	3.87	5.41	13.33	7.06	
55062	7.31	4.36	9.03	21.67	10.59	
55063	8.55	4.21	8.96	18.33	10.01	
55064	7.39	4.04	6.32	23.33	10.27	
55065	6.28	4.21	9.84	15.00	8.83	
55066	8.14	3.70	11.09	18.33	10.32	
55067	6.08	4.55	10.60	31.67	13.22	
55068	5.08	4.04	9.11	28.33	11.64	
55069	7.62	4.89	10.19	21.67	11.09	
55070	5.33	4.04	8.28	25.00	10.66	
55071	9.26	3.98	4.95	25.00	10.80	
55072	5.79	4.69	10.22	25.00	11.42	
55073	8.19	3.70	9.33	31.67	13.22	
55074	6.53	4.66	6.93	30.00	12.03	
55075	7.00	3.99	7.36	28.33	11.67	
55076	6.50	4.79	6.93	11.67	7.47	
55077	5.83	4.69	14.02	26.67	12.80	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55061	2.42	2.82	2.79	8.12	4.04	
55062	3.05	3.31	3.90	6.24	4.13	
55063	2.96	3.16	4.49	6.36	4.24	
55064	3.51	2.99	3.07	8.14	4.43	
55065	2.45	3.16	4.43	7.62	4.41	
55066	3.00	2.65	6.02	6.97	4.66	
55067	2.47	3.50	6.02	11.11	5.77	
55068	2.09	2.99	5.15	7.41	4.41	
55069	3.96	3.21	4.74	5.81	4.43	
55070	2.55	2.36	4.19	7.07	4.04	
55071	4.02	2.30	1.65	8.75	4.18	
55072	2.88	3.01	4.45	8.89	4.81	
55073	2.36	2.02	5.08	5.99	3.86	
55074	2.84	2.98	3.42	6.61	3.96	
55075	3.04	2.31	3.34	6.27	3.74	
55076	3.82	3.11	3.10	4.10	3.53	
55077	3.00	3.01	5.84	10.28	5.53	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Protected Conditions – No. of Sprays for Insect-Pests

Name of Entry	No. of Sprays for Insect-Pests					Remark
	GU	RA	CBE	WR	Mean	
55061	5.00	4.00	4.00	5.00	4.50	
55062	5.00	4.00	4.00	5.00	4.50	
55063	5.00	4.00	4.00	5.00	4.50	
55064	5.00	4.00	4.00	5.00	4.50	
55065	5.00	4.00	4.00	5.00	4.50	
55066	5.00	4.00	4.00	5.00	4.50	
55067	5.00	4.00	4.00	5.00	4.50	
55068	5.00	4.00	4.00	5.00	4.50	
55069	5.00	4.00	4.00	5.00	4.50	
55070	5.00	4.00	4.00	5.00	4.50	
55071	5.00	4.00	4.00	5.00	4.50	
55072	5.00	4.00	4.00	5.00	4.50	
55073	5.00	4.00	4.00	5.00	4.50	
55074	5.00	4.00	4.00	5.00	4.50	
55075	5.00	4.00	4.00	5.00	4.50	
55076	5.00	4.00	4.00	5.00	4.50	
55077	5.00	4.00	4.00	5.00	4.50	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Reaction to Diseases

Table 3 (a) Advanced Evaluation Trial –II of Intra-hirsutum Hybrids – Irrigated (AET-II Hybrids IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions															
			LAM, Guntur						CICR RS, Coimbatore									
			CoLS		GM		Rust		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
9	55061	KCH 9221 BGII	28.2	MR	13.6	R	25.9	MR	3.5	R	0.0	DF	0.0	DF	0.5	R	5.7	R
16	55062	Core 102	26.0	MR	28.8	MR	30.0	MR	6.0	R	0.0	DF	0.0	DF	0.9	R	5.8	R
1	55063	KCH 9225 BGII	3.5	R	26.5	MR	26.8	MR	6.7	R	0.0	DF	0.0	DF	0.9	R	3.8	R
7	55064	NBC 21 BGII	4.8	R	26.5	MR	26.5	MR	5.5	R	0.0	DF	0.0	DF	0.4	R	6.3	R
17	55065	DC 5105 BGII	25.8	MR	8.3	R	29.2	MR	5.5	R	0.0	DF	0.0	DF	1.6	R	6.2	R
4	55066	KCH 9222 BGII	26.5	MR	21.8	R	13.5	R	4.8	R	0.0	DF	0.0	DF	0.9	R	5.7	R
11	55067	C 9339 BGII	12.8	R	25.5	MR	26.3	MR	6.8	R	0.0	DF	0.0	DF	2.0	R	9.0	R
15	55068	VSCH 369 BGII (ZC 2)	26.2	MR	19.5	R	11.0	R	6.5	R	0.0	DF	0.0	DF	1.3	R	7.0	R
2	55069	KCH 9223 BGII	25.7	MR	30.5	MR	30.5	MR	7.3	R	0.0	DF	0.0	DF	2.3	R	7.0	R
14	55070	SS 459 BG II	27.0	MR	21.0	R	26.0	MR	7.0	R	0.0	DF	0.0	DF	1.2	R	7.5	R
6	55071	VSCH 372 BGII	22.7	R	19.2	R	26.5	MR	7.5	R	0.0	DF	0.0	DF	1.5	R	8.8	R
13	55072	US 717 BGII	21.5	R	21.5	R	30.3	MR	5.8	R	0.0	DF	0.0	DF	1.2	R	7.2	R
3	55073	RCH 1016 BGII	24.3	R	20.7	R	11.5	R	6.0	R	0.0	DF	0.0	DF	1.7	R	7.3	R
10	55074	RCH 1026 BG II	19.0	R	20.5	R	28.5	MR	6.2	R	0.0	DF	0.0	DF	1.3	R	8.2	R
5	55075	DLCH-9 Bt II	11.8	R	14.5	R	10.8	R	7.0	R	0.0	DF	0.0	DF	0.9	R	7.0	R
8	55076	NBC 1821 BGII (ZC 1)	27.5	MR	26.3	MR	27.3	MR	5.8	R	0.0	DF	0.0	DF	1.7	R	6.5	R
12	55077	25D181 BGII	29.5	MR	27.0	MR	30.3	MR	5.7	R	0.0	DF	0.0	DF	0.8	R	6.7	R

Table 3 (b) Advanced Evaluation Trial –II of Intra-hirsutum Hybrids – Irrigated (AET-II Hybrids IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions									
			RARS, Warangal									
			ALS		CoLS		GM		Rust		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
9	55061	KCH 9221 BGII	3.2	R	3.8	R	12.5	R	25.8	MR	2.4	R
16	55062	Core 102	4.0	R	5.5	R	12.3	R	26.8	MR	1.1	R
1	55063	KCH 9225 BGII	2.5	R	3.5	R	11.8	R	27.7	MR	0.2	R
7	55064	NBC 21 BGII	1.7	R	2.5	R	10.8	R	27.2	MR	0.7	R
17	55065	DC 5105 BGII	1.0	R	1.5	R	7.3	R	16.2	R	1.9	R
4	55066	KCH 9222 BGII	2.3	R	2.8	R	11.7	R	26.2	MR	0.2	R
11	55067	C 9339 BGII	3.3	R	4.8	R	12.7	R	27.0	MR	0.6	R
15	55068	VSCH 369 BGII (ZC 2)	2.5	R	4.5	R	13.3	R	27.2	MR	3.4	R
2	55069	KCH 9223 BGII	3.3	R	5.2	R	13.5	R	29.2	MR	1.1	R
14	55070	SS 459 BG II	3.3	R	3.8	R	12.7	R	27.5	MR	2.3	R
6	55071	VSCH 372 BGII	4.5	R	6.7	R	12.2	R	27.0	MR	2.4	R
13	55072	US 717 BGII	3.2	R	3.8	R	13.3	R	28.3	MR	2.4	R
3	55073	RCH 1016 BGII	4.2	R	4.5	R	12.0	R	27.2	MR	0.4	R
10	55074	RCH 1026 BG II	4.7	R	5.8	R	13.0	R	28.0	MR	1.1	R
5	55075	DLCH-9 Bt II	3.8	R	4.3	R	11.8	R	28.0	MR	2.5	R
8	55076	NBC 1821 BGII (ZC 1)	3.2	R	3.7	R	12.0	R	27.2	MR	4.6	R
12	55077	25D181 BGII	2.7	R	3.5	R	12.8	R	28.2	MR	1.9	R

Evaluation under Unprotected Condition for Insect pests
Reaction to Insect Pest
 (

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	5.13	2.11	9.09	9.07	6.35	BETL
55062	7.23	4.50	9.80	7.47	7.25	BETL
55063	4.47	3.08	9.30	7.60	6.11	BETL
55064	6.13	2.16	8.59	8.87	6.44	BETL
55065	5.70	2.49	8.76	7.87	6.20	BETL
55066	4.40	4.16	6.89	9.00	6.11	BETL
55067	5.13	2.55	10.37	9.47	6.88	BETL
55068	6.63	2.99	8.20	8.07	6.47	BETL
55069	5.97	5.19	6.14	8.47	6.44	BETL
55070	5.73	3.35	6.92	8.53	6.13	BETL
55071	4.83	2.05	5.97	10.13	5.75	BETL
55072	5.60	2.65	7.03	7.20	5.62	BETL
55073	4.33	2.97	8.29	7.60	5.80	BETL
55074	7.27	3.99	10.66	8.20	7.53	BETL
55075	6.03	2.29	8.72	7.47	6.13	BETL
55076	5.53	2.50	8.67	9.07	6.44	BETL
55077	5.23	3.29	7.56	8.53	6.15	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: H X H trial in South Zone under Unprotected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	8.37	3.92	3.93	3.67	4.97	BETL
55062	9.23	7.38	3.17	3.40	5.80	BETL
55063	7.83	4.96	3.77	3.53	5.02	BETL
55064	8.03	5.32	2.93	3.47	4.94	BETL
55065	10.20	5.11	6.57	4.00	6.47	AETL
55066	8.40	7.04	5.13	4.33	6.23	AETL
55067	7.63	3.34	2.77	3.53	4.32	BETL
55068	10.63	3.57	3.63	3.60	5.36	BETL
55069	9.23	4.03	3.90	3.60	5.19	BETL
55070	7.83	7.74	4.67	3.73	5.99	BETL
55071	8.23	3.27	3.93	4.33	4.94	BETL
55072	8.47	3.24	4.03	3.73	4.87	BETL
55073	7.57	3.06	3.27	3.33	4.31	BETL
55074	9.50	3.44	3.80	3.20	4.99	BETL
55075	7.83	4.51	4.20	3.27	4.95	BETL
55076	8.97	4.25	7.90	4.87	6.49	AETL
55077	9.27	4.00	3.77	3.93	5.24	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55061	II	II	I	III	II	
55062	IV	II	I	II	II	
55063	II	II	I	II	II	
55064	I	II	I	I	I	
55065	III	II	I	II	II	
55066	II	II	I	II	II	
55067	II	II	I	III	II	
55068	IV	II	I	II	II	
55069	III	II	I	II	II	
55070	III	II	I	II	II	
55071	III	II	I	II	II	
55072	II	II	I	II	II	
55073	I	II	I	I	I	
55074	II	II	I	I	II	
55075	III	II	I	II	II	
55076	IV	II	I	II	II	
55077	III	II	I	II	II	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	7.80	7.58	2.08	13.07	7.63	BETL
55062	8.70	4.58	2.52	13.47	7.32	BETL
55063	6.60	5.79	2.90	11.40	6.67	BETL
55064	7.47	6.37	3.44	13.80	7.77	BETL
55065	8.13	7.32	2.94	12.27	7.66	BETL
55066	7.27	4.97	1.67	13.27	6.79	BETL
55067	8.20	8.35	1.77	12.73	7.76	BETL
55068	7.43	6.92	4.20	10.27	7.21	BETL
55069	9.53	5.86	2.91	9.53	6.96	BETL
55070	7.93	6.33	2.63	9.27	6.54	BETL
55071	8.23	7.83	2.97	10.67	7.42	BETL
55072	8.00	6.46	3.28	11.60	7.33	BETL
55073	6.90	5.20	2.02	14.53	7.16	BETL
55074	8.23	3.79	2.77	13.60	7.10	BETL
55075	7.53	6.57	3.08	10.53	6.93	BETL
55076	7.90	7.01	3.03	10.13	7.02	BETL
55077	6.87	8.06	4.00	9.93	7.21	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.83	1.43	1.63	0.80	1.17	BETL
55062	1.20	0.93	1.97	0.87	1.24	BETL
55063	0.43	1.17	1.30	0.60	0.88	BETL
55064	0.67	0.90	1.97	0.93	1.12	BETL
55065	1.10	0.95	1.00	1.20	1.06	BETL
55066	0.80	0.66	1.73	1.60	1.20	BETL
55067	0.23	1.32	1.57	1.27	1.10	BETL
55068	1.10	1.65	1.23	0.80	1.20	BETL
55069	0.20	1.94	1.53	1.07	1.19	BETL
55070	1.50	0.73	1.07	1.07	1.09	BETL
55071	0.30	0.50	1.37	0.27	0.61	BETL
55072	1.26	1.10	1.47	0.73	1.14	BETL
55073	0.50	1.31	1.47	1.13	1.10	BETL
55074	0.73	1.39	1.07	0.80	1.00	BETL
55075	1.40	1.53	1.30	0.73	1.24	BETL
55076	1.20	0.97	1.60	1.07	1.21	BETL
55077	0.33	0.98	1.73	0.73	0.95	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.23	1.90	0.13	0.07	0.58	
55062	0.10	0.90	0.13	0.13	0.32	
55063	0.17	0.78	0.00	0.40	0.34	
55064	0.33	1.22	0.13	0.07	0.44	
55065	0.07	0.68	0.00	0.13	0.22	
55066	0.42	1.00	0.27	0.20	0.47	
55067	0.10	1.90	0.07	0.13	0.55	
55068	0.20	2.07	0.07	0.27	0.65	
55069	0.23	2.12	0.07	0.07	0.62	
55070	0.10	0.67	0.20	0.00	0.24	
55071	0.37	1.22	0.07	0.07	0.43	
55072	0.23	1.79	0.00	0.27	0.57	
55073	0.30	0.89	0.07	0.20	0.36	
55074	0.23	1.40	0.00	0.27	0.47	
55075	0.40	0.60	0.00	0.07	0.27	
55076	0.13	2.40	0.00	0.27	0.70	
55077	0.23	1.79	0.00	0.13	0.54	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions –*Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.00	0.22	0.00	0.00	0.06	BETL
55062	0.00	0.11	0.00	0.00	0.03	BETL
55063	0.00	0.11	0.00	0.00	0.03	BETL
55064	0.00	0.22	0.00	0.00	0.06	BETL
55065	0.00	0.11	0.00	0.00	0.03	BETL
55066	0.00	0.22	0.00	0.00	0.06	BETL
55067	0.00	0.11	0.00	0.00	0.03	BETL
55068	0.00	0.22	0.00	0.00	0.06	BETL
55069	0.00	0.11	0.00	0.00	0.03	BETL
55070	0.00	0.11	0.00	0.00	0.03	BETL
55071	0.00	0.11	0.00	0.00	0.03	BETL
55072	0.00	0.22	0.00	0.00	0.06	BETL
55073	0.00	0.11	0.00	0.00	0.03	BETL
55074	0.00	0.22	0.00	0.00	0.06	BETL
55075	0.00	0.11	0.00	0.00	0.03	BETL
55076	0.00	0.11	0.00	0.00	0.03	BETL
55077	0.00	0.11	0.00	0.00	0.03	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Spotted/ Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.00	0.00	0.00	0.00	0.00	BETL
55062	0.00	0.00	0.00	0.00	0.00	BETL
55063	0.00	0.00	0.00	0.00	0.00	BETL
55064	0.00	0.00	0.00	0.00	0.00	BETL
55065	0.00	0.00	0.00	0.00	0.00	BETL
55066	0.00	0.00	0.00	0.00	0.00	BETL
55067	0.00	0.00	0.00	0.00	0.00	BETL
55068	0.00	0.00	0.00	0.00	0.00	BETL
55069	0.00	0.00	0.00	0.00	0.00	BETL
55070	0.00	0.00	0.00	0.00	0.00	BETL
55071	0.00	0.00	0.00	0.00	0.00	BETL
55072	0.00	0.00	0.00	0.00	0.00	BETL
55073	0.00	0.00	0.00	0.00	0.00	BETL
55074	0.00	0.00	0.00	0.00	0.00	BETL
55075	0.00	0.00	0.00	0.00	0.00	BETL
55076	0.00	0.00	0.00	0.00	0.00	BETL
55077	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55061	0.20	0.44	0.00	0.00	0.16	BETL
55062	0.43	0.22	0.00	0.00	0.16	BETL
55063	0.30	0.33	0.00	0.00	0.16	BETL
55064	0.70	0.56	0.00	0.00	0.31	BETL
55065	0.53	0.89	0.00	0.00	0.36	BETL
55066	0.00	0.56	0.00	0.00	0.14	BETL
55067	0.00	0.56	0.00	0.00	0.14	BETL
55068	0.57	0.56	0.00	0.00	0.28	BETL
55069	0.13	0.67	0.00	0.00	0.20	BETL
55070	0.53	0.56	0.00	0.00	0.27	BETL
55071	0.50	0.56	0.00	0.00	0.26	BETL
55072	0.60	0.56	0.00	0.00	0.29	BETL
55073	0.60	0.78	0.00	0.00	0.34	BETL
55074	0.27	0.56	0.00	0.00	0.21	BETL
55075	0.53	0.44	0.00	0.00	0.24	BETL
55076	0.17	0.78	0.00	0.00	0.24	BETL
55077	0.30	0.44	0.00	0.00	0.19	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55061	4.00	2.19	1.00	8.67	3.96	AETL
55062	3.50	2.44	1.00	7.67	3.65	AETL
55063	3.83	1.66	0.33	8.67	3.62	AETL
55064	4.33	2.02	1.33	11.67	4.84	AETL
55065	5.50	1.75	0.67	9.33	4.31	AETL
55066	5.00	1.83	1.00	9.00	4.21	AETL
55067	3.67	2.14	0.67	9.33	3.95	AETL
55068	6.33	1.94	1.33	7.67	4.32	AETL
55069	3.83	1.77	1.00	6.67	3.32	AETL
55070	6.00	1.70	1.00	8.33	4.26	AETL
55071	3.50	1.94	0.67	12.00	4.53	AETL
55072	4.33	2.50	0.67	9.00	4.12	AETL
55073	5.33	1.52	1.00	5.33	3.30	AETL
55074	4.67	2.05	0.67	5.67	3.26	AETL
55075	5.00	1.91	0.67	11.33	4.73	AETL
55076	3.67	2.25	1.00	9.67	4.15	AETL
55077	4.67	1.58	0.67	9.33	4.06	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55061	0.00	0.00	0.00	0.00	0.00	BETL
55062	0.00	0.00	0.00	0.00	0.00	BETL
55063	0.00	0.00	0.00	0.00	0.00	BETL
55064	0.00	0.00	0.00	0.00	0.00	BETL
55065	0.00	0.00	0.00	0.00	0.00	BETL
55066	0.00	0.00	0.00	0.00	0.00	BETL
55067	0.00	0.00	0.00	0.00	0.00	BETL
55068	0.00	0.00	0.00	0.00	0.00	BETL
55069	0.00	0.00	0.00	0.00	0.00	BETL
55070	0.00	0.00	0.00	0.00	0.00	BETL
55071	0.00	0.00	0.00	0.00	0.00	BETL
55072	0.00	0.00	0.00	0.00	0.00	BETL
55073	0.00	0.00	0.00	0.00	0.00	BETL
55074	0.00	0.00	0.00	0.00	0.00	BETL
55075	0.00	0.00	0.00	0.00	0.00	BETL
55076	0.00	0.00	0.00	0.00	0.00	BETL
55077	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55061	33.33	7.54	0.00	56.67	24.39	AETL
55062	25.00	9.88	10.00	46.67	22.89	AETL
55063	33.33	7.35	10.00	53.33	26.00	AETL
55064	30.00	6.82	25.00	60.00	30.46	AETL
55065	46.67	7.46	10.00	50.00	28.53	AETL
55066	40.00	8.03	5.00	53.33	26.59	AETL
55067	30.00	9.42	25.00	56.67	30.27	AETL
55068	33.33	8.02	30.00	46.67	29.51	AETL
55069	36.67	8.37	30.00	43.33	29.59	AETL
55070	36.67	7.19	10.00	43.33	24.30	AETL
55071	23.33	9.43	5.00	53.33	22.77	AETL
55072	35.00	7.85	10.00	53.33	26.55	AETL
55073	31.67	7.73	20.00	36.67	24.02	AETL
55074	35.00	8.37	10.00	36.67	22.51	AETL
55075	35.00	6.59	20.00	60.00	30.40	AETL
55076	33.33	7.19	15.00	53.33	27.21	AETL
55077	30.00	5.88	15.00	53.33	26.05	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55061	55.62	10.98	8.19	55.00	32.45	
55062	41.61	14.40	9.08	40.00	26.27	
55063	50.31	10.49	12.10	30.00	25.73	
55064	49.61	9.36	19.91	40.00	29.72	
55065	62.14	10.43	7.02	45.00	31.15	
55066	58.11	11.36	20.66	30.00	30.03	
55067	40.65	11.75	10.24	60.00	30.66	
55068	41.64	11.98	11.20	45.00	27.46	
55069	38.96	11.86	14.77	55.00	30.15	
55070	54.21	10.66	10.38	30.00	26.31	
55071	33.64	13.43	7.67	40.00	23.69	
55072	42.19	12.57	12.19	45.00	27.99	
55073	38.75	10.49	12.35	45.00	26.65	
55074	41.78	12.54	10.17	50.00	28.62	
55075	50.26	10.01	7.72	45.00	28.25	
55076	39.74	11.28	9.80	25.00	21.46	
55077	41.22	10.38	14.22	65.00	32.70	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55061	26.75	8.67	3.71	15.42	13.64	
55062	23.74	12.09	4.48	13.00	13.33	
55063	31.25	8.18	6.15	10.61	14.05	
55064	29.14	7.05	9.45	12.06	14.42	
55065	38.95	8.12	1.93	17.26	16.57	
55066	29.11	9.05	6.17	13.30	14.41	
55067	22.67	9.44	4.05	21.29	14.36	
55068	23.78	9.67	5.44	14.15	13.26	
55069	22.56	9.55	5.63	20.75	14.62	
55070	30.26	8.35	4.52	10.34	13.37	
55071	21.56	11.12	3.54	11.17	11.85	
55072	23.87	10.26	5.43	17.54	14.27	
55073	20.77	8.18	5.91	10.19	11.26	
55074	23.56	10.23	3.99	16.50	13.57	
55075	30.31	7.70	3.27	20.71	15.50	
55076	27.56	8.97	4.05	11.39	12.99	
55077	19.55	8.07	5.77	15.53	12.23	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 3 (c) Advanced Evaluation Trial –II of Intra-hirsutum Hybrids – Irrigated (AET-II Hybrids IRR) under unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions															
			LAM, Guntur						CICR RS, Coimbatore									
			CoLS		GM		Rust		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
9	55061	KCH 9221 BGII	29.5	MR	15.0	R	26.3	MR	4.5	R	0.0	DF	0.0	DF	1.4	R	8.5	R
16	55062	Core 102	27.5	MR	30.3	MR	32.5	MR	7.5	R	0.0	DF	1.0	R	0.0	DF	6.0	R
1	55063	KCH 9225 BGII	4.5	R	30.4	MR	28.3	MR	5.0	R	0.0	DF	0.0	DF	0.0	DF	7.0	R
7	55064	NBC 21 BGII	4.97	R	28.5	MR	26.8	MR	4.0	R	0.0	DF	2.5	R	0.0	DF	6.5	R
17	55065	DC 5105 BGII	27.5	MR	9.2	R	31.5	MR	6.5	R	0.0	DF	0.0	DF	0.0	DF	10.0	R
4	55066	KCH 9222 BGII	31.0	MR	27.5	MR	15.8	R	5.5	R	0.0	DF	2.0	R	0.0	DF	6.0	R
11	55067	C 9339 BGII	19.8	R	26.3	MR	27.5	MR	6.0	R	0.0	DF	0.0	DF	0.0	DF	8.0	R
15	55068	VSCH 369 BGII (ZC 2)	28.5	MR	20.0	R	13.0	R	6.0	R	0.0	DF	2.0	R	0.0	DF	4.0	R
2	55069	KCH 9223 BGII	26.5	MR	33.8	MR	31.3	MR	5.5	R	0.0	DF	2.0	R	0.0	DF	4.0	R
14	55070	SS 459 BG II	29.0	MR	22.0	R	41.0	MR	5.0	R	0.0	DF	0.3	R	0.0	DF	5.0	R
6	55071	VSCH 372 BGII	24.5	R	26.0	MR	28.5	MR	3.0	R	0.0	DF	0.0	DF	0.0	DF	0.0	R
13	55072	US 717 BGII	24.0	R	22.5	R	32.0	MR	4.5	R	0.0	DF	3.0	R	0.0	DF	0.0	R
3	55073	RCH 1016 BGII	22.0	R	25.5	MR	17.2	R	0.0	DF	0.0	DF	0.0	DF	0.0	DF	4.5	R
10	55074	RCH 1026 BG II	20.0	R	21.5	R	29.5	MR	5.0	R	0.0	DF	3.0	R	0.0	DF	0.0	R
5	55075	DLCH-9 Bt II	20.4	R	16.5	R	12.3	R	6.0	R	0.0	DF	3.5	R	0.0	DF	0.0	R
8	55076	NBC 1821 BGII (ZC 1)	29.5	MR	27.3	MR	28.5	MR	7.0	R	0.0	DF	0.0	DF	0.0	DF	4.0	R
12	55077	25D181 BGII	31.5	MR	28.0	MR	33.3	MR	6.5	R	0.0	DF	2.5	R	0.0	DF	0.0	R

Table 3 (d) Advanced Evaluation Trial –II of Intra-hirsutum Hybrids – Irrigated (AET-II Hybrids IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions									
			RARS, Warangal									
			ALS		CoLS		GM		Rust		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
9	55061	KCH 9221 BGII	7.0	R	10.5	R	16.0	R	33.0	MR	11.3	R
16	55062	Core 102	7.0	R	7.0	R	21.0	R	43.5	MR	8.8	R
1	55063	KCH 9225 BGII	12.0	R	9.5	R	21.0	R	50.5	MS	7.5	R
7	55064	NBC 21 BGII	7.0	R	8.0	R	12.0	R	18.0	R	12.5	R
17	55065	DC 5105 BGII	6.5	R	8.0	R	21.5	R	46.5	MR	8.8	R
4	55066	KCH 9222 BGII	9.0	R	12.5	R	20.5	R	46.5	MR	6.3	R
11	55067	C 9339 BGII	7.0	R	7.0	R	20.0	R	53.0	MS	5.0	R
15	55068	VSCH 369 BGII (ZC 2)	7.0	R	9.0	R	23.5	R	39.5	MR	10.0	R
2	55069	KCH 9223 BGII	4.5	R	4.5	R	17.0	R	38.5	MR	6.3	R
14	55070	SS 459 BG II	7.5	R	16.5	R	18.0	R	26.5	MR	11.3	R
6	55071	VSCH 372 BGII	12.0	R	13.0	R	22.5	R	47.0	MR	13.8	R
13	55072	US 717 BGII	7.0	R	7.5	R	18.0	R	29.0	MR	6.3	R
3	55073	RCH 1016 BGII	8.0	R	5.5	R	24.0	R	39.0	MR	7.5	R
10	55074	RCH 1026 BG II	6.5	R	12.5	R	25.0	R	38.0	MR	5.0	R
5	55075	DLCH-9 Bt II	7.0	R	7.0	R	24.0	R	45.5	MR	10.0	R
8	55076	NBC 1821 BGII (ZC 1)	6.5	R	7.0	R	22.0	R	46.5	MR	12.5	R
12	55077	25D181 BGII	6.5	R	10.0	R	20.0	R	48.5	MR	10.0	R

Table 3 (e) Advanced Evaluation Trial –II of Intra-hirsutum Hybrids – Irrigated (AET-II Hybrids IRR) under Protected conditions and unprotected conditions

Code -I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions								Average PDI & Disease Reaction (DR): Unprotected conditions							
			Kaveri, Hyderabad								Kaveri, Hyderabad							
			GM		ALS		BLB		TSV		GM		ALS		BLB		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
9	55061	KCH 9221 BGII	4.1	R	3.7	R	2.9	R	0.6	R	10.5	R	12.1	R	8.9	R	2.9	R
16	55062	Core 102	6.6	R	4.7	R	4.1	R	1.2	R	14.0	R	14.4	R	10.0	R	3.4	R
1	55063	KCH 9225 BGII	4.2	R	3.8	R	3.0	R	0.8	R	11.3	R	12.3	R	8.7	R	2.7	R
7	55064	NBC 21 BGII	7.1	R	9.3	R	5.9	R	1.4	R	14.0	R	17.9	R	11.3	R	3.6	R
17	55065	DC 5105 BGII	10.4	R	8.8	R	4.6	R	2.2	R	18.5	R	17.0	R	10.8	R	4.1	R
4	55066	KCH 9222 BGII	4.4	R	3.9	R	3.1	R	0.8	R	12.0	R	12.0	R	9.0	R	3.0	R
11	55067	C 9339 BGII	7.2	R	4.4	R	5.0	R	2.3	R	11.8	R	13.0	R	10.8	R	4.4	R
15	55068	VSCH 369 BGII (ZC 2)	9.4	R	7.9	R	4.0	R	1.4	R	17.8	R	17.8	R	10.0	R	3.5	R
2	55069	KCH 9223 BGII	4.8	R	3.9	R	3.5	R	0.8	R	11.8	R	11.3	R	9.3	R	3.3	R
14	55070	SS 459 BG II	5.5	R	9.7	R	5.3	R	1.5	R	13.8	R	17.9	R	11.6	R	3.4	R
6	55071	VSCH 372 BGII	5.4	R	5.0	R	4.7	R	2.5	R	15.3	R	14.5	R	10.3	R	4.1	R
13	55072	US 717 BGII	6.3	R	10.5	R	4.6	R	2.0	R	15.8	R	18.4	R	10.4	R	4.5	R
3	55073	RCH 1016 BGII	6.8	R	4.2	R	3.1	R	2.2	R	11.8	R	11.5	R	11.3	R	4.7	R
10	55074	RCH 1026 BG II	4.8	R	3.8	R	5.0	R	1.5	R	16.8	R	11.3	R	9.5	R	3.9	R
5	55075	DLCH-9 Bt II	9.2	R	9.1	R	6.4	R	1.9	R	17.8	R	18.0	R	11.5	R	3.8	R
8	55076	NBC 1821 BGII (ZC 1)	5.7	R	8.5	R	6.6	R	1.4	R	13.8	R	17.0	R	12.0	R	3.4	R
12	55077	25D181 BGII	11.2	R	8.5	R	6.2	R	2.0	R	20.6	R	16.5	R	11.7	R	3.6	R

Table 3 (f) Advanced Evaluation Trial –II of Intra-hirsutum Hybrids – Irrigated (AET-II Hybrids IRR) under Protected conditions and unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction :Protected conditions						Average PDI & Disease Reaction: Unprotected conditions					
			Eldorado Agritech Ltd. Karimnagar						Eldorado Agritech Ltd. Karimnagar					
			ALS		GM		TSV		ALS		GM		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
9	55061	KCH 9221 BGII	13.7	R	14.3	R	2.5	R	19.0	R	21.5	R	9.5	R
16	55062	Core 102	7.3	R	10.3	R	2.5	R	12.5	R	16.0	R	7.5	R
1	55063	KCH 9225 BGII	10.3	R	24.7	R	3.7	R	20.5	R	28.5	R	10.5	R
7	55064	NBC 21 BGII	9.3	R	15.7	R	0.0	DF	18.5	R	24.0	R	5.0	R
17	55065	DC 5105 BGII	10.3	R	12.0	R	3.3	R	12.0	R	14.5	R	6.5	R
4	55066	KCH 9222 BGII	12.0	R	7.8	R	2.5	R	15.0	R	15.5	R	5.5	R
11	55067	C 9339 BGII	12.8	R	20.2	R	0.0	DF	11.0	R	18.0	R	5.0	R
15	55068	VSCH 369 BGII (ZC 2)	18.7	R	17.0	R	3.8	R	24.0	R	19.5	R	8.5	R
2	55069	KCH 9223 BGII	12.7	R	16.8	R	5.7	R	15.0	R	25.0	R	8.5	R
14	55070	SS 459 BG II	8.3	R	12.3	R	2.0	R	12.5	R	16.5	R	5.0	R
6	55071	VSCH 372 BGII	27.7	MR	20.3	R	4.3	R	38.0	MR	25.0	R	9.5	R
13	55072	US 717 BGII	17.7	R	15.3	R	3.3	R	22.5	R	18.0	R	8.0	R
3	55073	RCH 1016 BGII	18.0	R	24.0	R	2.2	R	20.5	R	22.5	R	5.5	R
10	55074	RCH 1026 BG II	29.3	MR	22.6	R	2.3	R	37.5	MR	22.5	R	9.0	R
5	55075	DLCH-9 Bt II	18.5	R	25.7	MR	4.3	R	24.0	R	36.5	MR	7.0	R
8	55076	NBC 1821 BGII (ZC 1)	27.0	MR	25.3	MR	0.0	DF	35.0	MR	33.0	MR	4.0	R
12	55077	25D181 BGII	23.3	R	23.5	R	2.0	R	28.5	MR	28.0	MR	7.0	R

Agronomic Evaluation

WARANGAL (SS459 BG-II)

The results of agronomic requirements of SS459 BG-II trial conducted at RARS, Warangal under irrigated conditions revealed that SS459 BG-II cotton hybrid produced a significantly higher seed cotton yield (2205 kg/ha) with a spacing of 90x30 cm (37,037 plants/ha) plant geometry and recorded 46.5 bolls/m² (Table 71). The low seed cotton yield (1574 kg/ha) realized in spacing of 90x60 cm with 18,518 plants/ha. Application of nitrogen 120 and 150 kg/ha recorded statistically on par seed cotton yield 1948 and 1951 kg/ha. The interaction among different plant geometries and nitrogen levels was found to be non-significant.

Table 71. Seed cotton yield (kg/ha) of SS-459 BG-II as influenced by spacing levels and nutrient levels at Warangal

Treatments	S ₁ : 90x30 cm	S ₂ : 90x45 cm	S ₃ : 90x60 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	2146	1566	1304	1692	Spacing	167.9	356
N ₂ - 100 %RDN	2220	1944	1681	1948	Nitrogen	167.9	356
N ₃ -125 %RDN	2250	1864	1738	1951	S X N	290.8	NS
Mean (spacing)	2205	1791	1574				

Basic parameters: pH: 6.5–7.5, EC: 0.4 dS m⁻¹, OC (%): 0.3, Available N: 120 kg/ha, Available P₂O₅: 56 kg/ha, Available K₂O: 280 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: SS459 BG-II, Environment: Rainfed, Total rainfall during cropping period: 744.5 mm

Bheemarayanagudi (RCH 1016 BG II)

The results of agronomic requirement studies conducted at Bheemarayanagudi under irrigated conditions revealed that significantly higher seed cotton yield was recorded with 90 x 45 cm spacing (2829 kg/ha) compared to other spacings.(Table 83).The increase in higher seed cotton yield was mainly due to increased number of bolls/sq. m. (200.1), Among fertilizer doses, higher seed cotton yield was obtained with 125% recommended N/ha (2688 kg/ha) followed by 100% recommended N/ha (2573 kg/ha) compared to 75% recommended N/ha (2431 kg/ha). This could be attributed to higher sympodia/plant, higher boll number/plant and boll weight. Interaction found non-significant.

Table 83. Total Seed cotton yield (kg/ha) of RCH 1016 BG II (140 DAS + 160 DAS) as influenced by spacing levels and nutrient levels at Bheemarayanagudi

Treatments	RCH 1016 BG II			Mean (N levels)
	S1: 90 x 45 cm	S2: 90 cm X 60 cm	S3: 90 x 75 cm	
N ₁ - 75 %RDN	2690	2410	2192	2431
N ₂ - 100 %RDN	2823	2601	2295	2573
N ₃ -125 %RDN	2974	2707	2382	2688
Mean (spacing)	2829	2573	2290	
ANOVA	Spacing	N levels	Interaction	
SE d	115	115	200	
CD (5%)	247	NS	NS	

Basic parameters: pH: 8.06, OC (%): 0.42, Available N: 328 kg/ha, Available P₂O₅: 39 kg/ha, Available K₂O: 358 kg/ha, Recommended nutrients: 180:90:90 kg NPK/ha, Genotype: RCH 1016 BG II, Environment: Irrigated

Bheemarayanagudi (DC 5105 BG II)

The results of agronomic requirement studies conducted at Bheemarayanagudi under irrigated conditions revealed that significantly higher seed cotton yield was recorded with 90 x 45 cm spacing (3122 kg/ha) compared to other spacings.(Table 82). The increase in higher seed cotton yield was mainly due to increased number of bolls/sq. m. (178.8), Among fertilizer doses, higher seed cotton yield was obtained with 125% recommended N/ha (2923 kg/ha) followed by 100% recommended N/ha (2799 kg/ha) compared to 75% recommended N/ha (2603 kg/ha). This could be attributed to higher sympodia/plant, higher boll number/plant and boll weight. Interaction found non-significant.

Table 82. Total Seed cotton yield (kg/ha) of DC 5105 BG II (140 DAS + 160 DAS) as influenced by spacing levels and nutrient levels at Bheemarayanagudi

Treatments	DC 5105 BG II			Mean (N levels)
	S1: 90 x 45 cm	S2: 90 cm X 60 cm	S3: 90 x 75 cm	
N ₁ - 75 %RDN	2938	2553	2317	2603
N ₂ - 100 %RDN	3141	2809	2445	2799
N ₃ -125 %RDN	3256	2959	2554	2923
Mean (spacing)	3112	2774	2439	
ANOVA	Spacing	N levels	Interaction	
SE d	125	125	217	
CD (5%)	217	NS	NS	

Basic parameters: pH: 8.04, OC (%): 0.42, Available N: 328 kg/ha, Available P₂O₅: 39 kg/ha, Available K₂O: 358 kg/ha, Recommended nutrients: 180:90:90 kg NPK/ha, Genotype: DC 5105 BG II, Environment: Irrigated

WARANGAL (CORE-102BG-II)

The results of agronomic requirements of Core genes CORE-102BG-II trial conducted at RARS, Warangal under irrigated conditions revealed that CORE-102BG-II cotton hybrid produced a non significant seed cotton yield under the different spacing level (Table 72). Application of Nitrogen 120 and 150 kg/ha recorded statistically at par seed cotton yield 2615 and 2620 kg/ha. Nitrogen application of 90 kg/ha recorded the least seed cotton yield 2131 kg/ha. The interaction among different plant geometries and nitrogen levels was found to be non significant.

Table 72. Seed cotton yield (kg/ha) of CORE-102BG-II as influenced by spacing levels and nutrient levels at Warangal

Treatments	S ₁ : 90x30 cm	S ₂ : 90x45 cm	S ₃ : 90x60 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	2390	2065	1939	2131	Spacing	134.9	NS
N ₂ - 100 %RDN	2875	2611	2371	2615	Nitrogen	134.9	286
N ₃ -125 %RDN	2832	2592	2437	2620	S X N	233.6	NS
Mean (spacing)	2699	2423	2249				

Basic parameters: pH: 6.5–7.5, EC: 0.4 dS m⁻¹, OC (%): 0.3, Available N: 120 kg/ha, Available P₂O₅: 56 kg/ha, Available K₂O: 280 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: CORE-102 BG-II, Environment: Rainfed, Total rainfall during cropping period: 744.5 mm

WARANGAL (DLCH-9 BG-II)

The results of agronomic requirements of DLCH-9 BG-II trial conducted at RARS, Warangal under irrigated conditions revealed that DLCH-9BG-II cotton hybrid produced a significantly higher seed cotton yield (2661 kg/ha) with a spacing of 90x30 cm (37,037 plants/ha) and recorded 61.5 bolls/m² (Table 73). The seed cotton yield of 2170 kg/ha realized in spacing of 90x60 cm with 18,518 plants/ha and 90x45 cm spacing with 24,691 plants/ha recorded seed cotton yield 2126 kg/ha. Among the nitrogen fertilizer level seed cotton yield was found to be non-significant. The interaction among different plant geometries and nitrogen levels was found to be non-significant.

Table 73. DLCH-9 BG-II : Seed cotton yield (kg/ha) as influenced by spacing levels and nutrient levels at Warangal

Treatments	S ₁ : 90x30 cm	S ₂ : 90x45 cm	S ₃ : 90x60 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	2329	1968	2055	2117	Spacing	133.78	283.6
N ₂ - 100 %RDN	2788	2320	2335	2481	Nitrogen	133.78	NS
N ₃ -125 %RDN	2865	2091	2119	2358	S X N	231.71	NS
Mean (spacing)	2661	2126	2170				

Basic parameters: pH: 6.5–7.5, EC: 0.4 dS m⁻¹, OC (%): 0.3, Available N: 120 kg/ha, Available P₂O₅: 56 kg/ha, Available K₂O: 280 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: DLCH-9 BG-II, Environment: Rainfed, Total rainfall during cropping period: 744.5 mm

WARANGAL (25D181 BG-II)

The results of agronomic requirements of V.25D181 BG-II trial conducted at RARS, Warangal under irrigated conditions revealed that V.25D181 BG-II cotton hybrid produced a significantly higher seed cotton yield (1346 kg/ha) with a spacing of 90x30 cm (37,037 plants/ha) plant geometry and recorded 43.7 bolls/m². (Table 74). The lowest seed cotton yield (895 kg/ha) was realized in a spacing of 90x60 cm with 18,518 plants/ha. Application of nitrogen 120 and 150 kg/ha recorded statistically at par seed cotton yield 11282 and 1211 kg/ha. The least seed cotton yield 1692 kg/ha realised by nitrogen application of 90 kg/ha. The interaction among different plant geometries and nitrogen levels was found to be non-significant.

Table 74. Seed cotton yield (kg/ha) of 25D181 BG-II as influenced by spacing levels and nutrient levels at Warangal

Treatments	S ₁ : 90x30 cm	S ₂ : 90x45 cm	S ₃ : 90x60 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	1053	1000	769	941	Spacing	92.95	197.0
N ₂ - 100 %RDN	1520	1303	1022	1282	Nitrogen	92.95	197.0
N ₃ -125 %RDN	1464	1276	894	1211	S X N	161.00	NS
Mean (spacing)	1346	1193	895				

Basic parameters: pH: 6.5–7.5, EC: 0.5 dS m⁻¹, OC (%): 0.2, Available N: 105 kg/ha, Available P₂O₅: 40 kg/ha, Available K₂O: 240 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: V.25D181 BG-II, Environment: Rainfed, Total rainfall during cropping period: 744.5 mm

WARANGAL (KCH-9221BG.II)

The results of agronomic requirements of KCH-9221BG.II trial conducted at RARS, Warangal under irrigated conditions revealed that KCH-9221BG.II cotton hybrid produced a numerically higher seed cotton yield (2021 kg/ha) with a spacing of 90x30 cm (37,037 plants/ha) plant geometry and recorded 47.90 bolls/m². (Table 75). The spacing 90 x 60 cm with 18,518 plants/ha registered the numerically least seed cotton yield (1865 kg/ha). Application of Nitrogen 120 and 150 kg/ha recorded statistically at par seed cotton yield 2036 and 2022 kg/ha and 90 kg/ha nitrogen application recorded Seed cotton yield 1582kg/ha. The interaction among different plant geometries and nitrogen levels was found to be non significant.

Table 75. Seed cotton yield (kg/ha) of KCH-9221 BG.II as influenced by spacing levels and nutrient levels at Warangal

Treatments	S ₁ : 90x30 cm	S ₂ : 90x45 cm	S ₃ : 90x60 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	1619	1428	1699	1582	Spacing	133.5	NS
N ₂ - 100 %RDN	2343	1852	1913	2036	Nitrogen	133.5	283.0
N ₃ -125 %RDN	2102	1980	1983	2022	S X N	231.3	NS
Mean (spacing)	2021	1753	1865				

Basic parameters: pH: 6.5–7.5, EC: 0.5 dS m⁻¹, OC (%): 0.3, Available N: 105 kg/ha, Available P₂O₅: 48 kg/ha, Available K₂O: 260 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: KCH-9221 BG.II, Environment: Rainfed, Total rainfall during cropping period: 744.5 mm



WARANGAL KCH-9223BG.II

The results of agronomic requirements of KCH-9223BG.II trial conducted at RARS, Warangal under irrigated conditions revealed that KCH-9223BG.II cotton hybrid produced significantly at par seed cotton yield 2494 kg/ha with a spacing of 90x30 cm (37,037 plants/ha) and of 90 x45 with 24,691 plants /ha (2375 kg/ha) and less seed cotton yield (2174 kg /ha) recorded in 90x60 cm spacing with 18,518 plants/ha. (Table 76). Application of Nitrogen 120 and 150 kg/ha recorded seed cotton yield 2397 and 2371 kg/ha and 90 kg/ha Nitrogen application recorded 2274 kg/ha seed cotton yield. Among the Nitrogen fertilizer level seed cotton yield was found to be non significant. The interaction among different plant geometries and nitrogen levels was found to be non significant

Table 76. Seed cotton yield (kg/ha) of KCH-9223BG.II as influenced by spacing levels and nutrient levels at Warangal

Treatments	S ₁ : 90x30 cm	S ₂ : 90x45 cm	S ₃ : 90x60 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	2423	2268	2130	2274	Spacing	58.5	124
N ₂ - 100 %RDN	2542	2448	2201	2397	Nitrogen	58.5	NS
N ₃ -125 %RDN	2516	2408	2189	2371	S X N	101.3	NS
Mean (spacing)	2494	2375	2174				

Basic parameters: pH: 6.5–7.5, EC: 0.5 dS m⁻¹, OC (%): 0.4, Available N: 105 kg/ha, Available P₂O₅: 48 kg/ha, Available K₂O: 260 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: KCH-9223 BG.II, Environment: Rainfed, Total rainfall during cropping period: 744.5 mm

WARANGAL

The results of agronomic requirements of KCH-9225BG.II trial conducted at RARS, Warangal under irrigated conditions revealed that KCH-9225BG.II cotton hybrid produced significantly at par seed cotton yield 2054 kg/ha with a spacing of 90x30 cm (37,037 plants/ha) and of 90 x45 with 24,691 plants /ha (1824 kg/ha) and less seed cotton yield (1728 kg /ha) recorded in 90x60 cm spacing with 18,518 plants/ha (Table 77). Application of Nitrogen 120 and 150 kg/ha recorded a statistically at par seed cotton yield 2002 and 2056 kg/ha and 90 kg/ha nitrogen application recorded 1548kg/ha seed cotton yield. The interaction among different plant geometries and nitrogen levels was found to be non-significant.

Table 77. Seed cotton yield (kg/ha) of KCH-9223BG.II as influenced by spacing levels and nutrient levels at Warangal

Treatments	S ₁ : 90x30 cm	S ₂ : 90x45 cm	S ₃ : 90x60 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	1806	1482	1356	1548	Spacing	111.3	236
N ₂ - 100 %RDN	2255	1883	1867	2002	Nitrogen	111.3	236
N ₃ -125 %RDN	2100	2107	1960	2056	S X N	192.8	NS
Mean (spacing)	2054	1824	1728				

Basic parameters: pH: 6.5–7.5, EC: 0.5 dS m⁻¹, OC (%): 0.4, Available N: 105 kg/ha, Available P₂O₅: 48 kg/ha, Available K₂O: 260 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: KCH-9225 BG.II, Environment: Rainfed, Total rainfall during cropping period: 744.5 mm



WARANGAL

The results of agronomic requirements of NCB 1821 BG-II trial conducted at RARS, Warangal under irrigated conditions revealed that NCB 1821 BG-II (**Check**) cotton hybrid produced significantly at par seed cotton yield 2147 kg/ha with a spacing of 90x30 cm (37,037 plants/ha) and of 90 x45 with 24,691 plants /ha (1963 kg/ha) and less seed cotton 1750kg /ha recorded in 90x60 cm spacing with 18,518 plants/ha . (Table 78).Application of Nitrogen 120 and 150 kg/ha recorded statistically at par seed cotton yield 2181and 2066 kg/ha and 90 kg/ha nitrogen application recorded 1613kg/ha seed cotton yield. The interaction among different plant geometries and nitrogen levels was found to be non significant

Table 78. Seed cotton yield (kg/ha) of NCB 1821 BG-II as influenced by spacing levels and nutrient levels at Warangal

Treatments	S ₁ : 90x30 cm	S ₂ : 90x45 cm	S ₃ : 90x60 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	1852	1652	1336	1613	Spacing	88.7	188
N ₂ - 100 %RDN	2378	2135	2029	2181	Nitrogen	88.7	188
N ₃ -125 %RDN	2212	2102	1885	2066	S X N	153.6	NS
Mean (spacing)	2147	1963	1750				

Basic parameters: pH: 6.5–7.5, EC: 0.5 dS m⁻¹, OC (%): 0.3, Available N: 105 kg/ha, Available P₂O₅: 48 kg/ha, Available K₂O: 260 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: NCB1821 BG.II (Check), Environment: Rainfed, Total rainfall during cropping period: 744.5 mm

Initial Evaluation Trial of Compact Intra-Hirsutum Bt Hybrids - Irrigated

Constitution of Trial

The trial was constituted with two Bt cotton hybrids containing MON 15985 event sponsored by various organization along with two different check hybrids at closer spacing and one zonal check hybrid in normal spacing as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	3	55081	VPCH-474 BG II	Vanapamula Seeds Pvt. Ltd.
2	1	55082	NBC 1821 BGII (ZC 1)	
3	4	55083	VSCH 369 BGII (ZC 2)	
4	2	55084	ACH-31-2 BGII	Ajeet Seeds Pvt Ltd., Aurangabad
5			NBC 1821 BGII (ZC 1) (normal)	

The trial was conducted in five locations viz., Warangal, Lam, Raichur, B'Gudi**, and Coimbatore.

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: All the coded entries were given a spacing of 90 x 15 cm and one zonal check hybrid was given recommended spacing for the hybrid.

Number of rows: 6 rows of 6 meters per entry with three replications

Data recorded:

Biometric evaluation

Table: Plant height (cm) at harvest in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	108.8	89.9	99.1	71.9	92.4
2	NBC 1821 BGII (ZC 1)	101.8	115.7	92.7	71.7	95.5
3	VSCH 369 BGII (ZC 2)	109.5	103.8	96.9	75.1	96.3
4	ACH-31-2 BGII	105.3	108.4	98.5	68.2	95.1
5	NBC 1821 BGII (ZC 1) (normal)	122.0	103.9	110.8	90.8	106.9
	CD @ 5%	12.9	NS	5.5	10.9	
	CV %	7.6	11.6	7.1	9.4	

Table: Number of monopodia in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	0.1	0.1	0.1	0.2	0.1
2	NBC 1821 BGII (ZC 1)	0.1	0.2	0.5	0.1	0.2
3	VSCH 369 BGII (ZC 2)	0.1	0.1	0.4	0.2	0.2
4	ACH-31-2 BGII	0.1	0.1	0.3	0.0	0.1
5	NBC 1821 BGII (ZC 1) (normal)	0.5	0.1	1.7	0.7	0.8
	CD @ 5%	0.3	0.0	0.3	0.4	
	CV %	119.9	12.1	20.0	98.1	

Table: Number of sympodia in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	11.6	11.8	10.4	10.1	11.0
2	NBC 1821 BGII (ZC 1)	11.5	14.0	11.9	10.5	12.0
3	VSCH 369 BGII (ZC 2)	10.7	10.6	10.1	9.8	10.3
4	ACH-31-2 BGII	12.6	12.1	10.7	10.3	11.4
5	NBC 1821 BGII (ZC 1) (normal)	16.5	9.1	14.7	14.2	13.6
	CD @ 5%	2.8	2.5	1.0	1.5	
	CV %	14.4	14.2	11.1	8.8	

Table: Boll weight (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	5.6	5.5	8.3	6.9	6.6
2	NBC 1821 BGII (ZC 1)	4.9	5.6	7.8	6.2	6.1
3	VSCH 369 BGII (ZC 2)	5.1	4.9	6.2	5.4	5.4
4	ACH-31-2 BGII	4.9	5.0	7.6	5.6	5.8
5	NBC 1821 BGII (ZC 1) (normal)	5.1	4.8	6.8	5.9	5.7
	CD @ 5%	0.5	NS	0.4	0.6	
	CV %	6.3	13.3	7.1	6.3	

Table: Number of bolls / plant in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	8.2	14.0	14.0	8.2	11.1
2	NBC 1821 BGII (ZC 1)	9.1	11.0	12.7	8.9	10.4
3	VSCH 369 BGII (ZC 2)	8.0	10.4	15.7	10.1	11.1
4	ACH-31-2 BGII	10.2	11.3	14.0	9.2	11.2
5	NBC 1821 BGII (ZC 1) (normal)	19.7	7.7	31.0	18.0	19.1
	CD @ 5%	4.1	2.4	3.2	3.6	
	CV %	23.7	14.3	19.6	21.4	

Table: Number of bolls / sq.m. in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	VPCH-474 BG II	56.3	84.0	60.7	67.0
2	NBC 1821 BGII (ZC 1)	63.8	66.0	65.9	65.2
3	VSCH 369 BGII (ZC 2)	55.2	62.4	74.8	64.1
4	ACH-31-2 BGII	69.0	67.5	68.1	68.2
5	NBC 1821 BGII (ZC 1) (normal)	42.9	45.9	44.7	44.5
	CD @ 5%	NS	14.1	15.2	
	CV %	21.1	13.9	15.7	

Table: Lint Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	6.1	6.0	7.4	7.4	6.7
2	NBC 1821 BGII (ZC 1)	5.4	6.5	6.0	7.1	6.3
3	VSCH 369 BGII (ZC 2)	6.6	6.5	6.8	7.9	7.0
4	ACH-31-2 BGII	5.2	7.0	6.3	6.7	6.3
5	NBC 1821 BGII (ZC 1) (normal)	5.4	7.5	6.0	7.2	6.5
	CD @ 5%	0.8	NS	3.2	0.3	
	CV %	8.4	10.1	13.9	2.8	

Table: Seed Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	12.8	11.0	13.3	13.4	12.6
2	NBC 1821 BGII (ZC 1)	12.1	10.8	13.1	13.6	12.4
3	VSCH 369 BGII (ZC 2)	10.7	11.0	10.4	11.3	10.9
4	ACH-31-2 BGII	11.0	12.0	11.9	12.3	11.8
5	NBC 1821 BGII (ZC 1) (normal)	12.1	13.1	11.2	13.1	12.4
	CD @ 5%	1.2	NS	0.6	0.6	
	CV %	6.5	10.7	6.5	2.9	

Table: Ginning outturn (%) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	32.4	34.9	35.7	35.5	34.6
2	NBC 1821 BGII (ZC 1)	31.0	37.4	31.3	34.4	33.5
3	VSCH 369 BGII (ZC 2)	38.2	36.5	39.8	41.2	38.9
4	ACH-31-2 BGII	32.2	35.7	34.6	35.2	34.4
5	NBC 1821 BGII (ZC 1) (normal)	30.9	35.5	34.8	35.3	34.1
	CD @ 5%	2.4	NS	1.4	1.3	
	CV %	4.6	5.3	5.2	2.4	

Table: Upper Half Mean Length (mm) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	29.9	29.2	31.2	31.6	30.5
2	NBC 1821 BGII (ZC 1)	29.5	28.5	31.7	30.6	30.1
3	VSCH 369 BGII (ZC 2)	26.5	29.6	28.8	27.2	28.0
4	ACH-31-2 BGII	27.7	30.1	30.6	30.4	29.7
5	NBC 1821 BGII (ZC 1) (normal)	28.6	30.0	30.8	30.7	30.0

Table: Uniformity index under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	85.0	86.0	87.0	85.5	85.9
2	NBC 1821 BGII (ZC 1)	84.0	82.0	87.0	85.9	84.7
3	VSCH 369 BGII (ZC 2)	83.0	85.0	86.0	85.3	84.8
4	ACH-31-2 BGII	84.0	85.0	87.0	86.2	85.6
5	NBC 1821 BGII (ZC 1) (normal)	85.0	85.0	86.0	85.0	85.3

Table: Micronaire under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	4.4	5.1	4.7	4.6	4.7
2	NBC 1821 BGII (ZC 1)	4.2	5.3	4.3	4.3	4.5
3	VSCH 369 BGII (ZC 2)	5.1	5.5	5.4	5.5	5.4
4	ACH-31-2 BGII	4.5	5.0	4.5	4.3	4.6
5	NBC 1821 BGII (ZC 1) (normal)	4.2	4.9	4.4	4.5	4.5

Table: Tenacity under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VPCH-474 BG II	30.8	30.1	31.6	30.2	30.7
2	NBC 1821 BGII (ZC 1)	30.5	30.7	32.9	29.7	31.0
3	VSCH 369 BGII (ZC 2)	28.5	33.8	28.8	26.9	29.5
4	ACH-31-2 BGII	30.2	33.8	31.2	29.1	31.1
5	NBC 1821 BGII (ZC 1) (normal)	30.7	31.8	31.1	30.0	30.9

Table: Seed Cotton Yield at 140 DAS (q/ha) at 140 DAS in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	VPCH-474 BG II	11.22	14.80	23.32	16.45
2	NBC 1821 BGII (ZC 1)	10.55	19.58	21.24	17.12
3	VSCH 369 BGII (ZC 2)	10.37	14.12	20.39	14.96
4	ACH-31-2 BGII	12.44	11.34	22.60	15.46
5	NBC 1821 BGII (ZC 1) (normal)	5.21	10.63	13.13	9.66
	CD @ 5%	2.55	2.29	3.80	
	CV %	16.45	10.43	12.15	

Table: Seed Cotton Yield at 165 DAS (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	VPCH-474 BG II	9.62	7.97	8.81	8.80
2	NBC 1821 BGII (ZC 1)	7.87	10.54	8.70	9.04
3	VSCH 369 BGII (ZC 2)	7.84	7.61	12.35	9.27
4	ACH-31-2 BGII	6.31	6.11	3.29	5.24
5	NBC 1821 BGII (ZC 1) (normal)	5.87	5.72	10.93	7.51
	CD @ 5%	2.04	1.21	3.20	
	CV %	17.46	10.26	23.27	

Table: Total Seed Cotton Yield (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Mean	Rank	SD	
1	VPCH-474 BG II	20.84	22.77	54.49	32.13	32.56	1	2.3
2	NBC 1821 BGII (ZC 1)	18.42	30.12	45.31	29.95	30.95	3	-2.7
3	VSCH 369 BGII (ZC 2)	18.21	21.73	54.59	32.74	31.82	2	0.0
4	ACH-31-2 BGII	18.75	17.45	50.26	25.89	28.09	4	-11.7
5	NBC 1821 BGII (ZC 1) (normal)	11.08	16.35	32.43	24.06	20.98	5	-34.1
	CD @ 5%	3.13	3.53	4.58	4.10			
	CV %	11.51	10.46	12.54	9.22			

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions –Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	1.13	1.80	2.15	5.97	2.76	BETL
55082	1.00	1.66	1.44	6.80	2.73	BETL
55083	1.23	1.40	2.11	5.42	2.54	BETL
55084	1.37	1.37	2.10	5.63	2.62	BETL
CHECK	1.40	1.33	2.21	7.27	3.05	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions –Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	2.03	0.38	1.44	1.73	1.40	BETL
55082	2.63	0.13	1.87	1.87	1.63	BETL
55083	2.57	0.11	2.19	1.40	1.57	BETL
55084	2.47	0.20	1.97	1.38	1.51	BETL
CHECK	1.97	0.24	2.31	1.42	1.49	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55081	II	I	I	II	II	
55082	I	I	I	I	I	
55083	I	I	I	II	I	
55084	I	I	I	I	I	
CHECK	I	I	I	I	I	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	4.30	3.42	0.88	4.47	3.27	BETL
55082	5.90	4.61	0.92	4.40	3.96	BETL
55083	4.50	4.07	1.18	3.97	3.43	BETL
55084	5.83	4.37	1.92	4.82	4.23	BETL
CHECK	4.55	4.24	1.35	5.70	3.96	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.17	0.13	0.50	2.13	0.73	BETL
55082	0.13	0.06	0.00	1.67	0.46	BETL
55083	0.03	0.00	0.68	1.15	0.47	BETL
55084	0.07	0.13	0.63	1.15	0.50	BETL
CHECK	0.00	0.02	0.58	1.33	0.48	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.00	0.90	0.07	0.07	0.26	
55082	0.20	0.45	0.08	0.08	0.20	
55083	0.07	0.78	0.08	0.08	0.25	
55084	0.10	2.13	0.08	0.13	0.61	
CHECK	0.17	0.56	0.12	0.07	0.23	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.00	0.00	0.00	0.00	0.00	BETL
55082	0.00	0.00	0.00	0.00	0.00	BETL
55083	0.00	0.00	0.00	0.00	0.00	BETL
55084	0.00	0.00	0.00	0.00	0.00	BETL
CHECK	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table-407- Initial H X H (Compact) trial in South Zone under Protected Conditions-Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.00	0.00	0.00	0.00	0.00	BETL
55082	0.00	0.00	0.00	0.00	0.00	BETL
55083	0.00	0.00	0.00	0.00	0.00	BETL
55084	0.00	0.00	0.00	0.00	0.00	BETL
CHECK	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.13	0.00	0.00	0.00	0.03	BETL
55082	0.03	0.00	0.00	0.00	0.01	BETL
55083	0.07	0.00	0.00	0.00	0.02	BETL
55084	0.20	0.00	0.00	0.00	0.05	BETL
CHECK	0.10	0.00	0.00	0.00	0.03	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.67	0.42	0.00	1.83	0.73	BETL
55082	1.17	0.34	0.00	1.25	0.69	BETL
55083	1.00	0.25	0.25	1.08	0.65	BETL
55084	0.50	0.25	0.25	1.50	0.63	BETL
CHECK	0.67	0.08	0.00	1.75	0.63	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55081	0.00	0.00	0.00	0.00	0.00	BETL
55082	0.00	0.00	0.00	0.00	0.00	BETL
55083	0.00	0.00	0.00	0.00	0.00	BETL
55084	0.00	0.00	0.00	0.00	0.00	BETL
CHECK	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55081	6.67	2.35	5.00	10.00	6.00	BETL
55082	8.33	2.02	1.25	9.17	5.19	BETL
55083	8.33	1.83	5.00	7.50	5.66	BETL
55084	6.67	1.49	3.75	10.00	5.48	BETL
CHECK	6.67	1.53	1.25	10.00	4.86	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55081	7.14	4.23	4.88	13.75	7.50	
55082	6.00	4.04	10.64	20.00	10.17	
55083	5.89	3.89	9.61	18.75	9.54	
55084	7.55	3.79	6.99	17.50	8.96	
CHECK	8.16	4.25	4.61	35.00	13.01	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55081	4.15	3.26	2.04	3.46	3.23	
55082	1.96	3.04	3.16	5.13	3.32	
55083	2.20	2.95	4.90	6.08	4.03	
55084	2.56	2.96	1.92	5.29	3.18	
CHECK	4.08	3.65	2.52	6.80	4.26	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – No. of Sprays for Insect-Pests

Name of Entry	Number of sprays for Insect-pests					Remark
	GU	RA	CBE	WR	Mean	
55081	5.00	5.00	4.00	5.00	4.75	
55082	5.00	5.00	4.00	5.00	4.75	
55083	5.00	5.00	4.00	5.00	4.75	
55084	5.00	5.00	4.00	5.00	4.75	
CHECK	5.00	5.00	4.00	5.00	4.75	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 4(a) Initial Evaluation Trial of Compact Intra-Hirsutum Hybrids – Irrigated (IET-Compact IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions																	
			LAM, Guntur						CICR RS, Coimbatore											
			CoLS		GM		Rust		ALS		Boll rot		GM		TSV		Rust		CLS	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	55081	VPCH-474 BG II	26.2	MR	30.8	MR	11.5	R	5.9	R	0.0	DF	0.0	DF	0.0	DF	0.0	DF	2.3	R
1	55082	NBC 1821 BGII (ZC 1)	29.0	MR	28.8	MR	31.5	MR	6.4	R	0.0	DF	0.0	DF	0.0	DF	0.0	DF	0.0	DF
4	55083	VSCH 369 BGII (ZC 2)	28.3	MR	29.7	MR	31.3	MR	6.8	R	0.0	DF	0.0	DF	0.0	DF	0.0	DF	0.9	R
2	55084	ACH-31-2 BGII	22.8	R	27.8	MR	14.4	R	6.1	R	0.0	DF	0.0	DF	0.0	DF	0.0	DF	1.5	R

Table 4 (b) Initial Evaluation Trial of Compact Intra-Hirsutum Hybrids – Irrigated (IET-Compact IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions									
			RARS, Warangal									
			ALS		CoLS		GM		Rust		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	55081	VPCH-474 BG II	2.4	R	4.4	R	12.8	R	26.8	MR	1.4	R
1	55082	NBC 1821 BGII (ZC 1)	2.3	R	4.0	R	11.6	R	26.8	MR	2.4	R
4	55083	VSCH 369 BGII (ZC 2)	3.8	R	3.6	R	13.0	R	27.8	MR	0.9	R
2	55084	ACH-31-2 BGII	3.4	R	4.0	R	13.3	R	27.5	MR	1.5	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pest

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –
Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	5.57	2.11	7.61	7.40	5.67	BETL
55082	6.07	2.61	5.86	9.80	6.08	BETL
55083	5.23	2.23	5.10	8.67	5.31	BETL
55084	7.60	2.09	4.80	10.60	6.27	BETL
CHECK	4.87	2.13	4.34	9.93	5.32	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	9.18	3.92	3.19	3.33	4.91	BETL
55082	10.77	6.42	2.88	11.33	7.85	AETL
55083	8.00	4.16	2.01	11.80	6.49	AETL
55084	7.98	6.38	2.36	3.20	4.98	BETL
CHECK	6.33	5.79	3.09	3.47	4.67	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –
JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55081	IV	I	I	III	II	
55082	IV	I	I	III	II	
55083	III	I	I	II	II	
55084	III	I	I	II	II	
CHECK	II	III	I	II	II	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions -Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	5.97	4.76	2.87	8.47	5.52	BETL
55082	6.50	4.22	2.73	8.13	5.40	BETL
55083	7.00	3.59	2.16	8.13	5.22	BETL
55084	5.87	4.90	2.46	8.67	5.47	BETL
CHECK	6.73	4.57	2.00	8.80	5.53	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	1.23	1.43	1.08	0.60	1.09	BETL
55082	0.50	0.68	0.82	0.80	0.70	BETL
55083	0.63	1.17	1.49	0.60	0.97	BETL
55084	1.30	0.84	1.22	0.60	0.99	BETL
CHECK	0.73	1.06	1.11	0.73	0.91	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.23	1.12	0.00	0.27	0.41	
55082	0.10	1.01	0.13	0.07	0.33	
55083	0.17	1.11	0.27	0.03	0.39	
55084	0.13	1.44	0.13	0.07	0.44	
CHECK	0.20	0.45	0.20	0.07	0.23	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.00	0.22	0.00	0.00	0.06	BETL
55082	0.00	0.11	0.00	0.00	0.03	BETL
55083	0.00	0.11	0.00	0.00	0.03	BETL
55084	0.00	0.22	0.00	0.00	0.06	BETL
CHECK	0.00	0.11	0.00	0.00	0.03	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.00	0.00	0.00	0.00	0.00	BETL
55082	0.00	0.00	0.00	0.00	0.00	BETL
55083	0.00	0.00	0.00	0.00	0.00	BETL
55084	0.00	0.00	0.00	0.00	0.00	BETL
CHECK	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –
Spodoptera litura

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55081	0.00	0.44	1.80	0.00	0.56	BETL
55082	0.63	0.22	0.00	0.00	0.21	BETL
55083	0.40	0.33	0.00	0.00	0.18	BETL
55084	0.23	0.56	0.00	0.00	0.20	BETL
CHECK	0.47	0.89	0.00	0.00	0.34	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –
Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55081	4.33	1.98	0.07	11.67	4.51	AETL
55082	6.33	2.25	0.33	9.67	4.65	AETL
55083	5.33	1.50	1.00	8.67	4.12	AETL
55084	4.33	1.66	0.73	10.67	4.35	AETL
CHECK	3.67	1.69	0.33	8.67	3.59	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –
Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55081	0.00	0.00	0.00	0.00	0.00	BETL
55082	0.00	0.00	0.00	0.00	0.00	BETL
55083	0.00	0.00	0.00	0.00	0.00	BETL
55084	0.00	0.00	0.00	0.00	0.00	BETL
CHECK	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –
Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55081	33.33	5.66	10.00	53.33	25.58	AETL
55082	40.00	5.82	7.50	50.00	25.83	AETL
55083	41.67	5.04	15.00	46.67	27.09	AETL
55084	38.33	4.94	12.50	56.67	28.11	AETL
CHECK	31.67	4.50	4.00	46.67	21.71	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –
Open Boll Damage**

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55081	56.22	10.95	20.51	35.00	30.67	
55082	61.78	12.34	35.10	45.00	38.56	
55083	50.24	9.69	16.25	35.00	27.79	
55084	46.22	9.05	19.90	45.00	30.04	
CHECK	48.12	9.55	15.56	60.00	33.31	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –
Locule Damage**

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55081	32.14	8.96	13.52	14.71	17.33	
55082	29.67	10.35	17.09	14.63	17.93	
55083	20.48	7.70	5.65	11.82	11.41	
55084	27.92	7.06	9.36	12.32	14.17	
CHECK	18.16	7.56	5.43	19.90	12.76	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 4(c) Initial Evaluation Trial of Compact Intra-Hirsutum Hybrids – Irrigated (IET-Compact IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions															
			LAM, Guntur								CICR RS, Coimbatore							
			CoLS		GM		Rust		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	55081	VPCH-474 BG II	28.5	MR	34.5	MR	18.5	R	5.5	DF	0.0	DF	2.5	R	0.0	DF	4.0	R
1	55082	NBC 1821 BGII (ZC 1)	29.3	MR	30.5	MR	26.5	MR	6.0	DF	0.0	DF	2.0	R	0.0	DF	0.0	DF
4	55083	VSCH 369 BGII (ZC 2)	30.5	MR	31.0	MR	32.0	MR	5.0	DF	0.0	DF	2.5	R	0.0	DF	4.0	R
2	55084	ACH-31-2 BGII	26.5	MR	28.3	MR	18.0	R	5.5	DF	0.0	DF	2.0	R	0.0	DF	0.0	DF

Table 4(d) Initial Evaluation Trial of Compact Intra-Hirsutum Hybrids – Irrigated (IET-Compact IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR):Unprotected conditions									
			RARS, Warangal									
			ALS		CoLS		GM		Rust		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	55081	VPCH-474 BG II	7.0	R	6.0	R	20.0	R	55.0	MS	10.0	R
1	55082	NBC 1821 BGII (ZC 1)	6.0	R	6.0	R	23.0	R	51.5	MS	17.5	R
4	55083	VSCH 369 BGII (ZC 2)	6.0	R	5.5	R	19.0	R	49.0	MR	11.3	R
2	55084	ACH-31-2 BGII	7.0	R	2.0	R	13.0	R	45.0	MR	22.5	R

Advanced Evaluation Trial – I of Compact Intra-Hirsutum Bt Hybrids - Irrigated

Constitution of Trial

The trial was constituted with two Bt cotton hybrids containing MON 15985 event sponsored by various organization along with two different check hybrids at closer spacing and one zonal check hybrid in normal spacing as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	3	55091	VSCH 369 BGII (ZC 2)	
2	1	55092	NBC 1821 BGII (ZC 1)	
3	4	55093	Indam 2412 BGII	Indo-American
4	2	55094	ACH 41-2 BGII	Ajeet seeds
5			NBC 1821 BGII (ZC 1) (normal)	

The trial was conducted in five locations viz., Warangal, Lam, Raichur, B'Gudi*, and Coimbatore.

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: All the coded entries were given a spacing of 90 x 15 cm and one zonal check hybrid was given recommended spacing for the hybrid.

Number of rows: 12 rows of 6 meters per entry with three replications

Data recorded:

Biometric evaluation

Table: Plant height (cm) at harvest in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	111.9	109.7	99.5	89.7	102.7
2	NBC 1821 BGII (ZC 1)	109.6	114.2	114.3	90.1	107.1
3	Indam 2412 BGII	96.4	121.5	111.8	85.2	103.7
4	ACH 41-2 BGII	80.3	123.4	98.0	90.3	98.0
5	NBC 1821 BGII (ZC 1) (normal)	114.3	115.9	128.7	112.6	117.9
	CD @ 5%	NS	NS	6.7	13.5	
	CV %	22.3	13.9	7.9	9.3	

Table: Number of monopodia in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	0.1	0.1	0.5	0.2	0.2
2	NBC 1821 BGII (ZC 1)	0.2	0.3	0.6	0.2	0.3
3	Indam 2412 BGII	0.1	0.2	0.4	0.2	0.2
4	ACH 41-2 BGII	0.1	0.2	0.3	0.1	0.2
5	NBC 1821 BGII (ZC 1) (normal)	0.6	0.1	1.9	1.0	0.9
	CD @ 5%	0.2	0.0	0.3	NS	
	CV %	55.5	16.1	16.9	0.0	

Table: Number of sympodia in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	12.1	15.0	13.0	10.3	12.6
2	NBC 1821 BGII (ZC 1)	13.9	10.7	14.5	9.5	12.2
3	Indam 2412 BGII	13.4	12.7	15.0	9.3	12.6
4	ACH 41-2 BGII	13.1	13.9	15.0	9.7	12.9
5	NBC 1821 BGII (ZC 1) (normal)	17.1	11.0	18.4	12.7	14.8
	CD @ 5%	2.0	2.0	1.4	2.3	
	CV %	9.1	10.0	11.9	14.6	

Table: Boll weight (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	5.2	5.6	7.1	5.6	5.9
2	NBC 1821 BGII (ZC 1)	5.2	4.5	7.6	6.1	5.9
3	Indam 2412 BGII	5.2	4.6	7.9	6.1	6.0
4	ACH 41-2 BGII	4.3	4.3	6.4	5.3	5.1
5	NBC 1821 BGII (ZC 1) (normal)	4.9	4.6	6.9	6.5	5.7
	CD @ 5%	0.4	0.7	0.3	0.4	
	CV %	4.5	9.0	4.9	4.9	

Table: Number of bolls / plant in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	13.3	15.8	16.3	14.2	14.9
2	NBC 1821 BGII (ZC 1)	12.8	12.8	15.3	13.1	13.5
3	Indam 2412 BGII	14.2	10.3	16.3	11.2	13.0
4	ACH 41-2 BGII	13.9	9.0	15.5	13.5	13.0
5	NBC 1821 BGII (ZC 1) (normal)	21.1	10.8	38.7	21.5	23.0
	CD @ 5%	4.2	1.9	4.2	3.1	
	CV %	18.0	10.6	20.0	13.7	

Table: Number of bolls / sq.m. in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	92.6	94.5	104.8	97.3
2	NBC 1821 BGII (ZC 1)	88.4	76.5	97.0	87.3
3	Indam 2412 BGII	98.1	61.5	83.0	80.9
4	ACH 41-2 BGII	94.1	54.0	100.0	82.7
5	NBC 1821 BGII (ZC 1) (normal)	27.1	64.3	53.0	48.1
	CD @ 5%	25.5	11.5	20.1	
	CV %	20.5	10.6	14.9	

Table: Lint Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	6.4	5.5	6.8	8.0	6.7
2	NBC 1821 BGII (ZC 1)	5.2	5.6	6.3	6.9	6.0
3	Indam 2412 BGII	5.1	4.9	6.0	6.5	5.6
4	ACH 41-2 BGII	5.0	5.1	6.7	7.2	6.0
5	NBC 1821 BGII (ZC 1) (normal)	5.7	5.5	6.5	7.1	6.2
	CD @ 5%	0.7	NS	0.2	0.4	
	CV %	7.7	13.4	4.3	3.2	

Table: Seed Index (g) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	10.3	10.8	10.2	11.1	10.6
2	NBC 1821 BGII (ZC 1)	11.9	11.2	12.8	13.3	12.3
3	Indam 2412 BGII	10.5	10.4	12.2	12.7	11.5
4	ACH 41-2 BGII	9.8	10.5	11.5	11.8	10.9
5	NBC 1821 BGII (ZC 1) (normal)	11.5	11.7	12.0	13.3	12.1
	CD @ 5%	1.3	NS	0.4	0.9	
	CV %	7.7	12.7	4.5	4.5	

Table: Ginning outturn (%) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	38.4	33.7	39.8	41.9	38.5
2	NBC 1821 BGII (ZC 1)	30.6	33.6	33.1	34.4	32.9
3	Indam 2412 BGII	32.7	30.7	33.0	34.0	32.6
4	ACH 41-2 BGII	34.0	32.8	36.9	37.8	35.4
5	NBC 1821 BGII (ZC 1) (normal)	33.1	31.9	35.2	34.8	33.8
	CD @ 5%	2.8	NS	1.4	1.7	
	CV %	5.4	12.7	4.9	2.9	

Table: Upper Half Mean Length (mm) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	26.9	27.2	28.9	27.2	27.6
2	NBC 1821 BGII (ZC 1)	28.7	30.5	30.8	30.7	30.2
3	Indam 2412 BGII	29.4	29.3	31.8	30.1	30.2
4	ACH 41-2 BGII	27.4	27.1	29.9	29.4	28.5
5	NBC 1821 BGII (ZC 1) (normal)	28.3	28.9	30.5	30.1	29.5

Table: Uniformity index under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	84.0	84.0	85.0	85.1	84.5
2	NBC 1821 BGII (ZC 1)	82.0	84.0	86.0	85.2	84.3
3	Indam 2412 BGII	83.0	84.0	87.0	85.3	84.8
4	ACH 41-2 BGII	83.0	84.0	86.0	85.2	84.6
5	NBC 1821 BGII (ZC 1) (normal)	83.0	84.0	87.0	85.0	84.8

Table: Micronaire under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	5.2	5.4	5.1	5.3	5.3
2	NBC 1821 BGII (ZC 1)	4.3	4.5	4.8	3.9	4.4
3	Indam 2412 BGII	4.7	5.0	4.6	4.5	4.7
4	ACH 41-2 BGII	4.6	5.4	4.7	4.4	4.8
5	NBC 1821 BGII (ZC 1) (normal)	4.5	4.7	4.6	4.2	4.5

Table: Tenacity under HVI Mode in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	28.9	26.8	30.0	26.2	28.0
2	NBC 1821 BGII (ZC 1)	30.6	32.5	33.2	31.4	31.9
3	Indam 2412 BGII	31.3	32.4	32.5	31.3	31.9
4	ACH 41-2 BGII	29.8	29.1	29.7	29.4	29.5
5	NBC 1821 BGII (ZC 1) (normal)	29.7	32.6	31.8	31.2	31.3

Table: Seed Cotton Yield at 140 DAS (q/ha) at 140 DAS in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	15.43	20.09	27.53	21.02
2	NBC 1821 BGII (ZC 1)	11.69	18.43	25.35	18.49
3	Indam 2412 BGII	12.03	17.44	26.36	18.61
4	ACH 41-2 BGII	15.78	15.05	32.15	20.99
5	NBC 1821 BGII (ZC 1) (normal)	7.17	14.22	20.34	13.91
	CD @ 5%	4.08	3.25	4.30	
	CV %	21.10	12.24	10.62	

Table: Seed Cotton Yield at 165 DAS (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	VSCH 369 BGII (ZC 2)	9.72	10.82	14.56	11.70
2	NBC 1821 BGII (ZC 1)	10.71	9.92	9.50	10.04
3	Indam 2412 BGII	9.21	9.39	5.76	8.12
4	ACH 41-2 BGII	7.05	8.10	4.74	6.63
5	NBC 1821 BGII (ZC 1) (normal)	7.38	7.66	14.36	9.80
	CD @ 5%	1.03	1.74	3.90	
	CV %	7.53	12.19	25.66	

Table: Total Seed Cotton Yield (q/ha) in H X H hybrids

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean	Rank	% Inc over best check
1	VSCH 369 BGII (ZC 2)	25.15	33.18	50.64	42.09	37.77	1	0.0
2	NBC 1821 BGII (ZC 1)	22.40	28.09	44.01	34.85	32.34	3	-14.4
3	Indam 2412 BGII	21.25	26.83	41.73	32.12	30.48	4	-19.3
4	ACH 41-2 BGII	22.83	23.46	46.66	36.90	32.46	2	-14.1
5	NBC 1821 BGII (ZC 1) (normal)	14.55	22.07	34.58	34.70	26.48	5	-29.9
	CD @ 5%	4.44	4.94	3.66	NS			
	CV %	13.42	12.10	10.93	13.84			

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions –Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	2.03	0.98	1.46	4.07	2.13	BETL
55092	0.97	1.25	1.79	3.75	1.94	BETL
55093	1.37	1.29	1.66	3.67	2.00	BETL
55094	1.60	2.05	1.54	5.73	2.73	BETL
Check	1.30	1.04	1.81	4.40	2.14	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions –Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	2.40	0.15	2.27	1.68	1.63	BETL
55092	2.37	0.23	2.67	1.13	1.60	BETL
55093	2.53	0.17	2.50	1.40	1.65	BETL
55094	2.57	0.40	2.58	1.43	1.75	BETL
Check	2.17	0.32	2.08	1.62	1.55	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions -JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55091	I	I	I	I	I	
55092	I	I	I	II	I	
55093	I	I	I	I	I	
55094	I	I	I	II	I	
Check	I	I	I	II	I	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	4.17	3.38	1.57	3.97	3.27	BETL
55092	4.73	3.27	1.47	4.75	3.55	BETL
55093	5.07	4.12	1.60	4.02	3.70	BETL
55094	4.20	4.15	0.65	3.78	3.20	BETL
Check	4.27	3.75	1.60	4.67	3.57	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.10	0.12	0.58	0.53	0.33	BETL
55092	0.17	0.08	0.57	0.97	0.45	BETL
55093	0.13	0.04	0.69	1.05	0.48	BETL
55094	0.07	0.14	1.00	1.11	0.58	BETL
Check	0.03	0.12	0.82	1.27	0.56	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.10	0.90	0.23	0.03	0.32	
55092	0.13	0.67	0.27	0.12	0.30	
55093	0.20	0.56	0.25	0.02	0.26	
55094	0.17	0.56	0.20	0.02	0.24	
Check	0.13	1.01	0.22	0.03	0.35	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.00	0.00	0.00	0.00	0.00	BETL
55092	0.00	0.00	0.00	0.00	0.00	BETL
55093	0.00	0.00	0.00	0.00	0.00	BETL
55094	0.00	0.00	0.00	0.00	0.00	BETL
Check	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.00	0.00	0.00	0.00	0.00	BETL
55092	0.00	0.00	0.00	0.00	0.00	BETL
55093	0.00	0.00	0.00	0.00	0.00	BETL
55094	0.00	0.00	0.00	0.00	0.00	BETL
Check	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.00	0.00	0.00	0.00	0.00	BETL
55092	0.10	0.00	0.00	0.00	0.03	BETL
55093	0.00	0.00	0.00	0.00	0.00	BETL
55094	0.03	0.00	0.00	0.00	0.01	BETL
Check	0.17	0.00	0.00	0.00	0.04	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.83	0.59	0.17	1.42	0.75	BETL
55092	1.00	0.50	0.33	1.17	0.75	BETL
55093	1.17	0.67	0.17	1.25	0.81	BETL
55094	1.00	0.42	0.33	1.58	0.83	BETL
Check	0.50	0.42	0.00	1.42	0.58	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55091	0.00	0.00	0.00	0.00	0.00	BETL
55092	0.00	0.00	0.00	0.00	0.00	BETL
55093	0.00	0.00	0.00	0.00	0.00	BETL
55094	0.00	0.00	0.00	0.00	0.00	BETL
Check	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%)/ 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55091	8.33	3.09	10.00	8.33	7.44	BETL
55092	8.33	2.57	7.50	9.17	6.89	BETL
55093	6.67	2.54	8.75	10.00	6.99	BETL
55094	6.67	2.46	7.50	7.50	6.03	BETL
Check	8.33	2.71	3.75	10.00	6.20	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions –Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55091	5.00	4.35	10.37	16.25	8.99	
55092	6.23	3.69	14.37	22.50	11.70	
55093	7.54	4.58	14.06	12.50	9.67	
55094	6.36	3.96	8.70	18.75	9.44	
Check	5.00	4.38	8.56	23.75	10.42	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55091	2.68	2.69	3.43	5.91	3.68	
55092	2.71	2.61	5.95	5.45	4.18	
55093	3.43	3.12	4.39	3.08	3.51	
55094	2.18	2.31	4.07	4.24	3.20	
Check	2.20	3.02	3.39	4.27	3.22	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – No. of Sprays for Insect-Pests

Name of Entry	Number of sprays for Insect-pests					Remark
	GU	RA	CBE	WR	Mean	
55091	5.00	5.00	4.00	5.00	4.75	
55092	5.00	5.00	4.00	5.00	4.75	
55093	5.00	5.00	4.00	5.00	4.75	
55094	5.00	5.00	4.00	5.00	4.75	
Check	5.00	5.00	4.00	5.00	4.75	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 5(a) Advanced Evaluation Trial– I of Compact Intra-Hirsutum Hybrids – Irrigated (AET-I Compact IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions															
			LAM, Guntur								CICR RS, Coimbatore							
			CoLS		GM		Rust		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	55091	VSCH 369 BGII (ZC 2)	28.2	MR	6.9	R	30.0	MR	7.3	R	0.0	DF	0.9	R	0.5	R	0.0	DF
1	55092	NBC 1821 BGII (ZC 1)	23.8	R	20.0	R	40.5	MR	7.0	R	0.0	DF	0.0	DF	0.6	R	0.0	DF
4	55093	Indam 2412 BGII	30.7	MR	24.5	R	10.0	R	7.5	R	0.0	DF	0.0	DF	1.0	R	0.0	DF
2	55094	ACH 41-2 BGII	26.8	MR	28.2	MR	16.3	R	5.3	R	0.0	DF	0.0	DF	0.4	R	0.0	DF

Table 5 (b) Advanced Evaluation Trial– I of Compact Intra-Hirsutum Hybrids – Irrigated (AET-I Compact IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions											
			RARS, Warangal											
			ALS		CoLS		GM		Rust		TSV			
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	55091	VSCH 369 BGII (ZC 2)	2.4	R	2.1	R	12.5	R	26.5	MR	5.5	R		
1	55092	NBC 1821 BGII (ZC 1)	2.0	R	3.0	R	12.6	R	27.6	MR	6.7	R		
4	55093	Indam 2412 BGII	3.3	R	1.9	R	12.0	R	28.3	MR	4.7	R		
2	55094	ACH 41-2 BGII	2.5	R	2.1	R	12.5	R	28.6	MR	6.4	R		

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pest

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions –
Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	5.27	3.51	7.10	8.40	6.07	BETL
55092	4.13	3.04	7.82	8.13	5.78	BETL
55093	5.30	2.43	5.77	6.80	5.07	BETL
55094	6.13	2.49	7.95	8.60	6.29	BETL
CHECK	5.47	1.75	6.11	9.67	5.75	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	8.77	6.52	4.47	4.13	5.97	AETL
55092	9.57	7.03	2.49	5.27	6.09	AETL
55093	9.60	6.25	2.56	2.80	5.30	BETL
55094	8.10	7.51	4.11	3.27	5.75	BETL
CHECK	7.30	5.79	2.98	4.27	5.08	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions -
JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55091	III	I	I	II	II	
55092	III	I	I	II	II	
55093	III	I	I	III	II	
55094	II	II	I	II	II	
CHECK	II	II	I	II	II	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions –
Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	8.87	5.26	2.91	12.27	7.33	BETL
55092	7.27	4.96	2.38	11.87	6.62	BETL
55093	8.57	4.19	2.38	10.13	6.32	BETL
55094	7.23	4.53	2.46	9.60	5.95	BETL
CHECK	8.23	5.23	1.72	10.07	6.31	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.60	1.54	0.81	0.67	0.91	BETL
55092	1.03	1.22	1.13	0.87	1.06	BETL
55093	1.17	1.28	1.12	0.60	1.04	BETL
55094	0.63	0.86	1.72	0.47	0.92	BETL
CHECK	1.20	0.97	1.20	0.67	1.01	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.20	0.90	0.20	0.07	0.34	
55092	0.17	1.12	0.20	0.13	0.41	
55093	0.10	1.00	0.00	0.20	0.33	
55094	0.23	1.89	0.13	0.13	0.60	
CHECK	0.13	1.34	0.20	0.20	0.47	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.00	0.22	0.00	0.00	0.06	BETL
55092	0.00	0.11	0.00	0.00	0.03	BETL
55093	0.00	0.11	0.00	0.00	0.03	BETL
55094	0.00	0.22	0.00	0.00	0.06	BETL
CHECK	0.00	0.11	0.00	0.00	0.03	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.00	0.00	0.00	0.00	0.00	BETL
55092	0.00	0.00	0.00	0.00	0.00	BETL
55093	0.00	0.00	0.00	0.00	0.00	BETL
55094	0.00	0.00	0.00	0.00	0.00	BETL
CHECK	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55091	0.37	0.22	0.00	0.00	0.15	BETL
55092	0.00	0.11	0.00	0.00	0.03	BETL
55093	0.73	0.11	0.00	0.00	0.21	BETL
55094	0.00	0.33	0.00	0.00	0.08	BETL
CHECK	0.50	0.67	0.00	0.00	0.29	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55091	4.83	2.19	0.33	8.00	3.84	AETL
55092	5.00	2.30	0.47	9.00	4.19	AETL
55093	4.17	1.41	0.67	9.00	3.81	AETL
55094	4.83	2.08	0.07	10.33	4.33	AETL
CHECK	4.50	1.64	0.33	8.00	3.62	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55091	0.00	0.00	0.00	0.00	0.00	BETL
55092	0.00	0.00	0.00	0.00	0.00	BETL
55093	0.00	0.00	0.00	0.00	0.00	BETL
55094	0.00	0.00	0.00	0.00	0.00	BETL
CHECK	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55091	25.00	5.59	10.00	50.00	22.65	AETL
55092	28.33	5.80	22.50	50.00	26.66	AETL
55093	21.67	5.52	10.00	50.00	21.80	AETL
55094	26.67	5.69	16.50	50.00	24.72	AETL
CHECK	30.00	5.03	15.00	46.67	24.17	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



**Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions –
Open Boll Damage**

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55091	46.25	10.73	20.50	40.00	29.37	
55092	32.14	11.91	26.27	40.00	27.58	
55093	30.75	9.23	14.62	45.00	24.90	
55094	41.36	9.89	26.49	30.00	26.94	
CHECK	46.78	9.78	14.87	45.00	29.11	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions –
Locule Damage**

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55091	30.25	8.71	10.42	14.03	15.85	
55092	19.84	9.89	11.83	12.92	13.62	
55093	21.34	7.22	6.13	14.29	12.25	
55094	25.62	7.88	12.46	12.25	14.55	
CHECK	21.33	7.77	4.93	14.91	12.23	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 5(c) Advanced Evaluation Trial– I of Compact Intra-Hirsutum Hybrids – Irrigated (AET-I Compact IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions															
			LAM, Guntur								CICR RS, Coimbatore							
			CoLS		GM		Rust		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	55091	VSCH 369 BGII (ZC 2)	36.0	MR	11.0	R	33.0	MR	5.0	R	0.0	DF	2.5	R	2.8	R	6.0	R
1	55092	NBC 1821 BGII (ZC 1)	26.5	MR	27.8	MR	42.5	MR	5.0	R	0.0	DF	2.0	R	0.0	DF	4.5	R
4	55093	Indam 2412 BGII	33.5	MR	26.5	MR	11.0	R	4.0	R	0.0	DF	2.0	R	0.0	DF	2.5	R
2	55094	ACH 41-2 BGII	29.0	MR	30.2	MR	20.5	R	4.0	R	0.0	DF	1.5	R	0.0	DF	4.0	R

Table 5(d) Advanced Evaluation Trial– I of Compact Intra-Hirsutum Hybrids – Irrigated (AET-I Compact IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions									
			RARS, Warangal									
			ALS		CoLS		GM		Rust		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	55091	VSCH 369 BGII (ZC 2)	7.5	R	8.5	R	17.0	R	38.5	MR	8.8	R
1	55092	NBC 1821 BGII (ZC 1)	5.0	R	7.0	R	15.0	R	35.0	MR	17.5	R
4	55093	Indam 2412 BGII	6.5	R	6.5	R	12.0	R	22.0	R	15.0	R
2	55094	ACH 41-2 BGII	6.5	R	6.0	R	12.5	R	41.0	MR	12.5	R

Agronomic Evaluation

RAICHUR (INDAM 2412 BG II)

Significantly higher seed cotton yield was recorded with 90 x 45 cm spacing (2956 kg/ha) compared to other spacings (Table 48). The increase in higher seed cotton yield was mainly due to increased number of bolls/sqm(192.0). Among nitrogen levels, higher seed cotton yield was obtained with 125% recommended N/ha (2808 kg/ha) followed by 100% recommended N/ha (2689 kg/ha) compared to 75% recommended N/ha (2540 kg/ha). This could be attributed to higher sympodia/plant, higher boll number/plant and boll weight. The interaction effect was found to be non significant.

Table 48. Total Seed cotton yield (kg/ha) of INDAM 2412 BG II as influenced by spacing levels and nutrient levels at Raichur

Treatments	INDAM 2412 BG II			Mean (N levels)
	S1: 90 X 45 cm	S2: 90 X 60 cm	S3: 90 X 75 cm	
N1- 75% of RDN	2810	2518	2290	2540
N2- 100 % of RDN	2950	2718	2398	2689
N3- 125% of RDN	3108	2828	2489	2808
Mean (spacing)	2956	2688	2392	
ANOVA	Spacing	N levels	Interaction	
SE d	121	121	209	
CD (5%)	209	NS	NS	

Basic parameters: pH: 8.06, OC (%): 0.42, Available N: 328 kg/ha, Available P₂O₅: 39 kg/ha, Available K₂O: 358 kg/ha, Recommended nutrients: 180:90:90 kg NPK/ha, Genotype: INDAM 2412 BG II, Environment: Irrigated

DHARWAD (BIO6910 BGII)

The results of one season trial reveals that number of bolls per sq mtr recorded significantly highest (197.9) with planting geometry (90X15 cm) with higher N level (125% RDN). None of the interactions of S X N with respect to growth and yield parameters were significant. Among the planting geometry 90 X 15 cm (S₂) recorded significantly higher seed cotton yield (1465 kg/ha) as compared to other level. The control Bt hybrid SP7679 BGII out yielded (1811 kg/ha) than the test Bt hybrid. Increased N levels from 75% to 125% numerically increased seed cotton yield (from 1123 kg/ha to 1307 kg/ha). Thus, BIO 6910 BGII performed better with planting geometry of 90 X 15 cm with 125% N levels to produce higher no of bolls per sq mtr and seed cotton yield per hectare (Table 54).

Table 54. Seed cotton yield (kg/ha) of BIO6910 BGII as influenced by spacing levels and nutrient levels at Dharwad

Treatments	S ₁ : 90x15 cm	S ₂ : 90x30 cm	S ₃ : 90x45 cm	Mean	ANOVA	SE d	CD (5%)	CV
N ₁ : 75% RDN	1356	1085	929	1123	Spacing	115.18	246.27	20.37
N ₂ : 100% RDN	1492	1094	1093	1226	Nitrogen	115.18	NS	
N ₃ : 125% RDN	1547	1148	1224	1307	S X N	199.49	NS	
Mean	1465	1109	1082					
Control (CCH 666 BGII)	1811							

Basic parameters: pH: 6.9, OC (%): 0.68, Available N: 295 kg/ha, Available P₂O₅: 32.0 kg/ha, Available K₂O: 510 kg/ha, Recommended nutrients: 100:50:50 kg NPK/ha, Genotype: BIO6910 BGII, Total rainfall during cropping period: 914.70 mm



Combined Evaluation Trial of Hirsutum x Barbadense Hybrids

Constitution of Trial

The trial was constituted with four Hirsutum x Barbadense Bt cotton Hybrids containing MON 15985 event sponsored by various Private organization along with two different check hybrids as furnished below.

S. No.	Code-I	Code -II	Entries	Company
1	6	55101	KSP 5253 (HXB) BGII	Kalash Seeds Pvt. Ltd
2	11	55102	ACHB 2111 BGII	Ankur seeds Pvt. Ltd
3	1	55103	US 781 BGII	Seedworks
4	8	55104	GBCH 2002 BGII	Green Gold Seeds
5	3	55105	CHB 1 BG II	CICR, Coimbatore
6	10	55106	PGCHB 64 BGII	Partech Seeds Pvt Ltd
7	4	55107	MRC 7918 BG II (ZC1)	
8	9	55108	DACHB 93S39 BGII	Dharti
9	7	55109	MRC 6918 BG II (ZC2)	
10	2	55110	NCHB 5799 Bt II	Nuziveedu
11	5	55111	SP 7710 BGII	Crystal

The trial was conducted in four locations viz., Lam, Coimbatore, Dharwad and Chamrajnagar.

Spacing: Recommended spacing for the hybrid has been followed.

Number of rows: 4 rows of 6 meters per entry with four replications

Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Hirsutum x Barbadense Hybrids trial**

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	180.0	143.7	131.1	137.7	148.1
2	ACHB 2111 BGII	164.7	156.4	134.0	135.1	147.6
3	US 781 BGII	187.5	133.1	150.0	124.8	148.9
4	GBCH 2002 BGII	214.2	159.3	147.8	145.5	166.7
5	CHB 1 BG II	185.0	161.1	139.6	152.8	159.6
6	PGCHB 64 BGII	194.1	154.8	133.5	134.7	154.3
7	MRC 7918 BG II (ZC1)	117.1	139.2	136.6	113.9	126.7
8	DACHB 93S39 BGII	147.0	153.1	133.7	126.9	140.2
9	MRC 6918 BG II (ZC2)	114.3	143.2	130.3	118.0	126.5
10	NCHB 5799 Bt II	163.7	143.0	135.5	137.1	144.8
11	SP 7710 BGII	147.7	115.8	142.9	130.1	134.1
	CD @ 5%	29.8	18.6	12.2	17.7	
	CV %	10.5	7.5	5.2	7.8	

Number of monopodia in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	2.1	1.6	2.3	0.5	1.6
2	ACHB 2111 BGII	1.7	1.2	2.3	0.4	1.4
3	US 781 BGII	1.7	3.7	2.1	1.1	2.2
4	GBCH 2002 BGII	2.2	2.3	2.4	0.2	1.8
5	CHB 1 BG II	1.3	3.3	2.5	0.7	2.0
6	PGCHB 64 BGII	3.4	1.8	2.5	0.5	2.1
7	MRC 7918 BG II (ZC1)	3.0	2.0	2.5	0.5	2.0
8	DACHB 93S39 BGII	1.4	2.2	2.3	0.1	1.5
9	MRC 6918 BG II (ZC2)	1.5	1.7	2.4	0.3	1.5
10	NCHB 5799 Bt II	1.6	1.2	2.6	0.5	1.5
11	SP 7710 BGII	2.2	1.8	2.3	0.5	1.7
	CD @ 5%	0.5	0.7	NS	0.7	
	CV %	13.5	18.3	6.9	52.5	

Number of sympodia in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	19.8	20.1	15.1	14.5	17.4
2	ACHB 2111 BGII	26.1	21.1	15.3	15.3	19.5
3	US 781 BGII	23.6	16.9	16.2	13.9	17.7
4	GBCH 2002 BGII	22.7	20.6	17.5	16.5	19.3
5	CHB 1 BG II	20.8	21.0	16.6	16.6	18.8
6	PGCHB 64 BGII	20.3	19.3	16.8	15.3	17.9
7	MRC 7918 BG II (ZC1)	21.6	19.7	17.7	13.7	18.2
8	DACHB 93S39 BGII	18.6	21.2	17.0	14.0	17.7
9	MRC 6918 BG II (ZC2)	18.5	20.6	17.7	14.9	17.9
10	NCHB 5799 Bt II	21.8	19.7	18.0	15.5	18.8
11	SP 7710 BGII	18.4	19.2	18.5	15.1	17.8
	CD @ 5%	4.2	2.8	1.7	NS	
	CV %	11.7	8.4	5.7	9.3	

Boll weight (g) in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	5.2	4.3	5.8	5.1
2	ACHB 2111 BGII	4.9	5.2	5.7	5.3
3	US 781 BGII	5.0	4.3	4.5	4.6
4	GBCH 2002 BGII	5.1	4.0	5.2	4.8
5	CHB 1 BG II	4.8	4.8	5.1	4.9
6	PGCHB 64 BGII	5.1	3.8	5.6	4.8
7	MRC 7918 BG II (ZC1)	5.0	4.2	5.0	4.7
8	DACHB 93S39 BGII	4.8	4.6	5.8	5.1
9	MRC 6918 BG II (ZC2)	4.9	3.9	4.3	4.4
10	NCHB 5799 Bt II	4.8	3.3	4.8	4.3
11	SP 7710 BGII	4.8	4.3	5.0	4.7
	CD @ 5%	NS	0.6	0.4	
	CV %	8.6	8.7	5.0	

Number of bolls / plant in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	44.1	26.7	30.4	19.2	30.1
2	ACHB 2111 BGII	46.9	24.3	27.8	23.1	30.5
3	US 781 BGII	46.5	25.1	47.6	23.0	35.6
4	GBCH 2002 BGII	42.1	26.8	48.5	22.3	34.9
5	CHB 1 BG II	43.2	26.8	26.5	20.9	29.4
6	PGCHB 64 BGII	26.3	23.6	45.7	17.5	28.3
7	MRC 7918 BG II (ZC1)	47.6	26.8	43.6	20.0	34.5
8	DACHB 93S39 BGII	51.7	21.9	35.9	19.5	32.3
9	MRC 6918 BG II (ZC2)	44.6	26.7	40.0	22.8	33.5
10	NCHB 5799 Bt II	49.3	27.2	44.8	20.3	35.4
11	SP 7710 BGII	50.7	24.7	42.8	22.7	35.2
	CD @ 5%	10.5	3.8	6.0	NS	
	CV %	13.6	8.8	8.9	15.7	

Number of bolls /sq.m. in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	88.3	37.1	54.7	47.4	56.9
2	ACHB 2111 BGII	93.7	33.8	50.0	57.1	58.7
3	US 781 BGII	92.9	34.9	85.6	56.8	67.6
4	GBCH 2002 BGII	84.0	37.2	87.2	55.0	65.9
5	CHB 1 BG II	86.4	37.2	47.6	51.5	55.7
6	PGCHB 64 BGII	52.7	32.7	82.3	43.1	52.7
7	MRC 7918 BG II (ZC1)	95.4	37.2	78.5	49.4	65.1
8	DACHB 93S39 BGII	103.7	30.4	64.6	48.2	61.7
9	MRC 6918 BG II (ZC2)	89.3	37.1	72.0	56.3	63.7
10	NCHB 5799 Bt II	98.1	37.8	80.6	50.2	66.7
11	SP 7710 BGII	101.4	34.3	77.1	56.1	67.2
	CD @ 5%	20.8	5.3	10.8	NS	
	CV %	13.5	8.8	8.9	15.7	

Lint Index (g) in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	5.9	7.0	4.5	7.7	6.3
2	ACHB 2111 BGII	6.9	7.3	4.5	8.0	6.7
3	US 781 BGII	6.6	6.2	4.7	6.4	6.0
4	GBCH 2002 BGII	5.8	5.7	4.4	6.5	5.6
5	CHB 1 BG II	6.8	5.7	4.4	6.5	5.9
6	PGCHB 64 BGII	4.8	6.9	4.3	7.1	5.8
7	MRC 7918 BG II (ZC1)	6.2	6.0	3.8	6.2	5.6
8	DACHB 93S39 BGII	7.4	7.6	5.0	8.1	7.0
9	MRC 6918 BG II (ZC2)	6.8	5.8	3.5	5.8	5.5
10	NCHB 5799 Bt II	6.9	6.0	4.1	5.9	5.7
11	SP 7710 BGII	7.8	6.7	4.1	7.6	6.6
	CD @ 5%	1.3		0.4	0.5	
	CV %	11.4		5.5	4.5	

Seed Index (g) in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	10.9	15.1	9.9	14.3	12.6
2	ACHB 2111 BGII	12.7	15.3	10.2	16.3	13.6
3	US 781 BGII	11.4	13.2	9.5	12.6	11.7
4	GBCH 2002 BGII	10.3	14.1	10.2	14.5	12.3
5	CHB 1 BG II	10.7	14.8	9.7	13.2	12.1
6	PGCHB 64 BGII	10.2	16.2	10.0	15.6	13.0
7	MRC 7918 BG II (ZC1)	9.9	15.0	9.4	14.9	12.3
8	DACHB 93S39 BGII	11.7	16.1	10.6	15.9	13.6
9	MRC 6918 BG II (ZC2)	11.7	14.1	8.7	13.6	12.0
10	NCHB 5799 Bt II	10.4	15.0	9.8	14.1	12.3
11	SP 7710 BGII	11.9	15.1	9.2	14.6	12.7
	CD @ 5%	NS		0.6	1.2	
	CV %	13.1		3.4	4.7	

Ginning outturn (%) in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	35.5	31.7	31.1	35.0	33.3
2	ACHB 2111 BGII	35.3	32.3	30.7	32.9	32.8
3	US 781 BGII	36.6	32.0	33.1	33.6	33.8
4	GBCH 2002 BGII	36.0	29.0	30.3	31.1	31.6
5	CHB 1 BG II	39.1	27.9	31.3	33.0	32.8
6	PGCHB 64 BGII	32.9	30.0	29.9	31.3	31.0
7	MRC 7918 BG II (ZC1)	38.3	28.7	28.9	29.6	31.4
8	DACHB 93S39 BGII	38.8	32.2	32.1	33.8	34.2
9	MRC 6918 BG II (ZC2)	36.5	29.0	28.7	29.8	31.0
10	NCHB 5799 Bt II	39.8	28.7	29.8	29.4	31.9
11	SP 7710 BGII	39.4	30.7	30.6	34.2	33.7
	CD @ 5%	NS		1.1	2.7	
	CV %	13.1		2.2	4.9	

Upper Half Mean Length (mm) under HVI Mode in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	36.4	35.9	32.4	37.5	35.5
2	ACHB 2111 BGII	36.9	39.0	32.9	38.9	36.9
3	US 781 BGII	36.7	33.6	32.7	36.5	34.9
4	GBCH 2002 BGII	37.2	37.3	33.8	38.2	36.6
5	CHB 1 BG II	37.8	39.2	33.4	36.6	36.8
6	PGCHB 64 BGII	36.1	38.6	33.1	38.6	36.6
7	MRC 7918 BG II (ZC1)	38.1	38.8	30.7	39.1	36.7
8	DACHB 93S39 BGII	36.5	39.1	33.1	38.3	36.7
9	MRC 6918 BG II (ZC2)	36.6	37.2	31.8	39.1	36.2
10	NCHB 5799 Bt II	34.4	39.2	34.1	39.2	36.7
11	SP 7710 BGII	35.4	37.8	33.5	38.6	36.3

Uniformity index under HVI Mode in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	87.0	87.0	81.7	89.0	86.2
2	ACHB 2111 BGII	86.0	88.0	82.7	90.0	86.7
3	US 781 BGII	87.0	89.0	83.0	89.0	87.0
4	GBCH 2002 BGII	86.0	87.0	82.3	89.0	86.1
5	CHB 1 BG II	87.0	88.0	83.3	87.0	86.3
6	PGCHB 64 BGII	87.0	89.0	82.7	90.0	87.2
7	MRC 7918 BG II (ZC1)	88.0	86.0	83.0	90.0	86.8
8	DACHB 93S39 BGII	86.0	88.0	83.3	90.0	86.8
9	MRC 6918 BG II (ZC2)	86.0	88.0	81.3	91.0	86.6
10	NCHB 5799 Bt II	88.0	87.0	83.0	90.0	87.0
11	SP 7710 BGII	86.0	89.0	83.7	90.0	87.2

Micronaire under HVI Mode in I Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	3.9	3.5	2.4	3.7	3.4
2	ACHB 2111 BGII	3.7	3.7	2.6	3.9	3.5
3	US 781 BGII	3.6	4.1	2.8	3.9	3.6
4	GBCH 2002 BGII	3.8	3.7	2.5	3.7	3.4
5	CHB 1 BG II	3.6	3.4	2.3	3.3	3.1
6	PGCHB 64 BGII	4.0	3.3	2.4	3.6	3.3
7	MRC 7918 BG II (ZC1)	3.3	2.8	2.3	2.9	2.8
8	DACHB 93S39 BGII	3.7	3.7	2.5	4.0	3.5
9	MRC 6918 BG II (ZC2)	3.0	3.2	2.2	3.4	2.9
10	NCHB 5799 Bt II	4.0	3.5	2.3	3.5	3.3
11	SP 7710 BGII	3.9	4.2	2.3	3.8	3.6

Tenacity under HVI Mode in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	38.6	33.6	29.3	34.9	34.1
2	ACHB 2111 BGII	34.4	34.3	31.1	34.3	33.5
3	US 781 BGII	38.9	36.2	30.5	37.0	35.6
4	GBCH 2002 BGII	35.7	36.8	29.9	33.8	34.1
5	CHB 1 BG II	39.9	37.3	29.4	36.1	35.7
6	PGCHB 64 BGII	41.5	35.1	29.1	34.5	35.1
7	MRC 7918 BG II (ZC1)	35.6	37.1	29.3	33.5	33.9
8	DACHB 93S39 BGII	37.8	34.4	30.1	34.7	34.3
9	MRC 6918 BG II (ZC2)	38.6	36.1	30.6	36.8	35.5
10	NCHB 5799 Bt II	37.7	40.3	31.3	36.6	36.5
11	SP 7710 BGII	36.9	39.0	32.2	36.9	36.3

Seed Cotton Yield at 140 DAS (q/ha) in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	8.17	5.15	15.52	9.61
2	ACHB 2111 BGII	10.63	5.87	17.28	11.26
3	US 781 BGII	10.00	6.06	16.06	10.71
4	GBCH 2002 BGII	8.25	4.33	14.02	8.87
5	CHB 1 BG II	6.90	1.05	11.34	6.43
6	PGCHB 64 BGII	6.83	5.83	16.98	9.88
7	MRC 7918 BG II (ZC1)	9.29	6.14	18.94	11.46
8	DACHB 93S39 BGII	13.65	4.19	16.59	11.48
9	MRC 6918 BG II (ZC2)	9.05	6.27	17.97	11.10
10	NCHB 5799 Bt II	12.06	4.75	15.18	10.66
11	SP 7710 BGII	13.10	5.63	14.29	11.01
	CD @ 5%	2.00	11.03	3.50	
	CV %	11.90	13.00	13.02	

Seed Cotton Yield at 165 DAS (q/ha) in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Coimbatore	Mean
1	KSP 5253 (HXB) BGII	5.45	9.74	12.06	9.08
2	ACHB 2111 BGII	7.09	11.97	11.56	10.21
3	US 781 BGII	6.67	10.91	15.64	11.07
4	GBCH 2002 BGII	5.50	9.30	14.20	9.67
5	CHB 1 BG II	4.60	8.74	14.40	9.25
6	PGCHB 64 BGII	4.55	10.19	10.41	8.38
7	MRC 7918 BG II (ZC1)	6.19	11.45	9.22	8.95
8	DACHB 93S39 BGII	9.10	11.96	11.32	10.79
9	MRC 6918 BG II (ZC2)	6.03	10.98	13.70	10.24
10	NCHB 5799 Bt II	8.04	9.73	15.35	11.04
11	SP 7710 BGII	8.73	10.79	14.49	11.34
	CD @ 5%	1.35	1.99	4.10	
	CV %	12.01	11.10	18.47	

Total Seed Cotton Yield (q/ha) in Hirsutum x Barbadense Hybrids trial

S. No.	Entries	Lam	Dharwad	Chamrajnagar	Coimbatore	Mean	Rank	% Inc over best check
1	KSP 5253 (HXB) BGII	13.62	14.90	14.61	27.58	17.68	10	-13.1
2	ACHB 2111 BGII	17.72	17.84	15.89	28.84	20.07	7	-1.4
3	US 781 BGII	16.67	16.96	22.44	31.69	21.94	1	7.8
4	GBCH 2002 BGII	13.76	13.63	21.52	28.22	19.28	8	-5.2
5	CHB 1 BG II	11.51	9.78	14.15	25.74	15.30	11	-24.8
6	PGCHB 64 BGII	11.38	16.02	18.81	27.39	18.40	9	-9.6
7	MRC 7918 BG II (ZC1)	15.48	17.59	20.17	28.16	20.35	5	0.0
8	DACHB 93S39 BGII	22.75	16.15	18.51	27.91	21.33	3	4.8
9	MRC 6918 BG II (ZC2)	15.08	17.26	17.06	31.68	20.27	6	-0.4
10	NCHB 5799 Bt II	20.11	14.48	16.49	30.53	20.40	4	0.3
11	SP 7710 BGII	21.83	16.42	20.41	28.78	21.86	2	7.4
	CD @ 5%	3.34	2.47	2.11	NS			
	CV %	11.92	9.30	6.78	10.49			

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Combined HXB trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	1.13	2.09	-	2.84	2.02	BETL
55102	1.07	1.89	-	2.54	1.83	BETL
55103	1.30	2.36	-	1.84	1.83	BETL
55104	1.37	2.13	-	5.01	2.84	BETL
55105	1.67	1.91	-	3.92	2.50	BETL
55106	1.00	2.13	-	2.62	1.92	BETL
55107	1.33	2.42	-	3.74	2.50	BETL
55108	0.93	2.60	-	3.64	2.39	BETL
55109	1.43	3.31	-	2.66	2.47	BETL
55110	0.93	2.58	-	2.50	2.00	BETL
55111	1.00	2.00	-	3.29	2.10	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	3.57	1.44	2.77	3.65	2.86	BETL
55102	2.83	1.51	2.43	3.70	2.62	BETL
55103	3.13	2.07	1.91	2.99	2.53	BETL
55104	3.80	1.89	1.97	2.41	2.52	BETL
55105	3.40	2.16	1.47	3.39	2.60	BETL
55106	3.03	1.56	3.90	3.54	3.01	BETL
55107	3.00	1.33	2.28	2.86	2.37	BETL
55108	3.00	1.49	1.67	3.39	2.39	BETL
55109	2.53	1.73	4.00	3.73	3.00	BETL
55110	3.70	1.40	1.75	3.27	2.53	BETL
55111	4.13	2.13	3.41	2.88	3.14	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	DH	CH	CBE	Mean	
55101	II	I	II	II	II	
55102	II	I	II	I	II	
55103	II	I	II	I	II	
55104	III	I	II	II	II	
55105	III	I	II	II	II	
55106	III	I	III	II	II	
55107	II	I	II	II	II	
55108	III	I	II	I	II	
55109	II	I	III	II	II	
55110	III	I	II	II	II	
55111	II	I	III	II	II	

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	3.83	3.85	0.00	1.49	2.29	BETL
55102	4.00	3.18	0.00	2.22	2.35	BETL
55103	4.17	2.98	0.68	1.53	2.34	BETL
55104	3.83	3.59	0.00	1.56	2.24	BETL
55105	3.27	3.41	0.00	1.56	2.06	BETL
55106	4.90	2.67	1.85	1.36	2.69	BETL
55107	4.73	3.49	0.00	1.02	2.31	BETL
55108	4.47	4.43	0.00	1.04	2.48	BETL
55109	4.43	2.85	2.48	1.42	2.80	BETL
55110	4.43	5.61	0.00	0.84	2.72	BETL
55111	4.27	6.41	0.00	1.16	2.96	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	0.00	0.13	1.78	1.50	0.85	BETL
55102	0.07	0.20	2.84	1.56	1.17	BETL
55103	0.03	0.16	1.98	1.01	0.80	BETL
55104	0.00	0.00	1.93	1.21	0.78	BETL
55105	0.03	0.03	1.17	1.33	0.64	BETL
55106	0.10	0.00	0.98	1.12	0.55	BETL
55107	0.07	0.02	1.17	1.19	0.61	BETL
55108	0.00	0.16	1.37	1.95	0.87	BETL
55109	0.07	0.22	2.02	1.34	0.91	BETL
55110	0.03	0.01	1.00	1.09	0.53	BETL
55111	0.17	0.03	1.17	1.30	0.67	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore



Table: Combined HXB trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	0.10	0.73	-	0.22	0.35	
55102	0.17	0.26	-	0.18	0.20	
55103	0.03	0.26	-	0.13	0.14	
55104	0.17	0.22	-	0.16	0.18	
55105	0.07	0.42	-	0.27	0.25	
55106	0.13	0.27	-	0.16	0.18	
55107	0.10	0.73	-	0.18	0.34	
55108	0.10	2.72	-	0.11	0.98	
55109	0.20	0.73	-	0.09	0.34	
55110	0.10	0.42	-	0.20	0.24	
55111	0.23	0.18	-	0.16	0.19	

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	DH	CH	CBE	Mean	
55101	0.00	0.00	-	0.00	0.00	BETL
55102	0.00	0.00	-	0.00	0.00	BETL
55103	0.00	0.00	-	0.00	0.00	BETL
55104	0.00	0.00	-	0.00	0.00	BETL
55105	0.00	0.00	-	0.00	0.00	BETL
55106	0.00	0.00	-	0.00	0.00	BETL
55107	0.00	0.00	-	0.00	0.00	BETL
55108	0.00	0.00	-	0.00	0.00	BETL
55109	0.00	0.00	-	0.00	0.00	BETL
55110	0.00	0.00	-	0.00	0.00	BETL
55111	0.00	0.00	-	0.00	0.00	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	DH	CH	CBE	Mean	
55101	0.00	0.00	-	0.00	0.00	BETL
55102	0.00	0.00	-	0.00	0.00	BETL
55103	0.00	0.00	-	0.00	0.00	BETL
55104	0.00	0.00	-	0.00	0.00	BETL
55105	0.00	0.00	-	0.00	0.00	BETL
55106	0.00	0.00	-	0.00	0.00	BETL
55107	0.00	0.00	-	0.00	0.00	BETL
55108	0.00	0.00	-	0.00	0.00	BETL
55109	0.00	0.00	-	0.00	0.00	BETL
55110	0.00	0.00	-	0.00	0.00	BETL
55111	0.00	0.00	-	0.00	0.00	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	0.03	0.00	-	0.00	0.01	BETL
55102	0.13	0.00	-	0.00	0.04	BETL
55103	0.00	0.00	-	0.00	0.00	BETL
55104	0.07	0.00	-	0.00	0.02	BETL
55105	0.17	0.00	-	0.00	0.06	BETL
55106	0.00	0.00	-	0.00	0.00	BETL
55107	0.03	0.00	-	0.00	0.01	BETL
55108	0.10	0.00	-	0.00	0.03	BETL
55109	0.07	0.00	-	0.00	0.02	BETL
55110	0.00	0.00	-	0.00	0.00	BETL
55111	0.10	0.00	-	0.00	0.03	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	DH	CH*	CBE	Mean	
55101	1.00	0.33	5.00	0.33	1.67	AETL
55102	0.33	0.33	4.33	0.56	1.39	AETL
55103	0.67	0.89	1.33	0.78	0.92	BETL
55104	0.50	0.89	1.67	0.11	0.79	BETL
55105	1.00	0.78	5.67	0.44	1.97	AETL
55106	0.83	0.89	2.67	0.56	1.24	AETL
55107	1.17	0.33	2.33	0.00	0.96	BETL
55108	1.17	1.00	3.00	0.11	1.32	AETL
55109	0.33	0.33	3.67	0.33	1.17	AETL
55110	1.17	0.56	4.00	0.33	1.51	AETL
55111	0.83	0.11	2.00	0.67	0.90	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore, * -No. of PBW/20 Bolls,

Table: Combined HXB trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	DH	CH	CBE	Mean	
55101	0.00	0.00	-	0.00	0.00	BETL
55102	0.00	0.00	-	0.00	0.00	BETL
55103	0.00	0.00	-	0.00	0.00	BETL
55104	0.00	0.00	-	0.00	0.00	BETL
55105	0.00	0.00	-	0.00	0.00	BETL
55106	0.00	0.00	-	0.93	0.31	BETL
55107	0.00	0.00	-	0.00	0.00	BETL
55108	0.00	0.00	-	0.00	0.00	BETL
55109	0.00	0.00	-	0.00	0.00	BETL
55110	0.00	0.00	-	0.00	0.00	BETL
55111	0.00	0.00	-	0.00	0.00	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%)/ 10 bolls destructive sampling					Remark
	GU	DH	CH	CBE	Mean	
55101	6.67	6.67	17.27	16.67	11.82	AETL
55102	3.33	7.78	16.61	15.00	10.68	AETL
55103	6.67	12.22	4.58	15.00	9.62	BETL
55104	3.33	11.11	5.83	15.00	8.82	BETL
55105	6.67	12.22	17.77	10.00	11.66	AETL
55106	6.67	7.78	10.73	15.00	10.04	AETL
55107	6.67	5.56	6.99	11.67	7.72	BETL
55108	8.33	10.00	12.79	8.33	9.86	BETL
55109	3.33	6.67	14.32	5.00	7.33	BETL
55110	10.00	8.89	15.78	10.00	11.17	AETL
55111	8.33	6.67	6.12	15.00	9.03	BETL

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	DH	CH	CBE	Mean	
55101	8.94	2.74	19.23	7.03	9.49	
55102	7.35	4.76	18.52	2.84	8.37	
55103	9.16	7.54	5.67	11.94	8.58	
55104	6.52	7.51	6.47	7.13	6.91	
55105	8.19	6.68	19.78	6.24	10.22	
55106	7.62	4.82	12.44	6.71	7.90	
55107	9.00	4.18	8.52	6.63	7.08	
55108	9.62	4.23	14.63	8.83	9.33	
55109	6.21	4.90	16.27	6.62	8.50	
55110	5.65	5.15	17.61	6.12	8.63	
55111	7.69	2.56	7.11	8.53	6.47	

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions –Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	DH	CH	CBE	Mean	
55101	4.54	6.83	22.37	2.81	9.14	
55102	2.61	8.17	21.07	1.22	8.27	
55103	4.16	9.94	8.82	4.04	6.74	
55104	3.04	10.55	9.51	2.66	6.44	
55105	2.97	12.94	22.69	2.65	10.31	
55106	2.33	7.89	15.63	2.81	7.16	
55107	5.00	7.94	11.79	2.92	6.91	
55108	3.85	12.72	17.89	4.70	9.79	
55109	2.62	5.89	19.97	3.09	7.89	
55110	2.15	7.39	20.76	2.83	8.28	
55111	2.79	5.72	10.23	3.68	5.60	

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Protected Conditions – No. of Sprays for Insect-Pests

Name of Entry	Number of sprays for Insect-pests					Remark
	GU	DH	CH	CBE	Mean	
55101	5.00	5.00	-	4.00	4.67	
55102	5.00	5.00	-	4.00	4.67	
55103	5.00	5.00	-	4.00	4.67	
55104	5.00	5.00	-	4.00	4.67	
55105	5.00	5.00	-	4.00	4.67	
55106	5.00	5.00	-	4.00	4.67	
55107	5.00	5.00	-	4.00	4.67	
55108	5.00	5.00	-	4.00	4.67	
55109	5.00	5.00	-	4.00	4.67	
55110	5.00	5.00	-	4.00	4.67	
55111	5.00	5.00	-	4.00	4.67	

GU- Lam Guntur, DH-Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Reaction to Diseases

Table 6(a): Combined Evaluation trial of Interspecific H X B Hybrids-Irrigated (CET- Hybrids IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions													
			UAS, Dharwad								LAM, Guntur					
			ALB		BLB		GM		Rust		CoLS		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
6	55101	KSP 5253 (HXB) BGII	17.9	R	10.8	R	18.3	R	18.3	R	24.8	R	10.5	R	13.0	R
11	55102	ACHB 2111 BGII	17.7	R	10.4	R	17.6	R	18.4	R	26.3	MR	12.0	R	25.8	MR
1	55103	US 781 BGII	20.1	R	10.1	R	17.3	R	18.2	R	34.0	MR	9.3	R	16.5	R
8	55104	GBCH 2002 BGII	18.6	R	10.1	R	17.6	R	18.2	R	30.3	MR	10.8	R	12.0	R
3	55105	CHB 1 BG II	18.6	R	9.2	R	17.5	R	18.7	R	27.8	MR	14.2	R	29.5	MR
10	55106	PGCHB 64 BGII	18.5	R	9.7	R	17.3	R	18.4	R	28.2	MR	18.5	R	10.8	R
4	55107	MRC 7918 BG II (ZC1)	13.3	R	9.8	R	18.0	R	17.9	R	29.5	MR	13.1	R	16.2	R
9	55108	DACHB 93S39 BGII	17.0	R	8.6	R	10.5	R	19.2	R	22.8	R	10.3	R	13.5	R
7	55109	MRC 6918 BG II (ZC2)	16.4	R	9.8	R	17.3	R	17.6	R	30.5	MR	9.5	R	30.8	MR
2	55110	NCHB 5799 Bt II	18.0	R	9.2	R	15.4	R	18.6	R	27.8	MR	10.8	R	26.0	MR
5	55111	SP 7710 BGII	17.3	R	9.0	R	18.3	R	17.9	R	20.3	R	16.3	R	10.0	MR

Table 6(b): Combined Evaluation trial of Interspecific H X B Hybrids-Irrigated (CET- Hybrids IRR) under Protected

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions									
			CICR RS, Coimbatore									
			ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
6	55101	KSP 5253 (HXB) BGII	5.3	R	0.0	DF	0.0	DF	0.0	DF	6.8	R
11	55102	ACHB 2111 BGII	5.8	R	0.0	DF	0.0	DF	0.0	DF	8.2	R
1	55103	US 781 BGII	5.2	R	0.0	DF	0.0	DF	0.0	DF	5.3	R
8	55104	GBCH 2002 BGII	5.8	R	0.0	DF	0.0	DF	0.2	R	10.5	R
3	55105	CHB 1 BG II	8.2	R	0.0	DF	0.0	DF	0.0	DF	9.0	R
10	55106	PGCHB 64 BGII	7.2	R	0.0	DF	0.0	DF	0.0	DF	9.5	R
4	55107	MRC 7918 BG II (ZC1)	6.8	R	0.0	DF	0.0	DF	0.0	DF	7.7	R
9	55108	DACHB 93S39 BGII	6.2	R	0.0	DF	0.0	DF	0.0	DF	7.8	R
7	55109	MRC 6918 BG II (ZC2)	6.0	R	0.0	DF	0.0	DF	0.0	DF	7.3	R
2	55110	NCHB 5799 Bt II	4.0	R	0.0	DF	0.0	DF	0.0	DF	8.5	R
5	55111	SP 7710 BGII	5.3	R	0.0	DF	0.0	DF	0.0	DF	8.8	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pest

Table: Combined HXB trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	4.77	7.73	5.29	10.27	6.77	BETL
55102	5.60	6.82	4.49	7.33	7.56	BETL
55103	4.80	7.09	4.33	6.60	7.10	BETL
55104	6.43	8.02	9.18	20.60	8.05	BETL
55105	5.43	7.27	8.78	21.27	7.72	BETL
55106	7.37	6.67	9.89	17.67	8.34	BETL
55107	5.17	7.29	10.84	22.13	8.56	BETL
55108	6.07	7.40	7.44	15.80	8.46	BETL
55109	7.37	7.27	2.58	4.13	8.07	BETL
55110	4.90	7.24	6.42	11.40	7.25	BETL
55111	7.03	6.78	10.44	18.40	9.75	BETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	10.27	3.49	2.78	6.11	5.66	BETL
55102	11.23	3.47	2.43	5.24	5.59	BETL
55103	10.07	3.27	1.88	3.42	4.66	BETL
55104	10.57	2.62	1.95	4.64	4.95	BETL
55105	11.77	2.80	1.50	4.69	5.19	BETL
55106	10.43	3.04	3.92	5.78	5.79	BETL
55107	11.03	3.56	2.42	2.09	4.77	BETL
55108	10.17	3.24	1.65	5.22	5.07	BETL
55109	10.13	2.51	4.00	2.56	4.80	BETL
55110	10.90	3.56	1.79	4.91	5.29	BETL
55111	9.83	2.93	3.31	4.27	5.09	BETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	DH	CH	CBE	Mean	
55101	III	II	II	III	III	
55102	III	II	II	III	III	
55103	III	II	II	II	II	
55104	III	II	II	II	II	
55105	IV	II	II	II	III	
55106	III	II	III	III	III	
55107	III	II	II	II	II	
55108	IV	II	II	III	III	
55109	IV	II	III	III	III	
55110	IV	II	II	II	III	
55111	III	II	III	II	III	

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	7.97	15.31	0.00	1.67	6.24	BETL
55102	8.37	13.89	0.00	2.33	6.15	BETL
55103	6.37	14.09	0.63	1.40	5.62	BETL
55104	8.27	13.42	0.00	3.87	6.39	BETL
55105	6.17	16.07	0.00	2.67	6.23	BETL
55106	7.37	16.98	2.15	1.47	6.99	BETL
55107	8.53	16.67	0.00	3.20	7.10	BETL
55108	5.97	15.62	0.00	2.40	6.00	BETL
55109	7.60	13.64	2.48	1.37	6.27	BETL
55110	8.20	13.84	0.00	1.40	5.86	BETL
55111	8.13	16.27	0.00	2.93	6.83	BETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	1.03	1.09	1.80	2.60	1.63	BETL
55102	1.23	1.08	2.88	2.87	2.01	BETL
55103	0.10	1.06	1.98	2.07	1.30	BETL
55104	1.37	0.92	2.00	2.07	1.59	BETL
55105	0.63	0.73	1.00	2.27	1.16	BETL
55106	0.23	1.24	0.98	2.00	1.11	BETL
55107	1.07	1.43	1.09	3.27	1.71	BETL
55108	0.67	0.96	1.35	2.53	1.38	BETL
55109	1.13	0.92	2.03	2.53	1.65	BETL
55110	0.97	1.30	1.00	2.40	1.42	BETL
55111	1.20	1.43	1.08	2.53	1.56	BETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	0.17	1.04	1.93	0.00	0.78	
55102	0.33	0.51	1.53	0.13	0.63	
55103	0.20	0.82	1.61	0.27	0.72	
55104	0.23	1.02	0.93	0.20	0.60	
55105	0.10	0.53	1.93	0.40	0.74	
55106	0.20	0.64	2.37	0.40	0.90	
55107	0.10	0.44	1.95	0.47	0.74	
55108	0.13	0.69	1.97	0.13	0.73	
55109	0.20	1.07	2.05	0.13	0.86	
55110	0.13	0.91	1.19	0.40	0.66	
55111	0.27	0.98	2.49	0.20	0.98	

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	DH	CH	CBE	Mean	
55101	0.00	0.00	-	0.00	0.00	BETL
55102	0.00	0.00	-	0.00	0.00	BETL
55103	0.00	0.00	-	0.00	0.00	BETL
55104	0.00	0.00	-	0.00	0.00	BETL
55105	0.00	0.00	-	0.00	0.00	BETL
55106	0.00	0.00	-	0.00	0.00	BETL
55107	0.00	0.00	-	0.00	0.00	BETL
55108	0.00	0.00	-	0.00	0.00	BETL
55109	0.00	0.00	-	0.00	0.00	BETL
55110	0.00	0.00	-	0.00	0.00	BETL
55111	0.00	0.00	-	0.00	0.00	BETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	DH	CH	CBE	Mean	
55101	0.00	0.00	-	0.00	0.00	BETL
55102	0.00	0.00	-	0.00	0.00	BETL
55103	0.00	0.00	-	0.00	0.00	BETL
55104	0.00	0.00	-	0.00	0.00	BETL
55105	0.00	0.00	-	0.00	0.00	BETL
55106	0.00	0.00	-	0.00	0.00	BETL
55107	0.00	0.00	-	0.00	0.00	BETL
55108	0.00	0.00	-	0.00	0.00	BETL
55109	0.00	0.00	-	0.00	0.00	BETL
55110	0.00	0.00	-	0.00	0.00	BETL
55111	0.00	0.00	-	0.00	0.00	BETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore



Table: Combined HXB trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plant)					Remark
	GU	DH	CH	CBE	Mean	
55101	0.67	0.00	-	0.00	0.22	BETL
55102	0.50	0.00	-	0.00	0.17	BETL
55103	0.00	0.00	-	0.00	0.00	BETL
55104	0.53	0.00	-	0.00	0.18	BETL
55105	0.40	0.00	-	0.00	0.13	BETL
55106	0.43	0.00	-	0.00	0.14	BETL
55107	0.60	0.00	-	0.00	0.20	BETL
55108	0.53	0.00	-	0.00	0.18	BETL
55109	0.77	0.00	-	0.00	0.26	BETL
55110	0.57	0.00	-	0.00	0.19	BETL
55111	0.53	0.00	-	0.00	0.18	BETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions-Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	DH	CH*	CBE	Mean	
55101	4.33	1.33	5.50	0.00	2.79	AETL
55102	4.67	1.56	5.00	0.00	2.81	AETL
55103	5.67	3.11	2.00	0.00	2.69	AETL
55104	3.83	3.11	2.50	0.67	2.53	AETL
55105	5.17	1.56	6.50	0.00	3.31	AETL
55106	5.17	1.89	3.50	1.33	2.97	AETL
55107	5.33	1.33	3.00	0.67	2.58	AETL
55108	3.33	2.56	3.50	1.00	2.60	AETL
55109	6.00	1.67	4.50	1.00	3.29	AETL
55110	4.83	1.44	5.00	1.33	3.15	AETL
55111	4.67	0.89	2.50	1.00	2.26	AETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore , *20 Green Bolls

Table: Combined HXB trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	DH	CH	CBE	Mean	
55101	0.00	0.00	-	0.00	0.00	BETL
55102	0.00	0.00	-	0.00	0.00	BETL
55103	0.00	0.00	-	0.00	0.00	BETL
55104	0.00	0.00	-	0.00	0.00	BETL
55105	0.00	0.00	-	0.00	0.00	BETL
55106	0.00	0.00	-	0.00	0.00	BETL
55107	0.00	0.00	-	0.00	0.00	BETL
55108	0.00	0.00	-	0.00	0.00	BETL
55109	0.00	0.00	-	0.00	0.00	BETL
55110	0.00	0.00	-	0.00	0.00	BETL
55111	0.00	0.00	-	0.00	0.00	BETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore



Table: Combined HXB trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	DH	CH	CBE	Mean	
55101	28.33	13.33	18.28	15.00	18.74	AETL
55102	33.33	13.33	15.41	15.00	19.27	AETL
55103	41.67	20.00	4.88	20.00	21.64	AETL
55104	30.00	21.11	5.13	15.00	17.81	AETL
55105	31.67	18.89	19.05	20.00	22.40	AETL
55106	33.33	16.67	11.84	45.00	26.71	AETL
55107	33.33	10.00	6.26	20.00	17.40	AETL
55108	28.33	14.44	14.01	35.00	22.95	AETL
55109	41.67	10.00	13.21	15.00	19.97	AETL
55110	28.33	15.56	16.86	25.00	21.44	AETL
55111	30.00	12.22	6.69	15.00	15.98	AETL

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	DH	CH	CBE	Mean	
55101	54.61	8.76	19.41	31.21	28.50	
55102	62.14	12.64	16.54	22.77	28.52	
55103	50.67	17.41	6.01	25.89	24.99	
55104	46.85	13.52	6.26	30.48	24.27	
55105	55.23	14.04	20.18	26.59	29.01	
55106	41.62	10.23	12.97	57.93	30.69	
55107	43.57	10.62	7.39	39.83	25.35	
55108	39.67	17.20	15.14	36.56	27.14	
55109	48.72	9.41	14.34	38.60	27.77	
55110	36.10	11.40	17.99	33.96	24.86	
55111	41.28	8.94	7.82	39.98	24.50	

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Table: Combined HXB trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	DH	CH	CBE	Mean	
55101	30.15	10.83	20.88	14.67	19.13	
55102	29.64	12.17	18.01	8.82	17.16	
55103	27.82	16.67	7.48	10.92	15.72	
55104	24.17	14.33	7.73	11.88	14.53	
55105	26.69	18.00	21.65	12.48	19.71	
55106	22.97	10.16	14.44	35.26	20.71	
55107	25.37	10.61	8.86	24.34	17.29	
55108	19.37	18.83	16.61	24.39	19.80	
55109	22.78	8.83	15.81	21.57	17.25	
55110	18.59	10.11	19.46	19.00	16.79	
55111	23.58	9.17	9.29	18.80	15.21	

GU- Lam Guntur, DH- Dharwad, CH-Chamarajanagar, CBE- Coimbatore

Reaction to Diseases

Table 6(c): Combined Evaluation trial of Interspecific H X B Hybrids-Irrigated (CET- Hybrids IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions													
			UAS Dharwad								LAM, Guntur					
			ALB		BLB		GM		Rust		CoLS		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
6	55101	KSP 5253 (HXB) BGII	27.1	MR	11.9	R	18.2	R	19.5	R	26.8	MR	14.3	R	15.3	R
11	55102	ACHB 2111 BGII	26.3	MR	11.4	R	18.2	R	17.1	R	30.0	MR	16.1	R	26.0	MR
1	55103	US 781 BGII	29.6	MR	12.7	R	18.0	R	20.2	R	44.3	MR	13.3	R	19.3	R
8	55104	GBCH 2002 BGII	25.0	R	12.3	R	18.0	R	20.9	R	32.5	MR	16.0	R	16.0	R
3	55105	CHB 1 BG II	28.2	MR	11.9	R	18.2	R	20.1	R	29.0	MR	18.5	R	32.0	MR
10	55106	PGCHB 64 BGII	27.7	MR	11.4	R	17.5	R	19.6	R	31.0	MR	29.0	MR	11.5	R
4	55107	MRC 7918 BG II (ZC1)	22.6	R	10.9	R	18.2	R	19.2	R	32.5	MR	17.5	R	19.0	R
9	55108	DACHB 93S39 BGII	25.4	MR	11.8	R	10.5	R	19.6	R	27.0	MR	14.3	R	26.0	MR
7	55109	MRC 6918 BG II (ZC2)	26.4	MR	10.8	R	17.9	R	18.9	R	40.3	MR	10.0	R	33.0	MR
2	55110	NCHB 5799 Bt II	28.5	MR	11.3	R	13.7	R	19.6	R	31.3	MR	12.3	R	26.8	MR
5	55111	SP 7710 BGII	24.3	MR	11.8	R	18.0	R	19.1	R	27.3	MR	18.5	R	13.5	MR

Table 6(d): Combined Evaluation trial of Interspecific H X B Hybrids-Irrigated (CET- Hybrids IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions									
			CICR RS, Coimbatore									
			ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
6	55101	KSP 5253 (HXB) BGII	6.0	R	0.0	DF	0.0	DF	0.0	DF	0.0	DF
11	55102	ACHB 2111 BGII	5.5	R	0.0	DF	0.0	DF	0.0	DF	4.0	R
1	55103	US 781 BGII	4.5	R	0.0	DF	2.0	R	0.0	DF	3.0	R
8	55104	GBCH 2002 BGII	3.5	R	0.0	DF	0.0	DF	0.0	DF	5.0	R
3	55105	CHB 1 BG II	4.0	R	0.0	DF	1.0	R	0.0	DF	4.5	R
10	55106	PGCHB 64 BGII	6.0	R	0.0	DF	2.0	R	0.0	DF	6.5	R
4	55107	MRC 7918 BG II (ZC1)	4.5	R	0.0	DF	1.5	R	0.0	DF	0.0	DF
9	55108	DACHB 93S39 BGII	3.5	R	0.0	DF	0.0	DF	0.0	DF	4.5	R
7	55109	MRC 6918 BG II (ZC2)	0.0	R	0.0	DF	2.5	R	0.0	DF	0.0	DF
2	55110	NCHB 5799 Bt II	5.0	R	0.0	DF	3.0	R	0.0	DF	6.0	R
5	55111	SP 7710 BGII	4.5	R	0.0	DF	1.5	R	0.0	DF	5.5	R

Initial Evaluation Trial of Hirsutum Varieties-Irrigated

Constitution of Trial

The trial was constituted with 19 Bt cotton varieties containing deregulated events along with two different check varieties as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	12	55121	MCU 5-VT Bt	CICR, Coimbatore
2	18	55122	Surabhi Bt	CICR, Coimbatore
3	21	55123	CCH 19-2 Bt	CICR, Coimbatore
4	1	55124	Sunantha Bt	CICR, Coimbatore
5	15	55125	WGCV Bt 139	Warangal
6	6	55126	RAHBt 27	UAS, Raichur
7	9	55127	Suraj Super Bt	CICR, Coimbatore
8	2	55128	PKV 081 Bt (ZC Bt-2)	
9	20	55129	WGCV Bt 134	Warangal
10	11	55130	LH Bt 8	Guntur
11	13	55131	NH 22072 Bt	CRS, Nanded
12	16	55132	RAHBt 28	UAS, Raichur
13	3	55133	LH Bt 6	Guntur
14	8	55134	WGCV Bt 138	Warangal
15	14	55135	RAHBt 29	UAS, Raichur
16	19	55136	Supriya Bt	CICR, Coimbatore
17	4	55137	NH 22032 Bt	CRS, Nanded
18	10	55138	CICR 23 Bt (ZC Bt-1)	
19	17	55139	LH Bt 9	Guntur
20	7	55140	RAHBt 30	UAS, Raichur
21	5	55141	LH Bt 15	Guntur

The zonal check variety **PKV 081 Bt (ZC Bt-2)** was not released for the south zone under irrigated conditions and was inadvertently added in the trial. Hence, the data of this check variety was not included in report preparation.

The trial was conducted in five locations viz., Warangal, Lam, Raichur, B'Gudi*, and Coimbatore.

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Recommended spacing for the variety has been followed.

Number of rows: 4 rows of 6 meters per entry with three replications



Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Initial Evaluation Trial of Hirsutum Variety**

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	109.1	138.7	142.3	109.3	124.9
2	Surabhi Bt	112.7	145.7	148.7	113.8	130.2
3	CCH 19-2 Bt	103.0	126.3	148.7	118.5	124.1
4	Sunantha Bt	106.1	138.5	143.3	120.6	127.1
5	WGCV Bt 139	92.5	131.9	126.0	94.9	111.3
6	RAHBt 27	107.6	133.3	125.0	103.1	117.3
7	Suraj Super Bt	100.4	124.3	136.7	109.0	117.6
8	WGCV Bt 134	102.8	116.2	130.7	111.1	115.2
9	LH Bt 8	105.6	124.9	110.3	89.3	107.5
10	NH 22072 Bt	111.1	117.0	132.0	100.5	115.2
11	RAHBt 28	98.0	114.7	109.0	92.3	103.5
12	LH Bt 6	111.7	94.9	105.3	97.3	102.3
13	WGCV Bt 138	89.3	116.6	105.3	97.8	102.3
14	RAHBt 29	103.0	131.1	123.3	101.9	114.8
15	Supriya Bt	107.3	127.9	127.0	104.0	116.6
16	NH 22032 Bt	106.6	104.7	114.7	95.9	105.5
17	CICR 23 Bt (ZC Bt-1)	110.9	125.9	142.7	124.5	126.0
18	LH Bt 9	110.5	138.3	124.0	91.4	116.1
19	RAHBt 30	118.1	132.5	118.0	109.4	119.5
20	LH Bt 15	103.7	124.3	109.7	90.9	107.2
		14.0	11.4	13.6	20.2	
		8.0	8.3	11.2	11.8	

Number of monopodia in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	2.8	1.2	1.3	0.5	1.5
2	Surabhi Bt	2.6	1.3	1.4	1.2	1.6
3	CCH 19-2 Bt	2.4	1.5	1.1	0.9	1.5
4	Sunantha Bt	1.3	1.3	1.3	0.5	1.1
5	WGCV Bt 139	2.4	0.8	1.1	0.9	1.3
6	RAHBt 27	0.7	0.8	1.6	0.6	0.9
7	Suraj Super Bt	1.3	0.7	1.7	0.5	1.1
8	WGCV Bt 134	2.6	1.2	1.4	1.5	1.7
9	LH Bt 8	1.3	0.7	1.5	0.3	1.0
10	NH 22072 Bt	0.5	1.2	1.3	0.3	0.8
11	RAHBt 28	1.5	0.8	1.9	0.6	1.2
12	LH Bt 6	1.3	1.3	0.9	0.5	1.0
13	WGCV Bt 138	2.6	1.0	1.5	0.7	1.5
14	RAHBt 29	0.7	0.5	1.4	0.6	0.8
15	Supriya Bt	1.2	1.2	1.1	0.1	0.9
16	NH 22032 Bt	1.6	1.2	1.0	0.5	1.1
17	CICR 23 Bt (ZC Bt-1)	1.8	1.2	0.5	1.3	1.2
18	LH Bt 9	1.0	0.8	1.0	0.9	0.9
19	RAHBt 30	2.5	1.4	1.3	0.9	1.5
20	LH Bt 15	1.7	0.5	1.3	0.7	1.1
		1.3	12.8	0.3	NS	
		45.5	0.1	19.0	64.2	

Number of sympodia in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	14.3	17.5	13.7	17.1	15.7
2	Surabhi Bt	14.9	20.5	16.0	16.8	17.1
3	CCH 19-2 Bt	13.7	19.1	16.7	15.2	16.2
4	Sunantha Bt	15.2	14.9	15.3	16.4	15.5
5	WGCV Bt 139	13.7	20.4	13.0	15.1	15.6
6	RAHBt 27	15.1	20.0	14.0	15.3	16.1
7	Suraj Super Bt	12.9	22.8	14.0	26.0	18.9
8	WGCV Bt 134	14.4	22.9	13.7	15.8	16.7
9	LH Bt 8	14.7	24.6	13.0	13.3	16.4
10	NH 22072 Bt	14.3	20.3	16.3	16.2	16.8
11	RAHBt 28	14.4	14.1	13.3	14.3	14.0
12	LH Bt 6	16.4	16.7	12.7	13.3	14.8
13	WGCV Bt 138	13.9	18.5	11.0	14.5	14.5
14	RAHBt 29	12.9	23.6	12.0	14.2	15.7
15	Supriya Bt	12.5	17.0	17.7	14.2	15.4
16	NH 22032 Bt	15.3	23.0	14.7	15.5	17.1
17	CICR 23 Bt (ZC Bt-1)	14.8	17.6	16.3	17.0	16.4
18	LH Bt 9	13.7	23.9	17.7	14.1	17.4
19	RAHBt 30	14.5	15.4	15.0	16.9	15.5
20	LH Bt 15	14.8	23.8	13.0	13.6	16.3
		NS	9.7	1.6	NS	
		10.9	1.1	11.8	10.6	

Boll weight (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	4.2	4.8	5.9	5.3	5.1
2	Surabhi Bt	3.4	4.5	5.3	4.6	4.5
3	CCH 19-2 Bt	4.0	4.6	5.8	5.8	5.1
4	Sunantha Bt	3.8	4.4	5.2	5.6	4.8
5	WGCV Bt 139	3.9	5.3	5.6	5.4	5.1
6	RAHBt 27	3.9	4.4	5.7	4.9	4.7
7	Suraj Super Bt	3.9	5.6	5.5	6.0	5.3
8	WGCV Bt 134	4.1	5.1	5.6	5.5	5.1
9	LH Bt 8	4.3	5.7	6.0	4.7	5.2
10	NH 22072 Bt	3.8	4.5	5.5	4.7	4.6
11	RAHBt 28	4.2	4.5	5.5	5.0	4.8
12	LH Bt 6	4.5	4.7	5.9	5.7	5.2
13	WGCV Bt 138	4.1	5.1	5.9	5.4	5.1
14	RAHBt 29	3.9	5.8	5.7	5.2	5.2
15	Supriya Bt	4.2	4.7	6.3	5.7	5.2
16	NH 22032 Bt	4.2	5.0	5.2	5.3	4.9
17	CICR 23 Bt (ZC Bt-1)	2.9	4.3	4.9	3.8	4.0
18	LH Bt 9	4.4	5.9	5.5	5.1	5.2
19	RAHBt 30	4.1	4.3	5.5	4.7	4.7
20	LH Bt 15	4.3	5.2	5.7	5.7	5.2
		0.6	10.5	0.5	0.4	
		8.7	0.3	8.6	5.2	

Number of bolls / plant in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	26.2	32.2	18.0	30.5	26.7
2	Surabhi Bt	26.2	33.5	21.7	33.5	28.7
3	CCH 19-2 Bt	17.5	39.9	15.0	31.1	25.9
4	Sunantha Bt	21.0	45.0	15.0	31.5	28.1
5	WGCV Bt 139	27.3	58.0	17.3	22.9	31.4
6	RAHBt 27	18.7	51.1	22.3	30.8	30.7
7	Suraj Super Bt	15.3	61.7	22.7	31.0	32.7
8	WGCV Bt 134	26.7	54.7	17.7	29.9	32.3
9	LH Bt 8	19.7	63.0	18.3	20.9	30.5
10	NH 22072 Bt	22.7	53.4	19.7	25.0	30.2
11	RAHBt 28	18.0	42.6	22.0	28.2	27.7
12	LH Bt 6	18.3	44.0	20.7	18.8	25.5
13	WGCV Bt 138	27.8	57.0	21.0	28.9	33.7
14	RAHBt 29	12.0	66.3	20.3	22.7	30.3
15	Supriya Bt	12.3	28.1	17.7	30.4	22.1
16	NH 22032 Bt	21.8	53.0	21.7	24.1	30.2
17	CICR 23 Bt (ZC Bt-1)	20.2	26.8	21.3	32.0	25.1
18	LH Bt 9	19.2	64.0	27.0	24.7	33.7
19	RAHBt 30	26.9	50.7	21.3	33.3	33.1
20	LH Bt 15	15.3	64.3	16.0	24.6	30.1
		9.8	8.1	2.8	6.6	
		27.9	2.3	14.5	14.4	

Number of bolls / sq.m. in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Lam	Coimbatore	Mean
1	MCU 5-VT Bt	66.3	75.4	70.9
2	Surabhi Bt	69.9	82.6	76.3
3	CCH 19-2 Bt	81.6	76.9	79.3
4	Sunantha Bt	92.7	77.9	85.3
5	WGCV Bt 139	110.9	56.5	83.7
6	RAHBt 27	103.7	76.0	89.9
7	Suraj Super Bt	127.5	76.6	102.1
8	WGCV Bt 134	113.4	73.7	93.6
9	LH Bt 8	130.1	51.7	90.9
10	NH 22072 Bt	110.5	61.7	86.1
11	RAHBt 28	87.7	69.6	78.7
12	LH Bt 6	90.5	46.4	68.5
13	WGCV Bt 138	117.2	71.4	94.3
14	RAHBt 29	136.9	56.0	96.5
15	Supriya Bt	58.4	75.1	66.8
16	NH 22032 Bt	109.4	59.6	84.5
17	CICR 23 Bt (ZC Bt-1)	55.2	79.0	67.1
18	LH Bt 9	132.4	61.1	96.8
19	RAHBt 30	104.6	82.1	93.4
20	LH Bt 15	132.9	60.7	96.8
		9.3	16.3	
		5.5	14.4	

Lint Index (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	5.0	5.3	5.7	6.6	5.7
2	Surabhi Bt	4.5	5.3	4.8	5.5	5.0
3	CCH 19-2 Bt	4.9	6.1	5.3	5.7	5.5
4	Sunantha Bt	4.8	6.2	5.4	6.8	5.8
5	WGCV Bt 139	4.2	6.1	5.3	6.0	5.4
6	RAHBt 27	3.7	4.8	4.8	5.3	4.7
7	Suraj Super Bt	4.9	5.4	6.4	6.9	5.9
8	WGCV Bt 134	5.0	5.2	5.4	6.2	5.5
9	LH Bt 8	4.9	5.7	4.6	5.3	5.1
10	NH 22072 Bt	5.0	5.1	4.7	6.2	5.3
11	RAHBt 28	4.4	4.9	4.4	5.2	4.7
12	LH Bt 6	4.6	5.8	5.2	5.9	5.4
13	WGCV Bt 138	4.5	5.8	5.0	6.1	5.4
14	RAHBt 29	4.9	5.0	5.6	6.3	5.5
15	Supriya Bt	5.1	5.6	6.6	6.8	6.0
16	NH 22032 Bt	5.8	5.2	5.8	7.5	6.1
17	CICR 23 Bt (ZC Bt-1)	3.6	5.1	4.5	4.5	4.4
18	LH Bt 9	5.8	6.6	6.0	7.0	6.4
19	RAHBt 30	4.7	5.1	5.0	5.9	5.2
20	LH Bt 15	4.3	6.1	4.7	5.0	5.0
		0.8	9.1	0.3	0.7	
		10.4	0.3	6.0	7.0	

Seed Index (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	10.1	11.4	11.8	12.4	11.4
2	Surabhi Bt	9.2	10.3	10.3	11.5	10.3
3	CCH 19-2 Bt	10.1	11.2	11.9	12.6	11.5
4	Sunantha Bt	9.7	11.5	10.8	12.3	11.1
5	WGCV Bt 139	9.4	11.0	12.0	13.5	11.5
6	RAHBt 27	9.8	9.0	10.1	11.1	10.0
7	Suraj Super Bt	10.3	9.4	11.7	12.6	11.0
8	WGCV Bt 134	9.8	9.6	11.0	12.5	10.7
9	LH Bt 8	10.9	10.2	11.0	11.9	11.0
10	NH 22072 Bt	9.4	9.4	9.0	10.4	9.6
11	RAHBt 28	9.8	9.4	9.9	11.3	10.1
12	LH Bt 6	11.7	11.0	11.2	11.9	11.5
13	WGCV Bt 138	10.2	10.6	11.8	13.2	11.5
14	RAHBt 29	9.7	9.3	9.7	10.8	9.9
15	Supriya Bt	10.6	10.8	12.3	12.4	11.5
16	NH 22032 Bt	10.0	9.6	9.1	10.9	9.9
17	CICR 23 Bt (ZC Bt-1)	8.0	10.6	8.8	9.5	9.2
18	LH Bt 9	10.2	11.5	10.3	11.1	10.8
19	RAHBt 30	9.1	9.3	10.3	10.9	9.9
20	LH Bt 15	9.8	11.6	10.2	12.7	11.1
		NS	9.9	0.4	1.0	
		11.4	0.6	3.4	5.3	

Ginning outturn (%) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	33.0	31.9	32.8	34.5	33.1
2	Surabhi Bt	32.7	34.5	31.8	32.3	32.8
3	CCH 19-2 Bt	32.7	35.5	30.7	31.2	32.5
4	Sunantha Bt	33.0	35.4	33.4	35.4	34.3
5	WGCV Bt 139	30.9	35.5	30.6	30.8	32.0
6	RAHBt 27	27.3	34.8	32.2	32.3	31.7
7	Suraj Super Bt	32.3	36.5	35.3	35.4	34.9
8	WGCV Bt 134	34.0	35.4	32.7	33.3	33.9
9	LH Bt 8	30.8	35.7	29.6	30.8	31.7
10	NH 22072 Bt	34.8	35.2	34.6	37.3	35.5
11	RAHBt 28	30.8	34.3	30.6	31.5	31.8
12	LH Bt 6	28.2	34.3	31.7	33.0	31.8
13	WGCV Bt 138	30.8	35.2	29.9	31.7	31.9
14	RAHBt 29	33.5	35.0	36.7	36.6	35.5
15	Supriya Bt	32.6	34.2	35.0	35.3	34.3
16	NH 22032 Bt	36.8	35.4	39.0	40.8	38.0
17	CICR 23 Bt (ZC Bt-1)	31.3	32.6	33.6	32.1	32.4
18	LH Bt 9	36.4	36.3	36.8	38.5	37.0
19	RAHBt 30	33.8	35.6	32.5	35.0	34.2
20	LH Bt 15	30.7	34.8	29.5	28.2	30.8
		2.9	7.3	1.0	2.4	
		5.5	1.5	3.1	4.4	

Upper Half Mean Length (mm) under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	30.1	31.9	32.6	33.1	31.9
2	Surabhi Bt	30.1	31.9	34.4	33.0	32.4
3	CCH 19-2 Bt	29.3	30.9	32.6	31.2	31.0
4	Sunantha Bt	28.4	32.5	32.3	32.0	31.3
5	WGCV Bt 139	26.9	27.9	27.2	28.5	27.6
6	RAHBt 27	27.9	30.6	31.2	30.3	30.0
7	Suraj Super Bt	29.6	30.7	31.5	31.0	30.7
8	WGCV Bt 134	28.3	30.8	30.5	30.9	30.1
9	LH Bt 8	29.8	30.9	30.8	30.5	30.5
10	NH 22072 Bt	27.4	27.6	30.1	29.5	28.7
11	RAHBt 28	28.4	29.7	31.0	31.1	30.1
12	LH Bt 6	29.2	30.6	31.4	30.1	30.3
13	WGCV Bt 138	24.9	26.7	27.8	27.6	26.8
14	RAHBt 29	28.3	30.3	31.6	30.1	30.1
15	Supriya Bt	28.0	30.8	31.3	29.3	29.9
16	NH 22032 Bt	26.1	26.3	27.7	27.7	27.0
17	CICR 23 Bt (ZC Bt-1)	27.1	28.2	28.1	27.3	27.7
18	LH Bt 9	25.9	27.2	27.1	25.7	26.5
19	RAHBt 30	29.0	30.9	32.3	30.9	30.8
20	LH Bt 15	27.5	28.8	31.1	30.6	29.5

Uniformity index under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	81.0	83.0	83.0	86.0	83.3
2	Surabhi Bt	82.0	84.0	87.0	88.1	85.3
3	CCH 19-2 Bt	85.0	85.0	86.0	85.4	85.4
4	Sunantha Bt	82.0	84.0	87.0	86.8	85.0
5	WGCV Bt 139	83.0	84.0	85.0	85.5	84.4
6	RAHBt 27	82.0	85.0	86.0	85.8	84.7
7	Suraj Super Bt	84.0	84.0	85.0	86.4	84.9
8	WGCV Bt 134	84.0	83.0	85.0	87.3	84.8
9	LH Bt 8	83.0	83.0	83.0	83.8	83.2
10	NH 22072 Bt	83.0	85.0	85.0	85.6	84.7
11	RAHBt 28	83.0	85.0	85.0	86.4	84.9
12	LH Bt 6	81.0	83.0	85.0	85.6	83.7
13	WGCV Bt 138	83.0	85.0	84.0	84.5	84.1
14	RAHBt 29	83.0	85.0	86.0	85.6	84.9
15	Supriya Bt	81.0	85.0	86.0	84.9	84.2
16	NH 22032 Bt	81.0	82.0	82.0	83.8	82.2
17	CICR 23 Bt (ZC Bt-1)	81.0	84.0	84.0	83.4	83.1
18	LH Bt 9	83.0	85.0	83.0	83.1	83.5
19	RAHBt 30	82.0	86.0	85.0	85.5	84.6
20	LH Bt 15	82.0	81.0	82.0	81.7	81.7

Micronaire under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	4.0	3.8	3.7	4.3	4.0
2	Surabhi Bt	4.2	3.9	3.9	4.2	4.1
3	CCH 19-2 Bt	3.6	4.2	4.0	4.5	4.1
4	Sunantha Bt	3.8	4.5	4.3	4.7	4.3
5	WGCV Bt 139	4.3	4.8	4.7	4.9	4.7
6	RAHBt 27	4.2	4.2	4.2	4.5	4.3
7	Suraj Super Bt	4.2	4.6	4.6	4.7	4.5
8	WGCV Bt 134	4.4	4.7	4.2	4.6	4.5
9	LH Bt 8	3.8	4.0	3.7	3.8	3.8
10	NH 22072 Bt	4.1	4.5	4.5	4.9	4.5
11	RAHBt 28	4.0	3.9	3.3	3.8	3.8
12	LH Bt 6	3.8	4.1	4.0	4.4	4.1
13	WGCV Bt 138	5.0	4.8	4.9	5.1	5.0
14	RAHBt 29	5.1	5.2	5.1	5.4	5.2
15	Supriya Bt	5.0	4.6	5.1	4.8	4.9
16	NH 22032 Bt	4.3	4.4	4.2	4.5	4.4
17	CICR 23 Bt (ZC Bt-1)	4.7	4.7	4.3	4.4	4.5
18	LH Bt 9	5.1	5.7	5.3	5.9	5.5
19	RAHBt 30	4.0	4.1	4.4	4.3	4.2
20	LH Bt 15	4.6	4.5	4.5	4.5	4.5

Tenacity under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	MCU 5-VT Bt	33.1	34.7	28.6	32.8	32.3
2	Surabhi Bt	33.7	32.2	31.2	31.4	32.1
3	CCH 19-2 Bt	32.0	34.0	32.1	31.1	32.3
4	Sunantha Bt	30.9	33.4	31.1	29.8	31.3
5	WGCV Bt 139	28.3	29.7	28.8	28.6	28.9
6	RAHBt 27	29.7	34.3	31.7	30.5	31.6
7	Suraj Super Bt	32.1	33.3	31.4	30.8	31.9
8	WGCV Bt 134	30.5	31.4	29.4	29.2	30.1
9	LH Bt 8	31.1	32.5	28.7	31.1	30.9
10	NH 22072 Bt	29.7	29.6	27.9	27.7	28.7
11	RAHBt 28	30.5	33.3	30.3	30.8	31.2
12	LH Bt 6	32.5	33.9	29.9	30.0	31.6
13	WGCV Bt 138	26.0	28.8	29.5	28.0	28.1
14	RAHBt 29	30.1	33.2	32.1	28.1	30.9
15	Supriya Bt	29.8	34.4	33.2	28.6	31.5
16	NH 22032 Bt	28.2	28.3	27.3	26.6	27.6
17	CICR 23 Bt (ZC Bt-1)	29.2	28.4	28.1	26.8	28.1
18	LH Bt 9	26.9	28.8	27.6	25.6	27.2
19	RAHBt 30	30.7	34.3	31.4	30.1	31.6
20	LH Bt 15	29.9	31.2	31.1	30.8	30.8

Seed Cotton Yield at 140 DAS (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	MCU 5-VT Bt	8.26	14.08	23.00	15.11
2	Surabhi Bt	6.54	15.15	26.84	16.18
3	CCH 19-2 Bt	5.56	15.70	23.62	14.96
4	Sunantha Bt	5.58	15.70	21.71	14.33
5	WGCV Bt 139	7.86	17.73	13.66	13.08
6	RAHBt 27	5.35	15.07	18.73	13.05
7	Suraj Super Bt	6.32	19.43	21.50	15.75
8	WGCV Bt 134	5.86	18.33	12.65	12.28
9	LH Bt 8	4.90	19.72	8.75	11.12
10	NH 22072 Bt	7.59	16.73	17.14	13.82
11	RAHBt 28	5.45	16.36	15.97	12.59
12	LH Bt 6	5.96	12.10	13.41	10.49
13	WGCV Bt 138	8.83	17.47	18.07	14.79
14	RAHBt 29	3.99	19.10	15.59	12.89
15	Supriya Bt	1.64	17.27	21.07	13.33
16	NH 22032 Bt	5.52	19.23	10.82	11.86
17	CICR 23 Bt (ZC Bt-1)	1.15	11.20	5.99	6.11
18	LH Bt 9	6.29	22.07	15.37	14.58
19	RAHBt 30	5.12	15.33	12.62	11.02
20	LH Bt 15	3.35	22.09	14.93	13.46
		2.16	12.41	3.00	
		22.99	1.22	11.12	



Seed Cotton Yield at 165 DAS (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	MCU 5-VT Bt	7.08	9.70	15.49	10.76
2	Surabhi Bt	5.95	9.43	15.80	10.39
3	CCH 19-2 Bt	3.73	9.67	14.79	9.40
4	Sunantha Bt	2.92	9.60	14.34	8.95
5	WGCV Bt 139	8.14	11.91	13.25	11.10
6	RAHBt 27	4.31	11.54	13.62	9.82
7	Suraj Super Bt	2.31	12.67	14.79	9.92
8	WGCV Bt 134	9.78	11.51	10.35	10.55
9	LH Bt 8	6.30	14.00	4.94	8.41
10	NH 22072 Bt	5.12	11.61	6.30	7.68
11	RAHBt 28	4.00	9.17	9.09	7.42
12	LH Bt 6	6.30	9.13	6.54	7.32
13	WGCV Bt 138	7.57	11.31	11.13	10.00
14	RAHBt 29	3.80	13.27	7.55	8.21
15	Supriya Bt	3.16	11.43	14.30	9.63
16	NH 22032 Bt	10.96	11.42	10.99	11.12
17	CICR 23 Bt (ZC Bt-1)	3.07	11.00	12.26	8.78
18	LH Bt 9	2.70	12.23	8.83	7.92
19	RAHBt 30	5.87	11.62	12.59	10.03
20	LH Bt 15	4.75	11.75	10.21	8.90
		2.20	12.52	2.60	
		24.46	0.81	13.74	

Total Seed Cotton Yield (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean	Rank	% Inc over best check
1	MCU 5-VT Bt	15.34	23.78	21.88	38.49	24.87	4	38.9
2	Surabhi Bt	12.49	24.58	26.03	42.65	26.44	2	47.6
3	CCH 19-2 Bt	9.29	25.37	24.32	38.42	24.35	6	36.0
4	Sunantha Bt	8.50	25.30	26.25	36.05	24.03	8	34.1
5	WGCV Bt 139	16.00	29.64	23.43	26.92	24.00	9	34.0
6	RAHBt 27	9.66	26.61	26.44	32.35	23.77	10	32.7
7	Suraj Super Bt	8.63	32.10	31.30	36.30	27.08	1	51.2
8	WGCV Bt 134	15.64	29.84	26.02	23.00	23.63	12	31.9
9	LH Bt 8	11.20	33.72	23.10	13.69	20.43	18	14.1
10	NH 22072 Bt	12.72	28.34	25.26	23.44	22.44	14	25.3
11	RAHBt 28	9.45	25.53	25.03	25.07	21.27	16	18.8
12	LH Bt 6	12.26	21.23	25.42	19.95	19.72	19	10.1
13	WGCV Bt 138	16.40	28.77	24.95	29.20	24.83	5	38.6
14	RAHBt 29	7.79	32.37	21.73	23.14	21.26	17	18.7
15	Supriya Bt	4.79	28.69	25.96	35.37	23.70	11	32.3
16	NH 22032 Bt	16.48	30.65	27.39	21.81	24.08	7	34.5
17	CICR 23 Bt (ZC Bt-1)	4.22	22.20	26.96	18.25	17.91	20	0.0
18	LH Bt 9	8.99	34.30	35.21	24.20	25.68	3	43.4
19	RAHBt 30	10.99	26.95	22.78	25.21	21.48	15	19.9
20	LH Bt 15	8.10	33.84	22.70	25.14	22.45	13	25.3
		3.59	9.78	2.41	3.80			
		19.52	1.60	9.70	8.27			

Evaluation under Protected Condition for Insect pests
Reaction to Insect Pests

Table: Initial Variety trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.93	2.54	3.10	4.12	2.67	BETL
55122	1.10	2.22	3.09	3.71	2.53	BETL
55123	1.17	2.97	2.73	3.78	2.66	BETL
55124	0.37	2.45	2.66	4.38	2.46	BETL
55125	1.17	2.20	2.45	3.93	2.44	BETL
55126	1.47	2.40	2.74	3.76	2.59	BETL
55127	0.87	2.75	2.93	3.40	2.49	BETL
55128	1.73	2.18	2.38	3.53	2.46	BETL
55129	0.73	2.07	3.11	3.53	2.36	BETL
55130	1.17	2.26	2.81	3.44	2.42	BETL
55131	1.07	2.26	3.13	4.13	2.65	BETL
55132	1.23	2.03	2.84	3.53	2.41	BETL
55133	1.37	2.04	2.71	3.67	2.45	BETL
55134	1.07	2.11	2.04	3.07	2.07	BETL
55135	1.53	1.98	3.07	3.84	2.61	BETL
55136	1.10	1.96	3.01	3.73	2.45	BETL
55137	1.40	1.39	3.60	4.38	2.69	BETL
55138	0.87	2.04	2.98	3.36	2.31	BETL
55139	1.23	1.70	2.60	4.13	2.42	BETL
55140	0.87	1.56	2.48	3.33	2.06	BETL
55141	0.97	1.46	3.39	3.87	2.42	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	2.60	1.17	2.21	1.87	1.96	BETL
55122	2.17	0.90	2.24	2.00	1.83	BETL
55123	2.00	1.34	1.73	2.33	1.85	BETL
55124	2.77	1.04	1.77	1.93	1.88	BETL
55125	2.67	2.00	2.29	1.40	2.09	BETL
55126	1.90	2.06	1.64	1.84	1.86	BETL
55127	2.40	1.51	1.91	2.24	2.02	BETL
55128	2.17	1.17	2.03	1.71	1.77	BETL
55129	2.73	0.91	1.59	1.49	1.68	BETL
55130	2.33	1.30	1.93	1.82	1.84	BETL
55131	2.50	1.50	1.69	2.22	1.98	BETL
55132	2.23	1.30	2.16	2.09	1.94	BETL
55133	2.60	2.41	1.56	2.04	2.15	BETL
55134	2.60	1.29	2.05	2.13	2.02	BETL
55135	1.83	1.09	1.66	1.64	1.56	BETL
55136	3.23	2.33	1.71	1.96	2.31	BETL
55137	3.40	2.29	2.24	1.53	2.37	BETL
55138	2.73	2.15	1.69	1.98	2.14	BETL
55139	2.77	1.93	1.95	1.84	2.12	BETL
55140	2.97	2.52	2.47	2.02	2.50	BETL
55141	1.83	1.96	2.16	1.91	1.97	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55121	I	I	I	I	I	
55122	I	I	I	I	I	
55123	II	I	I	I	I	
55124	I	I	I	I	I	
55125	I	I	I	I	I	
55126	I	I	I	I	I	
55127	II	I	I	I	I	
55128	I	I	I	II	I	
55129	I	I	I	I	I	
55130	I	I	I	II	I	
55131	I	I	I	I	I	
55132	II	I	I	I	I	
55133	I	I	I	I	I	
55134	I	I	I	I	I	
55135	I	I	I	I	I	
55136	I	I	I	I	I	
55137	I	I	I	I	I	
55138	I	I	I	I	I	
55139	I	I	I	I	I	
55140	II	I	I	II	II	
55141	I	I	I	I	I	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	4.30	2.67	2.39	10.33	4.92	BETL
55122	3.73	2.72	1.50	11.69	4.91	BETL
55123	3.07	2.45	1.22	11.71	4.61	BETL
55124	4.10	3.53	1.39	12.24	5.31	BETL
55125	2.97	3.19	1.04	11.71	4.73	BETL
55126	3.97	4.07	1.15	9.36	4.64	BETL
55127	3.20	3.38	1.54	9.58	4.42	BETL
55128	4.27	3.23	1.28	8.38	4.29	BETL
55129	2.97	2.89	1.22	6.82	3.47	BETL
55130	3.60	2.72	1.15	8.00	3.87	BETL
55131	3.63	2.45	1.11	9.18	4.09	BETL
55132	3.73	3.53	1.39	8.80	4.36	BETL
55133	4.60	3.19	1.37	7.89	4.26	BETL
55134	3.27	3.83	1.19	7.27	3.89	BETL
55135	3.73	3.38	1.48	7.76	4.09	BETL
55136	4.83	3.43	1.21	10.73	5.05	BETL
55137	4.30	3.95	1.36	9.04	4.66	BETL
55138	4.17	2.76	1.04	8.89	4.21	BETL
55139	5.30	3.27	1.41	7.69	4.42	BETL
55140	9.07	2.67	1.34	6.87	4.99	BETL
55141	4.60	3.53	1.28	7.22	4.16	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.07	0.24	0.67	0.44	0.35	BETL
55122	0.10	0.18	0.76	0.68	0.43	BETL
55123	0.03	0.10	0.59	0.60	0.33	BETL
55124	0.00	0.15	0.62	0.68	0.36	BETL
55125	0.00	0.11	0.61	0.83	0.39	BETL
55126	0.07	0.08	0.62	0.60	0.34	BETL
55127	0.10	0.15	0.54	0.69	0.37	BETL
55128	0.03	0.15	0.84	0.76	0.44	BETL
55129	0.00	0.12	0.77	0.76	0.41	BETL
55130	0.23	0.18	0.56	0.54	0.38	BETL
55131	0.00	0.10	0.50	0.40	0.25	BETL
55132	0.07	0.15	0.58	0.56	0.34	BETL
55133	0.03	0.16	0.69	0.64	0.38	BETL
55134	0.00	0.10	1.09	0.67	0.46	BETL
55135	0.10	0.19	0.56	0.67	0.38	BETL
55136	0.03	0.13	0.55	0.73	0.36	BETL
55137	0.07	0.03	0.51	0.67	0.32	BETL
55138	0.03	0.06	0.76	0.56	0.35	BETL
55139	0.07	0.03	0.76	0.53	0.35	BETL
55140	0.10	0.04	0.84	0.69	0.42	BETL
55141	0.03	0.08	0.61	0.64	0.34	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No. / plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.07	1.15	0.16	0.11	0.37	
55122	0.07	1.26	0.16	0.11	0.40	
55123	0.00	0.75	0.20	0.04	0.25	
55124	0.17	0.97	0.22	0.11	0.37	
55125	0.13	1.09	0.11	0.11	0.36	
55126	0.07	0.91	0.11	0.11	0.30	
55127	0.07	0.93	0.18	0.04	0.30	
55128	0.17	1.22	0.16	0.09	0.41	
55129	0.10	1.93	0.16	0.04	0.56	
55130	0.10	1.20	0.24	0.11	0.41	
55131	0.03	1.08	0.09	0.18	0.35	
55132	0.07	1.15	0.16	0.09	0.37	
55133	0.00	1.31	0.04	0.13	0.37	
55134	0.10	1.15	0.04	0.11	0.35	
55135	0.07	0.86	0.13	0.13	0.30	
55136	0.10	1.29	0.11	0.07	0.39	
55137	0.10	0.70	0.13	0.16	0.27	
55138	0.17	1.53	0.20	0.20	0.52	
55139	0.13	1.82	0.20	0.11	0.57	
55140	0.03	1.49	0.11	0.20	0.46	
55141	0.13	0.93	0.18	0.09	0.33	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions– *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.00	0.00	0.00	0.00	0.00	BETL
55122	0.00	0.00	0.00	0.00	0.00	BETL
55123	0.00	0.00	0.00	0.00	0.00	BETL
55124	0.00	0.00	0.00	0.00	0.00	BETL
55125	0.00	0.00	0.00	0.00	0.00	BETL
55126	0.00	0.00	0.00	0.00	0.00	BETL
55127	0.00	0.00	0.00	0.00	0.00	BETL
55128	0.00	0.00	0.00	0.00	0.00	BETL
55129	0.00	0.00	0.00	0.00	0.00	BETL
55130	0.00	0.00	0.00	0.00	0.00	BETL
55131	0.00	0.00	0.00	0.00	0.00	BETL
55132	0.00	0.00	0.00	0.00	0.00	BETL
55133	0.00	0.00	0.00	0.00	0.00	BETL
55134	0.00	0.00	0.00	0.00	0.00	BETL
55135	0.00	0.00	0.00	0.00	0.00	BETL
55136	0.00	0.00	0.00	0.00	0.00	BETL
55137	0.00	0.00	0.00	0.00	0.00	BETL
55138	0.00	0.00	0.00	0.00	0.00	BETL
55139	0.00	0.00	0.00	0.00	0.00	BETL
55140	0.00	0.00	0.00	0.00	0.00	BETL
55141	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.00	0.00	0.00	0.00	0.00	BETL
55122	0.00	0.00	0.00	0.00	0.00	BETL
55123	0.00	0.00	0.00	0.00	0.00	BETL
55124	0.00	0.00	0.00	0.00	0.00	BETL
55125	0.00	0.00	0.00	0.00	0.00	BETL
55126	0.00	0.00	0.00	0.00	0.00	BETL
55127	0.00	0.00	0.00	0.00	0.00	BETL
55128	0.00	0.00	0.00	0.00	0.00	BETL
55129	0.00	0.00	0.00	0.00	0.00	BETL
55130	0.00	0.00	0.00	0.00	0.00	BETL
55131	0.00	0.00	0.00	0.00	0.00	BETL
55132	0.00	0.00	0.00	0.00	0.00	BETL
55133	0.00	0.00	0.00	0.00	0.00	BETL
55134	0.00	0.00	0.00	0.00	0.00	BETL
55135	0.00	0.00	0.00	0.00	0.00	BETL
55136	0.00	0.00	0.00	0.00	0.00	BETL
55137	0.00	0.00	0.00	0.00	0.00	BETL
55138	0.00	0.00	0.00	0.00	0.00	BETL
55139	0.00	0.00	0.00	0.00	0.00	BETL
55140	0.00	0.00	0.00	0.00	0.00	BETL
55141	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.03	0.00	0.00	0.00	0.01	BETL
55122	0.07	0.00	0.00	0.00	0.02	BETL
55123	0.03	0.00	0.00	0.00	0.01	BETL
55124	0.10	0.00	0.00	0.00	0.03	BETL
55125	0.07	0.00	0.00	0.00	0.02	BETL
55126	0.00	0.00	0.00	0.00	0.00	BETL
55127	0.07	0.00	0.00	0.00	0.02	BETL
55128	0.03	0.00	0.00	0.00	0.01	BETL
55129	0.20	0.00	0.00	0.00	0.05	BETL
55130	0.07	0.00	0.00	0.00	0.02	BETL
55131	0.03	0.00	0.00	0.00	0.01	BETL
55132	0.00	0.00	0.00	0.00	0.00	BETL
55133	0.10	0.00	0.00	0.00	0.03	BETL
55134	0.03	0.00	0.00	0.00	0.01	BETL
55135	0.00	0.00	0.00	0.00	0.00	BETL
55136	0.07	0.00	0.00	0.00	0.02	BETL
55137	0.10	0.00	0.00	0.00	0.03	BETL
55138	0.00	0.00	0.00	0.00	0.00	BETL
55139	0.13	0.00	0.00	0.00	0.03	BETL
55140	0.10	0.00	0.00	0.00	0.03	BETL
55141	0.07	0.00	0.00	0.00	0.02	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Pink bollworm

Name of Entry	Pink bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.83	0.55	0.67	1.89	0.98	BETL
55122	0.33	1.26	0.67	2.33	1.15	AETL
55123	0.83	1.15	0.33	1.78	1.02	AETL
55124	0.83	1.48	0.11	2.11	1.13	AETL
55125	1.17	1.71	1.11	2.22	1.55	AETL
55126	1.00	1.26	1.11	1.89	1.32	AETL
55127	1.33	1.26	0.56	1.78	1.23	AETL
55128	0.83	1.49	0.11	2.22	1.16	AETL
55129	1.00	1.93	0.44	1.89	1.32	AETL
55130	0.83	0.99	0.56	2.00	1.10	AETL
55131	0.17	1.04	0.67	2.33	1.05	AETL
55132	0.50	0.93	0.00	1.78	0.80	BETL
55133	1.17	1.30	0.11	2.11	1.17	AETL
55134	0.83	1.71	0.11	2.00	1.16	AETL
55135	1.33	1.53	0.44	2.22	1.38	AETL
55136	0.83	1.44	0.78	1.78	1.21	AETL
55137	0.83	0.60	0.44	2.11	1.00	AETL
55138	0.83	1.42	0.44	2.00	1.17	AETL
55139	1.17	0.86	0.44	2.11	1.15	AETL
55140	0.50	0.86	0.44	1.78	0.90	BETL
55141	0.83	0.75	0.11	1.11	0.70	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55121	0.00	0.00	0.00	0.00	0.00	BETL
55122	0.00	0.00	0.00	0.00	0.00	BETL
55123	0.00	0.00	0.00	0.00	0.00	BETL
55124	0.00	0.00	0.00	0.00	0.00	BETL
55125	0.00	0.00	0.00	0.00	0.00	BETL
55126	0.00	0.00	0.00	0.00	0.00	BETL
55127	0.00	0.00	0.00	0.00	0.00	BETL
55128	0.00	0.00	0.00	0.00	0.00	BETL
55129	0.00	0.00	0.00	0.00	0.00	BETL
55130	0.00	0.00	0.00	0.00	0.00	BETL
55131	0.00	0.00	0.00	0.00	0.00	BETL
55132	0.00	0.00	0.00	0.00	0.00	BETL
55133	0.00	0.00	0.00	0.00	0.00	BETL
55134	0.00	0.00	0.00	0.00	0.00	BETL
55135	0.00	0.00	0.00	0.00	0.00	BETL
55136	0.00	0.00	0.00	0.00	0.00	BETL
55137	0.00	0.00	0.00	0.00	0.00	BETL
55138	0.00	0.00	0.00	0.00	0.00	BETL
55139	0.00	0.00	0.00	0.00	0.00	BETL
55140	0.00	0.00	0.00	0.00	0.00	BETL
55141	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll Damage (%)/ 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55121	6.67	1.15	15.00	12.22	8.76	BETL
55122	3.33	2.65	3.33	14.44	5.94	BETL
55123	8.33	2.96	8.33	14.44	8.52	BETL
55124	8.33	1.05	10.00	15.56	8.73	BETL
55125	6.67	2.23	21.67	12.22	10.70	AETL
55126	6.67	3.47	6.67	10.00	6.70	BETL
55127	6.67	1.52	5.00	10.00	5.80	BETL
55128	8.33	3.02	8.33	13.33	8.26	BETL
55129	8.33	1.57	11.67	15.56	9.28	BETL
55130	6.67	1.28	8.33	10.00	6.57	BETL
55131	3.33	1.19	11.67	14.44	7.66	BETL
55132	3.33	1.90	5.00	13.33	5.89	BETL
55133	6.67	1.41	3.33	12.22	5.91	BETL
55134	8.33	1.51	5.00	13.33	7.04	BETL
55135	8.33	1.68	11.67	12.22	8.47	BETL
55136	6.67	1.36	31.67	11.11	12.70	AETL
55137	6.67	2.81	11.67	12.22	8.34	BETL
55138	8.33	3.65	15.00	13.33	10.08	AETL
55139	6.67	3.14	13.33	13.33	9.12	BETL
55140	5.00	1.68	15.00	10.00	7.92	BETL
55141	3.33	1.62	6.67	6.67	4.57	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55121	6.58	4.65	13.75	13.33	9.58	
55122	8.31	3.51	12.61	23.33	11.94	
55123	5.88	4.70	14.05	23.33	11.99	
55124	5.73	4.67	18.50	11.67	10.14	
55125	8.91	4.69	15.01	16.67	11.32	
55126	5.46	4.22	15.89	13.33	9.72	
55127	8.34	3.68	11.91	28.33	13.06	
55128	9.37	3.95	14.77	25.00	13.27	
55129	7.69	4.23	13.57	26.67	13.04	
55130	8.10	4.69	14.37	23.33	12.62	
55131	7.39	4.21	10.57	21.67	10.96	
55132	6.74	3.89	13.52	28.33	13.12	
55133	10.34	4.69	11.63	30.00	14.17	
55134	9.21	3.79	14.41	18.33	11.44	
55135	6.99	4.37	11.95	23.33	11.66	
55136	7.46	3.59	14.29	23.33	12.17	
55137	6.18	4.05	11.82	16.67	9.68	
55138	9.87	4.95	14.92	23.33	13.27	
55139	9.00	4.87	11.64	25.00	12.63	
55140	8.16	3.85	13.29	21.67	11.74	
55141	6.24	4.40	13.09	26.67	12.60	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55121	2.14	3.03	8.15	5.11	4.61	
55122	3.26	1.89	7.28	6.78	4.80	
55123	2.00	3.08	6.04	5.11	4.06	
55124	1.88	3.05	13.02	7.36	6.33	
55125	2.75	3.07	9.90	4.98	5.18	
55126	2.14	2.60	12.63	5.14	5.63	
55127	1.93	2.06	9.19	9.91	5.77	
55128	3.89	2.33	3.49	5.25	3.74	
55129	2.55	2.61	7.43	7.10	4.92	
55130	3.12	2.96	4.92	5.08	4.02	
55131	2.46	2.48	4.76	7.83	4.38	
55132	1.93	2.16	6.46	5.75	4.07	
55133	4.68	2.96	4.90	9.49	5.51	
55134	4.00	2.06	7.75	6.03	4.96	
55135	3.17	2.64	5.83	10.23	5.47	
55136	3.29	1.86	6.53	5.62	4.33	
55137	2.18	2.73	7.90	4.27	4.27	
55138	4.34	3.63	10.53	5.75	6.06	
55139	3.72	3.55	5.14	10.59	5.75	
55140	2.98	2.53	7.40	8.90	5.45	
55141	1.73	3.08	5.88	11.11	5.45	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests					Remark
	GU	RA	CBE	WR	Mean	
55121	5.00	4.00	4.00	5.00	4.50	
55122	5.00	4.00	4.00	5.00	4.50	
55123	5.00	4.00	4.00	5.00	4.50	
55124	5.00	4.00	4.00	5.00	4.50	
55125	5.00	4.00	4.00	5.00	4.50	
55126	5.00	4.00	4.00	5.00	4.50	
55127	5.00	4.00	4.00	5.00	4.50	
55128	5.00	4.00	4.00	5.00	4.50	
55129	5.00	4.00	4.00	5.00	4.50	
55130	5.00	4.00	4.00	5.00	4.50	
55131	5.00	4.00	4.00	5.00	4.50	
55132	5.00	4.00	4.00	5.00	4.50	
55133	5.00	4.00	4.00	5.00	4.50	
55134	5.00	4.00	4.00	5.00	4.50	
55135	5.00	4.00	4.00	5.00	4.50	
55136	5.00	4.00	4.00	5.00	4.50	
55137	5.00	4.00	4.00	5.00	4.50	
55138	5.00	4.00	4.00	5.00	4.50	
55139	5.00	4.00	4.00	5.00	4.50	
55140	5.00	4.00	4.00	5.00	4.50	
55141	5.00	4.00	4.00	5.00	4.50	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 7(a): Initial Evaluation Trial of Hirsutum Varieties - Irrigated (IET Variety IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions															
			LAM, Guntur						CICR RS, Coimbatore									
			CoLS		GM		Rust		ALS		Boll rot		GM			TSV		Rust
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
12	55121	MCU 5-VT Bt	29.3	MR	9.3	R	28.3	MR	5.0	R	0.0	DF	0.0	DF	0.2	R	5.8	R
18	55122	Surabhi Bt	22.3	R	10.0	R	14.8	R	5.5	R	0.0	DF	1.5	R	0.2	R	6.5	R
21	55123	CCH 19-2 Bt	24.2	R	28.5	MR	27.5	MR	4.3	R	0.0	DF	0.0	DF	0.2	R	6.0	R
1	55124	Sunantha Bt	26.0	MR	12.8	R	8.6	R	4.3	R	0.0	DF	2.7	R	0.0	DF	7.5	R
15	55125	WGCV Bt 139	29.5	MR	26.5	MR	25.8	MR	3.2	R	0.0	DF	1.5	R	0.0	DF	7.7	R
6	55126	RAHBt 27	25.8	MR	14.3	R	10.3	R	5.0	R	0.0	DF	2.3	R	0.1	R	7.2	R
9	55127	Suraj Super Bt	28.2	MR	27.0	MR	28.0	MR	5.2	R	0.0	DF	0.7	R	0.2	R	6.7	R
2	55128	PKV 081 Bt (ZC Bt-2)	26.8	MR	12.2	R	13.4	R	4.0	R	0.0	DF	1.8	R	0.0	DF	7.5	R
20	55129	WGCV Bt 134	6.3	R	29.8	MR	14.8	R	3.7	R	0.0	DF	0.7	R	0.1	R	7.0	R
11	55130	LH Bt 8	20.8	MR	11.7	R	18.0	R	4.8	R	0.0	DF	0.7	R	0.0	DF	6.3	R
13	55131	NH 22072 Bt	28.8	MR	28.5	MR	16.0	R	4.7	R	0.0	DF	1.8	R	0.6	R	6.7	R
16	55132	RAHBt 28	26.1	MR	10.8	R	26.3	MR	5.2	R	0.0	DF	1.3	R	0.1	R	7.8	R
3	55133	LH Bt 6	27.3	MR	26.8	MR	28.0	MR	5.3	R	0.0	DF	0.0	DF	0.5	R	5.5	R
8	55134	WGCV Bt 138	26.0	MR	28.0	MR	27.5	MR	4.2	R	0.0	DF	1.3	R	0.0	DF	8.8	R
14	55135	RAHBt 29	26.5	MR	25.8	MR	28.3	MR	3.7	R	0.0	DF	0.8	R	0.0	DF	5.7	R
19	55136	Supriya Bt	26.5	MR	28.3	MR	26.0	MR	4.7	R	0.0	DF	1.2	R	1.0	R	5.5	R
4	55137	NH 22032 Bt	27.0	MR	27.5	MR	17.3	R	4.0	R	0.0	DF	1.2	R	0.0	DF	4.5	R
10	55138	CICR 23 Bt (ZC Bt-1)	26.2	MR	30.2	MR	27.3	MR	4.7	R	0.0	DF	2.8	R	0.0	DF	6.7	R
17	55139	LH Bt 9	21.3	R	25.8	MR	14.5	R	6.7	R	0.0	DF	0.7	R	0.0	DF	6.8	R
7	55140	RAHBt 30	24.2	R	27.5	MR	16.5	R	3.2	R	0.0	DF	1.8	R	0.0	DF	7.0	R
5	55141	LH Bt 15	29.5	MR	28.6	MR	27.3	MR	6.0	R	0.0	DF	1.3	R	0.6	R	7.5	R

Table 7(b) Initial Evaluation Trial of Hirsutum Varieties - Irrigated (IET Variety IRR) under protected conditions and Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions									
			RARS, Warangal									
			ALS		CoLS		GM		Rust		TSV	
			PDI		PDI	DR	PDI	DR	PDI	DR	PDI	DR
12	55121	MCU 5-VT Bt	2.7	R	3.8	R	12.7	R	26.5	MR	1.9	R
18	55122	Surabhi Bt	4.7	R	5.7	R	12.7	R	27.5	MR	2.2	R
21	55123	CCH 19-2 Bt	5.0	R	6.5	R	11.8	R	27.7	MR	3.3	R
1	55124	Sunantha Bt	4.3	R	5.5	R	12.0	R	28.2	MR	1.5	R
15	55125	WGCV Bt 139	1.8	R	2.3	R	8.3	R	17.2	R	0.6	R
6	55126	RAHBt 27	2.8	R	4.3	R	12.5	R	26.3	MR	2.1	R
9	55127	Suraj Super Bt	4.0	R	6.5	R	12.7	R	28.5	MR	0.6	R
2	55128	PKV 081 Bt (ZC Bt-2)	4.2	R	4.7	R	14.0	R	27.8	MR	3.8	R
20	55129	WGCV Bt 134	1.2	R	1.8	R	7.0	R	15.5	R	0.0	DF
11	55130	LH Bt 8	2.3	R	3.3	R	13.2	R	28.3	MR	0.4	R
13	55131	NH 22072 Bt	2.7	R	5.0	R	13.2	R	28.5	MR	0.7	R
16	55132	RAHBt 28	3.5	R	4.7	R	12.5	R	27.8	MR	1.3	R
3	55133	LH Bt 6	3.3	R	4.2	R	12.7	R	27.2	MR	1.5	R
8	55134	WGCV Bt 138	2.5	R	2.7	R	7.0	R	16.5	R	0.0	DF
14	55135	RAHBt 29	2.8	R	4.2	R	13.7	R	27.5	MR	0.9	R
19	55136	Supriya Bt	2.0	R	4.2	R	13.2	R	28.2	MR	2.3	R
4	55137	NH 22032 Bt	2.5	R	2.7	R	5.7	R	14.2	R	2.7	R
10	55138	CICR 23 Bt (ZC Bt-1)	3.5	R	5.7	R	13.8	R	26.7	MR	2.4	R
17	55139	LH Bt 9	3.7	R	4.7	R	13.0	R	27.2	MR	1.1	R
7	55140	RAHBt 30	3.0	R	4.0	R	13.2	R	28.8	MR	2.0	R
5	55141	LH Bt 15	2.8	R	2.5	R	12.0	R	26.7	MR	1.7	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pests

Table: Initial Variety trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	4.67	5.21	8.00	9.13	6.75	BETL
55122	6.03	4.89	7.93	9.73	7.15	BETL
55123	5.13	5.64	10.07	8.13	7.24	BETL
55124	4.83	5.12	9.33	8.87	7.04	BETL
55125	5.53	4.87	9.00	7.27	6.67	BETL
55126	7.00	5.07	9.44	7.20	7.18	BETL
55127	6.63	5.42	10.60	10.13	8.20	BETL
55128	5.10	4.85	6.78	8.20	6.23	BETL
55129	5.00	4.74	8.69	7.40	6.46	BETL
55130	8.60	4.93	5.89	7.87	6.82	BETL
55131	5.57	4.93	8.73	9.60	7.21	BETL
55132	5.33	4.70	8.16	7.93	6.53	BETL
55133	6.10	4.71	6.84	8.13	6.45	BETL
55134	5.10	4.78	7.60	7.13	6.15	BETL
55135	6.37	4.65	6.42	7.27	6.18	BETL
55136	4.63	4.63	6.31	6.67	5.56	BETL
55137	7.83	4.06	10.02	6.80	7.18	BETL
55138	5.93	4.71	7.89	6.87	6.35	BETL
55139	6.23	4.37	5.73	7.40	5.93	BETL
55140	5.20	4.23	5.96	8.07	5.86	BETL
55141	7.37	4.13	7.38	7.87	6.69	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	9.20	2.41	4.40	3.67	4.92	BETL
55122	9.57	2.14	4.13	3.87	4.93	BETL
55123	11.27	2.59	4.13	4.60	5.65	BETL
55124	10.39	2.29	3.20	3.93	4.95	BETL
55125	9.23	3.25	2.27	3.67	4.60	BETL
55126	8.73	3.31	4.27	3.67	4.99	BETL
55127	10.87	2.76	3.20	4.13	5.24	BETL
55128	9.33	2.41	4.17	3.33	4.81	BETL
55129	8.43	2.15	3.33	4.73	4.66	BETL
55130	9.97	2.54	2.93	3.93	4.84	BETL
55131	9.23	2.74	2.73	3.80	4.63	BETL
55132	11.03	2.54	3.13	4.60	5.33	BETL
55133	9.57	3.65	2.67	3.00	4.72	BETL
55134	9.47	2.54	3.33	3.67	4.75	BETL
55135	9.33	2.33	4.33	4.07	5.02	BETL
55136	8.60	3.57	2.80	3.60	4.64	BETL
55137	7.77	3.54	3.40	3.00	4.43	BETL
55138	9.50	3.40	3.93	3.40	5.06	BETL
55139	7.93	3.17	2.93	3.13	4.29	BETL
55140	9.10	3.76	3.60	3.87	5.08	BETL
55141	8.37	3.20	2.67	4.27	4.63	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55121	III	I	I	II	II	
55122	III	I	I	II	II	
55123	IV	I	I	II	II	
55124	III	I	I	II	II	
55125	III	I	I	II	II	
55126	III	I	I	III	II	
55127	IV	I	II	II	II	
55128	III	I	I	III	II	
55129	II	I	I	II	II	
55130	III	I	I	II	II	
55131	III	I	I	III	II	
55132	IV	I	I	II	II	
55133	IV	I	I	II	II	
55134	III	I	I	II	II	
55135	II	I	I	II	II	
55136	III	II	I	II	II	
55137	II	I	I	II	II	
55138	III	I	I	II	II	
55139	III	I	I	III	II	
55140	III	I	I	II	II	
55141	II	I	I	II	II	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	8.63	6.36	2.69	13.27	7.74	BETL
55122	7.53	6.40	2.04	14.53	7.63	BETL
55123	6.61	6.14	2.04	14.13	7.23	BETL
55124	7.70	7.21	3.10	11.60	7.40	BETL
55125	8.03	6.87	2.24	13.67	7.70	BETL
55126	9.10	7.76	2.64	10.87	7.59	BETL
55127	8.80	7.06	2.09	13.07	7.75	BETL
55128	7.07	6.92	2.27	12.53	7.20	BETL
55129	8.80	6.57	2.62	12.27	7.57	BETL
55130	9.73	6.40	2.29	13.40	7.96	BETL
55131	8.33	6.14	2.49	12.27	7.31	BETL
55132	8.57	7.21	2.02	11.53	7.33	BETL
55133	9.00	6.87	2.12	9.80	6.95	BETL
55134	8.40	7.51	1.68	11.13	7.18	BETL
55135	7.67	7.06	2.38	13.80	7.73	BETL
55136	9.67	7.11	2.08	14.67	8.38	BETL
55137	8.13	7.64	3.09	13.87	8.18	BETL
55138	6.90	6.45	2.49	13.47	7.33	BETL
55139	8.60	6.95	2.38	12.67	7.65	BETL
55140	7.97	6.36	1.91	12.27	7.13	BETL
55141	6.53	7.21	2.36	14.87	7.74	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.93	1.21	0.89	0.53	0.89	BETL
55122	1.43	1.48	1.49	0.80	1.30	BETL
55123	0.93	1.09	1.76	1.00	1.20	BETL
55124	0.87	1.01	1.38	0.53	0.95	BETL
55125	0.60	1.14	1.67	0.73	1.03	BETL
55126	0.83	1.05	2.29	0.67	1.21	BETL
55127	0.67	0.78	1.82	0.80	1.02	BETL
55128	1.17	1.19	1.27	0.60	1.06	BETL
55129	1.03	1.09	0.91	0.87	0.97	BETL
55130	0.60	1.09	1.69	0.80	1.04	BETL
55131	1.03	1.09	1.27	0.60	1.00	BETL
55132	0.70	0.89	1.16	0.67	0.85	BETL
55133	0.80	1.18	1.49	0.67	1.03	BETL
55134	0.53	1.41	1.16	0.33	0.86	BETL
55135	1.43	1.18	0.64	1.07	1.08	BETL
55136	0.73	1.78	1.36	0.67	1.13	BETL
55137	1.30	1.48	1.96	0.67	1.35	BETL
55138	1.40	1.10	2.02	0.60	1.28	BETL
55139	0.93	0.76	0.82	0.80	0.83	BETL
55140	1.23	0.68	1.24	0.33	0.87	BETL
55141	1.00	1.05	1.18	0.60	0.96	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./ plant)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.13	1.45	0.27	0.09	0.48	
55122	0.27	1.56	0.20	0.04	0.52	
55123	0.00	1.04	0.33	0.11	0.37	
55124	0.20	1.27	0.27	0.16	0.47	
55125	0.00	1.33	0.20	0.11	0.41	
55126	0.10	1.15	0.07	0.00	0.33	
55127	0.13	1.22	0.47	0.11	0.48	
55128	0.20	1.51	0.13	0.16	0.50	
55129	0.17	2.23	0.07	0.04	0.63	
55130	0.07	1.49	0.13	0.13	0.46	
55131	0.03	1.38	0.00	0.16	0.39	
55132	0.17	1.44	0.07	0.04	0.43	
55133	0.10	1.60	0.07	0.22	0.50	
55134	0.20	1.44	0.27	0.13	0.51	
55135	0.10	1.11	0.13	0.16	0.37	
55136	0.20	1.58	0.20	0.09	0.52	
55137	0.17	1.00	0.00	0.11	0.32	
55138	0.03	1.82	0.07	0.18	0.53	
55139	0.23	2.11	0.00	0.16	0.63	
55140	0.10	1.78	0.27	0.18	0.58	
55141	0.27	1.22	0.00	0.09	0.39	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Protected Conditions– *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.00	0.00	0.00	0.00	0.00	BETL
55122	0.00	0.00	0.00	0.00	0.00	BETL
55123	0.00	0.00	0.00	0.00	0.00	BETL
55124	0.00	0.00	0.00	0.00	0.00	BETL
55125	0.00	0.00	0.00	0.00	0.00	BETL
55126	0.00	0.00	0.00	0.00	0.00	BETL
55127	0.00	0.00	0.00	0.00	0.00	BETL
55128	0.00	0.00	0.00	0.00	0.00	BETL
55129	0.00	0.00	0.00	0.00	0.00	BETL
55130	0.00	0.00	0.00	0.00	0.00	BETL
55131	0.00	0.00	0.00	0.00	0.00	BETL
55132	0.00	0.00	0.00	0.00	0.00	BETL
55133	0.00	0.00	0.00	0.00	0.00	BETL
55134	0.00	0.00	0.00	0.00	0.00	BETL
55135	0.00	0.00	0.00	0.00	0.00	BETL
55136	0.00	0.00	0.00	0.00	0.00	BETL
55137	0.00	0.00	0.00	0.00	0.00	BETL
55138	0.00	0.00	0.00	0.00	0.00	BETL
55139	0.00	0.00	0.00	0.00	0.00	BETL
55140	0.00	0.00	0.00	0.00	0.00	BETL
55141	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.00	0.00	0.00	0.00	0.00	BETL
55122	0.00	0.00	0.00	0.00	0.00	BETL
55123	0.00	0.00	0.00	0.00	0.00	BETL
55124	0.00	0.00	0.00	0.00	0.00	BETL
55125	0.00	0.00	0.00	0.00	0.00	BETL
55126	0.00	0.00	0.00	0.00	0.00	BETL
55127	0.00	0.00	0.00	0.00	0.00	BETL
55128	0.00	0.00	0.00	0.00	0.00	BETL
55129	0.00	0.00	0.00	0.00	0.00	BETL
55130	0.00	0.00	0.00	0.00	0.00	BETL
55131	0.00	0.00	0.00	0.00	0.00	BETL
55132	0.00	0.00	0.00	0.00	0.00	BETL
55133	0.00	0.00	0.00	0.00	0.00	BETL
55134	0.00	0.00	0.00	0.00	0.00	BETL
55135	0.00	0.00	0.00	0.00	0.00	BETL
55136	0.00	0.00	0.00	0.00	0.00	BETL
55137	0.00	0.00	0.00	0.00	0.00	BETL
55138	0.00	0.00	0.00	0.00	0.00	BETL
55139	0.00	0.00	0.00	0.00	0.00	BETL
55140	0.00	0.00	0.00	0.00	0.00	BETL
55141	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55121	0.43	0.17	0.00	0.00	0.15	BETL
55122	0.70	0.06	0.00	0.00	0.19	BETL
55123	0.50	0.17	0.00	0.00	0.17	BETL
55124	0.00	0.39	0.00	0.00	0.10	BETL
55125	0.73	0.39	0.00	0.00	0.28	BETL
55126	0.40	0.62	0.00	0.00	0.25	BETL
55127	0.63	0.84	0.00	0.00	0.37	BETL
55128	0.00	0.39	0.00	0.00	0.10	BETL
55129	0.73	0.62	0.00	0.00	0.34	BETL
55130	0.60	0.17	0.00	0.00	0.19	BETL
55131	0.70	0.62	0.00	0.00	0.33	BETL
55132	0.00	0.39	0.00	0.00	0.10	BETL
55133	0.00	0.17	0.00	0.00	0.04	BETL
55134	0.50	0.62	0.00	0.00	0.28	BETL
55135	0.47	0.17	0.00	0.00	0.16	BETL
55136	0.70	0.47	0.00	0.00	0.29	BETL
55137	0.50	0.62	0.00	0.00	0.28	BETL
55138	0.00	0.28	0.00	0.00	0.07	BETL
55139	0.67	0.06	0.00	0.00	0.18	BETL
55140	0.47	0.28	0.00	0.00	0.19	BETL
55141	0.53	0.28	0.00	0.00	0.20	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – Pink bollworm

Name of Entry	Pink bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55121	5.17	1.31	0.00	9.67	4.04	AETL
55122	3.67	1.87	1.00	6.33	3.22	AETL
55123	5.67	1.76	0.00	7.33	3.69	AETL
55124	4.50	2.08	0.67	10.67	4.48	AETL
55125	4.33	2.32	0.67	10.33	4.41	AETL
55126	6.17	1.87	0.00	9.00	4.26	AETL
55127	4.50	1.87	1.67	6.00	3.51	AETL
55128	5.17	2.09	0.33	6.00	3.40	AETL
55129	6.33	2.54	1.00	9.33	4.80	AETL
55130	3.50	1.60	0.00	10.33	3.86	AETL
55131	5.00	1.64	0.33	6.67	3.41	AETL
55132	3.17	1.53	0.00	9.67	3.59	AETL
55133	3.00	1.91	0.33	8.00	3.31	AETL
55134	5.00	2.31	1.67	8.00	4.24	AETL
55135	4.00	2.13	0.33	11.67	4.53	AETL
55136	4.00	2.04	0.00	9.33	3.84	AETL
55137	6.33	1.20	0.67	9.33	4.38	AETL
55138	4.00	2.03	0.33	7.67	3.51	AETL
55139	3.67	1.46	0.00	8.67	3.45	AETL
55140	4.50	1.46	0.00	9.33	3.82	AETL
55141	3.67	1.35	0.67	5.67	2.84	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Initial Variety trial in South Zone under Unprotected Conditions – Green Boll
Damage due to ABW/SBW/TC**

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55121	0.00	0.01	0.00	0.00	0.00	BETL
55122	0.00	0.00	0.00	0.00	0.00	BETL
55123	0.00	0.24	0.00	0.00	0.06	BETL
55124	0.00	0.00	0.00	0.00	0.00	BETL
55125	0.00	0.00	0.00	0.00	0.00	BETL
55126	0.00	0.00	0.00	0.00	0.00	BETL
55127	0.00	0.00	0.00	0.00	0.00	BETL
55128	0.00	0.12	0.00	0.00	0.03	BETL
55129	0.00	0.01	0.00	0.00	0.00	BETL
55130	0.00	0.00	0.00	0.00	0.00	BETL
55131	0.00	0.12	0.00	0.00	0.03	BETL
55132	0.00	0.01	0.00	0.00	0.00	BETL
55133	0.00	0.00	0.00	0.00	0.00	BETL
55134	0.00	0.01	0.00	0.00	0.00	BETL
55135	0.00	0.07	0.00	0.00	0.02	BETL
55136	0.00	0.00	0.00	0.00	0.00	BETL
55137	0.00	0.35	0.00	0.00	0.09	BETL
55138	0.00	0.12	0.00	0.00	0.03	BETL
55139	0.00	0.12	0.00	0.00	0.03	BETL
55140	0.00	0.24	0.00	0.00	0.06	BETL
55141	0.00	0.12	0.00	0.00	0.03	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55121	36.67	3.00	15.00	56.67	27.83	AETL
55122	28.33	4.23	5.00	43.33	20.22	AETL
55123	35.00	4.71	35.00	43.33	29.51	AETL
55124	38.33	2.46	10.00	66.67	29.36	AETL
55125	36.67	4.15	20.00	53.33	28.54	AETL
55126	45.00	4.88	10.00	43.33	25.80	AETL
55127	36.67	2.93	35.00	40.00	28.65	AETL
55128	31.67	4.63	10.00	43.33	22.41	AETL
55129	41.67	3.74	20.00	50.00	28.85	AETL
55130	31.67	2.81	10.00	60.00	26.12	AETL
55131	35.00	2.69	15.00	53.33	26.51	AETL
55132	21.67	3.31	5.00	43.33	18.33	AETL
55133	15.00	2.37	5.00	43.33	16.43	AETL
55134	23.33	2.92	25.00	43.33	23.65	AETL
55135	18.33	3.11	10.00	26.67	14.53	AETL
55136	28.33	3.13	35.00	46.67	28.28	AETL
55137	33.33	6.38	15.00	43.33	24.51	AETL
55138	25.00	6.99	20.00	40.00	23.00	AETL
55139	23.33	6.70	15.00	46.67	22.92	AETL
55140	30.00	5.98	20.00	53.33	27.33	AETL
55141	28.33	9.02	10.00	43.33	22.67	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55121	46.85	9.79	12.12	30.00	24.69	
55122	41.22	10.45	9.39	45.00	26.52	
55123	62.41	9.84	26.00	55.00	38.31	
55124	50.74	9.81	22.15	40.00	30.67	
55125	41.26	9.83	21.95	20.00	23.26	
55126	63.74	9.35	15.49	30.00	29.64	
55127	31.51	11.10	18.17	35.00	23.94	
55128	40.22	10.98	19.89	40.00	27.77	
55129	53.15	10.92	18.52	30.00	28.15	
55130	48.91	9.83	25.12	40.00	30.96	
55131	44.22	11.87	10.01	30.00	24.02	
55132	37.26	12.35	15.62	40.00	26.31	
55133	23.10	9.83	9.13	45.00	21.77	
55134	34.67	11.80	8.78	30.00	21.31	
55135	26.34	10.17	15.23	35.00	21.68	
55136	37.51	11.32	16.44	55.00	30.07	
55137	43.66	9.19	10.14	55.00	29.50	
55138	31.12	10.08	13.13	40.00	23.58	
55139	29.65	5.52	24.47	30.00	22.41	
55140	41.34	3.30	29.66	35.00	27.33	
55141	37.18	9.54	12.19	45.00	25.98	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55121	21.65	7.48	4.60	13.68	11.85	
55122	20.24	8.14	4.24	17.62	12.56	
55123	34.61	7.53	10.76	20.79	18.42	
55124	27.88	7.49	9.12	19.57	16.02	
55125	19.65	7.51	9.08	9.14	11.35	
55126	26.80	7.04	7.42	17.50	14.69	
55127	19.41	8.79	6.83	18.88	13.48	
55128	20.61	8.66	8.65	14.29	13.05	
55129	23.65	8.61	7.45	13.00	13.18	
55130	20.70	7.52	9.29	21.84	14.84	
55131	23.74	9.56	3.56	18.41	13.82	
55132	20.54	10.04	6.28	16.16	13.26	
55133	17.51	7.52	5.34	16.50	11.72	
55134	18.69	9.49	3.88	13.57	11.41	
55135	15.66	7.86	6.07	15.76	11.34	
55136	22.67	9.01	8.65	20.49	15.20	
55137	25.55	6.88	4.07	19.80	14.07	
55138	18.62	7.77	4.84	12.25	10.87	
55139	17.10	3.21	11.61	13.88	11.45	
55140	26.75	0.99	15.93	9.00	13.17	
55141	20.36	7.23	5.01	16.75	12.34	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

T

Table 7(c): Initial Evaluation Trial of Hirsutum Varieties - Irrigated (IET Variety IRR) Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions															
			LAM, Guntur						CICR RS, Coimbatore									
			CoLS		GM		Rust		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
12	55121	MCU 5-VT Bt	37.0	MR	10.0	R	30.8	MR	4.5	R	0.0	DF	2.0	R	0.0	DF	6.0	R
18	55122	Surabhi Bt	26.8	MR	11.5	R	16.0	R	5.5	R	0.0	DF	0.0	DF	0.0	DF	6.0	R
21	55123	CCH 19-2 Bt	29.7	MR	30.3	MR	31.5	MR	6.0	R	0.0	DF	2.5	R	0.0	DF	4.5	R
1	55124	Sunantha Bt	26.6	MR	16.5	R	10.0	R	6.5	R	0.0	DF	0.0	DF	0.0	DF	7.5	R
15	55125	WGCV Bt 139	38.3	MR	28.8	MR	26.8	MR	4.0	R	0.0	DF	3.0	R	0.0	DF	6.0	R
6	55126	RAHBt 27	27.8	MR	18.5	R	13.5	R	5.5	R	0.0	DF	0.0	DF	0.0	DF	4.5	R
9	55127	Suraj Super Bt	32.0	MR	28.5	MR	29.0	MR	6.0	R	0.0	DF	2.5	R	0.0	DF	0.0	R
2	55128	PKV 081 Bt (ZC Bt-2)	28.8	MR	18.5	R	16.5	R	5.0	R	0.0	DF	0.0	DF	0.0	DF	0.0	R
20	55129	WGCV Bt 134	8.0	R	30.3	MR	18.0	R	4.5	R	0.0	DF	1.5	R	0.0	DF	4.0	R
11	55130	LH Bt 8	29.8	MR	15.5	R	20.3	R	4.5	R	0.0	DF	0.0	DF	0.0	DF	0.0	R
13	55131	NH 22072 Bt	30.2	MR	29.3	MR	17.8	R	4.5	R	0.0	DF	3.0	R	0.0	DF	3.0	R
16	55132	RAHBt 28	28.8	MR	12.2	R	27.3	MR	4.0	R	0.0	DF	0.0	DF	0.0	DF	3.5	R
3	55133	LH Bt 6	30.3	MR	29.8	MR	29.7	MR	3.5	R	0.0	DF	2.0	R	0.0	DF	0.0	R
8	55134	WGCV Bt 138	27.3	MR	30.0	MR	29.3	MR	4.0	R	0.0	DF	0.0	DF	0.0	DF	3.0	R
14	55135	RAHBt 29	27.8	MR	26.0	MR	30.0	MR	3.5	R	0.0	DF	2.0	R	0.0	DF	4.5	R
19	55136	Supriya Bt	29.0	MR	30.0	MR	27.3	MR	3.0	R	0.0	DF	3.5	R	3.3	R	4.0	R
4	55137	NH 22032 Bt	31.8	MR	28.5	MR	19.2	R	5.0	R	0.0	DF	2.3	R	1.7	R	5.0	R
10	55138	CICR 23 Bt (ZC Bt-1)	26.7	MR	31.5	MR	30.3	MR	5.0	R	0.0	DF	2.0	R	0.0	DF	4.0	R
17	55139	LH Bt 9	27.8	MR	26.8	MR	16.7	R	7.0	R	0.0	DF	2.0	R	3.0	R	4.0	R
7	55140	RAHBt 30	28.0	MR	27.3	MR	18.8	R	3.0	R	0.0	DF	3.5	R	0.0	DF	3.0	R
5	55141	LH Bt 15	30.0	MR	30.0	MR	28.0	MR	5.0	R	0.0	DF	2.5	R	0.0	DF	5.0	R

Table 7(d): Initial Evaluation Trial of Hirsutum Varieties - Irrigated (IET Variety IRR) Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions									
			RARS, Warangal									
			ALS		CoLS		GM		Rust		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
12	55121	MCU 5-VT Bt	7.0	R	14.0	R	14.0	R	41.0	MR	11.3	R
18	55122	Surabhi Bt	8.0	R	14.0	R	13.0	R	39.0	MR	18.8	R
21	55123	CCH 19-2 Bt	8.0	R	12.5	R	11.5	R	27.0	MR	16.3	R
1	55124	Sunantha Bt	7.5	R	7.5	R	10.0	R	27.5	MR	8.8	R
15	55125	WGCV Bt 139	7.0	R	8.0	R	12.5	R	18.0	R	5.0	R
6	55126	RAHBt 27	6.5	R	7.0	R	12.0	R	30.5	MR	13.8	R
9	55127	Suraj Super Bt	6.0	R	6.0	R	10.5	R	18.0	R	7.5	R
2	55128	PKV 081 Bt (ZC Bt-2)	6.5	R	3.5	R	21.0	R	28.0	MR	16.3	R
20	55129	WGCV Bt 134	3.0	R	2.5	R	9.5	R	18.5	R	6.3	R
11	55130	LH Bt 8	5.0	R	5.5	R	13.5	R	18.5	R	5.0	R
13	55131	NH 22072 Bt	6.5	R	7.5	R	12.0	R	34.5	MR	7.5	R
16	55132	RAHBt 28	2.0	R	3.0	R	10.5	R	26.5	MR	11.3	R
3	55133	LH Bt 6	6.0	R	6.0	R	23.0	R	49.0	MR	5.0	R
8	55134	WGCV Bt 138	9.5	R	20.5	R	17.0	R	18.5	R	5.0	R
14	55135	RAHBt 29	5.0	R	5.5	R	15.5	R	46.0	MR	11.3	R
19	55136	Supriya Bt	5.0	R	7.5	R	16.0	R	12.5	R	11.3	R
4	55137	NH 22032 Bt	3.5	R	7.5	R	19.0	R	21.0	R	6.3	R
10	55138	CICR 23 Bt (ZC Bt-1)	7.0	R	7.5	R	23.5	R	47.0	MR	8.8	R
17	55139	LH Bt 9	6.0	R	6.5	R	19.0	R	24.0	R	11.3	R
7	55140	RAHBt 30	10.0	R	8.5	R	19.0	R	36.0	MR	7.5	R
5	55141	LH Bt 15	6.0	R	7.0	R	15.0	R	31.0	MR	6.3	R

Advanced Evaluation Trial of Hirsutum Varieties (I) - Irrigated

Constitution of Trial

The trial was constituted with six Bt cotton varieties containing deregulated events along with three different check varieties as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	5	55151	Local Check	
2	1	55152	RAHBT – 2*	Raichur
3	8	55153	WGCV Bt-180	Warangal
4	3	55154	BGDHBT - 3	B'Gudi
5	9	55155	NH 1909 Bt	Nanded
6	6	55156	LH Bt 02	Lam
7	2	55157	CICR 23 Bt (Bt ZC)	
8	7	55158	Suraksha (Non-Bt ZC)	
9	4	55159	WGCV Bt-80	Warangal

*No germination was reported in all the centres

The trial was conducted in five different locations and detail is furnished below.

Location	Warangal	Lam	Raichur	B'Gudi*	Coimbatore
Local Check	Sivanandi	NDLH 2051-1	Sujay	Sujay	Sunantha

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Trial is conducted with recommended spacing for the variety.

Number of rows: 4 rows of 6 meters per entry with three replications

Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Advanced Evaluation Trial of Hirsutum Varieties (I)**

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	97.7	150.5	140.7	103.7	123.2
2	WGCV Bt-180	91.7	135.8	102.7	80.3	102.6
3	BGDHBT - 3	98.6	128.1	154.0	106.4	121.8
4	NH 1909 Bt	104.4	126.3	126.3	87.2	111.1
5	LH Bt 02	99.8	141.6	134.7	87.3	115.9
6	CICR 23 Bt (Bt ZC)	116.6	143.7	139.3	108.7	127.1
7	Suraksha (Non-Bt ZC)	100.9	129.0	133.0	82.9	111.5
8	WGCV Bt-80	96.9	120.0	113.0	82.9	103.2
	CD @ 5%	29.9	NS	11.9	14.4	
	CV %	17.9	15.0	9.0	8.9	

Number of monopodia in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	1.2	1.7	1.0	0.7	1.2
2	WGCV Bt-180	0.5	1.8	0.9	0.5	0.9
3	BGDHBT - 3	2.5	1.7	1.7	2.3	2.1
4	NH 1909 Bt	1.5	1.8	1.4	0.3	1.3
5	LH Bt 02	0.6	1.2	1.2	0.3	0.8
6	CICR 23 Bt (Bt ZC)	1.1	1.7	0.9	1.3	1.3
7	Suraksha (Non-Bt ZC)	0.4	2.2	1.1	0.1	1.0
8	WGCV Bt-80	2.6	1.9	1.0	0.5	1.5
	CD @ 5%	NS	0.4	0.3	0.9	
	CV %	83.2	14.4	17.8	69.4	

Number of sympodia in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	13.9	14.5	12.0	17.1	14.4
2	WGCV Bt-180	13.3	13.2	16.0	14.6	14.3
3	BGDHBT - 3	12.6	11.9	13.3	17.4	13.8
4	NH 1909 Bt	14.3	14.0	14.3	14.7	14.3
5	LH Bt 02	12.7	24.3	13.0	12.6	15.7
6	CICR 23 Bt (Bt ZC)	14.4	17.4	14.0	17.2	15.8
7	Suraksha (Non-Bt ZC)	13.9	15.9	15.3	11.9	14.3
8	WGCV Bt-80	14.6	16.0	13.3	13.3	14.3
	CD @ 5%	NS	3.7	1.2	3.7	
	CV %	22.1	13.3	8.2	14.2	

Boll weight (g) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	3.9	4.9	5.5	5.0	4.8
2	WGCV Bt-180	4.3	4.9	5.4	5.2	5.0
3	BGDHBT - 3	3.2	3.5	4.9	4.3	4.0
4	NH 1909 Bt	4.1	4.7	5.4	4.7	4.7
5	LH Bt 02	3.6	5.5	6.3	5.0	5.1
6	CICR 23 Bt (Bt ZC)	2.8	3.9	4.4	4.3	3.9
7	Suraksha (Non-Bt ZC)	4.6	4.9	7.0	5.8	5.6
8	WGCV Bt-80	4.1	5.1	5.5	4.7	4.9
	CD @ 5%	0.8	0.5	0.4	0.3	
	CV %	11.6	6.5	7.0	3.7	

Number of bolls / plant in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	18.4	43.2	21.3	27.7	27.7
2	WGCV Bt-180	18.9	40.8	25.3	19.7	26.2
3	BGDHBT - 3	16.7	39.9	22.7	21.9	25.3
4	NH 1909 Bt	25.2	38.8	22.3	24.5	27.7
5	LH Bt 02	16.0	56.6	21.3	15.7	27.4
6	CICR 23 Bt (Bt ZC)	13.7	36.2	22.3	23.3	23.9
7	Suraksha (Non-Bt ZC)	14.7	43.9	21.0	15.5	23.8
8	WGCV Bt-80	25.5	48.4	21.7	21.0	29.2
	CD @ 5%	NS	8.8	2.7	5.5	
	CV %	37.1	11.5	11.8	15.0	

Number of bolls / sq.m.in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Lam	Coimbatore	Mean
1	Local Check	83.8	68.3	76.1
2	WGCV Bt-180	74.8	48.7	61.8
3	BGDHBT - 3	72.1	54.2	63.2
4	NH 1909 Bt	72.3	60.4	66.4
5	LH Bt 02	124.6	38.7	81.7
6	CICR 23 Bt (Bt ZC)	62.5	57.4	60.0
7	Suraksha (Non-Bt ZC)	75.0	38.4	56.7
8	WGCV Bt-80	78.9	51.9	65.4
	CD @ 5%	19.7	13.7	
	CV %	13.9	15.0	

Lint Index (g) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	5.2	5.5	5.4	6.6	5.7
2	WGCV Bt-180	5.5	6.2	5.4	6.1	5.8
3	BGDHBT - 3	4.4	5.0	5.0	5.6	5.0
4	NH 1909 Bt	5.1	6.2	5.6	6.0	5.7
5	LH Bt 02	3.6	5.7	4.3	4.7	4.6
6	CICR 23 Bt (Bt ZC)	3.6	4.4	3.9	4.7	4.2
7	Suraksha (Non-Bt ZC)	5.5	6.0	6.2	7.1	6.2
8	WGCV Bt-80	5.3	6.4	5.1	6.4	5.8
	CD @ 5%	NS	1.0	0.3	0.5	
	CV %	21.8	9.9	5.4	5.0	

Seed Index (g) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	10.9	11.1	9.5	12.2	10.9
2	WGCV Bt-180	12.3	12.4	11.8	14.4	12.7
3	BGDHBT - 3	8.6	10.6	9.3	10.9	9.9
4	NH 1909 Bt	9.4	13.6	10.0	11.4	11.1
5	LH Bt 02	9.7	9.9	11.3	11.9	10.7
6	CICR 23 Bt (Bt ZC)	7.9	9.0	8.5	10.4	9.0
7	Suraksha (Non-Bt ZC)	10.7	11.9	12.3	12.9	12.0
8	WGCV Bt-80	10.7	12.3	10.5	12.5	11.5
	CD @ 5%	NS	2.3	0.5	0.9	
	CV %	24.4	11.3	5.1	4.5	

Ginning outturn (%) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	32.5	33.4	36.4	35.1	34.4
2	WGCV Bt-180	31.1	33.5	31.3	30.0	31.5
3	BGDHBT - 3	34.0	32.2	34.8	33.8	33.7
4	NH 1909 Bt	35.1	31.4	35.8	34.4	34.2
5	LH Bt 02	27.1	36.6	27.7	28.1	29.9
6	CICR 23 Bt (Bt ZC)	31.4	33.1	31.3	31.3	31.8
7	Suraksha (Non-Bt ZC)	34.1	33.7	33.6	35.4	34.2
8	WGCV Bt-80	33.1	34.4	32.9	33.7	33.5
	CD @ 5%	NS	NS	1.4	1.8	
	CV %	20.3	8.3	4.1	3.2	

Upper Half Mean Length (mm) under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	29.0	28.0	28.6	30.3	29.0
2	WGCV Bt-180	28.2	27.8	29.4	27.9	28.3
3	BGDHBT - 3	25.5	25.4	29.3	25.0	26.3
4	NH 1909 Bt	27.4	27.8	28.2	28.0	27.9
5	LH Bt 02	28.4	28.8	30.2	29.6	29.3
6	CICR 23 Bt (Bt ZC)	27.5	27.6	28.3	27.9	27.8
7	Suraksha (Non-Bt ZC)	29.3	31.3	31.0	30.3	30.5
8	WGCV Bt-80	27.0	28.4	28.9	27.7	28.0

Uniformity index under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	84.0	84.0	84.0	86.0	84.5
2	WGCV Bt-180	84.0	84.0	83.0	84.2	83.8
3	BGDHBT - 3	81.0	83.0	83.0	84.4	82.9
4	NH 1909 Bt	83.0	84.0	84.0	84.2	83.8
5	LH Bt 02	83.0	83.0	84.0	84.5	83.6
6	CICR 23 Bt (Bt ZC)	82.0	82.0	83.0	83.8	82.7
7	Suraksha (Non-Bt ZC)	83.0	84.0	86.0	86.1	84.8
8	WGCV Bt-80	83.0	86.0	87.0	85.1	85.3

Micronaire under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	5.1	4.6	4.4	4.6	4.7
2	WGCV Bt-180	4.8	5.3	5.1	5.5	5.2
3	BGDHBT - 3	4.6	4.9	4.6	4.8	4.7
4	NH 1909 Bt	4.5	4.6	4.9	4.9	4.7
5	LH Bt 02	4.1	4.7	4.5	4.4	4.4
6	CICR 23 Bt (Bt ZC)	4.2	4.4	4.1	4.7	4.4
7	Suraksha (Non-Bt ZC)	4.0	4.2	4.3	4.7	4.3
8	WGCV Bt-80	4.8	5.2	4.8	4.9	4.9

Tenacity under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	30.4	31.6	26.9	30.1	29.8
2	WGCV Bt-180	30.7	29.8	29.5	27.1	29.3
3	BGDHBT - 3	27.3	26.5	28.7	24.8	26.8
4	NH 1909 Bt	29.9	29.7	26.8	27.8	28.6
5	LH Bt 02	31.0	32.9	31.1	30.4	31.4
6	CICR 23 Bt (Bt ZC)	28.6	29.2	27.9	28.0	28.4
7	Suraksha (Non-Bt ZC)	30.2	33.5	29.3	27.0	30.0
8	WGCV Bt-80	28.7	30.6	28.8	26.7	28.7

Seed Cotton Yield at 140 DAS (q/ha) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	Local Check	3.57	13.73	18.85	12.05
2	WGCV Bt-180	5.37	15.32	10.60	10.43
3	BGDHBT - 3	3.04	14.76	4.43	7.41
4	NH 1909 Bt	6.04	14.13	13.36	11.18
5	LH Bt 02	4.26	20.95	8.28	11.16
6	CICR 23 Bt (Bt ZC)	1.37	14.68	7.40	7.82
7	Suraksha (Non-Bt ZC)	4.11	14.21	12.51	10.28
8	WGCV Bt-80	6.94	17.62	14.51	13.02
	CD @ 5%	2.55	3.97	2.70	
	CV %	38.72	14.33	13.53	

Seed Cotton Yield at 165 DAS (q/ha) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	Local Check	7.88	9.15	9.05	8.69
2	WGCV Bt-180	5.62	10.21	5.47	7.10
3	BGDHBT - 3	2.95	9.84	8.19	6.99
4	NH 1909 Bt	7.70	9.42	8.15	8.42
5	LH Bt 02	5.73	13.97	6.54	8.75
6	CICR 23 Bt (Bt ZC)	4.13	9.79	12.59	8.84
7	Suraksha (Non-Bt ZC)	6.57	9.47	8.27	8.10
8	WGCV Bt-80	10.17	11.75	7.20	9.71
	CD @ 5%	3.11	2.65	2.20	
	CV %	31.45	14.30	15.58	

Total Seed Cotton Yield (q/ha) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean	Rank	% Inc over best check
1	Local Check	11.45	22.88	33.26	27.91	23.88	2	0.0
2	WGCV Bt-180	10.99	25.53	39.09	16.07	22.92	4	-4.0
3	BGDHBT - 3	5.99	24.60	29.05	12.62	18.07	8	-24.4
4	NH 1909 Bt	13.74	23.54	33.65	21.51	23.11	3	-3.2
5	LH Bt 02	9.99	34.92	28.11	14.83	21.96	5	-8.0
6	CICR 23 Bt (Bt ZC)	5.49	24.47	34.05	19.99	21.00	7	-12.1
7	Suraksha (Non-Bt ZC)	10.69	23.68	31.13	20.78	21.57	6	-9.7
8	WGCV Bt-80	17.11	29.37	32.32	21.71	25.13	1	5.2
	CD @ 5%	3.65	6.66	4.90	4.00			
	CV %	22.13	14.41	14.86	11.73			

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Advanced Variety trial in South Zone under Protected Conditions –Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.63	0.72	2.65	4.31	2.08	BETL
55152	NG	0.58	-	3.64	2.11	BETL
55153	1.40	0.49	2.23	4.31	2.11	BETL
55154	1.23	1.20	2.66	4.09	2.30	BETL
55155	1.13	0.65	2.01	4.93	2.18	BETL
55156	1.00	0.83	2.26	5.09	2.29	BETL
55157	1.10	0.60	3.10	4.98	2.45	BETL
55158	1.27	0.44	2.83	4.00	2.13	BETL
55159	0.90	0.52	2.56	4.33	2.08	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	2.00	1.13	2.11	1.47	1.68	BETL
55152	NG	1.21	-	1.51	1.36	BETL
55153	2.47	1.37	2.54	1.71	2.02	BETL
55154	2.70	1.67	2.63	1.84	2.21	BETL
55155	1.80	1.41	1.97	2.07	1.81	BETL
55156	2.30	1.94	1.76	1.93	1.98	BETL
55157	2.90	1.15	2.74	2.09	2.22	BETL
55158	2.40	1.28	3.04	2.24	2.24	BETL
55159	2.80	1.18	2.30	1.93	2.05	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions -JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55151	I	I	I	I	I	
55152	NG	I	-	I	I	
55153	I	I	I	I	I	
55154	II	I	I	I	I	
55155	I	I	I	I	I	
55156	I	I	I	II	I	
55157	I	I	I	I	I	
55158	II	I	I	I	I	
55159	I	I	I	I	I	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal, NG- Not germinate



Table: Advanced Variety trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	3.57	0.92	0.71	5.24	2.61	BETL
55152	NG	0.90	-	4.29	2.59	BETL
55153	4.03	0.50	1.29	4.93	2.69	BETL
55154	3.78	0.50	0.87	5.58	2.68	BETL
55155	4.43	1.06	1.45	6.00	3.24	BETL
55156	4.13	1.38	0.84	5.71	3.02	BETL
55157	4.27	1.18	0.87	5.29	2.90	BETL
55158	3.23	1.62	0.60	4.02	2.37	BETL
55159	4.13	1.86	1.89	6.09	3.49	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table-449- Advanced Variety trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.03	0.18	0.83	0.58	0.40	BETL
55152	NG	0.16	-	0.42	0.29	BETL
55153	0.13	0.21	0.71	0.38	0.36	BETL
55154	0.07	0.13	0.80	0.69	0.42	BETL
55155	0.00	0.15	0.66	0.31	0.28	BETL
55156	0.17	0.19	0.48	0.67	0.38	BETL
55157	0.13	0.13	0.93	0.51	0.43	BETL
55158	0.07	0.16	0.56	0.20	0.25	BETL
55159	0.03	0.17	0.45	0.40	0.26	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.07	1.08	0.24	0.18	0.39	
55152	NG	1.67	-	0.07	0.87	
55153	0.13	1.77	0.27	0.07	0.56	
55154	0.17	1.88	0.24	0.07	0.59	
55155	0.10	1.45	0.27	0.04	0.46	
55156	0.13	1.77	0.29	0.09	0.57	
55157	0.10	1.89	0.22	0.00	0.55	
55158	0.20	1.84	0.29	0.07	0.60	
55159	0.10	1.87	0.20	0.11	0.57	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions–*Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.00	0.00	0.00	0.00	0.00	BETL
55152	NG	0.00	-	0.00	0.00	BETL
55153	0.00	0.00	0.00	0.00	0.00	BETL
55154	0.00	0.00	0.00	0.00	0.00	BETL
55155	0.00	0.00	0.00	0.00	0.00	BETL
55156	0.00	0.00	0.00	0.00	0.00	BETL
55157	0.00	0.00	0.00	0.00	0.00	BETL
55158	0.00	0.00	0.00	0.00	0.00	BETL
55159	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.00	0.00	0.00	0.00	0.00	BETL
55152	NG	0.00	-	0.00	0.00	BETL
55153	0.00	0.00	0.00	0.00	0.00	BETL
55154	0.00	0.00	0.00	0.00	0.00	BETL
55155	0.00	0.00	0.00	0.00	0.00	BETL
55156	0.00	0.00	0.00	0.00	0.00	BETL
55157	0.00	0.00	0.00	0.00	0.00	BETL
55158	0.00	0.00	0.00	0.00	0.00	BETL
55159	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.00	0.00	0.00	0.00	0.00	BETL
55152	NG	0.00	-	0.00	0.00	BETL
55153	0.13	0.00	0.00	0.00	0.03	BETL
55154	0.00	0.00	0.00	0.00	0.00	BETL
55155	0.17	0.00	0.00	0.00	0.04	BETL
55156	0.03	0.00	0.00	0.00	0.01	BETL
55157	0.00	0.00	0.00	0.00	0.00	BETL
55158	0.03	0.00	0.00	0.00	0.01	BETL
55159	0.10	0.00	0.00	0.00	0.03	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions- Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.67	1.11	0.67	2.22	1.17	AETL
55152	NG	1.22	-	1.56	1.39	AETL
55153	1.00	1.11	0.56	2.44	1.28	AETL
55154	0.83	1.22	0.33	1.56	0.99	BETL
55155	1.00	0.88	0.56	1.78	1.05	AETL
55156	0.83	1.22	0.11	1.67	0.96	BETL
55157	0.50	1.00	0.78	1.44	0.93	BETL
55158	1.17	1.00	0.67	1.67	1.12	AETL
55159	0.67	0.96	0.89	1.78	1.07	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55151	0.00	0.22	0.00	0.00	0.06	BETL
55152	NG	0.05	-	0.00	0.03	BETL
55153	0.00	0.47	0.00	0.00	0.12	BETL
55154	0.00	0.00	0.00	0.00	0.00	BETL
55155	0.00	0.17	1.23	0.00	0.35	BETL
55156	0.00	0.00	0.00	0.00	0.00	BETL
55157	0.00	0.04	0.00	0.00	0.01	BETL
55158	0.00	0.04	0.00	0.00	0.01	BETL
55159	0.00	0.03	0.00	0.00	0.01	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55151	6.67	3.07	20.00	13.33	10.77	AETL
55152	NG	1.72	-	7.78	4.75	BETL
55153	8.33	5.02	3.33	12.22	7.23	BETL
55154	6.67	1.66	16.67	8.89	8.47	BETL
55155	8.33	2.14	15.00	8.89	8.59	BETL
55156	6.67	2.18	15.00	12.22	9.02	BETL
55157	3.33	2.13	26.67	11.11	10.81	AETL
55158	10.00	2.39	23.33	12.22	11.99	AETL
55159	6.67	2.54	21.67	5.56	9.11	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55151	9.36	4.36	10.23	16.67	10.15	
55152	NG	3.96	-	23.33	13.65	
55153	8.14	4.38	4.85	11.67	7.26	
55154	8.47	3.25	9.03	15.00	8.94	
55155	7.35	4.35	9.46	18.33	9.87	
55156	6.22	3.92	9.56	25.00	11.18	
55157	4.93	3.86	7.75	13.33	7.47	
55158	9.00	3.05	8.78	21.67	10.62	
55159	7.18	3.67	4.82	26.67	10.58	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55151	4.21	2.74	2.62	7.58	4.29	
55152	NG	2.34	-	6.31	4.32	
55153	3.27	1.67	1.21	6.36	3.13	
55154	2.95	1.63	2.68	5.63	3.22	
55155	2.76	2.73	2.49	7.37	3.84	
55156	2.18	2.30	2.39	8.34	3.80	
55157	1.48	2.24	1.94	5.95	2.90	
55158	3.75	1.56	2.39	4.56	3.06	
55159	2.92	2.05	1.21	8.70	3.72	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – No. of Sprays for Insect-Pests

Name of Entry	Number of sprays for Insect-pests					Remark
	GU	RA	CBE	WR	Mean	
55151	5.00	4.00	4.00	5.00	4.50	
55152	NG	4.00	-	5.00	4.50	
55153	5.00	4.00	4.00	5.00	4.50	
55154	5.00	4.00	4.00	5.00	4.50	
55155	5.00	4.00	4.00	5.00	4.50	
55156	5.00	4.00	4.00	5.00	4.50	
55157	5.00	4.00	4.00	5.00	4.50	
55158	5.00	4.00	4.00	5.00	4.50	
55159	5.00	4.00	4.00	5.00	4.50	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 8 (a) Advanced Evaluation Trial of Hirsutum Varieties - Irrigated (AET-I Variety IRR) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions																			
			RARS, Warangal										CICR RS, Coimbatore									
			ALS		CoLS		GM		Rust		TSV		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
5	55151	Local Check	4.2	R	5.5	R	10.5	R	26.2	MR	0.2	R	6.0	R	0	DF	1.2	R	2.2	R	5.8	R
1	55152	RAHBT - 2	1.5	R	1.8	R	6.3	R	15.7	R	0.4	R	0.0	DF	0	DF	0.0	DF	0.0	DF	0.0	DF
8	55153	WGCV Bt-180	3.7	R	5.7	R	12.8	R	27.7	MR	1.3	R	4.7	R	0	DF	1.3	R	1.2	R	5.3	R
3	55154	BGDHBT - 3	4.3	R	5.8	R	12.7	R	28.5	MR	3.8	R	4.2	R	0	DF	1.2	R	2.0	R	4.0	R
9	55155	NH 1909 Bt	3.3	R	4.5	R	11.7	R	27.5	MR	3.1	R	4.2	R	0	DF	2.3	R	2.2	R	6.2	R
6	55156	LH Bt 02	2.8	R	4.0	R	12.7	R	26.7	MR	2.1	R	5.3	R	0	DF	0.0	DF	2.9	R	6.8	R
2	55157	CICR 23 Bt (Bt Zonal Check)	3.2	R	3.8	R	13.0	R	26.7	MR	0.4	R	5.2	R	0	DF	2.6	R	2.7	R	6.2	R
7	55158	Suraksha (Non-Bt ZC)	2.3	R	3.3	R	13.0	R	27.5	MR	2.1	R	4.8	R	0	DF	0.0	DF	2.9	R	5.0	R
4	55159	WGCV Bt-80	2.2	R	2.0	R	6.0	R	14.3	R	0.6	R	5.7	R	0	DF	0.0	DF	2.1	R	5.5	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pest

Table: Advanced Variety trial in South Zone under Unprotected Conditions –Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	5.10	2.26	6.57	8.33	5.57	BETL
55152	NG	2.13	-	8.13	5.13	BETL
55153	6.70	1.99	7.53	7.93	6.04	BETL
55154	5.27	2.74	8.44	7.53	6.00	BETL
55155	4.30	2.19	6.19	6.53	4.80	BETL
55156	5.57	2.37	6.93	7.40	5.57	BETL
55157	7.13	2.15	5.09	8.07	5.61	BETL
55158	5.37	2.31	10.22	7.73	6.41	BETL
55159	6.08	2.33	9.92	7.87	6.55	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Advanced Variety trial in South Zone under Unprotected Conditions –
Leafhopper**

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	9.90	2.31	5.03	3.73	5.24	BETL
55152	NG	2.94	-	4.13	3.54	BETL
55153	9.37	2.89	6.40	3.93	5.65	BETL
55154	10.07	2.84	4.07	3.07	5.01	BETL
55155	7.67	3.09	4.23	3.93	4.73	BETL
55156	9.17	3.12	4.70	4.40	5.35	BETL
55157	8.87	2.32	3.70	4.20	4.77	BETL
55158	10.10	2.87	2.67	4.40	5.01	BETL
55159	8.93	2.89	4.77	3.67	5.07	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions - JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55151	III	I	I	III	II	
55152	NG	I	-	II	I	
55153	III	I	I	II	II	
55154	IV	I	I	II	II	
55155	I	I	I	II	I	
55156	III	II	I	II	II	
55157	II	I	I	II	II	
55158	IV	II	I	II	II	
55159	II	II	I	II	II	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	7.57	3.10	3.30	16.07	7.51	BETL
55152	NG	2.93	-	10.87	6.90	BETL
55153	8.23	2.68	3.69	12.87	6.87	BETL
55154	7.30	2.41	3.51	13.40	6.65	BETL
55155	6.67	3.15	2.83	16.13	7.19	BETL
55156	7.20	3.11	2.74	14.93	7.00	BETL
55157	8.37	3.36	2.69	13.93	7.09	BETL
55158	9.53	3.19	3.48	17.60	8.45	BETL
55159	8.63	3.25	1.56	17.93	7.84	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	1.17	0.73	1.59	0.60	1.02	BETL
55152	NG	0.75	-	0.53	0.64	BETL
55153	0.57	0.77	2.14	0.93	1.10	BETL
55154	1.43	0.67	1.24	0.67	1.00	BETL
55155	0.43	0.70	1.02	0.53	0.67	BETL
55156	1.27	0.75	1.61	0.47	1.02	BETL
55157	0.97	0.74	1.10	0.60	0.85	BETL
55158	1.90	0.72	1.28	0.53	1.11	BETL
55159	1.00	0.72	1.27	0.67	0.91	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.13	1.40	0.20	0.22	0.49	
55152	NG	1.63	-	0.07	0.85	
55153	0.27	1.73	0.20	0.07	0.57	
55154	0.20	1.84	0.00	0.04	0.52	
55155	0.13	1.40	0.00	0.22	0.44	
55156	0.20	1.73	0.00	0.16	0.52	
55157	0.13	1.85	0.00	0.17	0.54	
55158	0.23	1.83	0.00	0.00	0.52	
55159	0.17	1.87	0.00	0.02	0.52	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.00	0.00	0.00	0.00	0.00	BETL
55152	NG	0.22	-	0.00	0.11	BETL
55153	0.00	0.11	0.00	0.00	0.03	BETL
55154	0.00	0.11	0.00	0.00	0.03	BETL
55155	0.00	0.11	0.00	0.00	0.03	BETL
55156	0.00	0.00	0.00	0.00	0.00	BETL
55157	0.00	0.11	0.00	0.00	0.03	BETL
55158	0.00	0.08	0.00	0.00	0.02	BETL
55159	0.00	0.08	0.00	0.00	0.02	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions - Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.00	0.00	0.00	0.00	0.00	BETL
55152	NG	0.00	-	0.00	0.00	BETL
55153	0.00	0.00	0.00	0.00	0.00	BETL
55154	0.00	0.00	0.00	0.00	0.00	BETL
55155	0.00	0.00	0.00	0.00	0.00	BETL
55156	0.00	0.00	0.00	0.00	0.00	BETL
55157	0.00	0.00	0.00	0.00	0.00	BETL
55158	0.00	0.00	0.00	0.00	0.00	BETL
55159	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55151	0.63	0.12	0.00	0.00	0.19	BETL
55152	NG	0.01	-	0.00	0.01	BETL
55153	0.47	0.12	0.00	0.00	0.15	BETL
55154	0.70	0.12	0.00	0.00	0.21	BETL
55155	0.53	0.12	0.00	0.00	0.16	BETL
55156	0.73	0.24	0.00	0.00	0.24	BETL
55157	0.90	0.35	0.00	0.00	0.31	BETL
55158	0.30	0.32	0.00	0.00	0.15	BETL
55159	0.40	0.36	0.00	0.00	0.19	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls Destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55151	4.33	2.17	1.67	5.67	3.46	AETL
55152	NG	2.23	-	5.33	3.78	AETL
55153	3.33	2.31	0.67	7.00	3.33	AETL
55154	2.50	2.34	0.33	6.33	2.88	AETL
55155	4.00	2.22	0.67	7.67	3.64	AETL
55156	2.50	2.36	1.33	6.67	3.22	AETL
55157	2.83	2.12	1.00	6.00	2.99	AETL
55158	4.33	2.25	0.67	5.67	3.23	AETL
55159	3.83	2.25	1.00	8.67	3.94	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55151	0.00	0.67	0.00	0.00	0.17	BETL
55152	NG	0.48	-	0.00	0.24	BETL
55153	0.00	1.01	0.00	0.00	0.25	BETL
55154	0.00	0.21	0.00	0.00	0.05	BETL
55155	0.00	0.68	0.00	0.00	0.17	BETL
55156	0.00	0.26	0.00	0.00	0.06	BETL
55157	0.00	0.64	0.00	0.00	0.16	BETL
55158	0.00	0.44	0.00	0.00	0.11	BETL
55159	0.00	0.41	0.00	0.00	0.10	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55151	35.00	4.41	30.00	43.33	28.19	AETL
55152	NG	3.00	-	36.67	19.83	AETL
55153	26.67	6.37	5.00	40.00	19.51	AETL
55154	20.00	2.93	10.00	40.33	18.32	AETL
55155	33.33	3.42	10.00	46.67	23.35	AETL
55156	20.00	3.46	15.00	30.00	17.11	AETL
55157	25.00	3.41	25.00	40.00	23.35	AETL
55158	33.33	3.14	20.00	30.00	21.62	AETL
55159	35.00	2.96	20.00	46.67	26.16	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions –Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55151	55.61	9.49	15.59	30.00	27.67	
55152	NG	8.80	-	40.00	24.40	
55153	40.65	11.32	22.37	30.00	26.08	
55154	38.72	6.28	21.27	55.00	30.32	
55155	41.36	8.26	17.79	40.00	26.85	
55156	30.74	6.95	20.89	30.00	22.15	
55157	35.21	8.43	17.97	35.00	24.15	
55158	46.71	7.09	16.37	40.00	27.54	
55159	49.36	6.73	9.94	45.00	27.76	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55151	30.25	7.32	9.64	13.07	15.07	
55152	NG	6.63	-	19.60	13.11	
55153	26.21	9.15	11.24	13.79	15.10	
55154	20.77	4.11	8.87	14.22	11.99	
55155	23.78	6.09	9.06	13.88	13.20	
55156	18.64	4.78	10.45	15.27	12.28	
55157	21.57	6.26	10.78	13.73	13.08	
55158	28.63	4.92	7.55	10.00	12.77	
55159	30.27	4.56	3.42	16.00	13.56	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table 8(b) Advanced Evaluation Trial of Hirsutum Varieties - Irrigated (AET-I Variety IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions																			
			RARS, Warangal										CICR RS, Coimbatore									
			ALS		CoLS		GM		Rust		TSV		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
5	55151	Local Check	6.5	R	6.0	R	15.0	R	50.0	MR	6.3	R	4.5	R	0.0	DF	2.0	R	0.0	DF	4.0	R
1	55152	RAHBT - 2	5.5	R	6.5	R	13.5	R	19.0	R	5.0	R	0.0	DF	0.0	DF	4.5	R	0.0	DF	0.0	DF
8	55153	WGCV Bt-180	8.5	R	12.5	R	14.5	R	32.5	MR	5.0	R	5.0	R	0.0	DF	3.0	R	3.7	R	5.0	R
3	55154	BGDHBT - 3	6.0	R	6.0	R	15.5	R	41.0	MR	17.5	R	3.5	R	0.0	DF	2.0	R	2.2	R	4.5	R
9	55155	NH 1909 Bt	4.0	R	6.0	R	15.5	R	38.5	MR	10.0	R	4.0	R	0.0	DF	4.0	R	3.2	R	4.5	R
6	55156	LH Bt 02	7.0	R	7.0	R	15.0	R	41.5	MR	8.8	R	3.5	R	0.0	DF	1.5	R	0.0	DF	4.0	R
2	55157	CICR 23 Bt (Bt Zonal Check)	7.0	R	7.0	R	15.5	R	27.5	MR	7.5	R	5.0	R	0.0	DF	0.0	DF	3.3	R	5.0	R
7	55158	Suraksha (Non-Bt ZC)	7.0	R	6.5	R	14.0	R	44.0	MR	7.5	R	6.5	R	0.0	DF	3.5	R	2.8	R	5.5	R
4	55159	WGCV Bt-80	6.0	R	8.5	R	15.5	R	23.0	R	7.5	R	4.0	R	0.0	DF	5.0	R	3.5	R	4.0	R

Table 8(c) Advanced Evaluation Trial of Hirsutum Varieties - Irrigated (AET-I Variety IRR) under Protected and Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions: Lam, Guntur						Average PDI & Disease Reaction (DR): Un Protected conditions: Lam, Guntur					
			CoLS		GM		Rust							
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
5	55151	Local Check	26.0	MR	14.5	R	15.0	R	27.5	MR	16.0	R	18.3	R
1	55152	RAHBT - 2	29.3	MR	27.8	MR	27.3	MR	31.5	MR	30.0	MR	29.3	MR
8	55153	WGCV Bt-180	20.0	R	21.3	R	29.8	MR	21.5	R	22.0	R	30.5	MR
3	55154	BGDHBT - 3	14.5	R	13.8	R	9.5	R	17.3	R	16.3	R	11.3	R
9	55155	NH 1909 Bt	27.5	MR	28.3	MR	28.2	MR	42.0	MR	31.2	MR	29.0	MR
6	55156	LH Bt 02	26.0	MR	16.0	R	28.3	MR	28.3	MR	18.0	R	30.8	MR
2	55157	CICR 23 Bt (Bt Zonal Check)	31.3	MR	25.8	MR	30.8	MR	33.8	MR	26.8	MR	33.5	MR
7	55158	Suraksha (Non-Bt ZC)	25.8	MR	26.2	MR	30.0	MR	26.0	MR	30.5	MR	31.0	MR
4	55159	WGCV Bt-80	27.0	MR	29.1	MR	29.0	MR	29.3	MR	31.2	MR	30.8	MR

Advanced Evaluation Trial of Hirsutum Varieties (II) - Irrigated

Constitution of Trial

The trial was constituted with four Bt cotton varieties containing deregulated events along with three different check varieties as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	5	55161	Local Check	
2	1	55162	Lam Bt 2208 BG II	RARS, Lam
3	7	55163	Suraksha (Non-Bt ZC)	
4	3	55164	CICR 23 Bt (Bt ZC)	
5	6	55165	WGCV Bt 28	RARS, Warangal
6	4	55166	ARCV 99 BGII	Ankur Seeds Pvt Ltd
7	2	55167	ARCV 111 BGII	Ankur Seeds Pvt Ltd

The trial was conducted in five different locations and detail is furnished below.

Location	Warangal	Lam	Raichur	B'Gudi*	Coimbatore
Local Check	Sivanandi	NDLH 2051-1	Sujay	Sujay	Sunantha

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Trial is conducted with recommended spacing for the variety.

Number of rows: 4 rows of 6 meters per entry with three replications

Data recorded:

Biometric evaluation

Plant height (cm) at harvest in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	119.4	144.3	127.7	100.3	122.9
2	Lam Bt 2208 BG II	103.5	167.7	126.3	92.1	122.4
3	Suraksha (Non-Bt ZC)	105.3	165.5	126.0	98.7	123.9
4	CICR 23 Bt (Bt ZC)	106.7	158.0	130.0	109.7	126.1
5	WGCV Bt 28	108.4	153.4	128.7	104.1	123.7
6	ARCV 99 BGII	106.2	168.8	121.3	99.4	123.9
7	ARCV 111 BGII	97.9	151.3	120.0	94.2	115.9
	CD @ 5%	NS	NS	9.4	NS	
	CV %	9.1	10.6	7.3	6.9	

Number of monopodia in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	1.7	1.1	1.7	0.5	1.3
2	Lam Bt 2208 BG II	1.0	0.6	1.1	0.6	0.8
3	Suraksha (Non-Bt ZC)	0.5	1.8	0.7	0.2	0.8
4	CICR 23 Bt (Bt ZC)	1.7	1.3	0.5	0.7	1.1
5	WGCV Bt 28	2.6	1.6	1.3	1.0	1.6
6	ARCV 99 BGII	1.3	0.7	1.1	0.2	0.8
7	ARCV 111 BGII	0.3	1.2	0.4	0.0	0.5
	CD @ 5%	NS	0.2	0.3	NS	
	CV %	70.0	10.0	19.6	119.4	

Number of sympodia in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	16.5	17.5	13.3	14.2	15.4
2	Lam Bt 2208 BG II	15.5	26.5	13.7	12.9	17.2
3	Suraksha (Non-Bt ZC)	13.9	14.7	14.0	15.1	14.4
4	CICR 23 Bt (Bt ZC)	14.0	13.0	13.0	15.2	13.8
5	WGCV Bt 28	14.7	25.2	14.3	14.8	17.3
6	ARCV 99 BGII	14.6	26.5	13.7	14.1	17.2
7	ARCV 111 BGII	13.1	23.6	15.0	13.6	16.3
	CD @ 5%	NS	4.0	1.2	NS	
	CV %	11.5	10.5	8.4	11.3	

Boll weight (g) in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	4.3	4.7	5.4	5.3	4.9
2	Lam Bt 2208 BG II	4.2	6.1	5.8	5.7	5.5
3	Suraksha (Non-Bt ZC)	5.2	5.1	6.7	6.3	5.8
4	CICR 23 Bt (Bt ZC)	3.0	4.7	4.4	4.1	4.1
5	WGCV Bt 28	4.2	5.1	5.4	5.3	5.0
6	ARCV 99 BGII	4.4	6.1	5.6	5.8	5.5
7	ARCV 111 BGII	4.8	4.6	5.8	5.1	5.1
	CD @ 5%	0.4	1.0	0.4	0.5	
	CV %	5.2	10.9	6.8	4.8	

Number of bolls / plant in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	26.1	27.4	16.7	23.3	23.4
2	Lam Bt 2208 BG II	21.4	60.1	18.0	17.1	29.2
3	Suraksha (Non-Bt ZC)	15.3	25.9	18.3	19.5	19.8
4	CICR 23 Bt (Bt ZC)	21.3	23.9	17.0	24.3	21.6
5	WGCV Bt 28	26.9	54.1	17.3	20.8	29.8
6	ARCV 99 BGII	17.9	60.5	15.0	17.8	27.8
7	ARCV 111 BGII	24.7	31.9	21.0	21.0	24.7
	CD @ 5%	6.7	9.8	1.7	2.9	
	CV %	17.1	13.4	9.4	7.8	

Number of bolls / sq.m.in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Lam	Coimbatore	Mean
1	Local Check	53.4	57.6	55.5
2	Lam Bt 2208 BG II	132.2	42.3	87.3
3	Suraksha (Non-Bt ZC)	49.8	48.2	49.0
4	CICR 23 Bt (Bt ZC)	47.1	59.9	53.5
5	WGCV Bt 28	119.0	51.4	85.2
6	ARCV 99 BGII	133.0	44.0	88.5
7	ARCV 111 BGII	60.9	51.9	56.4
	CD @ 5%	18.7	7.0	
	CV %	12.2	7.8	

Lint Index (g) in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	5.2	5.2	5.6	6.3	5.6
2	Lam Bt 2208 BG II	5.3	7.5	5.9	7.1	6.5
3	Suraksha (Non-Bt ZC)	5.4	5.5	6.4	7.0	6.1
4	CICR 23 Bt (Bt ZC)	3.5	4.4	4.3	4.5	4.2
5	WGCV Bt 28	5.6	6.1	5.8	7.0	6.1
6	ARCV 99 BGII	5.5	7.6	5.4	7.0	6.4
7	ARCV 111 BGII	5.9	4.9	5.8	6.5	5.8
	CD @ 5%	0.8	1.2	0.3	0.5	
	CV %	9.1	11.3	5.6	4.1	

Seed Index (g) in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	10.1	11.5	10.1	11.7	10.9
2	Lam Bt 2208 BG II	9.9	12.5	10.7	12.5	11.4
3	Suraksha (Non-Bt ZC)	12.1	11.9	12.3	13.3	12.4
4	CICR 23 Bt (Bt ZC)	7.7	8.1	8.9	9.8	8.6
5	WGCV Bt 28	10.7	12.3	11.7	13.3	12.0
6	ARCV 99 BGII	10.1	12.8	10.3	12.1	11.3
7	ARCV 111 BGII	11.0	10.6	10.7	11.2	10.9
	CD @ 5%	1.7	1.9	0.5	0.9	
	CV %	9.0	9.4	4.4	4.1	

Ginning outturn (%) in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	34.1	31.2	35.6	34.9	34.0
2	Lam Bt 2208 BG II	35.0	37.3	35.6	36.3	36.1
3	Suraksha (Non-Bt ZC)	31.0	31.4	34.3	34.3	32.8
4	CICR 23 Bt (Bt ZC)	31.1	35.2	32.6	31.6	32.6
5	WGCV Bt 28	34.4	33.2	33.2	34.4	33.8
6	ARCV 99 BGII	35.3	37.4	34.3	36.7	35.9
7	ARCV 111 BGII	34.7	31.4	35.2	36.8	34.5
	CD @ 5%	1.8	4.8	1.0	1.0	
	CV %	2.9	7.8	2.9	1.7	

Upper Half Mean Length (mm) under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	27.8	30.3	28.8	30.8	29.4
2	Lam Bt 2208 BG II	28.1	29.5	30.1	29.0	29.2
3	Suraksha (Non-Bt ZC)	28.9	32.0	30.7	31.5	30.8
4	CICR 23 Bt (Bt ZC)	26.5	28.6	28.2	28.2	27.9
5	WGCV Bt 28	27.1	28.9	29.7	28.6	28.6
6	ARCV 99 BGII	27.6	29.4	30.3	29.5	29.2
7	ARCV 111 BGII	25.2	25.9	26.7	25.4	25.8

Uniformity index under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	81.0	85.0	85.0	86.7	84.4
2	Lam Bt 2208 BG II	83.0	84.0	84.0	83.6	83.7
3	Suraksha (Non-Bt ZC)	82.0	84.0	85.0	83.4	83.6
4	CICR 23 Bt (Bt ZC)	82.0	83.0	83.0	83.7	82.9
5	WGCV Bt 28	84.0	85.0	87.0	86.1	85.5
6	ARCV 99 BGII	83.0	84.0	85.0	83.5	83.9
7	ARCV 111 BGII	82.0	83.0	82.0	82.3	82.3

Micronaire under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	4.3	4.7	4.6	4.5	4.5
2	Lam Bt 2208 BG II	4.7	4.7	5.0	4.8	4.8
3	Suraksha (Non-Bt ZC)	4.2	4.3	4.1	3.9	4.1
4	CICR 23 Bt (Bt ZC)	4.2	4.6	4.4	4.4	4.4
5	WGCV Bt 28	4.6	4.9	4.7	4.8	4.8
6	ARCV 99 BGII	4.5	5.1	4.3	5.1	4.8
7	ARCV 111 BGII	4.9	5.0	5.3	5.1	5.1

Tenacity under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	Local Check	29.5	32.4	28.3	29.3	29.9
2	Lam Bt 2208 BG II	30.8	33.1	30.7	30.0	31.2
3	Suraksha (Non-Bt ZC)	30.2	31.8	30.6	32.7	31.3
4	CICR 23 Bt (Bt ZC)	28.6	30.8	29.2	27.3	29.0
5	WGCV Bt 28	28.6	32.1	32.2	28.9	30.5
6	ARCV 99 BGII	29.8	32.0	32.8	29.4	31.0
7	ARCV 111 BGII	25.6	27.2	30.1	25.5	27.1

Seed Cotton Yield at 140 DAS (q/ha) in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	Local Check	6.70	12.07	18.43	12.40
2	Lam Bt 2208 BG II	5.95	21.97	12.83	13.58
3	Suraksha (Non-Bt ZC)	5.87	17.29	13.01	12.06
4	CICR 23 Bt (Bt ZC)	2.43	13.48	6.88	7.60
5	WGCV Bt 28	9.23	19.60	9.66	12.83
6	ARCV 99 BGII	6.86	21.85	15.76	14.82
7	ARCV 111 BGII	8.15	17.97	17.35	14.49
	CD @ 5%	1.88	4.49	1.90	
	CV %	16.16	14.05	8.03	

Seed Cotton Yield at 165 DAS (q/ha) in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	Local Check	6.39	7.26	11.19	8.28
2	Lam Bt 2208 BG II	7.46	12.89	8.89	9.75
3	Suraksha (Non-Bt ZC)	4.13	11.40	11.11	8.88
4	CICR 23 Bt (Bt ZC)	4.98	7.20	14.53	8.90
5	WGCV Bt 28	7.45	10.58	14.77	10.93
6	ARCV 99 BGII	7.41	13.06	7.90	9.46
7	ARCV 111 BGII	4.26	11.68	5.35	7.10
	CD @ 5%	1.50	2.78	2.30	
	CV %	13.90	14.62	10.96	

Total Seed Cotton Yield (q/ha) in Advanced Evaluation Trial of Hirsutum Varieties (II)

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean	Rank	% Inc over best check
1	Local Check	13.09	19.33	28.43	29.62	22.62	6	-9.2
2	Lam Bt 2208 BG II	13.41	34.86	34.81	21.72	26.20	1	5.2
3	Suraksha (Non-Bt ZC)	10.00	28.69	36.78	24.12	24.90	5	0.0
4	CICR 23 Bt (Bt ZC)	7.41	20.68	29.62	21.41	19.78	7	-20.6
5	WGCV Bt 28	16.68	30.18	32.49	24.44	25.95	3	4.2
6	ARCV 99 BGII	14.26	34.91	26.97	23.67	24.95	4	0.2
7	ARCV 111 BGII	12.41	29.64	39.23	22.70	26.00	2	4.4
	CD @ 5%	2.07	6.19	2.66	2.70			
	CV %	9.24	12.15	7.94	6.29			

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Advanced Variety trial in South Zone under Protected Conditions –Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	1.00	0.50	1.93	4.67	2.03	BETL
55162	1.27	1.27	2.93	4.98	2.61	BETL
55163	1.13	1.02	2.14	5.02	2.33	BETL
55164	1.07	0.42	2.66	3.84	2.00	BETL
55165	1.10	0.48	1.75	4.20	1.88	BETL
55166	0.97	0.72	2.28	3.93	1.98	BETL
55167	1.30	0.46	2.20	5.00	2.24	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	2.43	0.71	3.03	2.02	2.05	BETL
55162	1.90	1.34	4.42	1.80	2.37	BETL
55163	2.33	1.49	3.17	1.60	2.15	BETL
55164	2.60	1.44	2.90	1.56	2.12	BETL
55165	2.00	1.91	2.89	1.93	2.18	BETL
55166	2.73	2.08	2.92	1.84	2.39	BETL
55167	2.37	0.59	1.75	1.76	1.62	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions -JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55161	I	I	I	II	I	
55162	I	I	I	II	I	
55163	I	I	I	I	I	
55164	I	I	I	I	I	
55165	I	I	I	II	I	
55166	II	I	I	I	I	
55167	I	I	I	I	I	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	4.63	2.08	1.01	5.56	3.32	BETL
55162	4.20	0.73	1.14	6.18	3.06	BETL
55163	4.30	0.50	0.88	6.07	2.94	BETL
55164	5.23	1.07	1.54	5.69	3.38	BETL
55165	3.43	0.93	1.76	5.93	3.01	BETL
55166	4.27	0.97	0.35	5.02	2.65	BETL
55167	4.93	1.38	2.82	4.86	3.50	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.10	0.42	1.43	0.49	0.61	BETL
55162	0.00	0.09	0.90	0.29	0.32	BETL
55163	0.03	0.06	0.95	0.53	0.39	BETL
55164	0.13	0.40	0.69	0.47	0.42	BETL
55165	0.00	0.11	0.92	0.36	0.35	BETL
55166	0.03	0.00	0.46	0.22	0.18	BETL
55167	0.10	0.15	0.72	0.27	0.31	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.23	0.94	0.11	0.07	0.34	
55162	0.17	0.86	0.20	0.09	0.33	
55163	0.07	0.71	0.20	0.11	0.27	
55164	0.10	1.03	0.09	0.07	0.32	
55165	0.10	0.87	0.16	0.16	0.32	
55166	0.10	0.81	0.16	0.04	0.28	
55167	0.07	1.10	0.32	0.16	0.41	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.00	0.00	0.00	0.00	0.00	BETL
55162	0.00	0.00	0.00	0.00	0.00	BETL
55163	0.00	0.00	0.00	0.00	0.00	BETL
55164	0.00	0.00	0.00	0.00	0.00	BETL
55165	0.00	0.00	0.00	0.00	0.00	BETL
55166	0.00	0.00	0.00	0.00	0.00	BETL
55167	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.00	0.00	0.00	0.00	0.00	BETL
55162	0.00	0.00	0.00	0.00	0.00	BETL
55163	0.00	0.00	0.00	0.00	0.00	BETL
55164	0.00	0.00	0.00	0.00	0.00	BETL
55165	0.00	0.00	0.00	0.00	0.00	BETL
55166	0.00	0.00	0.00	0.00	0.00	BETL
55167	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions –

Spodoptera litura

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.07	0.00	0.00	0.00	0.02	BETL
55162	0.00	0.00	0.00	0.00	0.00	BETL
55163	0.10	0.00	0.00	0.00	0.03	BETL
55164	0.03	0.00	0.00	0.00	0.01	BETL
55165	0.13	0.00	0.00	0.00	0.03	BETL
55166	0.00	0.00	0.00	0.00	0.00	BETL
55167	0.17	0.00	0.00	0.00	0.04	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions- Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls Destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.67	0.89	0.22	2.00	0.94	BETL
55162	0.83	0.17	0.33	2.22	0.89	BETL
55163	1.17	0.91	0.33	2.33	1.19	AETL
55164	1.00	0.69	0.78	1.33	0.95	BETL
55165	0.50	0.17	0.78	1.22	0.67	BETL
55166	0.83	0.17	0.33	1.78	0.78	BETL
55167	1.17	0.17	0.44	1.33	0.78	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55161	0.00	0.00	0.00	0.00	0.00	BETL
55162	0.00	0.00	0.00	0.00	0.00	BETL
55163	0.00	0.00	0.00	0.00	0.00	BETL
55164	0.00	0.00	0.00	0.00	0.00	BETL
55165	0.00	0.00	0.00	0.00	0.00	BETL
55166	0.00	0.00	0.00	0.00	0.00	BETL
55167	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%)/ 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55161	3.33	2.16	5.00	12.22	5.68	BETL
55162	6.67	2.12	8.33	12.22	7.34	BETL
55163	6.67	1.40	13.33	9.56	7.74	BETL
55164	8.33	1.68	11.67	8.89	7.64	BETL
55165	5.00	2.06	6.67	7.78	5.38	BETL
55166	6.67	2.59	13.33	10.00	8.15	BETL
55167	6.67	2.66	10.00	8.89	7.05	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions –Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55161	5.12	3.42	6.82	33.33	12.17	
55162	8.36	3.38	2.35	21.67	8.94	
55163	7.51	2.66	9.19	18.33	9.42	
55164	9.14	2.94	3.49	25.00	10.14	
55165	5.55	3.32	4.61	35.00	12.12	
55166	7.87	3.85	8.00	21.67	10.35	
55167	8.32	3.92	7.55	20.00	9.95	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55161	2.11	1.88	2.13	10.52	4.16	
55162	3.26	1.84	0.59	6.62	3.08	
55163	2.17	1.12	2.99	12.83	4.78	
55164	4.10	1.71	0.99	6.51	3.33	
55165	2.39	2.09	1.38	8.53	3.60	
55166	2.14	2.62	2.79	5.63	3.29	
55167	3.36	2.69	1.89	7.09	3.76	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Protected Conditions – No. of Sprays for Insect-Pests

Name of Entry	Number of sprays for Insect-pests					Remark
	GU	RA	CBE	WR	Mean	
55161	5.00	4.00	4.00	5.00	4.50	
55162	5.00	4.00	4.00	5.00	4.50	
55163	5.00	4.00	4.00	5.00	4.50	
55164	5.00	4.00	4.00	5.00	4.50	
55165	5.00	4.00	4.00	5.00	4.50	
55166	5.00	4.00	4.00	5.00	4.50	
55167	5.00	4.00	4.00	5.00	4.50	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table-9(a) Advanced Evaluation Trial of Hirsutum Varieties - Irrigated (AET-II Variety IRR) under protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions																			
			RARS, Warangal										CICR RS, Coimbatore									
			ALS		CoLS		GM		Rust		TSV		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
5	55161	Local Check	3.7	R	6.8	R	11.5	R	27.2	MR	2.4	R	3.2	R	0.0	DF	1.5	R	2.2	R	5.7	R
1	55162	Lam Bt 2208 BG II	3.5	R	5.0	R	13.0	R	27.2	MR	3.2	R	4.3	R	0.0	DF	0.0	DF	2.4	R	6.2	R
7	55163	Suraksha (Non-Bt ZC)	3.0	R	3.8	R	13.7	R	27.2	MR	3.6	R	6.2	R	0.0	DF	1.3	R	0.9	R	6.2	R
3	55164	CICR 23 Bt (Bt Zonal Check)	3.0	R	4.7	R	11.3	R	27.2	MR	3.6	R	4.3	R	0.0	DF	1.8	R	1.1	R	7.0	R
6	55165	WGCV Bt 28	4.2	R	6.8	R	12.0	R	28.2	MR	3.5	R	5.5	R	0.0	DF	0.7	R	0.8	R	7.0	R
4	55166	ARCV 99 BGII	3.8	R	5.2	R	12.8	R	28.5	MR	1.7	R	5.8	R	0.0	DF	1.2	R	1.8	R	6.7	R
2	55167	ARCV 111 BGII	1.2	R	1.8	R	11.7	R	28.5	MR	0.4	R	4.8	R	0.0	DF	0.8	R	2.1	R	5.8	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pest

Table: Advanced Variety trial in South Zone under Unprotected Conditions –Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	5.23	1.74	6.58	7.47	5.25	BETL
55162	4.50	4.13	6.87	9.47	6.24	BETL
55163	5.60	2.88	9.99	7.67	6.53	BETL
55164	6.20	1.79	10.87	8.47	6.83	BETL
55165	4.13	2.11	8.94	7.53	5.68	BETL
55166	6.40	3.78	9.68	8.33	7.05	BETL
55167	5.17	2.27	6.27	7.93	5.41	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

**Table: Advanced Variety trial in South Zone under Unprotected Conditions –
Leafhopper**

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	8.10	1.53	3.87	4.87	4.59	BETL
55162	7.33	2.03	3.50	4.20	4.27	BETL
55163	8.58	1.98	3.87	2.60	4.26	BETL
55164	9.11	2.77	3.70	5.27	5.21	BETL
55165	7.83	2.33	4.13	3.80	4.52	BETL
55166	9.05	2.71	8.27	4.27	6.07	AETL
55167	8.67	1.19	3.07	4.67	4.40	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions - JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55161	II	I	I	II	II	
55162	III	II	I	II	II	
55163	III	II	I	III	II	
55164	II	II	I	III	II	
55165	III	II	I	III	II	
55166	IV	II	I	II	II	
55167	III	I	I	II	II	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	7.90	4.80	2.90	14.20	7.45	BETL
55162	8.10	2.74	3.06	14.40	7.07	BETL
55163	6.63	3.21	2.93	12.60	6.34	BETL
55164	8.07	3.52	3.03	12.07	6.67	BETL
55165	7.83	4.32	2.03	13.73	6.98	BETL
55166	6.70	1.73	2.10	10.53	5.27	BETL
55167	8.30	4.17	2.23	13.87	7.14	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.83	1.00	1.89	0.53	1.06	BETL
55162	1.03	0.34	1.74	0.80	0.98	BETL
55163	0.40	0.61	1.88	0.67	0.89	BETL
55164	1.30	0.45	1.59	0.53	0.97	BETL
55165	0.23	0.51	1.86	1.00	0.90	BETL
55166	1.20	0.59	1.66	0.67	1.03	BETL
55167	1.63	0.88	1.13	1.07	1.18	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.43	1.07	0.13	0.00	0.41	
55162	0.20	1.00	0.00	0.09	0.32	
55163	0.10	1.17	0.33	0.09	0.42	
55164	0.30	1.17	0.13	0.11	0.43	
55165	0.17	0.94	0.00	0.24	0.34	
55166	0.23	0.94	0.07	0.02	0.32	
55167	0.13	1.23	0.00	0.18	0.39	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.00	0.16	0.07	0.00	0.06	BETL
55162	0.00	0.04	0.00	0.00	0.01	BETL
55163	0.00	0.04	0.00	0.00	0.01	BETL
55164	0.00	0.16	0.00	0.00	0.04	BETL
55165	0.00	0.04	0.00	0.00	0.01	BETL
55166	0.00	0.16	0.00	0.00	0.04	BETL
55167	0.00	0.04	0.00	0.00	0.01	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.00	0.08	0.00	0.00	0.02	BETL
55162	0.00	0.10	0.00	0.00	0.03	BETL
55163	0.00	0.08	0.00	0.00	0.02	BETL
55164	0.00	0.17	0.00	0.00	0.04	BETL
55165	0.00	0.05	0.00	0.00	0.01	BETL
55166	0.00	0.07	0.00	0.00	0.02	BETL
55167	0.00	0.34	0.00	0.00	0.08	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 Plants)					Remark
	GU	RA	CBE	WR	Mean	
55161	0.13	0.41	0.00	0.00	0.14	BETL
55162	0.73	0.19	0.00	0.00	0.23	BETL
55163	0.50	0.30	0.00	0.00	0.20	BETL
55164	0.60	0.53	0.00	0.00	0.28	BETL
55165	0.20	0.86	0.67	0.00	0.43	BETL
55166	0.30	0.53	0.00	0.00	0.21	BETL
55167	0.53	0.53	0.00	0.00	0.26	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55161	3.50	2.00	0.33	9.33	3.79	AETL
55162	5.33	1.32	0.00	8.33	3.75	AETL
55163	2.67	2.07	0.33	7.00	3.02	AETL
55164	3.33	1.46	1.00	10.33	4.03	AETL
55165	3.17	1.96	1.33	5.67	3.03	AETL
55166	3.17	1.22	0.33	3.00	1.93	AETL
55167	4.00	2.16	0.00	7.67	3.46	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55161	0.00	0.16	0.00	0.00	0.04	BETL
55162	0.00	0.18	0.00	0.00	0.05	BETL
55163	0.00	0.14	0.00	0.00	0.04	BETL
55164	0.00	0.36	0.00	0.00	0.09	BETL
55165	0.00	0.56	0.00	0.00	0.14	BETL
55166	0.00	0.29	0.00	0.00	0.07	BETL
55167	0.00	0.17	0.00	0.00	0.04	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55161	28.33	4.58	15.00	46.67	23.64	AETL
55162	40.00	6.42	10.00	46.67	25.77	AETL
55163	26.67	3.66	15.00	46.67	23.00	AETL
55164	25.00	3.66	35.00	53.33	29.25	AETL
55165	26.67	4.28	30.00	40.00	25.24	AETL
55166	26.67	4.62	15.00	23.33	17.40	AETL
55167	30.00	4.71	15.00	50.00	24.93	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55161	46.55	10.82	13.14	60.00	32.63	
55162	62.14	9.59	12.16	45.00	32.22	
55163	40.63	10.88	15.30	30.00	24.20	
55164	43.75	9.72	13.82	40.00	26.82	
55165	51.28	9.94	19.51	65.00	36.43	
55166	37.16	12.25	15.85	40.00	26.31	
55167	44.17	7.95	18.04	35.00	26.29	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55161	29.36	8.51	5.21	22.00	16.27	
55162	38.59	7.28	6.64	18.18	17.67	
55163	22.17	8.57	6.71	18.81	14.07	
55164	25.20	7.41	4.97	11.82	12.35	
55165	28.66	7.63	7.79	20.90	16.25	
55166	22.68	9.94	7.04	17.82	14.37	
55167	25.11	5.64	8.23	14.22	13.30	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table-9(b) Advanced Evaluation Trial of Hirsutum Varieties - Irrigated (AET-II Variety IRR) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR):Unprotected conditions																			
			RARS, Warangal										CICR RS, Coimbatore									
			ALS		CoLS		GM		Rust		TSV		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
5	55161	Local Check	5.5	R	11.0	R	9.0	R	27.0	MR	5.0	R	5.0	R	0.0	DF	0.0	DF	3.3	R	6.0	R
1	55162	Lam Bt 2208 BG II	7.0	R	7.0	R	11.0	R	39.5	MR	7.5	R	4.5	R	0.0	DF	1.5	R	0.0	DF	5.0	R
7	55163	Suraksha (Non-Bt ZC)	6.5	R	6.5	R	14.0	R	38.5	MR	6.3	R	5.0	R	0.0	DF	0.0	DF	0.0	DF	4.5	R
3	55164	CICR 23 Bt (Bt Zonal Check)	7.0	R	6.5	R	18.5	R	38.5	MR	7.5	R	4.0	R	0.0	DF	2.0	R	3.2	R	3.5	R
6	55165	WGCV Bt 28	7.5	R	12.0	R	13.0	R	24.5	R	5.0	R	3.5	R	0.0	DF	1.5	R	0.0	DF	3.0	R
4	55166	ARCV 99 BGII	7.0	R	7.0	R	13.5	R	35.5	MR	6.3	R	4.5	R	0.0	DF	0.0	DF	3.5	R	4.5	R
2	55167	ARCV 111 BGII	4.0	R	3.0	R	13.5	R	26.5	MR	8.8	R	3.5	R	0.0	DF	0.0	DF	0.0	DF	2.0	R

Table-9(c) Advanced Evaluation Trial of Hirsutum Varieties - Irrigated (AET-II Variety IRR) under Protected and Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected Conditions:Lam , Guntur						Average PDI & Disease Reaction (DR):Un Protected Conditions:Lam , Guntur					
			CoLS		GM		Rust		CoLS		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
5	55161	Local Check	26.0	MR	27.0	MR	26.8	MR	28.5	MR	29.3	MR	28.8	MR
1	55162	Lam Bt 2208 BG II	28.5	MR	28.8	MR	14.2	R	32.7	MR	31.3	MR	19.8	R
7	55163	Suraksha (Non-Bt ZC)	26.0	MR	27.3	MR	28.5	MR	27.5	MR	29.0	MR	30.5	MR
3	55164	CICR 23 Bt (Bt Zonal Check)	26.3	MR	26.5	MR	10.0	R	27.3	MR	28.3	MR	11.8	R
6	55165	WGCV Bt 28	28.8	MR	27.0	MR	15.8	R	32.3	MR	29.8	MR	18.8	R
4	55166	ARCV 99 BGII	26.3	MR	26.8	MR	27.3	MR	27.3	MR	30.0	MR	29.2	MR
2	55167	ARCV 111 BGII	28.0	MR	28.2	MR	8.75	R	30.8	MR	29.8	MR	11.8	R

Agronomic Evaluation

RAICHUR (ARCV 111 BG II) variety

The results of agronomic requirement studies found that significantly higher seed cotton yield was recorded with 90 x 45 cm spacing (3128 kg/ha) compared to other spacings. (Table 49). The increase in higher seed cotton yield was mainly due to increased number of bolls/sqm (176.5). Among nitrogen levels, higher seed cotton yield was obtained with 125% recommended N/ha (2976 kg/ha) followed by 100% recommended N/ha (2845 kg/ha) compared to 75% recommended N/ha (2687 kg/ha). This could be attributed to higher sympodia/plant, higher boll number/plant and boll weight. The interaction effect was found to be non significant (Table 49)

Table 49. Total Seed cotton yield (kg/ha) of ARCV 111 BG II as influenced by spacing levels and nutrient levels at Raichur

Treatments	ARCV 111 BG II			Mean (N levels)
	S1: 90 x 45 cm	S2: 90 cm X 60 cm	S3: 90 x 75 cm	
F1.75% rec. N/ha (135:90:90 kg NPK/ha)	2974	2665	2424	2687
F2.100% rec. N/ha (180:90:90 kg NPK/ha)	3122	2876	2538	2845
F2.125% rec. N/ha (225:90:90 kg NPK/ha)	3288	3005	2634	2976
Mean (spacing)	3128	2849	2532	
ANOVA	Spacing	N levels	Interaction	
SE d	129	129	225	
CD (5%)	277	NS	NS	

Basic parameters: pH: 8.06, OC (%): 0.42, Available N: 328 kg/ha, Available P₂O₅: 39 kg/ha, Available K₂O: 358 kg/ha, Recommended nutrients: 180:90:90 kg NPK/ha, Genotype: ARCV 111 BGII, Environment: Irrigated

RAICHUR (ARCV 99 BG II)

The results of spacing and nutrient requirement studies found that significantly higher seed cotton yield was recorded with 90 x 45 cm spacing (3117 kg/ha) compared to other spacings. The increase in higher seed cotton yield was mainly due to increased number of bolls/sqm (184.9). Among nitrogen levels, higher seed cotton yield was obtained with 125% recommended N/ha (2965 kg/ha) followed by 100% recommended N/ha (2835 kg/ha) compared to 75% recommended N/ha (2678 kg/ha). This could be attributed to higher sympodia/plant, higher boll number/plant and boll weight. Interaction found non-significant by with spacing and nitrogen levels (Table 50).

Table 50. Total Seed cotton yield (kg/ha) of ARCV 99 BG II as influenced by spacing levels and nutrient levels at Raichur

Treatments	ARCV 99 BG II			Mean (N levels)
	S1: 90 x 45 cm	S2: 90 cm X 60 cm	S3: 90 x 75 cm	
N1- 75% of RDN	2964	2655	2416	2678
N2- 100 % of RDN	3111	2866	2529	2835
N3- 125% of RDN	3277	2994	2625	2965
Mean (spacing)	3117	2839	2523	
ANOVA	Spacing	N levels	Interaction	
SE d	129	129	224	
CD (5%)	276	276	NS	

Basic parameters: pH: 8.06, OC (%): 0.42, Available N: 328 kg/ha, Available P₂O₅: 39 kg/ha, Available K₂O: 358 kg/ha, Recommended nutrients: 180:90:90 kg NPK/ha, Genotype: ARCV 99 BGII, Environment: Irrigated

RAICHUR (WGCV Bt 28)

The results of agronomic requirement studies found that significantly higher seed cotton yield was recorded with 90 x 45 cm spacing (2907 kg/ha) compared to other spacings. The increase in higher seed cotton yield was mainly due to increased number of bolls/sqm (198.8). Among nitrogen levels, higher seed cotton yield was obtained with 125% recommended N/ha (2766 kg/ha) followed by 100% recommended N/ha (2644 kg/ha) compared to 75% recommended N/ha (2498 kg/ha). This could be attributed to higher sympodia/plant, higher boll number/plant and boll weight. Interaction effect was found to be non-significant (Table 51).

Table 51. Total Seed cotton yield (kg/ha) of WGCV Bt 28 as influenced by spacing levels and nutrient levels at Raichur

Treatments	WGCV Bt 28			Mean (N levels)
	S1: 90 X 45 cm	S2: 90 X 60 cm	S3: 90 X 75 cm	
N1- 75% of RDN	2764	2477	2253	2498
N2- 100 % of RDN	2901	2673	2358	2644
N3- 125% of RDN	3056	2793	2448	2766
Mean (spacing)	2907	2648	2353	
ANOVA	Spacing	N levels	Interaction	
SE d	121	121	209	
CD (5%)	258	258	NS	

Basic parameters: pH: 8.06, OC (%): 0.42, Available N: 328 kg/ha, Available P₂O₅: 39 kg/ha, Available K₂O: 358 kg/ha, Recommended nutrients: 180:90:90 kg NPK/ha, Genotype: WGCV Bt 28, Environment: Irrigated

RAICHUR (Lam Bt 2208 BG II)

The results of agronomic requirement studies found that significantly higher seed cotton yield was recorded with 90 x 45 cm spacing (2938 kg/ha) compared to other spacings. The increase in higher seed cotton yield was mainly due to an increased number of bolls/sqm (190.9). Among nitrogen levels, higher seed cotton yield was obtained with 125% recommended N/ha (2795 kg/ha), followed by 100% recommended N/ha (2672 kg/ha), compared to 75% recommended N/ha (2524 kg/ha). This could be attributed to higher sympodia/plant, higher boll number/plant and boll weight. The interaction effect was found to be non-significant (Table 52).

Table 52. Total Seed cotton yield (kg/ha) of Lam Bt 2208 BG II as influenced by spacing levels and nutrient levels in Raichur

Treatments	Lam Bt 2208 BG II			Mean (N levels)
	S1: 90 X 45 cm	S2: 90 X 60 cm	S3: 90 X 75 cm	
N1- 75% of RDN	2793	2503	2277	2524
N2- 100 % of RDN	2932	2701	2383	2672
N3- 125% of RDN	3088	2822	2473	2795
Mean (spacing)	2938	2675	2377	
ANOVA	Spacing	N levels	Interaction	
SE d	122	122	211	
CD (5%)	261	261	NS	

Basic parameters: pH: 8.06, OC (%): 0.42, Available N: 328 kg/ha, Available P₂O₅: 39 kg/ha, Available K₂O: 358 kg/ha, Recommended nutrients: 180:90:90 kg NPK/ha, Genotype: Lam Bt 2208 BG II, Environment: Irrigated

Initial Evaluation Trial of Compact Hirsutum Varieties - Irrigated

Constitution of Trial

The trial was constituted with seven Bt cotton varieties containing deregulated events along with two different check varieties as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	4	55171	CCH 25-3 Bt II	CICR, Coimbatore
2	9	55172	CCH 25-4 Bt II	CICR, Coimbatore
3	1	55173	CCH 25-1 Bt II	CICR, Coimbatore
4	7	55174	CICR 23 Bt (ZC Bt-1)	
5	3	55175	Nano Bt	CICR, Coimbatore
6	8	55176	Subiksha Bt	CICR, Coimbatore
7	2	55177	PKV 081 Bt (ZC Bt-2)*	
8	6	55178	CCH 25-2 Bt II	CICR, Coimbatore
9	5	55179	Suraksha Bt	CICR, Coimbatore

* The zonal check variety **PKV 081 Bt (ZC Bt-2)** was not released for the south zone under irrigated conditions and was inadvertently added in the trial. Hence, the data of this check variety was not included in report preparation.

The trial was conducted in five locations viz., Warangal, Lam, Raichur, B'Gudi*, and Coimbatore.

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Recommended spacing for the variety has been followed.

Number of rows: 4 rows of 6 meters per entry with three replications

Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Initial Evaluation Trial of Hirsutum Variety**

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	112.4	90.0	93.9	72.7	92.3
2	CCH 25-4 Bt II	101.4	78.7	87.1	65.4	83.2
3	CCH 25-1 Bt II	125.3	88.3	113.5	70.3	99.4
4	CICR 23 Bt (ZC Bt-1)	131.3	83.2	91.2	74.1	95.0
5	Nano Bt	104.7	70.0	102.5	64.1	85.3
6	Subiksha Bt	98.5	79.5	90.2	71.6	85.0
7	CCH 25-2 Bt II	124.9	65.5	93.9	61.4	86.4
8	Suraksha Bt	110.7	79.5	104.7	83.1	94.5
	CD @ 5%	18.7	NS	10.7	10.2	
	CV %	9.4	16.9	11.0	8.4	

Number of monopodia in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	0.3	0.1	0.3	0.2	0.2
2	CCH 25-4 Bt II	0.5	0.1	0.2	0.5	0.3
3	CCH 25-1 Bt II	0.3	0.1	0.7	0.0	0.3
4	CICR 23 Bt (ZC Bt-1)	0.7	0.2	0.3	0.7	0.5
5	Nano Bt	0.2	0.2	0.7	0.2	0.3
6	Subiksha Bt	0.7	0.1	0.5	0.1	0.4
7	CCH 25-2 Bt II	0.3	1.1	0.3	0.2	0.5
8	Suraksha Bt	0.9	1.1	0.3	0.5	0.7
	CD @ 5%	NS	0.1	0.2	NS	
	CV %	69.3	8.1	18.5	129.8	

Number of sympodia in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	11.8	13.7	9.2	10.2	11.2
2	CCH 25-4 Bt II	12.3	13.7	9.8	9.7	11.4
3	CCH 25-1 Bt II	10.3	10.1	11.7	9.5	10.4
4	CICR 23 Bt (ZC Bt-1)	15.9	13.9	13.5	11.8	13.8
5	Nano Bt	9.5	9.2	9.5	9.1	9.3
6	Subiksha Bt	11.8	11.8	11.5	10.6	11.4
7	CCH 25-2 Bt II	11.6	6.2	8.9	8.9	8.9
8	Suraksha Bt	12.1	11.9	12.0	11.3	11.8
	CD @ 5%	2.8	2.5	1.6	1.4	
	CV %	13.6	13.4	14.5	8.1	

Boll weight (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	4.6	4.3	6.2	5.2	5.1
2	CCH 25-4 Bt II	5.5	5.1	7.4	6.3	6.1
3	CCH 25-1 Bt II	5.8	5.3	7.0	6.2	6.1
4	CICR 23 Bt (ZC Bt-1)	3.7	4.2	5.6	4.1	4.4
5	Nano Bt	4.0	4.4	6.3	5.5	5.1
6	Subiksha Bt	4.3	4.1	7.0	5.2	5.2
7	CCH 25-2 Bt II	5.1	4.3	7.9	5.9	5.8
8	Suraksha Bt	4.2	3.9	6.0	5.1	4.8
	CD @ 5%	0.5	NS	0.7	0.6	
	CV %	6.7	11.6	10.3	6.4	

Number of bolls / plant in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	13.7	13.4	14.7	9.8	12.9
2	CCH 25-4 Bt II	10.9	14.3	11.3	10.3	11.7
3	CCH 25-1 Bt II	11.1	13.7	13.0	7.7	11.4
4	CICR 23 Bt (ZC Bt-1)	14.7	12.3	13.0	11.4	12.9
5	Nano Bt	9.5	11.3	11.3	9.9	10.5
6	Subiksha Bt	13.4	9.9	11.7	11.7	11.7
7	CCH 25-2 Bt II	8.4	12.0	10.0	9.2	9.9
8	Suraksha Bt	14.0	8.9	14.5	11.7	12.3
	CD @ 5%	NS	2.9	1.5	NS	
	CV %	25.7	14.2	11.8	16.6	

Number of bolls / sq.m. in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	CCH 25-3 Bt II	93.1	80.6	72.6	82.1
2	CCH 25-4 Bt II	73.7	86.0	76.0	78.6
3	CCH 25-1 Bt II	77.9	82.0	57.3	72.4
4	CICR 23 Bt (ZC Bt-1)	103.7	74.0	84.4	87.4
5	Nano Bt	66.5	68.0	73.6	69.4
6	Subiksha Bt	96.4	59.2	86.4	80.7
7	CCH 25-2 Bt II	59.7	72.0	68.1	66.6
8	Suraksha Bt	96.7	53.6	86.4	78.9
	CD @ 5%	NS	17.5	NS	
	CV %	25.8	14.2	16.6	

Lint Index (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	4.8	4.6	5.3	6.5	5.3
2	CCH 25-4 Bt II	5.0	6.0	5.9	6.8	5.9
3	CCH 25-1 Bt II	7.2	6.3	7.1	8.1	7.2
4	CICR 23 Bt (ZC Bt-1)	3.7	4.9	4.1	4.4	4.3
5	Nano Bt	4.9	5.9	5.9	6.8	5.9
6	Subiksha Bt	5.1	4.8	6.0	6.2	5.5
7	CCH 25-2 Bt II	5.8	5.8	5.9	7.0	6.1
8	Suraksha Bt	5.4	4.7	6.1	6.8	5.8
	CD @ 5%	1.0	1.1	0.4	0.7	
	CV %	10.6	12.4	7.7	6.6	

Seed Index (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	11.5	9.3	11.2	13.0	11.3
2	CCH 25-4 Bt II	11.9	11.0	13.1	13.0	12.3
3	CCH 25-1 Bt II	14.4	11.7	13.8	14.7	13.7
4	CICR 23 Bt (ZC Bt-1)	9.0	9.1	9.4	10.2	9.4
5	Nano Bt	10.2	10.6	12.1	12.7	11.4
6	Subiksha Bt	11.7	9.7	13.1	12.9	11.9
7	CCH 25-2 Bt II	12.9	11.7	13.3	14.3	13.1
8	Suraksha Bt	11.4	9.6	12.3	13.1	11.6
	CD @ 5%	2.0	NS	0.6	1.1	
	CV %	10.0	14.7	5.1	4.8	

Ginning outturn (%) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	29.5	33.0	32.2	33.3	32.0
2	CCH 25-4 Bt II	29.7	35.2	31.0	34.2	32.5
3	CCH 25-1 Bt II	33.1	35.0	34.0	35.5	34.4
4	CICR 23 Bt (ZC Bt-1)	29.4	35.2	30.5	30.3	31.4
5	Nano Bt	32.6	35.9	32.5	34.9	34.0
6	Subiksha Bt	30.1	33.7	31.5	32.5	32.0
7	CCH 25-2 Bt II	30.9	33.7	30.7	32.9	32.1
8	Suraksha Bt	32.1	32.8	33.0	34.2	33.0
	CD @ 5%	2.4	N/A	1.1	2.2	
	CV %	4.4	12.2	3.4	3.7	

Upper Half Mean Length (mm) under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	32.8	32.7	35.1	32.5	33.3
2	CCH 25-4 Bt II	32.8	33.4	35.7	32.7	33.7
3	CCH 25-1 Bt II	31.1	32.6	32.1	31.4	31.8
4	CICR 23 Bt (ZC Bt-1)	27.3	27.4	29.4	27.6	27.9
5	Nano Bt	29.4	29.8	31.9	31.1	30.6
6	Subiksha Bt	30.5	31.9	34.5	32.1	32.3
7	CCH 25-2 Bt II	30.8	32.9	31.9	31.1	31.7
8	Suraksha Bt	32.3	31.3	33.9	31.4	32.2

Uniformity index under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	84.0	85.0	86.0	84.0	84.8
2	CCH 25-4 Bt II	83.0	83.0	86.0	82.5	83.6
3	CCH 25-1 Bt II	86.0	87.0	86.0	86.5	86.4
4	CICR 23 Bt (ZC Bt-1)	81.0	82.0	85.0	82.5	82.6
5	Nano Bt	84.0	85.0	87.0	86.4	85.6
6	Subiksha Bt	84.0	85.0	87.0	86.1	85.5
7	CCH 25-2 Bt II	84.0	86.0	85.0	85.3	85.1
8	Suraksha Bt	85.0	85.0	86.0	86.3	85.6

Micronaire under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	3.7	3.8	3.8	3.5	3.7
2	CCH 25-4 Bt II	3.9	4.0	3.9	3.7	3.9
3	CCH 25-1 Bt II	4.2	4.3	4.3	4.5	4.3
4	CICR 23 Bt (ZC Bt-1)	4.1	4.6	4.5	4.4	4.4
5	Nano Bt	3.4	4.3	3.8	3.7	3.8
6	Subiksha Bt	3.9	4.0	4.4	3.8	4.0
7	CCH 25-2 Bt II	3.9	3.7	3.8	3.9	3.8
8	Suraksha Bt	4.2	4.6	4.0	4.2	4.3

Tenacity under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean
1	CCH 25-3 Bt II	32.4	31.8	29.2	30.2	30.9
2	CCH 25-4 Bt II	32.2	33.4	31.7	30.1	31.9
3	CCH 25-1 Bt II	31.9	34.9	31.3	29.8	32.0
4	CICR 23 Bt (ZC Bt-1)	29.5	29.5	30.0	26.5	28.9
5	Nano Bt	31.4	33.2	31.0	30.2	31.5
6	Subiksha Bt	32.7	36.5	34.5	33.2	34.2
7	CCH 25-2 Bt II	32.5	33.1	30.5	31.9	32.0
8	Suraksha Bt	31.5	31.6	34.5	31.2	32.2

Seed Cotton Yield at 140 DAS (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	CCH 25-3 Bt II	11.04	10.65	28.06	16.58
2	CCH 25-4 Bt II	5.50	14.35	28.57	16.14
3	CCH 25-1 Bt II	4.89	15.37	22.51	14.26
4	CICR 23 Bt (ZC Bt-1)	2.23	11.30	12.65	8.73
5	Nano Bt	9.06	11.84	27.92	16.27
6	Subiksha Bt	3.98	11.85	32.54	16.12
7	CCH 25-2 Bt II	4.62	10.19	28.49	14.43
8	Suraksha Bt	10.10	8.08	34.09	17.42
	CD @ 5%	1.83	2.38	4.70	
	CV %	15.08	11.66	10.18	

Seed Cotton Yield at 165 DAS (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Coimbatore	Mean
1	CCH 25-3 Bt II	11.36	7.99	14.16	11.17
2	CCH 25-4 Bt II	11.29	10.76	10.14	10.73
3	CCH 25-1 Bt II	11.29	11.53	11.79	11.54
4	CICR 23 Bt (ZC Bt-1)	7.39	8.47	18.07	11.31
5	Nano Bt	8.15	8.88	10.00	9.01
6	Subiksha Bt	11.26	8.89	13.50	11.22
7	CCH 25-2 Bt II	10.28	7.64	8.85	8.92
8	Suraksha Bt	11.04	6.06	12.55	9.88
	CD @ 5%	2.13	1.79	2.20	
	CV %	11.76	11.69	10.53	

Total Seed Cotton Yield (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Warangal	Lam	Raichur	Coimbatore	Mean	Rank	% Inc over best check
1	CCH 25-3 Bt II	22.40	18.63	37.97	42.21	30.30	1	33.7
2	CCH 25-4 Bt II	16.80	25.12	33.10	38.71	28.43	4	25.4
3	CCH 25-1 Bt II	16.18	26.90	26.71	34.30	26.02	6	14.8
4	CICR 23 Bt (ZC Bt-1)	9.62	19.77	30.56	30.71	22.67	8	0.0
5	Nano Bt	17.21	20.72	33.12	37.92	27.24	5	20.2
6	Subiksha Bt	15.24	20.74	32.13	46.04	28.54	3	25.9
7	CCH 25-2 Bt II	14.90	17.82	31.49	37.34	25.39	7	12.0
8	Suraksha Bt	21.14	14.13	37.60	46.65	29.88	2	31.8
	CD @ 5%	3.15	4.15	2.17	5.20			
	CV %	10.43	11.61	6.56	7.84			

Evaluation under Protected Condition for Insect pests Reaction to Insect Pests

Table: Initial Variety(Compact) trial in South Zone under Protected Conditions -Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	1.30	1.15	1.54	4.42	2.10	BETL
55172	1.37	1.20	1.67	4.02	2.07	BETL
55173	1.07	1.04	2.00	3.69	1.95	BETL
55174	0.87	1.35	2.01	4.87	2.27	BETL
55175	1.13	0.88	1.64	3.87	1.88	BETL
55176	1.83	1.54	1.41	4.44	2.31	BETL
55177	1.43	0.77	1.16	4.20	1.89	BETL
55178	1.20	1.05	2.30	4.20	2.19	BETL
55179	1.00	1.14	1.35	4.64	2.03	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	1.80	1.57	0.91	1.64	1.48	BETL
55172	2.40	1.39	2.31	1.91	2.00	BETL
55173	2.60	1.62	1.40	1.71	1.83	BETL
55174	2.13	1.59	1.51	1.76	1.75	BETL
55175	1.97	2.02	2.00	1.69	1.92	BETL
55176	1.73	1.30	1.44	2.02	1.63	BETL
55177	2.17	1.99	1.69	1.71	1.89	BETL
55178	2.23	1.39	2.00	2.13	1.94	BETL
55179	2.07	1.64	1.42	1.84	1.74	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55171	I	I	I	I	I	
55172	I	I	I	II	I	
55173	II	I	I	I	I	
55174	I	I	I	I	I	
55175	I	I	I	I	I	
55176	I	I	I	I	I	
55177	I	I	I	I	I	
55178	I	I	I	I	I	
55179	I	I	I	I	I	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	3.17	1.40	0.96	8.29	3.45	BETL
55172	3.40	3.10	0.91	9.24	4.16	BETL
55173	3.93	1.70	0.83	9.91	4.09	BETL
55174	3.93	2.72	0.92	10.24	4.45	BETL
55175	4.27	1.83	0.94	10.47	4.38	BETL
55176	4.43	1.06	1.14	8.00	3.66	BETL
55177	4.03	1.31	0.85	10.20	4.10	BETL
55178	4.97	2.15	1.15	9.47	4.43	BETL
55179	3.53	2.30	0.84	7.07	3.44	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.10	0.70	0.63	0.47	0.47	BETL
55172	0.00	0.65	0.78	0.36	0.45	BETL
55173	0.03	0.59	0.88	0.33	0.46	BETL
55174	0.07	0.73	0.71	0.53	0.51	BETL
55175	0.03	0.59	0.91	0.71	0.56	BETL
55176	0.00	0.69	0.72	0.58	0.50	BETL
55177	0.00	0.64	0.73	0.64	0.50	BETL
55178	0.03	0.66	1.04	0.71	0.61	BETL
55179	0.00	0.64	0.64	0.62	0.47	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No. / plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.27	1.03	0.22	0.13	0.41	
55172	0.07	0.78	0.11	0.13	0.27	
55173	0.20	0.74	0.16	0.07	0.29	
55174	0.23	1.19	0.13	0.13	0.42	
55175	0.13	0.65	0.11	0.09	0.25	
55176	0.03	1.33	0.11	0.13	0.40	
55177	0.30	1.59	0.07	0.07	0.51	
55178	0.10	1.21	0.13	0.07	0.38	
55179	0.07	0.68	0.16	0.09	0.25	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions– *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.00	0.00	0.00	0.00	0.00	BETL
55172	0.00	0.00	0.00	0.00	0.00	BETL
55173	0.00	0.00	0.00	0.00	0.00	BETL
55174	0.00	0.00	0.00	0.00	0.00	BETL
55175	0.00	0.00	0.00	0.00	0.00	BETL
55176	0.00	0.00	0.00	0.00	0.00	BETL
55177	0.00	0.00	0.00	0.00	0.00	BETL
55178	0.00	0.00	0.00	0.00	0.00	BETL
55179	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.00	0.00	0.00	0.00	0.00	BETL
55172	0.00	0.00	0.00	0.00	0.00	BETL
55173	0.00	0.00	0.00	0.00	0.00	BETL
55174	0.00	0.00	0.00	0.00	0.00	BETL
55175	0.00	0.00	0.00	0.00	0.00	BETL
55176	0.00	0.00	0.00	0.00	0.00	BETL
55177	0.00	0.00	0.00	0.00	0.00	BETL
55178	0.00	0.00	0.00	0.00	0.00	BETL
55179	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.10	0.00	0.00	0.00	0.03	BETL
55172	0.07	0.00	0.00	0.00	0.02	BETL
55173	0.00	0.00	0.00	0.00	0.00	BETL
55174	0.03	0.00	0.00	0.00	0.01	BETL
55175	0.23	0.00	0.00	0.00	0.06	BETL
55176	0.00	0.00	0.00	0.00	0.00	BETL
55177	0.10	0.00	0.00	0.00	0.03	BETL
55178	0.07	0.00	0.00	0.00	0.02	BETL
55179	0.03	0.00	0.00	0.00	0.01	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Pink bollworm

Name of Entry	Pink bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.50	0.39	0.56	1.56	0.75	BETL
55172	0.83	1.05	0.33	1.44	0.92	BETL
55173	0.67	0.19	0.56	2.00	0.85	BETL
55174	0.83	0.84	0.44	2.00	1.03	AETL
55175	0.33	0.32	0.22	2.33	0.80	BETL
55176	1.00	0.91	0.33	2.89	1.28	AETL
55177	0.67	0.57	0.22	1.33	0.70	BETL
55178	0.83	0.77	0.33	1.67	0.90	BETL
55179	0.83	0.79	0.78	1.78	1.05	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Green Boll damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55171	0.00	0.00	0.00	0.00	0.00	BETL
55172	0.00	0.00	0.00	0.00	0.00	BETL
55173	0.00	0.00	0.00	0.00	0.00	BETL
55174	0.00	0.00	0.00	0.00	0.00	BETL
55175	0.00	0.00	0.00	0.00	0.00	BETL
55176	0.00	0.00	0.00	0.00	0.00	BETL
55177	0.00	0.00	0.00	0.00	0.00	BETL
55178	0.00	0.00	0.00	0.00	0.00	BETL
55179	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions –Green Boll damage (Pink bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55171	8.33	0.54	3.34	12.22	6.11	BETL
55172	8.33	1.54	8.33	12.22	7.61	BETL
55173	8.33	0.43	13.33	11.11	8.30	BETL
55174	6.67	1.47	6.67	12.22	6.75	BETL
55175	6.67	0.79	6.67	13.33	6.86	BETL
55176	10.00	0.48	13.33	17.78	10.40	AETL
55177	8.50	0.75	8.33	8.89	6.62	BETL
55178	6.67	1.54	18.33	13.33	9.97	BETL
55179	11.67	1.72	18.33	11.11	10.71	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55171	7.36	0.82	14.24	26.67	12.27	
55172	8.84	2.33	16.61	23.33	12.78	
55173	7.65	0.65	18.34	36.67	15.83	
55174	6.63	2.21	13.45	23.33	11.41	
55175	7.05	1.19	12.45	20.00	10.17	
55176	9.21	0.73	13.37	16.67	9.99	
55177	7.39	1.13	9.15	16.67	8.58	
55178	6.17	2.33	19.01	28.33	13.96	
55179	9.54	2.60	15.18	26.67	13.50	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55171	2.63	0.83	5.42	10.26	4.78	
55172	3.14	2.35	5.67	9.22	5.09	
55173	2.71	0.65	6.44	11.05	5.21	
55174	2.59	2.23	5.78	7.40	4.50	
55175	3.00	1.20	4.31	8.49	4.25	
55176	4.05	0.74	4.53	7.92	4.31	
55177	2.66	1.14	3.57	6.81	3.54	
55178	2.18	2.35	5.92	7.30	4.44	
55179	4.27	2.62	6.14	5.91	4.74	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests					Remark
	GU	RA	CBE	WR	Mean	
55171	5.00	4.00	4.00	5.00	4.50	
55172	5.00	4.00	4.00	5.00	4.50	
55173	5.00	4.00	4.00	5.00	4.50	
55174	5.00	4.00	4.00	5.00	4.50	
55175	5.00	4.00	4.00	5.00	4.50	
55176	5.00	4.00	4.00	5.00	4.50	
55177	5.00	4.00	4.00	5.00	4.50	
55178	5.00	4.00	4.00	5.00	4.50	
55179	5.00	4.00	4.00	5.00	4.50	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table- 10 (a) Initial Evaluation Trial of Compact Hirsutum Varieties – Irrigated (IET-Compact Variety IRR) Under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions																			
			RARS, Warangal										CICR RS, Coimbatore									
			ALS		CoLS		GM		Rust		TSV		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
4	55171	CCH 25-3 Bt II	2.8	R	3.5	R	12.7	R	27.0	MR	3.5	R	6.3	R	0.0	DF	0.0	DF	1.9	R	6.5	R
9	55172	CCH 25-4 Bt II	3.2	R	4.2	R	13.2	R	26.7	MR	1.5	R	6.3	R	0.0	DF	0.0	DF	0.6	R	6.8	R
1	55173	CCH 25-1 Bt II	3.0	R	4.2	R	11.5	R	27.3	MR	1.0	R	5.8	R	0.0	DF	0.0	DF	0.2	R	6.0	R
7	55174	CICR 23 Bt (ZC Bt-1)	2.3	R	3.8	R	12.2	R	26.7	MR	1.4	R	6.3	R	0.0	DF	0.0	DF	0.6	R	6.3	R
3	55175	Nano Bt	2.8	R	3.5	R	12.3	R	27.0	MR	1.9	R	5.3	R	0.0	DF	0.0	DF	0.7	R	5.8	R
8	55176	Subiksha Bt	3.0	R	4.5	R	12.2	R	26.8	MR	1.6	R	6.8	R	0.0	DF	0.0	DF	0.9	R	7.3	R
2	55177	PKV 081 Bt (ZC Bt-2)	2.7	R	3.7	R	12.0	R	27.0	MR	1.3	R	6.2	R	0.0	DF	0.0	DF	0.4	R	7.2	R
6	55178	CCH 25-2 Bt II	3.2	R	3.8	R	12.3	R	27.7	MR	0.9	R	5.3	R	0.0	DF	0.0	DF	0.6	R	4.8	R
5	55179	Suraksha Bt	2.8	R	3.8	R	11.0	R	26.8	MR	1.5	R	5.8	R	0.0	DF	0.0	DF	0.9	R	5.7	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pests

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions –
Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	5.30	3.83	7.46	8.67	6.31	BETL
55172	6.03	3.87	4.92	6.33	5.29	BETL
55173	4.43	3.72	8.46	6.93	5.88	BETL
55174	7.10	3.74	10.68	7.47	7.25	BETL
55175	5.60	3.56	9.70	6.27	6.28	BETL
55176	7.03	4.21	6.53	8.00	6.44	BETL
55177	5.23	3.86	8.07	7.13	6.07	BETL
55178	8.57	3.73	5.07	8.07	6.36	BETL
55179	5.40	3.63	5.19	9.73	5.99	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions - Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	10.70	3.74	4.87	4.00	5.83	BETL
55172	10.83	3.56	4.80	4.53	5.93	BETL
55173	8.90	3.78	4.20	3.47	5.09	BETL
55174	10.23	3.76	3.27	2.87	5.03	BETL
55175	11.80	4.19	3.43	3.00	5.61	BETL
55176	9.80	3.47	6.33	3.60	5.80	BETL
55177	8.13	4.15	2.97	3.47	4.68	BETL
55178	9.03	3.56	4.60	4.93	5.53	BETL
55179	9.53	3.81	4.43	3.93	5.43	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	GU	RA	CBE	WR	Mean	
55171	II	I	I	II	II	
55172	III	I	I	III	II	
55173	III	II	I	II	II	
55174	II	I	I	II	II	
55175	III	II	I	II	II	
55176	III	I	II	II	II	
55177	II	II	I	II	II	
55178	III	I	I	II	II	
55179	III	II	I	II	II	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety(Compact) trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	8.60	5.95	3.63	13.73	7.98	BETL
55172	7.70	7.15	2.77	14.13	7.94	BETL
55173	5.70	6.60	2.67	11.33	6.57	BETL
55174	8.30	6.77	3.33	11.47	7.47	BETL
55175	8.27	5.88	2.80	14.00	7.74	BETL
55176	7.80	5.59	2.93	11.00	6.83	BETL
55177	6.73	5.36	2.47	12.40	6.74	BETL
55178	7.50	5.50	1.77	13.27	7.01	BETL
55179	8.43	6.35	3.63	9.87	7.07	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact)trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	1.57	1.18	1.90	0.67	1.33	BETL
55172	1.43	1.10	2.73	0.47	1.43	BETL
55173	0.40	1.04	2.40	0.80	1.16	BETL
55174	1.67	1.18	1.33	1.20	1.34	BETL
55175	0.90	1.06	1.80	0.53	1.07	BETL
55176	1.47	1.16	1.47	1.07	1.29	BETL
55177	0.63	1.14	1.33	0.67	0.94	BETL
55178	0.83	1.15	1.13	0.93	1.01	BETL
55179	1.50	1.13	0.50	0.73	0.97	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No. / plant)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.33	1.38	0.07	0.09	0.47	
55172	0.40	1.15	0.20	0.22	0.49	
55173	0.13	1.09	0.07	0.11	0.35	
55174	0.27	1.53	0.40	0.24	0.61	
55175	0.17	1.00	0.00	0.11	0.32	
55176	0.10	1.68	0.00	0.18	0.49	
55177	0.30	1.94	0.00	0.07	0.58	
55178	0.10	1.60	0.00	0.00	0.43	
55179	0.23	1.04	0.47	0.09	0.46	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial (Compact) in South Zone under Protected Conditions– *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.00	0.00	0.07	0.00	0.02	BETL
55172	0.00	0.00	0.00	0.00	0.00	BETL
55173	0.00	0.00	0.00	0.00	0.00	BETL
55174	0.00	0.00	0.00	0.00	0.00	BETL
55175	0.00	0.00	0.00	0.00	0.00	BETL
55176	0.00	0.00	0.00	0.00	0.00	BETL
55177	0.00	0.00	0.00	0.00	0.00	BETL
55178	0.00	0.00	0.00	0.00	0.00	BETL
55179	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety trial (Compact) in South Zone under Unprotected Conditions- Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.00	0.00	0.00	0.00	0.00	BETL
55172	0.00	0.00	0.00	0.00	0.00	BETL
55173	0.00	0.00	0.00	0.00	0.00	BETL
55174	0.00	0.00	0.00	0.00	0.00	BETL
55175	0.00	0.00	0.00	0.00	0.00	BETL
55176	0.00	0.00	0.00	0.00	0.00	BETL
55177	0.00	0.00	0.00	0.00	0.00	BETL
55178	0.00	0.00	0.00	0.00	0.00	BETL
55179	0.00	0.00	0.00	0.00	0.00	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	GU	RA	CBE	WR	Mean	
55171	0.43	0.40	0.00	0.00	0.21	BETL
55172	0.50	0.29	0.00	0.00	0.20	BETL
55173	0.53	0.18	0.00	0.00	0.18	BETL
55174	0.17	0.51	0.00	0.00	0.17	BETL
55175	0.80	0.85	0.00	0.00	0.41	BETL
55176	0.27	0.51	0.00	0.00	0.20	BETL
55177	0.57	0.29	0.00	0.00	0.21	BETL
55178	0.53	0.51	0.00	0.00	0.26	BETL
55179	0.53	0.51	0.00	0.00	0.26	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	GU	RA	CBE	WR	Mean	
55171	3.17	2.42	0.67	10.67	4.23	AETL
55172	3.67	2.61	0.33	7.67	3.57	AETL
55173	4.17	1.84	1.67	10.00	4.42	AETL
55174	2.33	2.01	0.33	8.33	3.25	AETL
55175	4.00	1.80	1.00	8.67	3.87	AETL
55176	5.00	2.18	0.67	7.00	3.71	AETL
55177	4.83	2.10	0.33	7.00	3.57	AETL
55178	4.50	1.99	1.33	8.00	3.96	AETL
55179	4.00	1.84	1.00	8.00	3.71	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	GU	RA	CBE	WR	Mean	
55171	0.00	0.11	0.00	0.00	0.03	BETL
55172	0.00	0.48	0.00	0.00	0.12	BETL
55173	0.00	0.00	0.00	0.00	0.00	BETL
55174	0.00	0.37	0.00	0.00	0.09	BETL
55175	0.00	0.04	0.00	0.00	0.01	BETL
55176	0.00	0.00	0.00	0.00	0.00	BETL
55177	0.00	0.09	0.00	0.00	0.02	BETL
55178	0.00	0.37	0.00	0.00	0.09	BETL
55179	0.00	0.59	0.00	0.00	0.15	BETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	GU	RA	CBE	WR	Mean	
55171	26.67	3.93	10.00	56.67	24.32	AETL
55172	30.00	5.26	10.50	46.67	23.11	AETL
55173	30.00	3.77	16.00	56.67	26.61	AETL
55174	20.00	5.14	10.00	43.33	19.62	AETL
55175	33.33	3.78	20.00	46.67	25.94	AETL
55176	43.33	3.78	16.00	40.00	25.78	AETL
55177	38.33	4.59	15.00	40.00	24.48	AETL
55178	35.00	5.03	21.00	46.67	26.92	AETL
55179	30.00	6.80	20.50	46.67	25.99	AETL

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal



Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55171	60.11	11.36	19.45	50.00	35.23	
55172	46.85	20.77	17.61	45.00	32.56	
55173	52.17	13.00	25.10	60.00	37.57	
55174	40.21	19.82	17.10	45.00	30.53	
55175	51.36	15.01	17.52	35.00	29.72	
55176	63.18	12.25	18.13	35.00	32.14	
55177	45.66	11.79	16.44	30.00	25.97	
55178	50.50	19.82	19.52	60.00	37.46	
55179	41.82	15.87	14.79	50.00	30.62	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	GU	RA	CBE	WR	Mean	
55171	40.25	9.25	7.41	22.34	19.81	
55172	29.64	18.66	8.62	16.75	18.42	
55173	44.62	10.90	10.41	16.49	20.60	
55174	28.31	17.72	7.22	15.50	17.19	
55175	34.20	12.91	6.67	13.00	16.70	
55176	37.67	10.14	6.68	18.32	18.20	
55177	28.31	9.69	5.82	16.97	15.20	
55178	30.13	17.72	5.60	20.51	18.49	
55179	33.75	13.77	4.52	16.08	17.03	

GU- Lam Guntur, RA- Raichur, CBE-Coimbatore, WR- Warangal

Reaction to Diseases

Table- 10 (b) Initial Evaluation Trial of Compact Hirsutum Varieties – Irrigated (IET-Compact Variety IRR) Under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions																			
			RARS, Warangal										CICR RS, Coimbatore									
			ALS		CoLS		GM		Rust		TSV		ALS		Boll rot		GM		TSV		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
4	55171	CCH 25-3 Bt II	5.0	R	6.0	R	17.0	R	38.5	MR	7.5	R	4.5	R	0.0	DF	0.0	DF	0.0	DF	3.5	R
9	55172	CCH 25-4 Bt II	6.5	R	6.5	R	18.5	R	36.5	MR	7.5	R	5.0	R	0.0	DF	1.5	R	0.0	DF	4.5	R
1	55173	CCH 25-1 Bt II	4.0	R	5.5	R	18.0	R	29.0	MR	10.0	R	5.5	R	0.0	DF	0.0	DF	0.0	DF	3.0	R
7	55174	CICR 23 Bt (ZC Bt-1)	5.5	R	5.5	R	13.0	R	44.0	MR	7.5	R	4.0	R	0.0	DF	0.0	DF	0.0	DF	4.5	R
3	55175	Nano Bt	6.0	R	8.0	R	13.0	R	28.5	MR	10.0	R	3.5	R	0.0	DF	2.5	R	0.0	DF	3.5	R
8	55176	Subiksha Bt	7.0	R	7.0	R	16.0	R	36.0	MR	7.5	R	4.0	R	0.0	DF	2.0	R	0.0	DF	4.5	R
2	55177	PKV 081 Bt (ZC Bt-2)	6.5	R	6.0	R	13.5	R	42.0	MR	10.0	R	5.0	R	0.0	DF	1.0	R	2.5	R	3.5	R
6	55178	CCH 25-2 Bt II	7.0	R	8.0	R	19.0	R	38.0	MR	11.3	R	4.5	R	0.0	DF	2.0	R	0.0	DF	4.0	R
5	55179	Suraksha Bt	7.0	R	8.0	R	13.5	R	38.5	MR	7.5	R	6.5	R	0.0	DF	3.0	R	2.6	R	6.5	R

Table- 10 (c) Initial Evaluation Trial of Compact Hirsutum Varieties – Irrigated (IET-Compact Variety IRR) Under protected and Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions: Lam, Guntur						Average PDI & Disease Reaction (DR): UnProtected conditions: Lam, Guntur					
			CoLS		GM		Rust		CoLS		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
4	55171	CCH 25-3 Bt II	24.0	R	22.8	R	16.3	R	30.5	MR	28.0	MR	18.3	R
9	55172	CCH 25-4 Bt II	25.8	MR	27.3	MR	26.0	MR	31.5	MR	29.0	MR	27.8	MR
1	55173	CCH 25-1 Bt II	23.5	R	26.0	MR	27.5	MR	28.3	MR	27.5	MR	30.0	MR
7	55174	CICR 23 Bt (ZC Bt-1)	24.3	R	12.5	R	26.3	MR	27.3	MR	18.5	R	30.8	MR
3	55175	Nano Bt	28.1	MR	28.5	MR	26.5	MR	42.0	MR	30.8	MR	28.0	MR
8	55176	Subiksha Bt	20.0	R	27.8	MR	27.8	MR	26.3	MR	31.0	MR	30.8	MR
2	55177	PKV 081 Bt (ZC Bt-2)	26.8	MR	26.8	MR	28.2	MR	30.8	MR	30.8	MR	32.8	MR
6	55178	CCH 25-2 Bt II	20.2	R	28.0	MR	29.2	MR	28.8	MR	31.0	MR	30.8	MR
5	55179	Suraksha Bt	23.8	R	22.5	R	26.8	MR	26.5	MR	30.5	MR	29.0	MR

Initial Evaluation Trial of Intra-Hirsutum Bt Hybrids - Rainfed

Constitution of Trial

The trial was constituted with 12 Bt cotton hybrids containing MON 15985 event sponsored by various organization along with two different check hybrids as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	14	56001	KCH9268 BGII	Kaveri Seed Company Ltd.
2	7	56002	SP7679 BGII (ZC 1)	
3	4	56003	KCH9269 BGII	Kaveri Seed Company Ltd.
4	1	56004	RSCH-136 BGII	Royal Seeds Private Limited
5	10	56005	PMCH-114 Bt2	Palamoor Seeds Pvt Ltd
6	12	56006	RSCH-119 BGII	Royal Seeds Private Limited
7	5	56007	SBCH-4145	Sai Bhavya Seeds Pvt Ltd
8	8	56008	Core 105 BGII	Core seeds
9	2	56009	Daftari 615 BG II (ZC 2)	
10	9	56010	DC5108 BGII	Rallis India Limited
11	13	56011	KCH9267 BGII	Kaveri Seed Company Ltd.
12	11	56012	SBCH-2142	Sai Bhavya Seeds Pvt Ltd
13	6	56013	SP 7705 BGII	Crystal Crop Protection Limited
14	3	56014	BIOSEED 6901 BGII	Bioseed Research India

The trial was conducted in seven locations viz., Mudhole, Adilabad, Nandyal*, Dharwad, Perambalur, Hyderabad (Kaveri), and Warangal (Core seeds)*.

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Recommended spacing for the hybrid has been followed.

Number of rows: 4 rows of 6 meters per entry with three replications

Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Initial Evaluation Trial of H X H hybrids**

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	179.6	183.6	110.7	206.9	151.1	166.4
2	SP7679 BGII (ZC 1)	144.5	186.2	113.1	182.4	158.5	156.9
3	KCH9269 BGII	160.1	173.4	107.0	182.0	160.5	156.6
4	RSCH-136 BGII	158.1	177.9	114.1	186.4	156.7	158.6
5	PMCH-114 Bt2	152.3	176.6	110.4	171.2	154.4	153.0
6	RSCH-119 BGII	147.7	191.6	120.2	181.2	155.5	159.2
7	SBCH-4145	153.6	169.9	111.1	197.9	140.5	154.6
8	Core 105 BGII	154.7	211.2	129.6	216.9	158.2	174.1
9	Daftari 615 BG II (ZC 2)	140.8	176.0	131.7	185.6	149.5	156.7
10	DC5108 BGII	165.1	211.8	141.6	207.4	172.5	179.7
11	KCH9267 BGII	165.9	179.1	113.6	196.5	155.9	162.2
12	SBCH-2142	162.5	194.6	111.0	189.9	177.2	167.0
13	SP 7705 BGII	122.4	194.3	104.2	178.7	146.1	149.1
14	BIOSEED 6901 BGII	122.5	187.3	114.7	187.4	136.2	149.6
	CD @ 5%	21.1	NS	16.6	25.3	8.0	
	CV %	8.2	6.1	8.5	8.3	20.9	

Number of monopodia in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	1.0	2.0	2.1	2.0	1.1	1.6
2	SP7679 BGII (ZC 1)	0.6	3.3	1.2	2.7	1.7	1.9
3	KCH9269 BGII	0.8	1.4	0.9	2.0	1.2	1.3
4	RSCH-136 BGII	0.7	2.0	0.9	2.0	1.2	1.4
5	PMCH-114 Bt2	0.8	1.4	1.1	1.8	1.1	1.2
6	RSCH-119 BGII	0.7	1.1	0.9	1.3	1.3	1.1
7	SBCH-4145	0.5	1.7	1.1	2.2	1.1	1.3
8	Core 105 BGII	0.5	1.3	1.1	1.3	1.2	1.1
9	Daftari 615 BG II (ZC 2)	0.6	1.5	0.9	1.7	1.1	1.2
10	DC5108 BGII	0.7	1.2	2.0	2.2	1.1	1.4
11	KCH9267 BGII	0.5	1.1	0.8	1.8	1.0	1.0
12	SBCH-2142	1.0	1.4	1.9	1.5	1.3	1.4
13	SP 7705 BGII	0.4	1.4	0.1	1.6	1.1	0.9
14	BIOSEED 6901 BGII	0.4	1.4	1.0	2.3	1.3	1.3
	CD @ 5%	0.3	0.7	0.3	0.7	16.8	
	CV %	34.0	25.0	17.7	24.5	0.3	

Number of sympodia in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	15.5	20.1	17.6	28.8	18.5	20.1
2	SP7679 BGII (ZC 1)	14.1	19.3	18.6	22.8	17.9	18.5
3	KCH9269 BGII	14.9	19.5	18.4	27.6	19.5	20.0
4	RSCH-136 BGII	18.2	19.6	19.1	27.8	17.3	20.4
5	PMCH-114 Bt2	16.1	18.6	17.6	27.5	19.4	19.8
6	RSCH-119 BGII	16.8	20.9	18.7	26.8	16.7	20.0
7	SBCH-4145	14.2	18.3	16.3	26.8	15.2	18.2
8	Core 105 BGII	16.4	21.1	19.8	27.0	19.3	20.7
9	Daftari 615 BG II (ZC 2)	12.2	17.8	20.1	25.9	17.5	18.7
10	DC5108 BGII	14.8	19.1	21.0	27.0	20.9	20.6
11	KCH9267 BGII	15.3	17.9	18.6	27.0	17.8	19.3
12	SBCH-2142	12.7	20.2	18.9	27.9	24.2	20.8
13	SP 7705 BGII	12.2	21.2	17.4	24.7	14.9	18.1
14	BIOSEED 6901 BGII	13.4	21.9	19.7	29.1	16.7	20.2
	CD @ 5%	3.4	NS	2.7	2.0	15.4	
	CV %	13.8	9.8	8.5	4.8	4.7	

Boll weight (g) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	5.4	6.3	6.2	6.3	6.1	6.1
2	SP7679 BGII (ZC 1)	5.1	6.3	6.4	6.1	5.8	5.9
3	KCH9269 BGII	5.2	7.1	6.4	5.7	5.8	6.0
4	RSCH-136 BGII	5.3	6.3	6.4	7.1	5.5	6.1
5	PMCH-114 Bt2	5.4	6.8	6.2	6.1	5.1	5.9
6	RSCH-119 BGII	5.1	6.8	6.4	6.6	5.6	6.1
7	SBCH-4145	5.4	6.6	6.4	7.5	5.6	6.3
8	Core 105 BGII	4.9	6.4	5.7	6.0	5.0	5.6
9	Daftari 615 BG II (ZC 2)	5.2	7.0	7.0	7.0	5.3	6.3
10	DC5108 BGII	5.2	7.3	6.5	7.6	5.5	6.4
11	KCH9267 BGII	4.6	5.6	5.9	5.9	5.4	5.5
12	SBCH-2142	5.0	6.2	5.8	6.2	5.3	5.7
13	SP 7705 BGII	4.9	6.5	7.1	6.6	6.0	6.2
14	BIOSEED 6901 BGII	4.2	6.0	5.4	6.3	4.5	5.3
	CD @ 5%	0.4	0.9	0.6	0.9	5.1	
	CV %	5.5	8.2	5.5	9.1	0.5	

Number of bolls / plant in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	22.5	22.1	19.7	26.7	34.1	25.0
2	SP7679 BGII (ZC 1)	16.2	21.0	21.3	29.7	25.1	22.7
3	KCH9269 BGII	21.7	27.3	20.1	36.2	34.7	28.0
4	RSCH-136 BGII	29.7	20.5	23.0	36.6	27.8	27.5
5	PMCH-114 Bt2	27.1	21.3	19.8	35.5	28.7	26.5
6	RSCH-119 BGII	23.0	20.7	18.3	38.4	27.1	25.5
7	SBCH-4145	20.3	17.3	21.9	32.6	22.4	22.9
8	Core 105 BGII	23.5	19.9	24.6	32.1	32.3	26.5
9	Daftari 615 BG II (ZC 2)	17.3	18.6	20.3	27.3	26.9	22.1
10	DC5108 BGII	23.9	22.0	22.2	34.0	26.7	25.8
11	KCH9267 BGII	26.8	20.7	21.8	35.9	36.9	28.4
12	SBCH-2142	17.6	25.6	22.3	37.1	32.3	27.0
13	SP 7705 BGII	15.5	17.9	18.3	25.4	23.5	20.1
14	BIOSEED 6901 BGII	21.2	20.9	22.4	30.5	32.1	25.4
	CD @ 5%	4.5	3.5	3.4	8.9	9.0	
	CV %	12.4	9.9	9.5	17.1	4.4	

Number of bolls / sq.m. in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	76.7	78.7	36.4	110.0	103.2	81.0
2	SP7679 BGII (ZC 1)	72.0	78.7	39.5	117.0	76.2	76.7
3	KCH9269 BGII	81.7	87.7	37.2	145.0	105.1	91.3
4	RSCH-136 BGII	89.3	85.3	42.6	146.0	84.2	89.5
5	PMCH-114 Bt2	73.7	70.3	36.6	143.0	87.1	82.1
6	RSCH-119 BGII	75.0	82.7	33.9	158.0	82.0	86.3
7	SBCH-4145	79.3	82.0	40.5	128.0	67.9	79.5
8	Core 105 BGII	82.3	68.7	45.4	127.0	97.8	84.2
9	Daftari 615 BG II (ZC 2)	78.7	81.0	37.6	112.0	81.6	78.2
10	DC5108 BGII	89.0	68.7	41.1	139.0	80.8	83.7
11	KCH9267 BGII	92.3	75.3	40.3	136.0	111.7	91.1
12	SBCH-2142	82.0	78.3	41.3	157.0	98.0	91.3
13	SP 7705 BGII	66.7	83.0	33.9	101.0	71.1	71.1
14	BIOSEED 6901 BGII	79.3	86.3	41.5	135.0	97.2	87.9
	CD @ 5%	11.3	NS	6.3	34.5	9.0	
	CV %	8.0	12.9	9.5	16.3	13.4	

Lint Index (g) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	6.9	5.3	5.9	9.2	5.9	6.6
2	SP7679 BGII (ZC 1)	5.2	6.3	8.5	8.3	5.7	6.8
3	KCH9269 BGII	4.9	5.6	6.0	8.9	5.4	6.2
4	RSCH-136 BGII	5.8	5.5	6.7	10.3	4.8	6.6
5	PMCH-114 Bt2	4.7	5.4	5.8	9.8	4.6	6.1
6	RSCH-119 BGII	7.5	5.0	6.3	9.5	4.6	6.6
7	SBCH-4145	6.6	6.0	7.1	10.0	5.6	7.1
8	Core 105 BGII	6.5	6.8	7.1	9.8	5.7	7.2
9	Daftari 615 BG II (ZC 2)	5.5	5.5	6.9	10.7	4.2	6.6
10	DC5108 BGII	6.8	5.7	6.2	9.4	5.1	6.6
11	KCH9267 BGII	5.1	4.6	5.6	8.4	5.2	5.8
12	SBCH-2142	6.0	5.8	7.2	9.0	5.3	6.7
13	SP 7705 BGII	7.6	6.7	8.2	10.0	5.9	7.7
14	BIOSEED 6901 BGII	6.9	5.3	6.3	8.9	4.5	6.4
	CD @ 5%	0.8	0.6		0.7	5.7	
	CV %	8.2	6.5		4.4	0.5	

Seed Index (g) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	11.4	11.3	12.5	13.8	10.3	11.9
2	SP7679 BGII (ZC 1)	10.8	11.3	12.9	13.3	10.0	11.7
3	KCH9269 BGII	10.8	12.7	12.8	13.6	9.3	11.8
4	RSCH-136 BGII	10.9	11.6	13.5	14.4	10.7	12.2
5	PMCH-114 Bt2	11.3	10.9	12.4	13.7	9.7	11.6
6	RSCH-119 BGII	9.9	11.7	12.6	13.5	9.3	11.4
7	SBCH-4145	10.3	11.9	12.6	14.3	10.0	11.8
8	Core 105 BGII	10.2	11.7	11.6	13.5	9.3	11.3
9	Daftari 615 BG II (ZC 2)	11.5	12.7	15.9	14.5	10.7	13.1
10	DC5108 BGII	11.3	11.9	12.7	14.0	10.3	12.0
11	KCH9267 BGII	9.7	9.9	11.2	12.5	9.0	10.5
12	SBCH-2142	10.0	11.0	12.5	13.3	9.7	11.3
13	SP 7705 BGII	10.1	11.6	12.4	14.0	10.3	11.7
14	BIOSEED 6901 BGII	8.7	10.1	11.6	12.8	9.3	10.5
	CD @ 5%	0.9	1.3		0.7	5.2	
	CV %	5.5	6.7		3.0	0.9	

Ginning outturn (%) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	37.6	32.0	32.0	39.9	36.5	35.6
2	SP7679 BGII (ZC 1)	32.3	35.8	39.7	38.3	36.5	36.5
3	KCH9269 BGII	31.0	30.7	32.0	39.5	36.7	34.0
4	RSCH-136 BGII	34.5	32.3	33.1	41.7	31.1	34.5
5	PMCH-114 Bt2	29.4	33.1	31.8	41.5	32.3	33.6
6	RSCH-119 BGII	42.1	30.1	33.3	41.3	33.1	36.0
7	SBCH-4145	38.9	33.4	36.0	41.3	35.7	37.1
8	Core 105 BGII	39.1	36.6	38.0	42.1	37.8	38.7
9	Daftari 615 BG II (ZC 2)	32.4	30.1	30.1	42.5	28.0	32.6
10	DC5108 BGII	37.0	32.2	32.7	40.3	33.1	35.1
11	KCH9267 BGII	36.1	31.9	33.4	40.3	36.6	35.7
12	SBCH-2142	39.4	34.5	36.7	40.4	35.3	37.3
13	SP 7705 BGII	41.0	36.7	39.8	41.6	36.2	39.1
14	BIOSEED 6901 BGII	44.2	34.5	35.3	41.0	32.3	37.5
	CD @ 5%	4.2	1.8		2.3	1.6	
	CV %	6.7	3.3		3.5	0.9	

Upper Half Mean Length (mm) under HVI Mode in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	28.4	27.9	29.1	28.2	28.4	28.4
2	SP7679 BGII (ZC 1)	27.8	27.6	29.4	25.8	27.4	27.6
3	KCH9269 BGII	29.7	30.3	29.3	29.6	29.9	29.8
4	RSCH-136 BGII	30.0	28.2	32.1	28.7	28.9	29.6
5	PMCH-114 Bt2	29.8	29.8	31.6	29.9	28.3	29.9
6	RSCH-119 BGII	28.2	31.2	32.1	30.6	28.5	30.1
7	SBCH-4145	28.4	29.2	31.3	33.2	28.9	30.2
8	Core 105 BGII	27.3	27.9	30.0	30.5	28.6	28.9
9	Daftari 615 BG II (ZC 2)	30.3	30.8	34.7	32.5	30.2	31.7
10	DC5108 BGII	28.1	28.4	32.1	27.4	27.0	28.6
11	KCH9267 BGII	26.9	25.9	28.2	26.6	25.4	26.6
12	SBCH-2142	27.3	27.7	28.9	27.6	26.2	27.5
13	SP 7705 BGII	27.5	27.4	29.7	27.9	26.9	27.9
14	BIOSEED 6901 BGII	27.8	27.9	30.6	28.1	26.2	28.1

Uniformity index under HVI Mode in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	83.0	82.0	84.0	84.0	84.0	83.4
2	SP7679 BGII (ZC 1)	83.0	83.0	85.0	83.0	84.0	83.6
3	KCH9269 BGII	83.0	83.0	85.0	84.0	83.0	83.6
4	RSCH-136 BGII	82.0	83.0	86.0	84.0	85.0	84.0
5	PMCH-114 Bt2	83.0	84.0	85.0	84.0	82.0	83.6
6	RSCH-119 BGII	83.0	83.0	87.0	85.0	84.0	84.4
7	SBCH-4145	83.0	83.0	86.0	85.0	84.0	84.2
8	Core 105 BGII	84.0	82.0	87.0	84.0	84.0	84.2
9	Daftari 615 BG II (ZC 2)	83.0	83.0	86.0	85.0	83.0	84.0
10	DC5108 BGII	84.0	83.0	84.0	84.0	84.0	83.8
11	KCH9267 BGII	84.0	83.0	86.0	83.0	82.0	83.6
12	SBCH-2142	84.0	82.0	85.0	84.0	84.0	83.8
13	SP 7705 BGII	84.0	83.0	85.0	84.0	84.0	84.0
14	BIOSEED 6901 BGII	83.0	83.0	86.0	84.0	82.0	83.6

Micronaire under HVI Mode in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	4.4	4.4	4.8	4.8	3.7	4.4
2	SP7679 BGII (ZC 1)	4.6	5.1	5.3	4.7	4.1	4.8
3	KCH9269 BGII	4.5	4.7	4.7	4.7	3.7	4.5
4	RSCH-136 BGII	3.7	4.3	4.1	5.0	3.3	4.1
5	PMCH-114 Bt2	4.3	4.5	4.4	4.8	3.6	4.3
6	RSCH-119 BGII	4.2	3.7	4.1	4.4	3.3	3.9
7	SBCH-4145	4.4	4.8	4.5	5.0	3.6	4.5
8	Core 105 BGII	4.6	4.8	4.7	4.5	4.1	4.5
9	Daftari 615 BG II (ZC 2)	4.0	4.3	4.6	4.3	3.3	4.1
10	DC5108 BGII	4.2	4.7	4.8	5.1	3.8	4.5
11	KCH9267 BGII	4.4	5.0	4.8	5.4	4.1	4.7
12	SBCH-2142	4.4	4.8	5.7	4.7	4.1	4.7
13	SP 7705 BGII	4.0	4.9	4.8	5.2	3.7	4.5
14	BIOSEED 6901 BGII	4.5	4.8	4.3	4.8	3.2	4.3

Tenacity under HVI Mode in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	29.8	29.8	31.5	29.2	27.1	29.5
2	SP7679 BGII (ZC 1)	29.0	28.7	30.2	27.1	28.6	28.7
3	KCH9269 BGII	31.4	30.6	27.6	29.4	26.1	29.0
4	RSCH-136 BGII	30.6	30.3	29.5	30.2	29.4	30.0
5	PMCH-114 Bt2	30.2	31.0	29.5	30.7	25.1	29.3
6	RSCH-119 BGII	31.1	31.8	31.7	30.1	27.0	30.3
7	SBCH-4145	29.5	30.8	31.6	29.7	27.0	29.7
8	Core 105 BGII	28.1	29.9	28.8	30.1	26.6	28.7
9	Daftari 615 BG II (ZC 2)	31.6	30.8	31.6	32.3	29.5	31.2
10	DC5108 BGII	29.3	29.8	29.8	28.2	26.2	28.7
11	KCH9267 BGII	29.1	27.3	30.5	27.4	26.5	28.2
12	SBCH-2142	29.6	29.8	31.4	28.5	24.6	28.8
13	SP 7705 BGII	29.6	28.9	31.3	27.9	27.3	29.0
14	BIOSEED 6901 BGII	29.4	29.8	28.4	27.3	25.0	28.0

Seed Cotton Yield at 140 DAS (q/ha) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	18.63	23.30	10.07	8.10	23.09	16.64
2	SP7679 BGII (ZC 1)	15.31	19.50	8.85	10.58	15.49	13.95
3	KCH9269 BGII	19.00	23.30	13.87	10.09	24.28	18.11
4	RSCH-136 BGII	24.73	20.31	11.03	12.32	23.01	18.28
5	PMCH-114 Bt2	16.10	18.41	8.33	14.26	12.38	13.90
6	RSCH-119 BGII	17.11	26.94	6.28	14.29	19.57	16.84
7	SBCH-4145	21.19	26.31	7.81	11.54	16.61	16.69
8	Core 105 BGII	22.09	12.93	7.62	15.02	16.08	14.75
9	Daftari 615 BG II (ZC 2)	17.08	21.80	11.01	12.79	11.63	14.86
10	DC5108 BGII	24.37	18.43	5.58	15.49	14.14	15.60
11	KCH9267 BGII	25.30	24.04	12.50	13.39	26.99	20.44
12	SBCH-2142	20.68	20.76	7.08	16.03	16.91	16.29
13	SP 7705 BGII	17.89	21.85	16.55	10.29	14.96	16.31
14	BIOSEED 6901 BGII	18.77	20.80	8.18	13.66	18.15	15.91
	CD @ 5%	2.50	5.17	2.10	2.72	13.81	
	CV %	7.50	14.43	13.03	13.41	4.19	

Seed Cotton Yield at 165 DAS (q/ha) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	KCH9268 BGII	4.25	9.06	8.90	9.64	7.98	7.97
2	SP7679 BGII (ZC 1)	2.92	7.26	9.74	9.85	10.35	8.02
3	KCH9269 BGII	4.19	6.89	8.99	10.50	9.57	8.03
4	RSCH-136 BGII	3.33	7.17	13.04	11.42	7.15	8.42
5	PMCH-114 Bt2	3.85	9.41	8.43	8.36	10.09	8.03
6	RSCH-119 BGII	3.45	5.87	12.60	7.82	7.87	7.52
7	SBCH-4145	4.02	5.24	11.63	10.90	7.46	7.85
8	Core 105 BGII	4.65	9.67	15.00	11.06	10.05	10.09
9	Daftari 615 BG II (ZC 2)	3.96	8.78	11.72	7.85	7.22	7.91
10	DC5108 BGII	4.00	11.89	14.33	14.35	9.00	10.71
11	KCH9267 BGII	3.79	14.20	13.43	14.17	7.90	10.70
12	SBCH-2142	2.94	10.07	12.60	10.93	12.64	9.84
13	SP 7705 BGII	3.02	6.06	6.44	10.96	6.72	6.64
14	BIOSEED 6901 BGII	3.73	9.65	10.58	10.90	9.61	8.89
	CD @ 5%	0.65	2.47	2.66	2.12	17.81	
	CV %	10.40	17.01	14.10	12.49	2.64	

Total Seed Cotton Yield (q/ha) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean	Rank	% Inc over best check
1	KCH9268 BGII	22.88	32.35	18.98	17.74	31.07	24.60	8	8.1
2	SP7679 BGII (ZC 1)	18.23	26.76	18.59	20.42	25.83	21.97	13	-3.5
3	KCH9269 BGII	23.19	30.19	22.86	20.59	33.85	26.14	4	14.8
4	RSCH-136 BGII	28.06	27.48	24.07	23.74	30.16	26.70	2	17.3
5	PMCH-114 Bt2	19.95	27.81	16.76	22.62	22.47	21.92	14	-3.7
6	RSCH-119 BGII	20.56	32.81	18.88	22.11	27.44	24.36	10	7.0
7	SBCH-4145	25.20	31.55	19.44	22.43	24.07	24.54	9	7.8
8	Core 105 BGII	26.74	22.59	22.62	26.08	26.13	24.83	6	9.1
9	Daftari 615 BG II (ZC 2)	21.05	30.57	22.72	20.64	18.85	22.77	12	0.0
10	DC5108 BGII	28.37	30.31	19.91	29.85	23.14	26.32	3	15.6
11	KCH9267 BGII	29.08	38.24	25.93	27.56	34.89	31.14	1	36.8
12	SBCH-2142	23.61	30.83	19.69	26.95	29.56	26.13	5	14.7
13	SP 7705 BGII	20.91	27.91	22.99	21.24	21.67	22.94	11	0.8
14	BIOSEED 6901 BGII	22.50	30.44	18.76	24.56	27.76	24.80	7	8.9
	CD @ 5%	2.50	5.70	3.27	3.41	11.68			
	CV %	6.40	11.33	9.40	9.14	5.28			

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Initial H X H trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	1.14	-	3.39	3.45	2.66	BETL
56002	-	1.13	-	2.93	3.73	2.60	BETL
56003	-	1.80	-	2.40	5.17	3.12	BETL
56004	-	1.44	-	2.57	3.52	2.51	BETL
56005	-	1.08	-	2.90	3.65	2.54	BETL
56006	-	0.97	-	2.91	2.73	2.20	BETL
56007	-	1.04	-	3.12	2.30	2.16	BETL
56008	-	1.18	-	3.47	3.34	2.66	BETL
56009	-	1.38	-	3.06	6.27	3.57	BETL
56010	-	1.02	-	1.19	5.31	2.51	BETL
56011	-	1.23	-	2.64	2.41	2.09	BETL
56012	-	1.38	-	3.33	1.78	2.16	BETL
56013	-	1.47	-	2.56	2.55	2.19	BETL
56014	-	2.14	-	3.43	2.48	2.69	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	0.39	7.00	0.96	1.21	2.39	BETL
56002	-	1.09	8.67	0.92	2.54	3.30	BETL
56003	-	0.42	4.33	1.54	0.70	1.75	BETL
56004	-	0.64	5.33	0.51	0.81	1.82	BETL
56005	-	0.84	7.33	0.50	1.32	2.50	BETL
56006	-	0.82	6.67	0.20	1.12	2.20	BETL
56007	-	0.98	6.67	0.26	2.02	2.48	BETL
56008	-	1.26	6.00	0.46	1.42	2.28	BETL
56009	-	0.99	5.33	0.53	3.05	2.48	BETL
56010	-	1.13	5.67	0.48	1.22	2.12	BETL
56011	-	0.97	6.00	0.14	1.12	2.06	BETL
56012	-	0.56	6.00	0.20	1.83	2.15	BETL
56013	-	0.99	8.33	0.23	1.20	2.69	BETL
56014	-	0.69	7.33	0.50	1.12	2.41	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-		-	-	-		
56002	-		-	-	-		
56003	-		-	-	-		
56004	-		-	-	-		
56005	-		-	-	-		
56006	-		-	-	-		
56007	-		-	-	-		
56008	-		-	-	-		
56009	-		-	-	-		
56010	-		-	-	-		
56011	-		-	-	-		
56012	-		-	-	-		
56013	-		-	-	-		
56014	-		-	-	-		

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	2.49	0.00	0.27	0.68	0.86	BETL
56002	-	1.56	0.00	1.37	0.71	0.91	BETL
56003	-	1.20	0.33	1.57	1.81	1.23	BETL
56004	-	2.16	0.33	1.40	2.85	1.68	BETL
56005	-	0.73	0.00	0.90	4.08	1.43	BETL
56006	-	2.36	0.00	1.40	2.79	1.64	BETL
56007	-	0.86	0.00	1.00	0.62	0.62	BETL
56008	-	2.09	0.00	1.00	0.92	1.00	BETL
56009	-	1.02	0.00	1.10	1.41	0.88	BETL
56010	-	1.31	0.00	1.47	3.51	1.57	BETL
56011	-	2.42	0.00	0.83	1.57	1.21	BETL
56012	-	1.49	0.00	0.87	3.70	1.52	BETL
56013	-	2.18	0.00	0.10	1.56	0.96	BETL
56014	-	1.93	0.00	2.03	4.13	2.02	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	0.00	1.67	0.23	0.74	0.66	BETL
56002	-	0.03	0.00	0.33	0.96	0.33	BETL
56003	-	0.01	0.67	0.30	0.32	0.32	BETL
56004	-	0.10	1.00	0.20	0.55	0.46	BETL
56005	-	0.07	1.33	0.60	0.52	0.63	BETL
56006	-	0.00	0.67	0.17	0.51	0.34	BETL
56007	-	0.02	1.33	0.17	0.85	0.59	BETL
56008	-	0.07	0.33	0.13	0.93	0.36	BETL
56009	-	0.02	0.67	0.20	0.22	0.28	BETL
56010	-	0.04	1.00	0.23	0.21	0.37	BETL
56011	-	0.02	0.00	0.13	0.81	0.24	BETL
56012	-	0.02	1.00	0.20	0.73	0.49	BETL
56013	-	0.03	0.00	0.27	0.40	0.17	BETL
56014	-	0.06	1.33	0.20	0.37	0.49	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	1.41	0.00	-	-	0.70	
56002	-	0.69	0.00	-	-	0.34	
56003	-	0.62	0.00	-	-	0.31	
56004	-	0.52	0.00	-	-	0.26	
56005	-	1.20	0.00	-	-	0.60	
56006	-	0.51	0.00	-	-	0.26	
56007	-	0.51	0.00	-	-	0.26	
56008	-	0.67	0.00	-	-	0.33	
56009	-	1.29	0.00	-	-	0.64	
56010	-	0.93	0.00	-	-	0.47	
56011	-	0.51	0.00	-	-	0.26	
56012	-	0.57	0.00	-	-	0.28	
56013	-	0.88	0.00	-	-	0.44	
56014	-	0.96	0.00	-	-	0.48	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions –*Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	0.00	0.00	0.00	-	0.00	BETL
56002	-	0.00	0.00	0.00	-	0.00	BETL
56003	-	0.00	0.00	0.00	-	0.00	BETL
56004	-	0.00	0.00	0.00	-	0.00	BETL
56005	-	0.00	0.00	0.00	-	0.00	BETL
56006	-	0.00	0.00	0.00	-	0.00	BETL
56007	-	0.00	0.00	0.00	-	0.00	BETL
56008	-	0.00	0.00	0.00	-	0.00	BETL
56009	-	0.00	0.00	0.00	-	0.00	BETL
56010	-	0.00	0.00	0.00	-	0.00	BETL
56011	-	0.00	0.00	0.00	-	0.00	BETL
56012	-	0.00	0.00	0.00	-	0.00	BETL
56013	-	0.00	0.00	0.00	-	0.00	BETL
56014	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	0.00	0.00	0.00	-	0.00	BETL
56002	-	0.00	0.00	0.00	-	0.00	BETL
56003	-	0.00	0.00	0.00	-	0.00	BETL
56004	-	0.00	0.00	0.00	-	0.00	BETL
56005	-	0.00	0.00	0.00	-	0.00	BETL
56006	-	0.00	0.00	0.00	-	0.00	BETL
56007	-	0.00	0.00	0.00	-	0.00	BETL
56008	-	0.00	0.00	0.00	-	0.00	BETL
56009	-	0.00	0.00	0.00	-	0.00	BETL
56010	-	0.00	0.00	0.00	-	0.00	BETL
56011	-	0.00	0.00	0.00	-	0.00	BETL
56012	-	0.00	0.00	0.00	-	0.00	BETL
56013	-	0.00	0.00	0.00	-	0.00	BETL
56014	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	0.00	0.00	0.00	-	0.00	BETL
56002	-	0.00	0.00	0.00	-	0.00	BETL
56003	-	0.00	0.00	0.00	-	0.00	BETL
56004	-	0.00	0.00	0.00	-	0.00	BETL
56005	-	0.00	0.00	0.00	-	0.00	BETL
56006	-	0.00	0.00	0.00	-	0.00	BETL
56007	-	0.00	0.00	0.00	-	0.00	BETL
56008	-	0.00	0.00	0.00	-	0.00	BETL
56009	-	0.00	0.00	0.00	-	0.00	BETL
56010	-	0.00	0.00	0.00	-	0.00	BETL
56011	-	0.00	0.00	0.00	-	0.00	BETL
56012	-	0.00	0.00	0.00	-	0.00	BETL
56013	-	0.00	0.00	0.00	-	0.00	BETL
56014	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Pink bollworm

Name of Entry	Pink bollworm Larva (No./10 bolls destructive sampling)						Remark
	NA	DH	PE	AD#	MU	Mean	
56001	-	0.83	2.30	0.80	-	1.31	AETL
56002	-	0.83	1.30	0.67	-	0.93	BETL
56003	-	1.83	1.63	0.20	-	1.22	AETL
56004	-	0.83	2.63	0.73	-	1.40	AETL
56005	-	0.50	1.30	1.13	-	0.98	BETL
56006	-	0.33	1.63	0.87	-	0.94	BETL
56007	-	0.33	1.40	0.40	-	0.71	BETL
56008	-	0.50	1.33	0.53	-	0.79	BETL
56009	-	0.83	1.63	1.00	-	1.15	AETL
56010	-	0.33	2.30	0.80	-	1.14	AETL
56011	-	0.33	1.63	0.87	-	0.94	BETL
56012	-	0.67	2.30	0.40	-	1.12	AETL
56013	-	0.17	1.97	0.47	-	0.87	BETL
56014	-	1.67	1.63	0.27	-	1.19	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # based on 5 observations

Table: Initial H X H trial in South Zone under Protected Conditions – Green Boll damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	0.00	-	0.00	-	0.00	BETL
56002	-	0.00	-	0.00	-	0.00	BETL
56003	-	0.00	-	0.00	-	0.00	BETL
56004	-	0.00	-	0.00	-	0.00	BETL
56005	-	0.00	-	0.00	-	0.00	BETL
56006	-	0.00	-	0.00	-	0.00	BETL
56007	-	0.00	-	0.00	-	0.00	BETL
56008	-	0.00	-	0.00	-	0.00	BETL
56009	-	0.00	-	0.00	-	0.00	BETL
56010	-	0.00	-	0.00	-	0.00	BETL
56011	-	0.00	-	0.00	-	0.00	BETL
56012	-	0.00	-	0.00	-	0.00	BETL
56013	-	0.00	-	0.00	-	0.00	BETL
56014	-	0.00	-	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Green Boll damage (Pink bollworm)

Name of Entry	Green Boll damage (%) /10 bolls destructive sampling						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	5.00	-	6.67	-	5.84	BETL
56002	-	8.33	-	12.17	-	10.25	AETL
56003	-	16.67	-	9.33	-	13.00	AETL
56004	-	6.67	-	14.67	-	10.67	AETL
56005	-	11.67	-	20.83	-	16.25	AETL
56006	-	11.67	-	14.67	-	13.17	AETL
56007	-	8.33	-	16.17	-	12.25	AETL
56008	-	13.33	-	16.67	-	15.00	AETL
56009	-	13.33	-	21.50	-	17.42	AETL
56010	-	8.33	-	10.50	-	9.42	BETL
56011	-	5.00	-	13.17	-	9.09	BETL
56012	-	8.33	-	10.33	-	9.33	BETL
56013	-	5.00	-	9.00	-	7.00	BETL
56014	-	18.33	-	8.50	-	13.42	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	9.96	6.00	9.10	-	8.35	
56002	-	10.84	9.00	15.77	-	11.87	
56003	-	15.36	8.00	11.93	-	11.76	
56004	-	8.42	4.00	16.78	-	9.73	
56005	-	9.15	4.00	11.75	-	8.30	
56006	-	8.01	7.00	12.29	-	9.10	
56007	-	10.46	4.00	10.02	-	8.16	
56008	-	8.94	7.00	10.43	-	8.79	
56009	-	9.86	6.00	12.47	-	9.44	
56010	-	8.16	5.00	13.33	-	8.83	
56011	-	3.78	7.00	14.30	-	8.36	
56012	-	8.96	5.00	11.27	-	8.41	
56013	-	3.78	6.00	11.23	-	7.00	
56014	-	14.59	8.00	10.43	-	11.01	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	9.17	3.00	3.33	-	5.17	
56002	-	8.50	3.00	7.33	-	6.28	
56003	-	11.42	2.00	8.50	-	7.31	
56004	-	5.58	1.00	7.17	-	4.58	
56005	-	5.92	1.00	6.50	-	4.47	
56006	-	4.67	3.00	6.50	-	4.72	
56007	-	9.08	2.00	8.67	-	6.58	
56008	-	5.25	3.00	7.67	-	5.31	
56009	-	5.00	1.00	8.50	-	4.83	
56010	-	4.92	2.00	6.83	-	4.58	
56011	-	7.58	2.00	8.00	-	5.86	
56012	-	8.67	3.00	5.67	-	5.78	
56013	-	3.42	3.00	5.33	-	3.92	
56014	-	11.75	3.00	4.50	-	6.42	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests						Remark
	NA	DH	PE	AD	MU	Mean	
56001	-	5.00	6.00	4.00	4.00	4.75	
56002	-	5.00	6.00	4.00	4.00	4.75	
56003	-	5.00	6.00	4.00	4.00	4.75	
56004	-	5.00	6.00	4.00	4.00	4.75	
56005	-	5.00	6.00	4.00	4.00	4.75	
56006	-	5.00	6.00	4.00	4.00	4.75	
56007	-	5.00	6.00	4.00	4.00	4.75	
56008	-	5.00	6.00	4.00	4.00	4.75	
56009	-	5.00	6.00	4.00	4.00	4.75	
56010	-	5.00	6.00	4.00	4.00	4.75	
56011	-	5.00	6.00	4.00	4.00	4.75	
56012	-	5.00	6.00	4.00	4.00	4.75	
56013	-	5.00	6.00	4.00	4.00	4.75	
56014	-	5.00	6.00	4.00	4.00	4.75	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 11(a): Initial Evaluation Trial of Intra-Hirsutum Hybrids – Rainfed (IET-Hybrids RF) under Protected conditions

Table 11(b): Initial Evaluation Trial of Intra-Hirsutum Hybrids – Rainfed (IET-Hybrids RF) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions							
			UAS, Dharwad							
			ALS		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
14	56001	KCH9268 BGII	24.4	R	11.6	R	18.7	R	18.7	R
7	56002	SP7679 BGII (ZC 1)	24.9	R	12.3	R	18.2	R	18.2	R
4	56003	KCH9269 BGII	26.0	MR	11.9	R	18.0	R	18.2	R
1	56004	RSCH-136 BGII	25.3	MR	13.1	R	18.7	R	19.1	R
10	56005	PMCH-114 Bt2	25.4	MR	13.8	R	18.6	R	16.6	R
12	56006	RSCH-119 BGII	23.9	R	11.7	R	18.6	R	18.6	R
5	56007	SBCH-4145	23.5	R	12.4	R	19.3	R	18.9	R
8	56008	Core 105 BGII	22.8	R	11.5	R	18.9	R	21.4	R
2	56009	Daftari 615 BG II (ZC 2)	23.5	R	11.9	R	16.5	R	19.7	R
9	56010	DC5108 BGII	23.7	R	12.4	R	18.3	R	18.9	R
13	56011	KCH9267 BGII	23.8	R	11.6	R	17.0	R	18.6	R
11	56012	SBCH-2142	23.5	R	12.5	R	18.6	R	18.9	R
6	56013	SP 7705 BGII	23.5	R	12.3	R	18.0	R	18.6	R
3	56014	BIOSEED 6901 BGII	24.9	R	12.0	R	18.4	R	18.6	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pest

Table: Initial H X H trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56001	5.22	3.33	1.10	6.62	4.07	BETL
56002	5.13	2.00	1.20	7.15	3.87	BETL
56003	4.82	3.67	1.37	9.92	4.95	BETL
56004	7.11	2.67	1.18	6.75	4.43	BETL
56005	7.62	3.00	1.16	7.01	4.70	BETL
56006	6.82	2.00	1.32	5.29	3.86	BETL
56007	6.80	1.67	1.09	4.46	3.50	BETL
56008	6.93	4.67	1.29	6.45	4.83	BETL
56009	7.84	2.00	1.11	12.04	5.75	BETL
56010	7.76	2.00	1.03	10.19	5.24	BETL
56011	8.04	1.33	1.03	4.63	3.76	BETL
56012	7.16	3.00	1.05	3.44	3.66	BETL
56013	6.91	2.67	1.25	4.90	3.93	BETL
56014	6.89	2.00	1.15	4.76	3.70	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

**Table: Initial H X H trial in South Zone under Unprotected Conditions –
Leafhopper**

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56001	3.20	12.67	1.17	2.03	4.77	BETL
56002	3.29	17.00	0.86	4.22	6.34	AETL
56003	3.40	10.00	1.80	1.18	4.10	BETL
56004	2.02	9.00	0.47	1.35	3.21	BETL
56005	2.96	12.00	0.73	2.19	4.47	BETL
56006	2.36	10.67	0.27	1.86	3.79	BETL
56007	2.72	9.33	0.38	3.38	3.95	BETL
56008	2.32	9.00	0.44	2.36	3.53	BETL
56009	3.24	9.33	0.44	5.06	4.52	BETL
56010	2.45	9.33	0.55	2.02	3.59	BETL
56011	2.19	11.00	0.17	1.86	3.80	BETL
56012	2.46	11.67	0.22	3.04	4.35	BETL
56013	1.95	10.33	0.13	2.03	3.61	BETL
56014	2.42	10.00	0.64	1.86	3.73	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	DH	PE	AD	MU	Mean	
56001	I	-	-	-	I	
56002	II	-	-	-	II	
56003	II	-	-	-	II	
56004	I	-	-	-	I	
56005	II	-	-	-	II	
56006	I	-	-	-	I	
56007	II	-	-	-	II	
56008	II	-	-	-	II	
56009	II	-	-	-	II	
56010	I	-	-	-	I	
56011	I	-	-	-	I	
56012	I	-	-	-	I	
56013	I	-	-	-	I	
56014	I	-	-	-	I	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56001	15.96	4.00	0.30	0.88	5.28	BETL
56002	17.38	6.33	1.75	0.88	6.59	BETL
56003	14.29	2.33	1.73	2.22	5.14	BETL
56004	14.18	5.33	1.76	3.47	6.18	BETL
56005	13.04	3.67	1.42	4.99	5.78	BETL
56006	15.78	2.67	1.71	3.41	5.89	BETL
56007	15.20	2.00	1.67	0.76	4.91	BETL
56008	15.84	6.00	1.58	1.13	6.14	BETL
56009	19.26	3.00	1.40	1.73	6.35	BETL
56010	15.71	2.33	1.69	4.29	6.00	BETL
56011	17.13	2.33	1.09	1.92	5.62	BETL
56012	18.00	2.00	1.53	4.50	6.51	BETL
56013	13.49	2.67	0.09	1.92	4.54	BETL
56014	14.53	3.67	2.35	5.02	6.39	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56001	1.53	3.00	0.27	1.06	1.47	BETL
56002	1.30	1.67	0.27	1.37	1.15	BETL
56003	1.30	1.00	0.29	0.47	0.76	BETL
56004	0.72	3.67	0.18	0.79	1.34	BETL
56005	1.23	2.33	0.58	0.74	1.22	BETL
56006	1.56	3.00	0.18	0.74	1.37	BETL
56007	1.13	2.67	0.11	1.22	1.28	BETL
56008	0.89	2.00	0.18	1.32	1.10	BETL
56009	0.90	2.00	0.31	0.32	0.88	BETL
56010	0.41	2.33	0.27	0.32	0.83	BETL
56011	1.06	2.33	0.15	1.16	1.18	BETL
56012	1.08	3.00	0.22	1.06	1.34	BETL
56013	0.83	2.67	0.18	0.58	1.07	BETL
56014	1.01	3.67	0.35	0.53	1.39	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	DH	PE	AD	MU	Mean	
56001	0.78	0.00	0.20	-	0.33	
56002	0.78	0.00	0.00	-	0.26	
56003	0.98	0.00	0.07	-	0.35	
56004	0.82	0.00	0.00	-	0.27	
56005	0.22	0.00	0.00	-	0.07	
56006	0.76	0.00	0.00	-	0.25	
56007	0.40	0.00	0.00	-	0.13	
56008	0.56	0.00	0.07	-	0.21	
56009	0.49	0.00	0.00	-	0.16	
56010	0.51	0.00	0.13	-	0.21	
56011	0.29	0.00	0.13	-	0.14	
56012	0.38	0.00	0.13	-	0.17	
56013	0.38	0.00	0.13	-	0.17	
56014	0.49	0.00	0.07	-	0.19	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5plants)					Remark
	DH	PE	AD	MU	Mean	
56001	0.00	0.00	0.00	-	0.00	BETL
56002	0.00	0.00	0.00	-	0.00	BETL
56003	0.00	0.00	0.00	-	0.00	BETL
56004	0.00	0.00	0.00	-	0.00	BETL
56005	0.00	0.00	0.00	-	0.00	BETL
56006	0.00	0.00	0.00	-	0.00	BETL
56007	0.00	0.00	0.00	-	0.00	BETL
56008	0.00	0.00	0.00	-	0.00	BETL
56009	0.00	0.00	0.00	-	0.00	BETL
56010	0.00	0.00	0.00	-	0.00	BETL
56011	0.00	0.00	0.00	-	0.00	BETL
56012	0.00	0.00	0.00	-	0.00	BETL
56013	0.00	0.00	0.00	-	0.00	BETL
56014	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – Spotted/ Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56001	0.00	0.00	0.00	-	0.00	BETL
56002	0.00	0.00	0.00	-	0.00	BETL
56003	0.00	0.00	0.00	-	0.00	BETL
56004	0.00	0.00	0.00	-	0.00	BETL
56005	0.00	0.00	0.00	-	0.00	BETL
56006	0.00	0.00	0.00	-	0.00	BETL
56007	0.00	0.00	0.00	-	0.00	BETL
56008	0.00	0.00	0.00	-	0.00	BETL
56009	0.00	0.00	0.00	-	0.00	BETL
56010	0.00	0.00	0.00	-	0.00	BETL
56011	0.00	0.00	0.00	-	0.00	BETL
56012	0.00	0.00	0.00	-	0.00	BETL
56013	0.00	0.00	0.00	-	0.00	BETL
56014	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56001	0.00	0.00	0.00	-	0.00	BETL
56002	0.00	0.00	0.00	-	0.00	BETL
56003	0.00	0.00	0.00	-	0.00	BETL
56004	0.00	0.00	0.00	-	0.00	BETL
56005	0.00	0.00	0.00	-	0.00	BETL
56006	0.00	0.00	0.00	-	0.00	BETL
56007	0.00	0.00	0.00	-	0.00	BETL
56008	0.00	0.00	0.00	-	0.00	BETL
56009	0.00	0.00	0.00	-	0.00	BETL
56010	0.00	0.00	0.00	-	0.00	BETL
56011	0.00	0.00	0.00	-	0.00	BETL
56012	0.00	0.00	0.00	-	0.00	BETL
56013	0.00	0.00	0.00	-	0.00	BETL
56014	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	DH	PE	AD#	MU	Mean	
56001	1.67	1.78	0.20	-	1.22	AETL
56002	1.33	2.45	0.40	-	1.39	AETL
56003	3.17	2.12	0.00	-	1.76	AETL
56004	1.67	1.78	0.60	-	1.35	AETL
56005	3.33	1.78	0.00	-	1.70	AETL
56006	1.83	1.55	1.40	-	1.59	AETL
56007	2.17	1.48	0.40	-	1.35	AETL
56008	1.67	1.78	0.80	-	1.42	AETL
56009	1.17	2.45	1.20	-	1.61	AETL
56010	1.00	2.45	0.20	-	1.22	AETL
56011	1.00	1.45	0.20	-	0.88	BETL
56012	1.00	1.78	0.00	-	0.93	BETL
56013	1.17	2.78	0.00	-	1.32	AETL
56014	3.50	1.45	1.00	-	1.98	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # based on 5 observations

**Table: Initial H X H trial in South Zone under Unprotected Conditions – Green Boll
Damage due to ABW/SBW/TC**

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	DH	PE	AD	MU	Mean	
56001	0.00	-	0.00	-	0.00	BETL
56002	0.00	-	0.00	-	0.00	BETL
56003	0.00	-	0.00	-	0.00	BETL
56004	0.00	-	0.00	-	0.00	BETL
56005	0.00	-	0.00	-	0.00	BETL
56006	0.00	-	0.00	-	0.00	BETL
56007	0.00	-	0.00	-	0.00	BETL
56008	0.00	-	0.00	-	0.00	BETL
56009	0.00	-	0.00	-	0.00	BETL
56010	0.00	-	0.00	-	0.00	BETL
56011	0.00	-	0.00	-	0.00	BETL
56012	0.00	-	0.00	-	0.00	BETL
56013	0.00	-	0.00	-	0.00	BETL
56014	0.00	-	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

**Table: Initial H X H trial in South Zone under Unprotected Conditions – Green Boll
Damage (Pink Bollworm)**

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	DH	PE	AD	MU	Mean	
56001	15.00	-	22.00	-	18.50	AETL
56002	16.67	-	16.00	-	16.34	AETL
56003	30.00	-	20.00	-	25.00	AETL
56004	21.67	-	18.00	-	19.84	AETL
56005	21.67	-	28.00	-	24.84	AETL
56006	15.00	-	30.00	-	22.50	AETL
56007	13.33	-	26.00	-	19.67	AETL
56008	23.33	-	34.00	-	28.67	AETL
56009	18.33	-	24.00	-	21.17	AETL
56010	10.00	-	24.00	-	17.00	AETL
56011	10.00	-	18.00	-	14.00	AETL
56012	16.67	-	26.00	-	21.34	AETL
56013	10.00	-	22.00	-	16.00	AETL
56014	41.67	-	34.00	-	37.84	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56001	15.17	12.00	10.00	-	12.39	
56002	18.50	13.00	10.00	-	13.83	
56003	19.42	15.00	12.00	-	15.47	
56004	10.25	8.00	10.00	-	9.42	
56005	10.75	9.00	15.00	-	11.58	
56006	9.42	14.00	20.00	-	14.47	
56007	10.25	10.00	20.00	-	13.42	
56008	14.67	15.00	20.00	-	16.56	
56009	11.75	13.00	15.00	-	13.25	
56010	8.92	11.00	15.00	-	11.64	
56011	9.67	14.00	10.00	-	11.22	
56012	12.67	10.00	15.00	-	12.56	
56013	6.25	12.00	15.00	-	11.08	
56014	19.25	16.00	20.00	-	18.42	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56001	12.67	5.00	12.00	-	9.89	
56002	16.38	6.00	9.50	-	10.63	
56003	18.38	7.00	13.00	-	12.79	
56004	9.96	4.00	16.00	-	9.99	
56005	9.54	3.00	18.50	-	10.35	
56006	8.17	4.00	22.50	-	11.56	
56007	12.17	3.00	17.50	-	10.89	
56008	9.92	4.00	25.00	-	12.97	
56009	8.42	4.00	16.50	-	9.64	
56010	8.17	3.00	16.00	-	9.06	
56011	8.83	3.00	13.00	-	8.28	
56012	11.08	4.00	17.00	-	10.69	
56013	5.08	3.00	12.00	-	6.69	
56014	16.67	3.00	24.50	-	14.72	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 11(c): Initial Evaluation Trial of Intra-Hirsutum Hybrids – Rainfed (IET-Hybrids RF) under Protected and Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions								Average PDI & Disease Reaction (DR): Unprotected conditions							
			Kaveri, Hyderabad								Kaveri, Hyderabad							
			ALS		GM		BLB		TSV		ALS		GM		BLB		TSV	
			PDI	DR	PDI	D R	PDI	DR	PDI	DR	PDI	DR	PDI	D R	PDI	DR	PDI	D R
14	56001	KCH9268 BGII	4.3	R	4.0	R	2.3	R	1.0	R	10.0	R	7.5	R	11.0	R	2.5	R
7	56002	SP7679 BGII (ZC 1)	9.3	R	8.9	R	7.6	R	2.2	R	16.8	R	13.0	R	17.2	R	3.3	R
4	56003	KCH9269 BGII	4.4	R	4.1	R	1.9	R	0.9	R	10.0	R	7.5	R	10.3	R	2.8	R
1	56004	RSCH-136 BGII	7.0	R	7.3	R	5.3	R	2.5	R	13.7	R	7.5	R	13.3	R	2.5	R
10	56005	PMCH-114 Bt2	4.2	R	6.1	R	4.3	R	1.9	R	12.0	R	9.3	R	13.7	R	3.3	R
12	56006	RSCH-119 BGII	10.9	R	7.2	R	3.8	R	1.8	R	17.5	R	9.3	R	13.3	R	3.3	R
5	56007	SBCH-4145	10.6	R	8.5	R	3.3	R	2.3	R	17.0	R	9.0	R	14.3	R	4.4	R
8	56008	Core 105 BGII	8.4	R	8.8	R	2.3	R	2.2	R	15.3	R	9.8	R	15.2	R	4.0	R
2	56009	Daftari 615 BG II (ZC 2)	9.6	R	8.1	R	5.0	R	1.8	R	17.1	R	10.8	R	17.5	R	4.3	R
9	56010	DC5108 BGII	8.6	R	5.6	R	4.2	R	1.6	R	13.0	R	9.5	R	18.0	R	4.1	R
13	56011	KCH9267 BGII	4.2	R	5.0	R	2.4	R	0.8	R	10.5	R	7.5	R	10.8	R	2.5	R
11	56012	SBCH-2142	9.0	R	9.2	R	6.4	R	3.0	R	15.7	R	12.3	R	17.3	R	4.4	R
6	56013	SP 7705 BGII	5.6	R	9.4	R	7.2	R	3.0	R	13.1	R	13.3	R	15.3	R	3.1	R
3	56014	BIOSEED 6901 BGII	9.0	R	9.2	R	4.8	R	2.5	R	15.6	R	7.4	R	16.0	R	2.6	R

Advanced Evaluation Trial (I) of Intra-Hirsutum Bt Hybrids - Rainfed

Constitution of Trial

The trial was constituted with 12 Bt cotton hybrids containing MON 15985 event sponsored by various organization along with two different check hybrids as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	9	56031	MSCH 639 BGII	Mudra Seed Sciences Pvt Ltd
2	13	56032	RSCH 999 BGII	Royal Seeds Pvt Ltd
3	1	56033	RCH 1116 BGII	Rasi Seeds
4	6	56034	US 720 BGII	Seedworks
5	12	56035	KCH 9298 BGII	Kaveri Seed Co Ltd
6	5	56036	24SS66 BGII	Sri Sathya seeds
7	10	56037	GBCH 6666 BGII	Green Gold seeds
8	7	56038	CORE 103 BGII	Coregenes
9	3	56039	Daftari 615 BG II (ZC 2)	
10	11	56040	RSCH 369 BGII	Royal Seeds Pvt Ltd
11	8	56041	RCH 1121 BGII	Rasi Seeds
12	4	56042	KCH 9294 BGII	Kaveri Seed Co Ltd
13	2	56043	CCH 529 Bt2	Caspian Seeds Private Limited
14	14	56044	SP7679 BGII (ZC 1)	

The trial was conducted in seven locations viz., Mudhole, Adilabad, Nandyal*, Dharwad, Perambalur, Hyderabad (Kaveri), and Warangal (Core seeds)*.

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Recommended spacing for the hybrid has been followed.

Number of rows: 4 rows of 6 meters per entry with three replications

Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Advanced Evaluation Trial of H X H hybrids - I**

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	145.7	186.5	100.4	187.7	140.1	152.1
2	RSCH 999 BGII	133.0	190.3	108.7	178.9	148.9	152.0
3	RCH 1116 BGII	128.9	184.7	97.9	164.1	136.5	142.4
4	US 720 BGII	141.7	179.4	102.9	205.2	150.4	155.9
5	KCH 9298 BGII	160.3	193.9	120.9	199.1	139.5	162.7
6	24SS66 BGII	154.5	224.0	115.6	212.9	136.1	168.6
7	GBCH 6666 BGII	147.6	194.3	108.9	169.1	149.1	153.8
8	CORE 103 BGII	179.9	220.3	111.1	213.2	165.9	178.1
9	Daftari 615 BG II (ZC 2)	146.3	191.1	114.0	199.9	150.1	160.3
10	RSCH 369 BGII	142.6	185.9	103.6	180.9	141.3	150.9
11	RCH 1121 BGII	149.9	198.3	106.3	168.0	142.3	153.0
12	KCH 9294 BGII	149.7	204.5	102.8	196.1	149.9	160.6
13	CCH 529 Bt2	167.3	200.5	116.6	208.6	150.3	168.7
14	SP7679 BGII (ZC 1)	137.5	181.6	117.3	189.3	139.5	153.0
	CD @ 5%	16.8	24.4	14.2	33.4	6.0	
	CV %	6.7	7.4	7.8	11.0	14.7	

Number of monopodia in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	0.5	1.6	1.4	1.9	1.2	1.3
2	RSCH 999 BGII	0.7	1.9	2.9	1.9	1.1	1.7
3	RCH 1116 BGII	1.3	1.5	2.1	2.1	1.6	1.7
4	US 720 BGII	0.5	1.3	1.9	2.6	1.1	1.5
5	KCH 9298 BGII	0.3	1.3	1.7	1.7	1.1	1.2
6	24SS66 BGII	1.1	2.1	3.1	2.5	1.1	2.0
7	GBCH 6666 BGII	0.6	1.7	1.9	2.9	1.3	1.7
8	CORE 103 BGII	0.7	0.9	1.4	2.0	1.2	1.2
9	Daftari 615 BG II (ZC 2)	1.6	1.3	1.8	1.6	1.2	1.5
10	RSCH 369 BGII	0.5	1.8	1.9	1.9	1.2	1.5
11	RCH 1121 BGII	1.5	2.5	2.9	2.2	2.1	2.2
12	KCH 9294 BGII	0.9	2.1	2.9	2.3	1.1	1.9
13	CCH 529 Bt2	1.3	2.0	2.8	2.5	1.1	1.9
14	SP7679 BGII (ZC 1)	1.1	2.1	1.2	3.7	1.7	2.0
	CD @ 5%	0.5	0.9	0.6	0.8	13.6	
	CV %	38.8	29.9	17.0	20.8	0.3	

Number of sympodia in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	12.7	20.7	15.4	27.6	17.2	18.7
2	RSCH 999 BGII	11.9	21.9	18.1	28.0	19.9	20.0
3	RCH 1116 BGII	11.9	23.4	17.2	24.8	18.1	19.1
4	US 720 BGII	12.9	21.1	17.7	24.2	22.9	19.8
5	KCH 9298 BGII	13.1	22.2	20.0	25.1	20.7	20.2
6	24SS66 BGII	12.9	23.7	17.7	23.8	18.4	19.3
7	GBCH 6666 BGII	11.0	21.3	18.1	22.1	18.1	18.1
8	CORE 103 BGII	16.1	23.3	17.8	25.0	20.1	20.5
9	Daftari 615 BG II (ZC 2)	13.3	20.7	19.0	24.1	17.6	18.9
10	RSCH 369 BGII	13.9	20.9	16.0	26.0	19.5	19.3
11	RCH 1121 BGII	10.4	22.5	16.7	23.4	21.4	18.9
12	KCH 9294 BGII	9.9	22.0	18.1	24.6	22.9	19.5
13	CCH 529 Bt2	13.1	20.3	17.7	25.3	16.7	18.6
14	SP7679 BGII (ZC 1)	12.7	19.7	19.9	22.3	20.1	18.9
	CD @ 5%	2.2	2.0	2.8	2.9	11.5	
	CV %	10.4	5.5	9.2	7.3	3.8	

Boll weight (g) in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	5.1	5.8	5.2	5.7	6.2	5.6
2	RSCH 999 BGII	4.8	5.2	5.5	6.5	5.4	5.5
3	RCH 1116 BGII	4.6	5.2	4.8	6.1	5.4	5.2
4	US 720 BGII	4.9	6.2	5.2	6.8	5.9	5.8
5	KCH 9298 BGII	4.6	5.0	4.5	5.8	5.2	5.0
6	24SS66 BGII	4.3	5.0	5.4	6.6	4.6	5.2
7	GBCH 6666 BGII	5.2	6.3	6.4	7.0	5.8	6.1
8	CORE 103 BGII	5.5	5.1	4.7	5.6	5.7	5.3
9	Daftari 615 BG II (ZC 2)	5.3	5.8	4.4	8.2	5.9	5.9
10	RSCH 369 BGII	5.1	5.7	5.3	6.4	5.9	5.7
11	RCH 1121 BGII	5.5	5.6	6.1	6.8	5.3	5.9
12	KCH 9294 BGII	5.1	6.0	5.5	7.1	6.3	6.0
13	CCH 529 Bt2	5.3	5.6	5.7	7.0	5.9	5.9
14	SP7679 BGII (ZC 1)	5.2	5.5	5.4	6.2	5.8	5.6
	CD @ 5%	0.6	0.7	0.6	0.7	4.8	
	CV %	7.0	7.1	7.0	7.0	0.5	

Number of bolls / plant in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	27.2	19.9	22.7	38.8	29.9	27.7
2	RSCH 999 BGII	23.6	19.4	20.4	39.7	29.1	26.4
3	RCH 1116 BGII	23.1	20.7	23.9	42.0	30.4	28.0
4	US 720 BGII	23.5	19.2	19.2	41.1	26.6	25.9
5	KCH 9298 BGII	23.8	22.3	25.7	40.2	36.3	29.7
6	24SS66 BGII	28.8	19.1	30.7	38.4	30.1	29.4
7	GBCH 6666 BGII	17.0	17.7	23.0	40.8	31.2	25.9
8	CORE 103 BGII	19.4	18.4	24.0	36.7	29.0	25.5
9	Daftari 615 BG II (ZC 2)	20.1	19.8	21.7	29.3	27.1	23.6
10	RSCH 369 BGII	22.5	18.9	18.8	35.5	27.6	24.7
11	RCH 1121 BGII	18.8	18.4	15.9	32.1	30.8	23.2
12	KCH 9294 BGII	19.9	16.5	17.9	30.9	32.1	23.5
13	CCH 529 Bt2	26.4	17.0	25.9	35.5	28.6	26.7
14	SP7679 BGII (ZC 1)	22.8	17.9	14.4	33.2	28.1	23.3
	CD @ 5%	4.8	4.6	4.8	7.9	7.1	
	CV %	12.5	14.4	13.3	13.4	3.5	

Number of bolls / sq.m. in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	90.7	77.0	41.9	155.0	90.7	91.1
2	RSCH 999 BGII	82.0	79.0	37.8	154.7	88.1	88.3
3	RCH 1116 BGII	81.7	71.3	44.2	168.0	92.1	91.5
4	US 720 BGII	73.0	91.3	35.6	158.3	80.6	87.8
5	KCH 9298 BGII	79.7	91.3	47.5	152.3	109.9	96.1
6	24SS66 BGII	91.7	67.0	56.7	150.3	91.3	91.4
7	GBCH 6666 BGII	60.7	76.7	42.6	154.3	94.5	85.8
8	CORE 103 BGII	71.3	70.7	44.4	142.0	87.9	83.3
9	Daftari 615 BG II (ZC 2)	73.7	80.0	40.1	117.3	82.2	78.7
10	RSCH 369 BGII	82.0	74.7	34.7	134.7	83.6	81.9
11	RCH 1121 BGII	56.0	59.0	29.4	128.0	93.3	73.1
12	KCH 9294 BGII	77.7	55.0	33.1	126.0	97.4	77.8
13	CCH 529 Bt2	103.0	71.7	47.9	142.0	86.7	90.3
14	SP7679 BGII (ZC 1)	81.3	69.0	26.7	125.7	85.1	77.6
	CD @ 5%	12.3	14.8	9.0	27.9	7.1	
	CV %	9.2	11.9	13.3	12.2	10.7	

Lint Index (g) in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	5.4	5.9	6.5	7.0	5.4	6.0
2	RSCH 999 BGII	5.9	5.1	6.8	8.1	4.5	6.1
3	RCH 1116 BGII	5.9	5.6	5.8	8.8	4.9	6.2
4	US 720 BGII	4.4	5.4	6.3	8.6	5.4	6.0
5	KCH 9298 BGII	4.6	4.8	5.5	7.1	5.8	5.6
6	24SS66 BGII	7.0	5.1	5.4	8.0	5.1	6.1
7	GBCH 6666 BGII	6.4	5.6	6.0	8.7	4.9	6.3
8	CORE 103 BGII	5.8	5.4	5.9	8.8	4.9	6.2
9	Daftari 615 BG II (ZC 2)	4.6	5.2	6.6	10.1	4.8	6.3
10	RSCH 369 BGII	6.2	5.4	6.6	7.7	5.1	6.2
11	RCH 1121 BGII	5.0	6.0	6.0	8.8	4.4	6.0
12	KCH 9294 BGII	6.6	5.5	6.3	8.9	5.4	6.5
13	CCH 529 Bt2	6.5	5.4	6.2	8.9	6.0	6.6
14	SP7679 BGII (ZC 1)	4.9	6.5	7.9	9.1	5.9	6.9
	CD @ 5%	0.6	0.5		0.8	5.0	
	CV %	6.4	5.4		3.9	0.4	

Seed Index (g) in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	9.9	11.6	12.8	12.0	10.7	11.4
2	RSCH 999 BGII	9.8	10.6	13.5	12.9	9.3	11.2
3	RCH 1116 BGII	10.1	10.9	11.3	12.9	9.0	10.8
4	US 720 BGII	10.2	11.4	11.6	12.7	10.3	11.2
5	KCH 9298 BGII	10.4	10.4	11.0	11.5	10.0	10.7
6	24SS66 BGII	9.4	9.7	10.5	11.7	9.3	10.1
7	GBCH 6666 BGII	10.9	12.9	13.8	12.6	11.3	12.3
8	CORE 103 BGII	10.6	11.1	11.2	12.7	10.7	11.3
9	Daftari 615 BG II (ZC 2)	11.1	12.6	14.5	15.1	10.7	12.8
10	RSCH 369 BGII	10.2	11.6	12.8	12.8	11.0	11.7
11	RCH 1121 BGII	10.6	11.5	12.4	12.9	8.7	11.2
12	KCH 9294 BGII	9.8	10.5	11.5	12.7	9.3	10.8
13	CCH 529 Bt2	10.2	10.5	11.5	12.7	11.0	11.2
14	SP7679 BGII (ZC 1)	10.7	11.4	12.3	13.3	10.7	11.7
	CD @ 5%	0.7	0.9		0.7	4.8	
	CV %	4.2	4.7		3.3	0.8	

Ginning outturn (%) in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	33.6	33.8	33.8	36.9	33.6	34.3
2	RSCH 999 BGII	39.2	32.4	33.4	38.5	32.6	35.2
3	RCH 1116 BGII	35.1	34.1	34.1	40.5	35.1	35.8
4	US 720 BGII	31.5	32.2	35.4	40.3	34.2	34.7
5	KCH 9298 BGII	32.3	31.7	33.6	38.1	36.6	34.5
6	24SS66 BGII	41.5	34.3	33.9	40.6	35.3	37.1
7	GBCH 6666 BGII	37.1	30.2	30.4	40.9	30.3	33.8
8	CORE 103 BGII	37.3	32.5	34.6	40.8	31.6	35.4
9	Daftari 615 BG II (ZC 2)	31.0	29.0	31.3	40.0	30.8	32.4
10	RSCH 369 BGII	38.3	31.5	34.1	37.3	31.8	34.6
11	RCH 1121 BGII	34.2	34.1	32.8	40.7	33.7	35.1
12	KCH 9294 BGII	40.7	34.2	35.5	41.1	36.7	37.6
13	CCH 529 Bt2	36.9	33.9	35.2	41.2	35.2	36.5
14	SP7679 BGII (ZC 1)	33.6	36.3	39.1	40.6	35.7	37.1
	CD @ 5%	3.0	2.0		2.5	1.8	
	CV %	5.0	3.7		3.9	1.0	

Upper Half Mean Length (mm) under HVI Mode in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	30.6	27.8	30.8	30.8	28.7	29.7
2	RSCH 999 BGII	28.1	28.7	32.1	30.4	30.8	30.0
3	RCH 1116 BGII	27.2	28.3	28.2	28.5	26.3	27.7
4	US 720 BGII	28.9	29.7	30.7	25.9	28.0	28.6
5	KCH 9298 BGII	28.4	27.3	28.8	26.6	26.6	27.5
6	24SS66 BGII	27.6	28.1	29.0	28.1	28.4	28.2
7	GBCH 6666 BGII	30.4	31.0	32.5	30.1	28.8	30.6
8	CORE 103 BGII	29.1	30.1	30.7	28.8	29.1	29.6
9	Daftari 615 BG II (ZC 2)	29.4	30.6	34.3	32.2	31.8	31.7
10	RSCH 369 BGII	31.0	28.4	31.3	30.2	28.3	29.8
11	RCH 1121 BGII	27.2	26.4	28.9	28.7	26.1	27.5
12	KCH 9294 BGII	28.2	27.5	30.4	28.8	27.7	28.5
13	CCH 529 Bt2	28.6	29.5	29.8	28.0	26.7	28.5
14	SP7679 BGII (ZC 1)	27.4	27.1	28.3	27.0	27.3	27.4

Uniformity index under HVI Mode in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	83.0	80.0	85.0	85.0	85.0	83.6
2	RSCH 999 BGII	82.0	83.0	87.0	85.0	83.0	84.0
3	RCH 1116 BGII	81.0	84.0	85.0	84.0	83.0	83.4
4	US 720 BGII	85.0	85.0	85.0	84.0	83.0	84.4
5	KCH 9298 BGII	83.0	85.0	86.0	84.0	83.0	84.2
6	24SS66 BGII	85.0	84.0	85.0	83.0	84.0	84.2
7	GBCH 6666 BGII	85.0	84.0	88.0	86.0	86.0	85.8
8	CORE 103 BGII	83.0	84.0	86.0	84.0	83.0	84.0
9	Daftari 615 BG II (ZC 2)	84.0	83.0	86.0	84.0	86.0	84.6
10	RSCH 369 BGII	83.0	82.0	87.0	84.0	83.0	83.8
11	RCH 1121 BGII	83.0	83.0	85.0	85.0	83.0	83.8
12	KCH 9294 BGII	83.0	83.0	87.0	84.0	84.0	84.2
13	CCH 529 Bt2	84.0	85.0	86.0	84.0	85.0	84.8
14	SP7679 BGII (ZC 1)	84.0	82.0	85.0	83.0	85.0	83.8

Micronaire under HVI Mode in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	3.6	4.3	4.4	4.3	3.8	4.1
2	RSCH 999 BGII	3.8	4.4	4.3	4.5	3.0	4.0
3	RCH 1116 BGII	4.6	5.1	5.2	4.7	3.5	4.6
4	US 720 BGII	4.5	5.2	4.8	5.6	4.5	4.9
5	KCH 9298 BGII	4.2	4.7	4.5	4.7	3.5	4.3
6	24SS66 BGII	5.1	5.2	5.7	5.1	5.1	5.2
7	GBCH 6666 BGII	3.9	4.4	4.2	4.1	3.5	4.0
8	CORE 103 BGII	4.0	4.5	4.5	4.3	3.6	4.2
9	Daftari 615 BG II (ZC 2)	3.9	4.0	4.2	4.5	3.5	4.0
10	RSCH 369 BGII	3.8	4.6	4.3	4.0	3.4	4.0
11	RCH 1121 BGII	4.8	4.9	5.3	5.4	4.2	4.9
12	KCH 9294 BGII	4.0	4.4	4.6	4.8	3.4	4.2
13	CCH 529 Bt2	3.9	4.4	4.5	4.5	3.8	4.2
14	SP7679 BGII (ZC 1)	4.5	4.6	5.0	5.0	4.4	4.7

Tenacity under HVI Mode in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	30.8	29.7	29.3	29.1	25.0	28.8
2	RSCH 999 BGII	30.8	29.9	29.9	30.2	28.0	29.8
3	RCH 1116 BGII	28.8	29.7	30.0	28.7	24.2	28.3
4	US 720 BGII	29.8	30.2	30.8	27.6	26.9	29.1
5	KCH 9298 BGII	30.1	29.1	32.7	28.2	27.2	29.5
6	24SS66 BGII	28.6	30.1	30.3	30.1	27.7	29.4
7	GBCH 6666 BGII	30.5	31.3	32.7	31.0	30.4	31.2
8	CORE 103 BGII	30.7	31.4	30.2	29.9	27.2	29.9
9	Daftari 615 BG II (ZC 2)	30.7	30.9	30.3	31.8	31.2	31.0
10	RSCH 369 BGII	31.1	29.6	30.1	29.3	26.9	29.4
11	RCH 1121 BGII	29.1	27.8	28.1	30.6	28.0	28.7
12	KCH 9294 BGII	30.0	28.6	29.4	28.8	26.8	28.7
13	CCH 529 Bt2	31.1	30.8	30.5	28.9	26.8	29.6
14	SP7679 BGII (ZC 1)	29.6	28.7	29.6	28.3	27.3	28.7

Seed Cotton Yield at 140 DAS (q/ha) in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	24.0	23.44	11.55	15.59	22.50	19.42
2	RSCH 999 BGII	23.6	20.81	9.14	13.87	20.50	17.58
3	RCH 1116 BGII	21.4	26.24	10.72	20.84	22.53	20.35
4	US 720 BGII	17.8	19.76	9.01	16.03	20.49	16.62
5	KCH 9298 BGII	22.2	19.59	13.71	17.45	25.85	19.76
6	24SS66 BGII	22.9	13.31	11.22	15.56	21.69	16.94
7	GBCH 6666 BGII	16.6	16.33	8.59	15.82	18.22	15.11
8	CORE 103 BGII	19.9	11.89	12.81	13.51	19.37	15.50
9	Daftari 615 BG II (ZC 2)	19.4	22.37	12.81	13.91	16.27	16.95
10	RSCH 369 BGII	22.1	19.85	9.88	19.88	21.42	18.63
11	RCH 1121 BGII	16.6	21.04	8.12	20.27	22.70	17.75
12	KCH 9294 BGII	20.3	13.30	5.19	15.01	24.16	15.59
13	CCH 529 Bt2	23.7	20.63	7.97	18.80	22.84	18.79
14	SP7679 BGII (ZC 1)	20.3	14.31	9.02	9.90	20.45	14.80
	CD @ 5%	3.4	4.28	2.19	4.29	9.27	
	CV %	9.7	13.59	13.04	16.59	3.32	

Seed Cotton Yield at 165 DAS (q/ha) in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean
1	MSCH 639 BGII	3.40	11.00	9.67	9.67	9.74	8.70
2	RSCH 999 BGII	2.56	7.57	10.50	9.53	6.21	7.27
3	RCH 1116 BGII	2.73	6.65	8.93	9.34	11.19	7.77
4	US 720 BGII	5.11	9.41	9.61	14.51	3.15	8.36
5	KCH 9298 BGII	4.19	14.26	10.26	11.74	9.00	9.89
6	24SS66 BGII	2.69	10.76	10.36	13.97	9.84	9.52
7	GBCH 6666 BGII	4.61	10.69	11.45	10.33	11.49	9.71
8	CORE 103 BGII	3.24	16.20	10.53	14.62	11.30	11.18
9	Daftari 615 BG II (ZC 2)	3.04	9.57	9.46	9.97	7.91	7.99
10	RSCH 369 BGII	3.94	7.43	9.29	13.77	8.43	8.57
11	RCH 1121 BGII	4.19	6.72	8.94	9.22	7.32	7.28
12	KCH 9294 BGII	2.96	7.11	8.77	12.26	11.10	8.44
13	CCH 529 Bt2	3.87	7.20	12.22	10.34	8.45	8.42
14	SP7679 BGII (ZC 1)	1.70	8.96	9.60	9.44	8.17	7.57
	CD @ 5%	0.87	2.28	2.40	1.38	16.68	
	CV %	15.00	14.24	14.05	7.61	2.47	

Total Seed Cotton Yield (q/ha) in Advanced Evaluation Trial of H X H hybrids - I

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mean	Rank	% Inc over best check
1	MSCH 639 BGII	27.36	34.44	21.22	25.26	32.24	28.10	3	12.6
2	RSCH 999 BGII	26.14	28.39	19.64	23.40	26.70	24.85	11	-0.4
3	RCH 1116 BGII	24.15	32.89	19.65	30.18	33.71	28.12	2	12.7
4	US 720 BGII	22.91	29.17	18.62	30.54	23.64	24.98	9	0.1
5	KCH 9298 BGII	26.40	33.85	23.97	29.19	34.86	29.65	1	18.9
6	24SS66 BGII	25.56	24.07	21.58	29.53	31.53	26.45	7	6.0
7	GBCH 6666 BGII	21.20	27.02	20.03	26.15	29.71	24.82	12	-0.5
8	CORE 103 BGII	23.17	28.09	23.34	28.13	30.67	26.68	6	6.9
9	Daftari 615 BG II (ZC 2)	22.48	31.94	22.27	23.88	24.19	24.95	10	0.0
10	RSCH 369 BGII	26.06	27.28	19.17	33.65	29.85	27.20	5	9.0
11	RCH 1121 BGII	20.80	27.76	17.06	29.49	30.01	25.02	8	0.3
12	KCH 9294 BGII	23.30	20.41	13.95	27.27	35.25	24.04	13	-3.7
13	CCH 529 Bt2	27.61	27.83	20.19	29.14	31.29	27.21	4	9.1
14	SP7679 BGII (ZC 1)	21.98	23.28	18.62	19.34	28.62	22.37	14	-10.3
	CD @ 5%	3.40	5.41	2.90	4.00	8.15			
	CV %	8.50	11.38	8.64	9.09	4.13			

Evaluation under Protected Condition for Insect pests
Reaction to Insect Pest
 (

Table: Advanced H X H trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	1.02	-	2.39	2.48	1.96	BETL
56032	-	0.66	-	2.03	2.58	1.76	BETL
56033	-	0.88	-	2.96	2.62	2.15	BETL
56034	-	1.02	-	2.20	5.38	2.87	BETL
56035	-	1.13	-	1.94	1.86	1.64	BETL
56036	-	2.15	-	1.91	3.52	2.53	BETL
56037	-	0.86	-	1.53	1.59	1.33	BETL
56038	-	0.82	-	1.94	4.89	2.55	BETL
56039	-	1.65	-	1.80	12.48	5.31	BETL
56040	-	1.11	-	2.17	4.55	2.61	BETL
56041	-	0.84	-	1.54	4.41	2.26	BETL
56042	-	0.62	-	2.55	4.96	2.71	BETL
56043	-	0.73	-	2.50	2.62	1.95	BETL
56044	-	0.70	-	2.15	2.69	1.85	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	0.37	2.89	0.27	1.42	1.24	BETL
56032	-	0.25	2.94	0.26	0.92	1.09	BETL
56033	-	0.78	1.63	0.51	0.51	0.86	BETL
56034	-	0.34	2.16	0.56	1.31	1.09	BETL
56035	-	0.34	2.71	0.52	0.41	0.99	BETL
56036	-	0.28	2.45	0.54	0.61	0.97	BETL
56037	-	0.38	2.94	0.57	0.81	1.18	BETL
56038	-	0.47	2.38	0.50	0.51	0.96	BETL
56039	-	0.65	2.58	0.35	0.92	1.12	BETL
56040	-	0.36	2.71	0.40	1.12	1.15	BETL
56041	-	0.51	1.73	0.48	1.12	0.96	BETL
56042	-	0.60	2.08	0.48	1.02	1.05	BETL
56043	-	0.37	2.31	0.52	0.71	0.98	BETL
56044	-	0.43	2.31	0.44	2.24	1.36	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-		-	-	-		
56032	-		-	-	-		
56033	-		-	-	-		
56034	-		-	-	-		
56035	-		-	-	-		
56036	-		-	-	-		
56037	-		-	-	-		
56038	-		-	-	-		
56039	-		-	-	-		
56040	-		-	-	-		
56041	-		-	-	-		
56042	-		-	-	-		
56043	-		-	-	-		
56044	-		-	-	-		

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	1.75	0.00	1.23	1.13	1.03	BETL
56032	-	1.28	0.00	1.4	1.18	0.96	BETL
56033	-	1.58	0.00	1.4	3.18	1.54	BETL
56034	-	2.13	0.00	1.37	3.72	1.81	BETL
56035	-	1.80	0.00	1.53	5.25	2.14	BETL
56036	-	3.31	0.00	1.77	0.35	1.36	BETL
56037	-	1.40	0.00	1.57	5.40	2.09	BETL
56038	-	1.88	0.00	1.5	3.40	1.70	BETL
56039	-	2.79	1.41	1.27	1.63	1.77	BETL
56040	-	2.18	0.00	1.17	1.45	1.20	BETL
56041	-	1.33	0.58	1.3	2.53	1.43	BETL
56042	-	1.21	0.00	1.4	3.08	1.42	BETL
56043	-	1.61	0.00	1.63	2.78	1.50	BETL
56044	-	1.64	1.15	1.37	4.25	2.10	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	0.02	0.00	0.90	0.85	0.44	BETL
56032	-	0.02	0.58	0.57	0.97	0.53	BETL
56033	-	0.04	0.00	0.63	0.33	0.25	BETL
56034	-	0.04	0.00	0.70	0.45	0.30	BETL
56035	-	0.02	0.58	0.67	0.15	0.35	BETL
56036	-	0.04	0.00	0.53	0.11	0.17	BETL
56037	-	0.06	0.82	0.37	0.07	0.33	BETL
56038	-	0.01	0.82	0.30	0.41	0.38	BETL
56039	-	0.07	1.15	0.27	0.45	0.48	BETL
56040	-	0.02	0.58	0.30	0.67	0.39	BETL
56041	-	0.02	0.00	0.20	0.67	0.22	BETL
56042	-	0.06	0.82	0.40	0.52	0.45	BETL
56043	-	0.02	0.00	0.30	0.78	0.28	BETL
56044	-	0.22	0.00	0.47	0.45	0.28	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table Advanced H X H trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	0.20	0.00	-	-	0.10	
56032	-	0.26	0.00	-	-	0.13	
56033	-	0.54	0.00	-	-	0.27	
56034	-	0.65	0.00	-	-	0.33	
56035	-	1.07	0.00	-	-	0.54	
56036	-	0.75	0.00	-	-	0.38	
56037	-	0.48	0.00	-	-	0.24	
56038	-	0.51	0.00	-	-	0.26	
56039	-	0.61	0.00	-	-	0.30	
56040	-	0.94	0.00	-	-	0.47	
56041	-	0.62	0.00	-	-	0.31	
56042	-	0.71	0.00	-	-	0.35	
56043	-	0.26	0.00	-	-	0.13	
56044	-	0.49	0.00	-	-	0.24	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions– *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	0.00	0.00	0.00	-	0.00	BETL
56032	-	0.00	0.00	0.00	-	0.00	BETL
56033	-	0.00	0.00	0.00	-	0.00	BETL
56034	-	0.00	0.00	0.00	-	0.00	BETL
56035	-	0.00	0.00	0.00	-	0.00	BETL
56036	-	0.00	0.00	0.00	-	0.00	BETL
56037	-	0.00	0.00	0.00	-	0.00	BETL
56038	-	0.00	0.00	0.00	-	0.00	BETL
56039	-	0.00	0.00	0.00	-	0.00	BETL
56040	-	0.00	0.00	0.00	-	0.00	BETL
56041	-	0.00	0.00	0.00	-	0.00	BETL
56042	-	0.00	0.00	0.00	-	0.00	BETL
56043	-	0.00	0.00	0.00	-	0.00	BETL
56044	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Spotted/
Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	0.00	0.00	0.00	-	0.00	BETL
56032	-	0.00	0.00	0.00	-	0.00	BETL
56033	-	0.00	0.00	0.00	-	0.00	BETL
56034	-	0.00	0.00	0.00	-	0.00	BETL
56035	-	0.00	0.00	0.00	-	0.00	BETL
56036	-	0.00	0.00	0.00	-	0.00	BETL
56037	-	0.00	0.00	0.00	-	0.00	BETL
56038	-	0.00	0.00	0.00	-	0.00	BETL
56039	-	0.00	0.00	0.00	-	0.00	BETL
56040	-	0.00	0.00	0.00	-	0.00	BETL
56041	-	0.00	0.00	0.00	-	0.00	BETL
56042	-	0.00	0.00	0.00	-	0.00	BETL
56043	-	0.00	0.00	0.00	-	0.00	BETL
56044	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	0.00	0.00	0.00	-	0.00	BETL
56032	-	0.00	0.00	0.00	-	0.00	BETL
56033	-	0.00	0.00	0.00	-	0.00	BETL
56034	-	0.00	0.00	0.00	-	0.00	BETL
56035	-	0.00	0.00	0.00	-	0.00	BETL
56036	-	0.00	0.00	0.00	-	0.00	BETL
56037	-	0.00	0.00	0.00	-	0.00	BETL
56038	-	0.00	0.00	0.00	-	0.00	BETL
56039	-	0.00	0.00	0.00	-	0.00	BETL
56040	-	0.00	0.00	0.00	-	0.00	BETL
56041	-	0.00	0.00	0.00	-	0.00	BETL
56042	-	0.00	0.00	0.00	-	0.00	BETL
56043	-	0.00	0.00	0.00	-	0.00	BETL
56044	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Pink bollworm

Name of Entry	Pink bollworm Larva (No./10 bolls destructive sampling)						Remark
	NA	DH	PE	AD#	MU	Mean	
56031	-	1.50	1.48	0.40	-	1.13	AETL
56032	-	0.83	1.15	0.87	-	0.95	BETL
56033	-	1.33	1.38	0.53	-	1.08	AETL
56034	-	1.17	1.82	0.53	-	1.17	AETL
56035	-	0.83	2.15	0.47	-	1.15	AETL
56036	-	0.83	1.32	0.93	-	1.03	AETL
56037	-	0.50	1.48	0.33	-	0.77	BETL
56038	-	1.00	2.15	0.53	-	1.23	AETL
56039	-	0.50	1.15	1.27	-	0.97	BETL
56040	-	1.17	1.75	0.53	-	1.15	AETL
56041	-	0.83	1.35	0.93	-	1.04	AETL
56042	-	2.17	1.38	1.00	-	1.52	AETL
56043	-	0.83	1.95	0.87	-	1.22	AETL
56044	-	1.33	1.65	0.53	-	1.17	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # based on 5 observations

Table: Advanced H X H trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	0.00	-	0.00	-	0.00	BETL
56032	-	0.00	-	0.00	-	0.00	BETL
56033	-	0.00	-	0.00	-	0.00	BETL
56034	-	0.00	-	0.00	-	0.00	BETL
56035	-	0.00	-	0.00	-	0.00	BETL
56036	-	0.00	-	0.00	-	0.00	BETL
56037	-	0.00	-	0.00	-	0.00	BETL
56038	-	0.00	-	0.00	-	0.00	BETL
56039	-	0.00	-	0.00	-	0.00	BETL
56040	-	0.00	-	0.00	-	0.00	BETL
56041	-	0.00	-	0.00	-	0.00	BETL
56042	-	0.00	-	0.00	-	0.00	BETL
56043	-	0.00	-	0.00	-	0.00	BETL
56044	-	0.00	-	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll Damage (%) /10 bolls destructive sampling						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	10.00	-	18.67	-	14.34	AETL
56032	-	8.33	-	19.33	-	13.83	AETL
56033	-	6.67	-	18.00	-	12.34	AETL
56034	-	8.33	-	27.33	-	17.83	AETL
56035	-	5.00	-	17.33	-	11.17	AETL
56036	-	8.33	-	17.33	-	12.83	AETL
56037	-	8.33	-	16.00	-	12.17	AETL
56038	-	8.33	-	31.33	-	19.83	AETL
56039	-	8.33	-	27.33	-	17.83	AETL
56040	-	10.00	-	18.00	-	14.00	AETL
56041	-	8.33	-	19.33	-	13.83	AETL
56042	-	16.67	-	18.00	-	17.34	AETL
56043	-	5.00	-	15.33	-	10.17	AETL
56044	-	6.67	-	23.33	-	15.00	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	6.81	6.00	35.00	-	15.94	
56032	-	8.29	4.00	37.91	-	16.73	
56033	-	8.58	5.00	36.11	-	16.56	
56034	-	5.85	6.00	36.67	-	16.17	
56035	-	6.17	8.00	30.00	-	14.72	
56036	-	6.98	4.00	33.67	-	14.88	
56037	-	6.05	5.00	30.89	-	13.98	
56038	-	7.22	4.00	44.78	-	18.67	
56039	-	3.91	3.00	53.55	-	20.15	
56040	-	6.84	4.00	37.00	-	15.95	
56041	-	6.32	5.00	39.22	-	16.85	
56042	-	10.00	4.00	36.67	-	16.89	
56043	-	8.59	5.00	27.78	-	13.79	
56044	-	6.73	7.00	39.44	-	17.72	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	4.08	3.00	13.33	-	6.80	
56032	-	5.92	1.00	13.33	-	6.75	
56033	-	4.67	2.00	11.67	-	6.11	
56034	-	5.75	2.00	18.33	-	8.69	
56035	-	4.42	3.00	11.67	-	6.36	
56036	-	5.42	1.00	11.67	-	6.03	
56037	-	3.67	2.00	10.67	-	5.45	
56038	-	5.17	2.00	18.33	-	8.50	
56039	-	4.92	1.00	18.33	-	8.08	
56040	-	3.58	2.00	12.00	-	5.86	
56041	-	10.67	3.00	13.67	-	9.11	
56042	-	12.08	1.00	11.67	-	8.25	
56043	-	11.17	2.00	10.33	-	7.83	
56044	-	6.42	3.00	13.33	-	7.58	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests						Remark
	NA	DH	PE	AD	MU	Mean	
56031	-	5.00	6.00	4.00	4.00	4.75	
56032	-	5.00	6.00	4.00	4.00	4.75	
56033	-	5.00	6.00	4.00	4.00	4.75	
56034	-	5.00	6.00	4.00	4.00	4.75	
56035	-	5.00	6.00	4.00	4.00	4.75	
56036	-	5.00	6.00	4.00	4.00	4.75	
56037	-	5.00	6.00	4.00	4.00	4.75	
56038	-	5.00	6.00	4.00	4.00	4.75	
56039	-	5.00	6.00	4.00	4.00	4.75	
56040	-	5.00	6.00	4.00	4.00	4.75	
56041	-	5.00	6.00	4.00	4.00	4.75	
56042	-	5.00	6.00	4.00	4.00	4.75	
56043	-	5.00	6.00	4.00	4.00	4.75	
56044	-	5.00	6.00	4.00	4.00	4.75	

NA- Nandyal, DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 12(a): Advanced Evaluation Trial-I of Intra-hirsutum Hybrids –Rainfed (AET-I Hybrids RF) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions: UAS, Dharwad							
			ALS		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
9	56031	MSCH 639 BGII	22.4	R	10.7	R	18.8	R	17.7	R
13	56032	RSCH 999 BGII	23.0	R	9.5	R	19.6	R	19.0	R
1	56033	RCH 1116 BGII	19.9	R	9.7	R	19.5	R	19.1	R
6	56034	US 720 BGII	24.5	R	10.3	R	21.3	R	17.7	R
12	56035	KCH 9298 BGII	22.8	R	11.1	R	20.3	R	17.4	R
5	56036	24SS66 BGII	22.8	R	9.8	R	19.9	R	17.1	R
10	56037	GBCH 6666 BGII	23.2	R	10.8	R	21.4	R	17.2	R
7	56038	CORE 103 BGII	21.7	R	10.5	R	21.6	R	18.4	R
3	56039	Daftari 615 BG II (ZC 2)	21.3	R	10.8	R	21.3	R	18.2	R
11	56040	RSCH 369 BGII	24.1	R	9.9	R	21.6	R	17.2	R
8	56041	RCH 1121 BGII	21.3	R	8.8	R	18.8	R	16.9	R
4	56042	KCH 9294 BGII	20.7	R	10.8	R	21.7	R	18.9	R
2	56043	CCH 529 Bt2	30.5	MR	10.7	R	21.7	R	19.0	R
14	56044	SP7679 BGII (ZC 1)	21.6	R	10.7	R	22.8	R	17.6	R

Evaluation under Unprotected Condition for Insect pests
Reaction to Insect Pest
)

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56031	6.69	1.67	2.18	4.76	3.82	BETL
56032	5.96	0.67	1.25	4.98	3.21	BETL
56033	7.33	0.67	1.85	5.03	3.72	BETL
56034	6.64	0.67	1.17	10.32	4.70	BETL
56035	7.42	1.33	3.07	3.57	3.85	BETL
56036	7.02	1.33	2.34	6.75	4.36	BETL
56037	7.58	1.33	1.52	3.04	3.37	BETL
56038	8.04	0.67	1.04	9.39	4.79	BETL
56039	7.69	2.00	1.23	24.08	8.75	BETL
56040	8.24	0.33	2.60	8.73	4.98	BETL
56041	6.89	1.67	2.83	8.47	4.96	BETL
56042	7.62	1.33	0.80	9.53	4.82	BETL
56043	7.02	1.33	1.66	5.03	3.76	BETL
56044	8.04	1.33	1.51	5.16	4.01	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

**Table: Advanced H X H trial in South Zone under Unprotected Conditions –
 Leafhopper**

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56031	2.70	11.67	0.31	2.36	4.26	BETL
56032	2.84	10.00	0.40	1.52	3.69	BETL
56033	3.20	6.67	0.29	0.84	2.75	BETL
56034	2.80	6.33	0.24	2.19	2.89	BETL
56035	2.64	8.33	0.15	0.68	2.95	BETL
56036	3.17	7.33	0.09	1.01	2.90	BETL
56037	2.56	11.67	0.13	1.35	3.93	BETL
56038	1.71	7.67	0.17	0.84	2.60	BETL
56039	2.44	7.67	0.26	1.52	2.97	BETL
56040	2.12	11.33	0.40	1.86	3.93	BETL
56041	1.80	4.67	0.24	1.86	2.14	BETL
56042	3.02	5.33	0.24	1.69	2.57	BETL
56043	2.09	7.67	0.33	1.18	2.82	BETL
56044	2.02	5.67	0.15	3.71	2.89	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	DH	PE	AD	MU	Mean	
56031	II	-	-	-	II	
56032	II	-	-	-	II	
56033	II	-	-	-	II	
56034	II	-	-	-	II	
56035	II	-	-	-	II	
56036	II	-	-	-	II	
56037	II	-	-	-	II	
56038	I	-	-	-	I	
56039	I	-	-	-	I	
56040	I	-	-	-	I	
56041	I	-	-	-	I	
56042	II	-	-	-	II	
56043	I	-	-	-	I	
56044	I	-	-	-	I	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56031	15.64	3.00	4.33	1.37	6.09	BETL
56032	15.51	2.33	2.38	1.43	5.41	BETL
56033	13.93	2.33	3.45	3.86	5.89	BETL
56034	13.80	2.67	2.47	4.53	5.87	BETL
56035	13.13	2.67	2.48	6.39	6.17	BETL
56036	19.80	2.00	2.11	2.37	6.57	BETL
56037	14.84	2.33	2.60	6.57	6.59	BETL
56038	16.64	3.67	2.62	4.14	6.77	BETL
56039	16.33	2.33	2.42	1.98	5.77	BETL
56040	21.13	2.33	2.13	1.76	6.84	BETL
56041	14.31	2.33	2.11	3.07	5.46	BETL
56042	13.60	3.33	2.33	3.74	5.75	BETL
56043	20.96	2.00	2.29	3.34	7.15	BETL
56044	19.38	2.67	0.42	5.17	6.91	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56031	1.40	0.67	0.11	1.22	0.85	BETL
56032	1.37	1.33	0.13	1.37	1.05	BETL
56033	1.30	0.67	0.49	0.47	0.73	BETL
56034	1.10	1.67	0.29	0.63	0.92	BETL
56035	1.03	1.33	0.18	0.21	0.69	BETL
56036	1.22	1.67	0.15	0.16	0.80	BETL
56037	1.01	0.67	0.15	0.11	0.48	BETL
56038	0.86	1.00	0.22	0.58	0.66	BETL
56039	0.97	1.33	0.15	0.63	0.77	BETL
56040	1.02	1.67	0.22	0.95	0.97	BETL
56041	1.23	1.67	0.22	0.95	1.02	BETL
56042	1.08	0.67	0.24	0.74	0.68	BETL
56043	0.83	0.67	0.42	1.11	0.76	BETL
56044	1.02	0.67	0.26	0.63	0.65	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	DH	PE	AD	MU	Mean	
56031	1.16	0.00	0.07	-	0.41	
56032	0.98	0.00	0.07	-	0.35	
56033	1.07	0.00	0.00	-	0.36	
56034	0.82	0.00	0.00	-	0.27	
56035	0.53	0.00	0.20	-	0.24	
56036	0.51	0.00	0.20	-	0.24	
56037	0.60	0.00	0.20	-	0.27	
56038	0.73	0.00	0.07	-	0.27	
56039	0.55	0.00	0.20	-	0.25	
56040	0.60	0.00	0.07	-	0.22	
56041	0.67	0.00	0.20	-	0.29	
56042	1.27	0.00	0.00	-	0.42	
56043	0.44	0.00	0.54	-	0.33	
56044	0.71	0.00	0.44	-	0.38	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions– *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5plants)					Remark
	DH	PE	AD	MU	Mean	
56031	0.00	0.00	0.00	-	0.00	BETL
56032	0.00	0.00	0.00	-	0.00	BETL
56033	0.00	0.00	0.00	-	0.00	BETL
56034	0.00	0.00	0.00	-	0.00	BETL
56035	0.00	0.00	0.00	-	0.00	BETL
56036	0.00	0.00	0.00	-	0.00	BETL
56037	0.00	0.00	0.00	-	0.00	BETL
56038	0.00	0.00	0.00	-	0.00	BETL
56039	0.00	0.00	0.00	-	0.00	BETL
56040	0.00	0.00	0.00	-	0.00	BETL
56041	0.00	0.00	0.00	-	0.00	BETL
56042	0.00	0.00	0.00	-	0.00	BETL
56043	0.00	0.00	0.00	-	0.00	BETL
56044	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Spotted/ Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56031	0.00	0.00	0.00	-	0.00	BETL
56032	0.00	0.00	0.00	-	0.00	BETL
56033	0.00	0.00	0.00	-	0.00	BETL
56034	0.00	0.00	0.00	-	0.00	BETL
56035	0.00	0.00	0.00	-	0.00	BETL
56036	0.00	0.00	0.00	-	0.00	BETL
56037	0.00	0.00	0.00	-	0.00	BETL
56038	0.00	0.00	0.00	-	0.00	BETL
56039	0.00	0.00	0.00	-	0.00	BETL
56040	0.00	0.00	0.00	-	0.00	BETL
56041	0.00	0.00	0.00	-	0.00	BETL
56042	0.00	0.00	0.00	-	0.00	BETL
56043	0.00	0.00	0.00	-	0.00	BETL
56044	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56031	0.00	0.00	0.00	-	0.00	BETL
56032	0.00	0.00	0.00	-	0.00	BETL
56033	0.00	0.00	0.00	-	0.00	BETL
56034	0.00	0.00	0.00	-	0.00	BETL
56035	0.00	0.00	0.00	-	0.00	BETL
56036	0.00	0.00	0.00	-	0.00	BETL
56037	0.00	0.00	0.00	-	0.00	BETL
56038	0.00	0.00	0.00	-	0.00	BETL
56039	0.00	0.00	0.00	-	0.00	BETL
56040	0.00	0.00	0.00	-	0.00	BETL
56041	0.00	0.00	0.00	-	0.00	BETL
56042	0.00	0.00	0.00	-	0.00	BETL
56043	0.00	0.00	0.00	-	0.00	BETL
56044	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	DH	PE	AD#	MU	Mean	
56031	2.50	1.94	0.00	-	1.48	AETL
56032	1.83	2.27	0.60	-	1.57	AETL
56033	2.83	1.44	0.00	-	1.42	AETL
56034	2.67	1.60	1.00	-	1.76	AETL
56035	1.83	2.27	0.20	-	1.43	AETL
56036	2.17	1.60	0.00	-	1.26	AETL
56037	1.33	1.27	0.60	-	1.07	AETL
56038	2.00	1.50	0.60	-	1.37	AETL
56039	1.00	1.27	0.40	-	0.89	BETL
56040	1.50	1.87	0.80	-	1.39	AETL
56041	2.33	1.47	0.60	-	1.47	AETL
56042	3.83	1.50	0.80	-	2.04	AETL
56043	2.00	2.07	0.60	-	1.56	AETL
56044	2.17	1.77	0.20	-	1.38	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # based on 5 observations

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	DH	PE	AD	MU	Mean	
56031	0.00	-	0.00	-	0.00	BETL
56032	0.00	-	0.00	-	0.00	BETL
56033	0.00	-	0.00	-	0.00	BETL
56034	0.00	-	0.00	-	0.00	BETL
56035	0.00	-	0.00	-	0.00	BETL
56036	0.00	-	0.00	-	0.00	BETL
56037	0.00	-	0.00	-	0.00	BETL
56038	0.00	-	0.00	-	0.00	BETL
56039	0.00	-	0.00	-	0.00	BETL
56040	0.00	-	0.00	-	0.00	BETL
56041	0.00	-	0.00	-	0.00	BETL
56042	0.00	-	0.00	-	0.00	BETL
56043	0.00	-	0.00	-	0.00	BETL
56044	0.00	-	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	DH	PE	AD	MU	Mean	
56031	15.00	-	24.00	-	19.50	AETL
56032	10.00	-	16.00	-	13.00	AETL
56033	11.67	-	20.00	-	15.84	AETL
56034	15.00	-	24.00	-	19.50	AETL
56035	10.00	-	20.00	-	15.00	AETL
56036	11.67	-	20.00	-	15.84	AETL
56037	15.00	-	18.00	-	16.50	AETL
56038	15.00	-	24.00	-	19.50	AETL
56039	10.00	-	20.00	-	15.00	AETL
56040	15.00	-	18.00	-	16.50	AETL
56041	13.33	-	16.00	-	14.67	AETL
56042	26.67	-	22.00	-	24.34	AETL
56043	11.67	-	22.00	-	16.84	AETL
56044	11.67	-	10.00	-	10.84	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56031	9.47	16.00	10.00	-	11.82	
56032	9.13	14.00	12.00	-	11.71	
56033	12.02	7.00	15.00	-	11.34	
56034	7.34	5.00	10.00	-	7.45	
56035	6.86	14.00	15.00	-	11.95	
56036	7.90	8.00	12.00	-	9.30	
56037	8.98	12.00	10.00	-	10.33	
56038	12.06	8.00	15.00	-	11.69	
56039	6.82	9.00	15.00	-	10.27	
56040	6.84	13.00	10.00	-	9.95	
56041	7.90	12.00	10.00	-	9.97	
56042	12.59	11.00	15.00	-	12.86	
56043	8.59	10.00	15.00	-	11.20	
56044	10.64	10.00	5.00	-	8.55	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56031	9.67	6.00	19.00	-	11.56	
56032	13.58	4.00	12.50	-	10.03	
56033	11.58	3.00	15.60	-	10.06	
56034	12.17	2.00	16.50	-	10.22	
56035	8.42	4.00	12.50	-	8.31	
56036	10.42	3.00	16.00	-	9.81	
56037	6.92	4.00	12.50	-	7.81	
56038	11.58	4.00	17.50	-	11.03	
56039	8.25	3.00	17.00	-	9.42	
56040	8.17	3.00	18.00	-	9.72	
56041	18.25	4.00	10.00	-	10.75	
56042	19.08	2.00	14.00	-	11.69	
56043	11.17	3.00	13.00	-	9.06	
56044	11.67	4.00	7.50	-	7.72	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 12(b): Advanced Evaluation Trial-I of Intra-hirsutum Hybrids –Rainfed (AET-I Hybrids RF) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions : UAS, Dharwad							
			ALS		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
9	56031	MSCH 639 BGII	22.4	R	12.4	R	16.2	R	15.9	R
13	56032	RSCH 999 BGII	22.6	R	12.3	R	15.8	R	16.8	R
1	56033	RCH 1116 BGII	20.1	R	11.9	R	17.4	R	16.8	R
6	56034	US 720 BGII	23.8	R	11.2	R	16.2	R	16.8	R
12	56035	KCH 9298 BGII	22.6	R	11.8	R	15.7	R	13.3	R
5	56036	24SS66 BGII	21.2	R	11.9	R	16.0	R	16.9	R
10	56037	GBCH 6666 BGII	22.8	R	11.2	R	17.4	R	16.7	R
7	56038	CORE 103 BGII	21.9	R	11.5	R	14.1	R	16.6	R
3	56039	Daftari 615 BG II (ZC 2)	21.7	R	11.1	R	18.3	R	17.4	R
11	56040	RSCH 369 BGII	24.3	R	11.5	R	16.2	R	17.2	R
8	56041	RCH 1121 BGII	21.0	R	11.4	R	14.1	R	16.8	R
4	56042	KCH 9294 BGII	19.8	R	13.1	R	15.0	R	16.6	R
2	56043	CCH 529 Bt2	28.5	MR	11.9	R	16.7	R	18.9	R
14	56044	SP7679 BGII (ZC 1)	21.4	R	12.5	R	14.3	R	19.4	R

Table 12(c): Advanced Evaluation Trial-I of Intra-hirsutum Hybrids –Rainfed (AET-I Hybrids RF) under Protected and Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions								Average PDI & Disease Reaction (DR): Unprotected conditions							
			Kaveri, Hyderabad								Kaveri, Hyderabad							
			ALS		BLB		GM		TSV		ALS		BLB		GM		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
9	56031	MSCH 639 BGII	9.9	R	3.8	R	5.6	R	1.8	R	11.8	R	11.0	R	12.5	R	4.3	R
13	56032	RSCH 999 BGII	8.3	R	3.3	R	5.0	R	2.0	R	17.0	R	10.5	R	15.9	R	4.4	R
1	56033	RCH 1116 BGII	6.9	R	4.9	R	8.6	R	3.0	R	14.6	R	13.5	R	16.3	R	5.3	R
6	56034	US 720 BGII	6.6	R	3.5	R	11.7	R	2.9	R	15.5	R	10.8	R	19.7	R	5.0	R
12	56035	KCH 9298 BGII	2.7	R	2.2	R	4.7	R	1.0	R	11.3	R	7.8	R	11.0	R	2.8	R
5	56036	24SS66 BGII	3.2	R	3.2	R	8.4	R	2.0	R	15.5	R	9.5	R	14.3	R	4.2	R
10	56037	GBCH 6666 BGII	7.8	R	3.3	R	11.5	R	1.9	R	12.3	R	10.3	R	16.3	R	4.1	R
7	56038	CORE 103 BGII	10.0	R	4.1	R	6.9	R	2.7	R	17.5	R	11.3	R	12.8	R	4.7	R
3	56039	Daftari 615 BG II (ZC 2)	9.3	R	3.9	R	10.6	R	2.3	R	14.3	R	12.3	R	16.7	R	5.5	R
11	56040	RSCH 369 BGII	8.0	R	2.6	R	9.8	R	2.8	R	13.8	R	8.8	R	17.5	R	3.0	R
8	56041	RCH 1121 BGII	3.0	R	3.2	R	8.9	R	1.5	R	13.3	R	10.5	R	15.0	R	3.8	R
4	56042	KCH 9294 BGII	3.2	R	2.3	R	5.5	R	1.0	R	11.3	R	8.3	R	10.5	R	2.5	R
2	56043	CCH 529 Bt2	10.7	R	4.5	R	12.5	R	3.6	R	17.5	R	11.0	R	19.0	R	5.6	R
14	56044	SP7679 BGII (ZC 1)	9.0	R	5.3	R	10.4	R	2.8	R	15.5	R	12.5	R	16.7	R	5.1	R

Advanced Evaluation Trial of Intra-Hirsutum Bt Hybrids (II) - Rainfed

Constitution of Trial

The trial was constituted with 11 Bt cotton hybrids containing MON 15985 event sponsored by various organization along with two different check hybrids as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	6	56051	SP7679 BGII (ZC 1)	
2	10	56052	SRCH 369 BGII	Sri Rama
3	1	56053	BIO 6720 BGII	Bioseed
4	13	56054	DACH 85S85 BGII	Dharti
5	3	56055	ARCH 771 BGII	Ankur Seeds
6	8	56056	C 9340 BGII	Mahyco
7	4	56057	RCH 1060 BGII	Rasi Seeds (P) Ltd,
8	12	56058	KCH 9227 BGII	Kaveri Seed
9	9	56059	ARCH 781 BGII	Ankur Seeds
10	11	56060	RCH 1039 BGII	Rasi Seeds (P) Ltd,
11	7	56061	CORE 101 BGII	Coregenes
12	2	56062	Daftari 615 BG II (ZC 2)	
13	5	56063	KCH 9226 BGII	Kaveri Seed

The trial was conducted in nine locations viz., Mudhole, Adilabad, Nandyal*, Dharwad, Perambalur, Warangal (Ankur), Hyderabad (Kaveri), Mokhila (Bioseed) and Guntur (Core seeds).

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Recommended spacing for the hybrid has been followed.

Number of rows: 4 rows of 6 meters per entry with four replications

Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Advanced Evaluation Trial of H X H hybrids - II**

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	127.1	165.9	118.4	187.2	120.7	141.5	143.0	154.6	144.8
2	SRCH 369 BGII	129.5	172.7	116.1	198.4	133.0	148.7	149.0	156.2	150.5
3	BIO 6720 BGII	140.9	201.8	120.2	192.7	137.7	148.5	154.3	154.8	156.4
4	DACH 85S85 BGII	118.7	179.4	108.6	185.2	122.7	137.0	135.7	153.9	142.7
5	ARCH 771 BGII	123.4	159.2	120.2	179.9	130.7	138.6	141.7	158.2	144.0
6	C 9340 BGII	128.7	183.4	102.4	192.5	119.7	142.3	150.3	156.8	147.0
7	RCH 1060 BGII	125.4	187.5	111.7	191.6	124.7	140.9	155.0	157.6	149.3
8	KCH 9227 BGII	138.5	190.1	123.2	217.4	127.0	141.1	153.7	148.9	155.0
9	ARCH 781 BGII	140.2	197.1	113.4	185.0	129.7	143.7	137.7	156.3	150.4
10	RCH 1039 BGII	112.7	177.6	111.3	171.0	116.3	134.6	138.0	144.5	138.3
11	CORE 101 BGII	147.6	236.1	125.8	218.6	136.0	162.3	158.3	160.6	168.2
12	Daftari 615 BG II (ZC 2)	143.4	189.7	123.2	186.5	138.3	144.1	154.3	156.0	154.4
13	KCH 9226 BGII	142.6	203.1	114.8	205.9	130.0	143.4	156.3	154.4	156.3
	CD @ 5%	11.2	26.5	14.6	19.2		1.9	10.4		
	CV %	4.9	8.4	7.5	6.2		4.5	4.2		

Number of monopodia in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	0.9	2.3	2.1	3.3	1.7	1.7	1.7	1.1	1.9
2	SRCH 369 BGII	1.0	1.3	1.7	2.1	1.6	1.1	1.3	1.2	1.4
3	BIO 6720 BGII	0.9	1.5	1.8	1.3	1.7	1.1	1.0	0.9	1.3
4	DACH 85S85 BGII	1.5	2.2	2.1	2.2	1.6	1.1	1.7	1.3	1.7
5	ARCH 771 BGII	0.5	1.9	1.0	2.7	1.4	1.3	1.0	1.1	1.4
6	C 9340 BGII	1.0	2.7	1.9	1.9	1.2	1.1	1.0	1.3	1.5
7	RCH 1060 BGII	0.6	1.7	2.0	1.9	1.1	1.0	1.0	1.2	1.3
8	KCH 9227 BGII	0.8	1.3	1.8	2.4	1.6	1.2	0.7	1.2	1.4
9	ARCH 781 BGII	1.1	1.8	1.6	1.8	1.2	1.7	0.7	1.0	1.4
10	RCH 1039 BGII	1.5	2.0	2.9	2.6	1.8	1.7	1.7	1.3	1.9
11	CORE 101 BGII	0.7	1.6	2.0	2.0	1.5	1.3	0.7	1.1	1.4
12	Daftari 615 BG II (ZC 2)	1.4	1.7	1.1	2.0	1.9	1.1	0.7	1.0	1.4
13	KCH 9226 BGII	0.5	1.1	1.3	1.9	1.8	1.0	1.0	0.5	1.1
	CD @ 5%	0.6	0.7	0.5	0.9		12.3	0.7		
	CV %	37.7	23.6	17.7	24.9		0.3	4.1		

Number of sympodia in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	15.6	20.9	18.8	27.4	18.1	20.1	17.0	18.3	19.5
2	SRCH 369 BGII	18.3	22.1	17.4	28.9	19.3	20.7	19.3	18.0	20.5
3	BIO 6720 BGII	16.7	21.8	18.1	29.1	17.2	18.7	17.7	25.1	20.6
4	DACH 85S85 BGII	13.7	20.0	16.3	27.8	16.3	17.3	16.7	18.1	18.3
5	ARCH 771 BGII	15.5	19.4	17.6	27.1	18.5	16.3	16.7	18.5	18.7
6	C 9340 BGII	16.1	23.5	18.1	29.5	17.9	19.7	18.3	18.7	20.2
7	RCH 1060 BGII	15.3	22.5	17.8	28.3	16.5	16.7	18.3	18.2	19.2
8	KCH 9227 BGII	17.3	22.9	19.4	30.4	18.4	17.1	18.7	21.9	20.8
9	ARCH 781 BGII	14.5	23.9	18.4	28.9	19.0	19.9	16.0	18.8	19.9
10	RCH 1039 BGII	14.9	21.7	17.7	28.4	15.0	18.3	17.3	18.7	19.0
11	CORE 101 BGII	16.5	25.7	18.8	29.3	19.8	18.0	17.7	24.9	21.3
12	Daftari 615 BG II (ZC 2)	15.6	22.7	19.4	26.7	17.6	17.5	17.0	19.4	19.5
13	KCH 9226 BGII	18.4	22.2	18.8	29.2	17.2	19.2	20.0	18.3	20.4
	CD @ 5%	1.8	2.9	2.6	2.2		7.2	2.4		
	CV %	6.7	7.8	8.3	4.9		2.2	8.1		

Boll weight (g) in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	5.1	5.7	6.8	5.2	4.3	5.8	6.3	5.1	5.5
2	SRCH 369 BGII	5.0	5.8	6.4	5.5	4.7	4.9	6.0	5.3	5.5
3	BIO 6720 BGII	4.6	5.5	6.1	5.2	5.2	5.6	6.4	5.6	5.5
4	DACH 85S85 BGII	5.0	5.9	5.8	5.5	4.2	5.4	6.1	4.9	5.4
5	ARCH 771 BGII	5.2	6.1	6.1	6.4	4.8	5.7	6.2	5.0	5.7
6	C 9340 BGII	5.1	5.9	6.4	4.4	4.3	5.8	5.7	5.3	5.4
7	RCH 1060 BGII	4.9	6.1	5.7	6.0	4.8	5.1	6.0	5.1	5.5
8	KCH 9227 BGII	4.5	5.6	5.7	4.2	4.6	5.9	5.4	4.9	5.1
9	ARCH 781 BGII	6.1	6.6	6.6	5.5	5.3	5.9	6.0	5.3	5.9
10	RCH 1039 BGII	4.9	5.7	5.5	5.2	4.7	5.7	5.7	5.3	5.3
11	CORE 101 BGII	5.1	6.6	6.2	5.1	3.9	5.1	6.4	5.5	5.5
12	Daftari 615 BG II (ZC 2)	5.2	5.6	7.1	5.7	5.2	5.2	6.1	5.3	5.7
13	KCH 9226 BGII	4.6	5.7	5.8	4.5	4.4	5.8	5.4	5.3	5.2
	CD @ 5%	0.5	NS	0.4	0.9		3.4	0.5		
	CV %	6.2	8.3	3.6	11.0		0.3	5.3		

Number of bolls / plant in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	19.5	19.0	19.8	43.2	15.7	30.4	39.3	51.8	29.8
2	SRCH 369 BGII	24.7	22.3	22.0	52.4	18.9	25.2	42.3	47.7	31.9
3	BIO 6720 BGII	22.1	17.5	24.7	40.7	20.3	29.9	36.7	62.5	31.8
4	DACH 85S85 BGII	21.5	18.7	19.3	47.7	22.9	31.7	36.7	52.6	31.4
5	ARCH 771 BGII	26.3	20.9	21.2	46.8	23.1	29.9	38.7	54.4	32.7
6	C 9340 BGII	20.1	18.7	22.0	58.8	17.9	28.4	39.0	51.7	32.1
7	RCH 1060 BGII	23.8	21.1	20.7	54.5	20.7	28.5	41.3	54.1	33.1
8	KCH 9227 BGII	23.5	24.5	21.0	57.7	21.9	34.9	49.3	54.1	35.9
9	ARCH 781 BGII	21.2	17.4	21.8	45.8	22.5	33.7	35.0	57.1	31.8
10	RCH 1039 BGII	24.3	20.2	21.3	52.3	23.7	26.0	51.3	52.5	34.0
11	CORE 101 BGII	23.2	16.6	21.8	45.6	19.5	26.9	34.0	64.2	31.5
12	Daftari 615 BG II (ZC 2)	18.5	18.8	22.0	41.2	17.1	26.2	36.7	52.7	29.2
13	KCH 9226 BGII	27.3	24.4	22.6	49.8	26.1	36.9	41.7	52.7	35.2
	CD @ 5%	4.7	4.0	4.0	11.0		11.0	4.7		
	CV %	12.0	11.8	10.9	14.0		5.5	7.0		

Number of bolls / sq.m. in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	82.3	84.3	36.6	183.7	92.1	158.3	78.2	102.2
2	SRCH 369 BGII	93.0	101.7	40.7	179.7	76.4	166.3	73.4	104.5
3	BIO 6720 BGII	95.0	90.0	45.6	170.3	90.5	187.3	96.2	110.7
4	DACH 85S85 BGII	83.3	78.0	35.8	183.7	96.2	148.3	91.8	102.4
5	ARCH 771 BGII	92.3	92.7	39.3	192.0	90.7	147.7	93.6	106.9
6	C 9340 BGII	87.7	86.3	40.7	195.0	86.1	159.0	58.2	101.9
7	RCH 1060 BGII	90.0	92.7	38.2	196.3	86.5	160.3	74.3	105.5
8	KCH 9227 BGII	66.7	114.0	38.9	194.0	105.7	201.3	78.0	114.1
9	ARCH 781 BGII	83.7	79.0	40.3	188.0	102.0	135.0	90.1	102.6
10	RCH 1039 BGII	91.0	92.0	39.5	186.7	78.8	208.3	80.9	111.0
11	CORE 101 BGII	84.3	85.7	40.3	182.3	81.4	139.7	98.9	101.8
12	Daftari 615 BG II (ZC 2)	85.3	86.0	40.7	167.3	79.4	156.7	81.1	99.5
13	KCH 9226 BGII	97.0	98.3	41.7	190.0	111.7	173.3	74.4	112.3
	CD @ 5%	11.9	15.5	7.3	16.9	11.0	24.2		
	CV %	8.1	10.1	10.9	5.7	16.8	8.7		

Lint Index (g) in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	7.2	6.0	8.5	7.8	5.0	6.1	7.3	5.1	6.6
2	SRCH 369 BGII	5.3	5.2	6.3	6.8	5.1	4.9	6.5	5.1	5.7
3	BIO 6720 BGII	6.3	5.5	6.3	6.7	4.8	5.2	6.3	6.1	5.9
4	DACH 85S85 BGII	6.1	5.6	5.6	7.3	4.4	5.5	6.8	4.9	5.8
5	ARCH 771 BGII	6.9	5.7	6.8	7.9	6.1	5.2	7.3	5.3	6.4
6	C 9340 BGII	6.9	5.0	6.1	7.2	4.7	4.1	6.0	5.2	5.7
7	RCH 1060 BGII	6.5	5.6	5.6	7.7	5.9	5.1	6.3	5.1	6.0
8	KCH 9227 BGII	5.1	4.8	5.6	6.1	5.2	5.3	5.7	5.0	5.4
9	ARCH 781 BGII	4.5	5.3	5.8	6.8	6.3	4.3	6.2	5.5	5.6
10	RCH 1039 BGII	7.5	5.7	5.9	7.2	5.3	5.2	7.2	5.6	6.2
11	CORE 101 BGII	6.7	4.7	6.1	5.9	4.4	4.4	7.2	6.1	5.7
12	Daftari 615 BG II (ZC 2)	4.8	4.7	7.8	7.7	5.2	4.5	6.3	5.2	5.8
13	KCH 9226 BGII	5.3	4.6	5.5	5.7	4.7	5.8	5.5	5.4	5.3
	CD @ 5%	0.5	0.6		0.8		4.1	0.8		
	CV %	5.6	7.3		7.2		0.4	7.7		

Seed Index (g) in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	10.1	11.1	13.5	12.1	8.8	11.0	13.0	9.3	11.1
2	SRCH 369 BGII	10.0	11.5	12.4	11.5	9.7	10.3	12.2	9.3	10.9
3	BIO 6720 BGII	9.7	11.9	12.2	11.1	8.9	10.3	12.8	11.1	11.0
4	DACH 85S85 BGII	10.9	11.3	12.8	11.5	7.9	11.0	12.8	9.9	11.0
5	ARCH 771 BGII	9.8	11.2	12.3	12.4	9.8	10.3	12.7	9.1	11.0
6	C 9340 BGII	10.1	11.2	12.7	11.8	8.6	9.0	12.0	9.4	10.6
7	RCH 1060 BGII	9.2	10.8	11.3	12.2	9.4	10.0	12.0	10.4	10.7
8	KCH 9227 BGII	9.2	10.1	10.8	10.7	9.1	9.3	11.0	10.7	10.1
9	ARCH 781 BGII	11.1	12.2	13.0	11.6	11.4	10.0	12.8	10.3	11.6
10	RCH 1039 BGII	9.5	10.5	11.4	11.2	8.9	9.3	11.5	10.3	10.3
11	CORE 101 BGII	9.3	10.6	12.1	11.0	8.2	9.0	13.3	10.9	10.6
12	Daftari 615 BG II (ZC 2)	10.5	12.4	15.9	13.5	10.4	11.0	14.0	8.7	12.1
13	KCH 9226 BGII	9.1	9.9	11.1	9.9	8.3	10.0	10.7	9.5	9.8
	CD @ 5%	0.7	NS		1.2		3.3	2.0		
	CV %	4.5	8.3		6.2		0.6	9.5		

Ginning outturn (%) in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	39.0	35.0	38.7	39.2	36.2	35.8	36.2	36.3	37.1
2	SRCH 369 BGII	33.3	31.1	33.9	37.3	34.6	32.0	34.8	35.9	34.1
3	BIO 6720 BGII	38.0	31.5	34.1	37.6	35.1	33.5	33.1	36.0	34.9
4	DACH 85S85 BGII	34.2	33.1	30.3	38.9	36.0	33.5	32.8	36.5	34.4
5	ARCH 771 BGII	39.2	33.9	35.7	39.0	38.4	33.4	36.6	35.0	36.4
6	C 9340 BGII	38.6	30.7	32.3	37.8	35.0	31.4	33.3	34.8	34.2
7	RCH 1060 BGII	39.3	34.1	33.1	38.5	38.6	33.7	34.6	35.0	35.9
8	KCH 9227 BGII	35.5	32.1	33.9	36.2	36.4	36.3	33.7	36.3	35.1
9	ARCH 781 BGII	29.0	30.2	31.1	36.9	35.7	30.1	31.8	35.0	32.5
10	RCH 1039 BGII	41.5	35.0	34.2	39.4	37.4	35.9	38.1	36.2	37.2
11	CORE 101 BGII	39.7	30.5	33.4	35.1	35.0	33.0	33.7	36.1	34.6
12	Daftari 615 BG II (ZC 2)	31.3	27.7	33.0	36.2	33.3	29.0	31.3	35.2	32.1
13	KCH 9226 BGII	35.2	31.9	33.2	36.7	36.1	36.7	34.1	35.7	35.0
	CD @ 5%	2.7	2.1		2.9		3.3	2.7		
	CV %	4.4	3.9		4.9		1.9	4.8		

Upper Half Mean Length (mm) under HVI Mode in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	26.5	25.9	29.3	26.7	25.5	28.6	27.6	27.0	27.1
2	SRCH 369 BGII	30.3	30.0	32.9	32.7	28.8	30.3	32.0	30.9	31.0
3	BIO 6720 BGII	27.9	28.0	29.5	27.5	25.8	27.8	28.3	28.0	27.9
4	DACH 85S85 BGII	26.6	30.4	33.0	29.7	28.6	30.3	30.4	30.4	29.9
5	ARCH 771 BGII	29.7	28.2	30.2	28.6	28.5	27.9	29.4	27.5	28.8
6	C 9340 BGII	27.5	28.2	28.6	27.7	25.5	26.3	28.8	27.5	27.5
7	RCH 1060 BGII	26.4	27.1	28.9	29.0	26.4	26.5	26.8	28.9	27.5
8	KCH 9227 BGII	26.0	27.3	28.6	27.3	27.2	25.5	27.0	26.8	27.0
9	ARCH 781 BGII	27.9	30.0	31.3	30.0	27.8	28.1	29.9	30.2	29.4
10	RCH 1039 BGII	26.2	27.0	28.7	27.4	25.2	27.4	28.5	27.9	27.3
11	CORE 101 BGII	28.8	29.4	31.5	29.6	26.5	29.0	29.9	29.5	29.3
12	Daftari 615 BG II (ZC 2)	30.9	30.1	33.7	31.5	28.1	30.8	30.7	31.9	31.0
13	KCH 9226 BGII	27.3	27.1	28.4	26.2	27.8	27.2	29.2	28.1	27.7

Uniformity index under HVI Mode in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	82.0	83.0	86.0	85.0	82.8	86.0	84.0	85.0	84.2
2	SRCH 369 BGII	84.0	82.0	85.0	85.0	82.3	84.0	85.0	85.0	84.0
3	BIO 6720 BGII	83.0	83.0	85.0	84.0	83.4	84.0	83.0	85.0	83.8
4	DACH 85S85 BGII	82.0	83.0	86.0	85.0	83.1	86.0	83.0	85.0	84.1
5	ARCH 771 BGII	84.0	81.0	85.0	84.0	82.5	84.0	85.0	84.0	83.7
6	C 9340 BGII	83.0	85.0	86.0	85.0	82.2	84.0	86.0	86.0	84.7
7	RCH 1060 BGII	83.0	83.0	84.0	85.0	83.0	85.0	84.0	86.0	84.1
8	KCH 9227 BGII	83.0	83.0	86.0	84.0	83.1	84.0	84.0	86.0	84.1
9	ARCH 781 BGII	83.0	84.0	86.0	85.0	82.6	85.0	86.0	86.0	84.7
10	RCH 1039 BGII	83.0	83.0	85.0	81.0	82.3	84.0	84.0	86.0	83.5
11	CORE 101 BGII	83.0	83.0	86.0	85.0	81.9	85.0	85.0	86.0	84.4
12	Daftari 615 BG II (ZC 2)	83.0	83.0	86.0	84.0	82.4	84.0	84.0	85.0	83.9
13	KCH 9226 BGII	85.0	84.0	87.0	83.0	82.9	85.0	86.0	86.0	84.9

Micronaire under HVI Mode in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	4.7	4.8	5.1	5.2	4.9	4.2	4.4	4.6	4.7
2	SRCH 369 BGII	4.1	4.2	4.2	4.6	4.5	3.6	3.3	4.0	4.1
3	BIO 6720 BGII	4.4	4.5	5.0	5.1	4.7	4.3	3.9	4.1	4.5
4	DACH 85S85 BGII	4.4	4.4	4.9	5.2	4.4	4.3	3.9	4.6	4.5
5	ARCH 771 BGII	4.4	4.5	4.7	4.4	4.9	3.8	3.7	4.2	4.3
6	C 9340 BGII	4.5	4.5	5.1	4.6	4.7	3.8	3.6	3.9	4.3
7	RCH 1060 BGII	4.7	4.6	5.0	5.1	5.0	4.1	3.9	3.6	4.5
8	KCH 9227 BGII	4.6	4.6	4.4	4.5	5.0	3.9	3.7	4.3	4.4
9	ARCH 781 BGII	4.4	4.7	5.0	4.5	4.8	3.7	3.9	3.4	4.3
10	RCH 1039 BGII	4.8	4.9	5.4	5.7	5.3	4.4	4.3	4.4	4.9
11	CORE 101 BGII	4.2	4.5	4.6	4.4	4.3	3.8	3.7	4.0	4.2
12	Daftari 615 BG II (ZC 2)	4.1	4.2	4.3	4.2	4.6	3.2	3.2	4.2	4.0
13	KCH 9226 BGII	4.6	5.0	4.6	5.0	4.7	4.2	4.0	4.3	4.6

Tenacity under HVI Mode in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	28.3	27.5	31.0	27.8	28.9	27.7	27.8	28.9	28.5
2	SRCH 369 BGII	30.8	30.8	30.3	29.9	30.5	29.2	30.3	32.1	30.5
3	BIO 6720 BGII	29.4	29.8	28.1	28.8	29.7	26.1	30.6	30.3	29.1
4	DACH 85S85 BGII	28.4	31.8	31.0	29.9	30.6	29.0	28.0	30.3	29.9
5	ARCH 771 BGII	30.9	28.9	30.1	29.0	30.4	26.9	29.2	29.9	29.4
6	C 9340 BGII	29.7	30.6	30.5	29.6	31.4	27.0	30.9	28.6	29.8
7	RCH 1060 BGII	28.7	28.5	28.6	30.3	30.2	25.0	26.2	29.9	28.4
8	KCH 9227 BGII	28.0	29.8	32.2	28.3	30.9	27.2	29.0	26.1	28.9
9	ARCH 781 BGII	30.3	31.1	31.6	31.0	30.9	28.6	32.9	32.0	31.1
10	RCH 1039 BGII	28.1	28.8	31.2	28.6	30.4	27.8	29.8	29.8	29.3
11	CORE 101 BGII	30.7	30.1	31.1	29.1	30.0	27.9	29.3	33.6	30.2
12	Daftari 615 BG II (ZC 2)	32.7	32.5	29.4	30.9	30.9	29.0	29.8	33.5	31.1
13	KCH 9226 BGII	27.7	29.0	29.7	27.7	30.5	28.2	29.3	30.0	29.0

Seed Cotton Yield at 140 DAS (q/ha) in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	16.8	15.37	10.38	8.09	7.04	20.66	20.92	19.71	14.87
2	SRCH 369 BGII	24.7	24.50	12.59	16.46	9.79	26.08	25.70	17.82	19.71
3	BIO 6720 BGII	23.8	13.19	9.90	15.81	15.33	24.67	21.19	25.84	18.72
4	DACH 85S85 BGII	17.8	11.59	6.43	13.77	16.18	27.53	26.06	25.16	18.07
5	ARCH 771 BGII	26.4	26.63	9.22	15.86	15.92	25.13	29.81	29.90	22.36
6	C 9340 BGII	18.3	15.13	6.97	14.14	8.63	28.31	21.10	20.07	16.58
7	RCH 1060 BGII	23.2	23.70	10.68	20.97	12.00	25.34	27.83	18.05	20.22
8	KCH 9227 BGII	20.8	26.15	12.72	15.26	13.77	29.52	33.41	19.75	21.42
9	ARCH 781 BGII	17.0	14.28	7.86	13.57	16.21	28.03	15.80	24.22	17.12
10	RCH 1039 BGII	26.0	24.93	11.02	19.70	10.84	16.70	30.61	20.52	20.04
11	CORE 101 BGII	18.7	14.59	11.56	12.25	15.32	19.92	21.21	28.19	17.72
12	Daftari 615 BG II (ZC 2)	16.4	14.94	12.65	17.11	9.05	18.36	17.80	20.68	15.87
13	KCH 9226 BGII	25.6	24.80	12.31	14.49	15.53	31.56	30.96	18.06	21.66
	CD @ 5%	3.7	4.36	2.42	4.60		8.00	3.97		
	CV %	10.5	13.48	13.90	18.95		3.34	9.60		

Seed Cotton Yield at 165 DAS (q/ha) in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean
1	SP7679 BGII (ZC 1)	2.66	13.02	11.46	4.81	2.24	9.82	3.38	7.07	6.81
2	SRCH 369 BGII	3.36	10.26	13.39	6.01	3.29	6.21	1.90	7.05	6.43
3	BIO 6720 BGII	4.31	16.33	14.50	4.88	3.62	8.43	2.04	7.14	7.66
4	DACH 85S85 BGII	3.93	13.98	10.53	6.44	3.43	11.24	3.77	7.15	7.56
5	ARCH 771 BGII	2.56	8.69	10.63	6.79	2.94	8.43	2.90	7.35	6.29
6	C 9340 BGII	4.73	14.48	15.33	5.96	2.39	3.15	3.27	7.02	7.04
7	RCH 1060 BGII	3.81	10.59	9.80	2.90	1.88	8.15	3.21	7.00	5.92
8	KCH 9227 BGII	5.83	11.35	12.93	7.33	4.46	11.95	2.56	7.11	7.94
9	ARCH 781 BGII	3.69	11.09	10.33	6.22	3.51	7.32	1.60	7.06	6.35
10	RCH 1039 BGII	2.89	8.04	13.40	5.21	3.21	9.82	3.04	6.99	6.58
11	CORE 101 BGII	5.06	17.48	12.91	5.57	2.60	11.30	2.82	7.22	8.12
12	Daftari 615 BG II (ZC 2)	3.88	11.30	12.20	5.80	2.82	7.95	2.84	7.02	6.73
13	KCH 9226 BGII	4.03	17.35	13.32	4.97	1.80	9.30	2.58	7.00	7.54
	CD @ 5%	1.06	3.17	2.51	1.82		16.45			
	CV %	16.00	14.90	12.10	20.37		2.41			

Total Seed Cotton Yield (q/ha) in Advanced Evaluation Trial of H X H hybrids - II

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Hyderabad (Kaveri)	Mokhila (Bioseed)	Guntur (Core seeds)	Mean	Rank	% Inc over best check
1	SP7679 BGII (ZC 1)	19.43	28.39	21.84	12.90	9.28	30.48	24.30	26.04	21.58	13	-4.8
2	SRCH 369 BGII	28.10	34.76	25.97	22.47	13.08	32.28	27.60	24.86	26.14	7	15.4
3	BIO 6720 BGII	28.14	29.52	24.40	20.69	18.95	33.10	23.22	32.64	26.33	5	16.2
4	DACH 85S85 BGII	21.73	25.57	16.96	20.21	19.61	38.77	29.83	31.59	25.53	9	12.7
5	ARCH 771 BGII	28.98	35.31	19.85	22.65	18.87	33.56	32.71	37.40	28.67	3	26.5
6	C 9340 BGII	23.03	29.61	22.30	20.10	11.02	31.46	24.37	28.11	23.75	10	4.8
7	RCH 1060 BGII	27.01	34.30	20.48	23.87	13.88	33.49	31.04	25.40	26.18	6	15.6
8	KCH 9227 BGII	28.61	37.50	25.65	22.59	18.23	41.46	35.97	27.99	29.75	1	31.3
9	ARCH 781 BGII	20.66	25.37	18.19	19.79	19.72	35.35	17.39	31.01	23.44	11	3.4
10	RCH 1039 BGII	28.93	32.96	24.41	24.91	14.05	26.52	33.65	29.28	26.84	4	18.4
11	CORE 101 BGII	23.72	32.07	24.48	17.82	17.92	31.22	24.03	35.63	25.86	8	14.1
12	Daftari 615 BG II (ZC 2)	20.24	26.24	24.86	22.91	11.87	26.31	20.63	28.23	22.66	12	0.0
13	KCH 9226 BGII	29.61	42.15	25.63	19.46	17.32	40.85	33.53	25.74	29.29	2	29.2
	CD @ 5%	3.60	3.81	2.58	5.14	3.30	6.41	3.97				
	CV %	8.40	7.10	6.75	15.44	12.90	3.62	8.65				

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Advanced H X H trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	1.77	-	0.45	2.69	1.64	BETL
56052	-	3.49	-	0.56	2.76	2.27	BETL
56053	-	1.62	-	0.46	8.48	3.52	BETL
56054	-	1.84	-	0.32	1.24	1.13	BETL
56055	-	2.13	-	0.46	5.38	2.66	BETL
56056	-	2.53	-	0.50	9.51	4.18	BETL
56057	-	1.50	-	0.45	0.48	0.81	BETL
56058	-	1.97	-	0.40	1.31	1.23	BETL
56059	-	3.22	-	0.39	5.02	2.88	BETL
56060	-	3.27	-	0.37	2.96	2.20	BETL
56061	-	1.03	-	0.46	3.72	1.74	BETL
56062	-	1.88	-	0.45	10.34	4.22	BETL
56063	-	1.84	-	0.40	6.76	3.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	0.33	5.67	0.34	1.02	1.84	BETL
56052	-	0.54	7.00	0.21	1.63	2.35	BETL
56053	-	0.44	5.33	0.26	1.53	1.89	BETL
56054	-	0.53	6.00	0.22	2.34	2.27	BETL
56055	-	0.33	6.67	0.31	0.61	1.98	BETL
56056	-	0.35	6.67	0.23	1.42	2.17	BETL
56057	-	0.28	5.33	0.28	0.82	1.68	BETL
56058	-	0.45	4.00	0.23	0.82	1.37	BETL
56059	-	0.28	2.00	0.17	0.71	0.79	BETL
56060	-	0.45	6.33	0.23	0.41	1.86	BETL
56061	-	0.64	7.33	0.20	1.73	2.48	BETL
56062	-	0.56	4.67	0.25	1.42	1.73	BETL
56063	-	0.44	5.33	0.29	0.91	1.74	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	I	-	-	-	I	
56052	-	I	-	-	-	I	
56053	-	I	-	-	-	I	
56054	-	I	-	-	-	I	
56055	-	I	-	-	-	I	
56056	-	I	-	-	-	I	
56057	-	I	-	-	-	I	
56058	-	I	-	-	-	I	
56059	-	I	-	-	-	I	
56060	-	I	-	-	-	I	
56061	-	I	-	-	-	I	
56062	-	I	-	-	-	I	
56063	-	I	-	-	-	I	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	3.61	1.00	0.67	2.73	2.00	BETL
56052	-	3.54	0.00	0.60	0.87	1.25	BETL
56053	-	3.21	0.67	0.60	5.61	2.52	BETL
56054	-	3.41	0.67	0.57	2.88	1.88	BETL
56055	-	3.48	0.00	0.47	2.10	1.51	BETL
56056	-	3.95	0.00	0.73	5.29	2.49	BETL
56057	-	3.54	0.00	0.57	0.34	1.11	BETL
56058	-	2.27	0.00	0.37	2.91	1.39	BETL
56059	-	3.27	0.67	0.47	5.06	2.37	BETL
56060	-	3.34	0.00	0.30	0.93	1.14	BETL
56061	-	4.48	0.00	0.67	3.68	2.21	BETL
56062	-	2.87	0.00	0.67	1.85	1.35	BETL
56063	-	4.15	1.00	0.60	3.20	2.24	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	0.07	0.00	0.40	0.78	0.31	BETL
56052	-	0.11	1.00	0.30	0.30	0.43	BETL
56053	-	0.18	0.00	0.23	0.52	0.23	BETL
56054	-	0.00	1.33	0.33	0.33	0.50	BETL
56055	-	0.09	0.33	0.40	0.40	0.31	BETL
56056	-	0.00	0.67	0.30	0.41	0.34	BETL
56057	-	0.04	1.67	0.30	2.19	1.05	BETL
56058	-	0.09	0.33	0.23	0.59	0.31	BETL
56059	-	0.00	0.67	0.37	0.26	0.32	BETL
56060	-	0.13	0.67	0.20	0.74	0.44	BETL
56061	-	0.00	0.67	0.23	0.45	0.34	BETL
56062	-	0.00	1.00	0.30	0.48	0.45	BETL
56063	-	0.07	0.33	0.40	0.48	0.32	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	1.37	0.00	-	-	0.68	
56052	-	1.35	0.00	-	-	0.67	
56053	-	1.23	0.00	-	-	0.62	
56054	-	2.20	0.00	-	-	1.10	
56055	-	2.23	0.00	-	-	1.11	
56056	-	2.04	0.00	-	-	1.02	
56057	-	1.68	0.00	-	-	0.84	
56058	-	0.92	0.00	-	-	0.46	
56059	-	1.14	0.00	-	-	0.57	
56060	-	1.39	0.00	-	-	0.70	
56061	-	1.89	0.00	-	-	0.94	
56062	-	1.46	0.00	-	-	0.73	
56063	-	1.89	0.00	-	-	0.94	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	0.00	0.00	0.00	-	0.00	BETL
56052	-	0.00	0.00	0.00	-	0.00	BETL
56053	-	0.00	0.00	0.00	-	0.00	BETL
56054	-	0.00	0.00	0.00	-	0.00	BETL
56055	-	0.00	0.00	0.00	-	0.00	BETL
56056	-	0.00	0.00	0.00	-	0.00	BETL
56057	-	0.00	0.00	0.00	-	0.00	BETL
56058	-	0.00	0.00	0.00	-	0.00	BETL
56059	-	0.00	0.00	0.00	-	0.00	BETL
56060	-	0.00	0.00	0.00	-	0.00	BETL
56061	-	0.00	0.00	0.00	-	0.00	BETL
56062	-	0.00	0.00	0.00	-	0.00	BETL
56063	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	0.00	0.00	0.00	-	0.00	BETL
56052	-	0.00	0.00	0.00	-	0.00	BETL
56053	-	0.00	0.00	0.00	-	0.00	BETL
56054	-	0.00	0.00	0.00	-	0.00	BETL
56055	-	0.00	0.00	0.00	-	0.00	BETL
56056	-	0.00	0.00	0.00	-	0.00	BETL
56057	-	0.00	0.00	0.00	-	0.00	BETL
56058	-	0.00	0.00	0.00	-	0.00	BETL
56059	-	0.00	0.00	0.00	-	0.00	BETL
56060	-	0.00	0.00	0.00	-	0.00	BETL
56061	-	0.00	0.00	0.00	-	0.00	BETL
56062	-	0.00	0.00	0.00	-	0.00	BETL
56063	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	0.00	0.00	0.00	-	0.00	BETL
56052	-	0.00	0.00	0.00	-	0.00	BETL
56053	-	0.00	0.00	0.00	-	0.00	BETL
56054	-	0.00	0.00	0.00	-	0.00	BETL
56055	-	0.00	0.00	0.00	-	0.00	BETL
56056	-	0.00	0.00	0.00	-	0.00	BETL
56057	-	0.00	0.00	0.00	-	0.00	BETL
56058	-	0.00	0.00	0.00	-	0.00	BETL
56059	-	0.00	0.00	0.00	-	0.00	BETL
56060	-	0.00	0.00	0.00	-	0.00	BETL
56061	-	0.00	0.00	0.00	-	0.00	BETL
56062	-	0.00	0.00	0.00	-	0.00	BETL
56063	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Pink bollworm

Name of Entry	Pink bollworm Larva (No./10 bolls destructive sampling)						Remark
	NA	DH	PE	AD#	MU	Mean	
56051	-	0.83	1.68	1.20	-	1.24	AETL
56052	-	1.00	2.35	2.53	-	1.96	AETL
56053	-	0.83	0.85	2.00	-	1.23	AETL
56054	-	0.67	1.68	1.47	-	1.27	AETL
56055	-	0.83	2.28	2.40	-	1.84	AETL
56056	-	2.00	0.68	1.27	-	1.32	AETL
56057	-	0.50	1.85	1.20	-	1.18	AETL
56058	-	0.50	2.05	1.07	-	1.21	AETL
56059	-	0.67	1.68	1.80	-	1.38	AETL
56060	-	1.67	1.35	0.87	-	1.30	AETL
56061	-	1.00	1.08	0.93	-	1.00	AETL
56062	-	1.50	1.08	0.47	-	1.02	AETL
56063	-	2.00	1.18	0.53	-	1.24	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # Based on 5 observations

Table: Advanced H X H trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	0.00	-	0.00	-	0.00	BETL
56052	-	0.00	-	0.00	-	0.00	BETL
56053	-	0.00	-	0.00	-	0.00	BETL
56054	-	0.00	-	0.00	-	0.00	BETL
56055	-	0.00	-	0.00	-	0.00	BETL
56056	-	0.00	-	0.00	-	0.00	BETL
56057	-	0.00	-	0.00	-	0.00	BETL
56058	-	0.00	-	0.00	-	0.00	BETL
56059	-	0.00	-	0.00	-	0.00	BETL
56060	-	0.00	-	0.00	-	0.00	BETL
56061	-	0.00	-	0.00	-	0.00	BETL
56062	-	0.00	-	0.00	-	0.00	BETL
56063	-	0.00	-	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll damage (%) /10 bolls destructive sampling						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	5.00	-	22.67	-	13.84	AETL
56052	-	8.33	-	22.00	-	15.17	AETL
56053	-	8.33	-	20.00	-	14.17	AETL
56054	-	6.67	-	20.00	-	13.34	AETL
56055	-	6.67	-	22.67	-	14.67	AETL
56056	-	15.00	-	23.33	-	19.17	AETL
56057	-	6.67	-	22.00	-	14.34	AETL
56058	-	8.33	-	28.00	-	18.17	AETL
56059	-	10.00	-	20.00	-	15.00	AETL
56060	-	11.67	-	13.33	-	12.50	AETL
56061	-	8.33	-	14.00	-	11.17	AETL
56062	-	10.00	-	12.67	-	11.34	AETL
56063	-	16.67	-	12.67	-	14.67	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	5.76	7.00	20.67	-	11.14	
56052	-	8.95	6.00	33.89	-	16.28	
56053	-	8.12	9.00	27.78	-	14.97	
56054	-	7.44	7.00	23.55	-	12.66	
56055	-	5.43	8.00	28.44	-	13.96	
56056	-	7.34	7.00	28.89	-	14.41	
56057	-	4.13	5.00	24.44	-	11.19	
56058	-	3.34	6.00	30.11	-	13.15	
56059	-	7.68	4.00	23.67	-	11.78	
56060	-	8.84	9.00	24.67	-	14.17	
56061	-	10.18	6.00	25.55	-	13.91	
56062	-	8.21	7.00	21.67	-	12.29	
56063	-	17.30	4.00	20.00	-	13.77	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	6.50	3.00	15.00	-	8.17	
56052	-	5.83	2.00	14.00	-	7.28	
56053	-	2.67	3.00	10.67	-	5.45	
56054	-	7.83	3.00	13.33	-	8.05	
56055	-	3.22	3.00	14.00	-	6.74	
56056	-	9.22	4.00	11.67	-	8.30	
56057	-	5.89	2.00	14.00	-	7.30	
56058	-	5.50	3.00	19.00	-	9.17	
56059	-	5.11	2.00	14.00	-	7.04	
56060	-	6.22	3.00	10.00	-	6.41	
56061	-	4.67	2.00	11.67	-	6.11	
56062	-	5.39	3.00	10.00	-	6.13	
56063	-	11.05	1.00	10.67	-	7.57	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests						Remark
	NA	DH	PE	AD	MU	Mean	
56051	-	5.00	6.00	4.00	4.00	4.75	
56052	-	5.00	6.00	4.00	4.00	4.75	
56053	-	5.00	6.00	4.00	4.00	4.75	
56054	-	5.00	6.00	4.00	4.00	4.75	
56055	-	5.00	6.00	4.00	4.00	4.75	
56056	-	5.00	6.00	4.00	4.00	4.75	
56057	-	5.00	6.00	4.00	4.00	4.75	
56058	-	5.00	6.00	4.00	4.00	4.75	
56059	-	5.00	6.00	4.00	4.00	4.75	
56060	-	5.00	6.00	4.00	4.00	4.75	
56061	-	5.00	6.00	4.00	4.00	4.75	
56062	-	5.00	6.00	4.00	4.00	4.75	
56063	-	5.00	6.00	4.00	4.00	4.75	

NA- Nandyal, DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 13(a): Advanced Evaluation Trial- II of Intra-hirsutum Hybrids –Rainfed (AET-II Hybrids RF) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions							
			UAS, Dharwad							
			ALS		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
6	56051	SP7679 BGII (ZC 1)	23.0	R	10.5	R	16.7	R	17.4	R
10	56052	SRCH 369 BGII	23.5	R	10.7	R	17.2	R	19.1	R
1	56053	BIO 6720 BGII	25.7	MR	10.9	R	19.5	R	18.4	R
13	56054	DACH 85S85 BGII	21.6	R	11.8	R	20.3	R	18.9	R
3	56055	ARCH 771 BGII	22.1	R	11.6	R	19.3	R	18.2	R
8	56056	C 9340 BGII	22.0	R	10.0	R	18.9	R	19.2	R
4	56057	RCH 1060 BGII	23.5	R	11.0	R	18.3	R	18.0	R
12	56058	KCH 9227 BGII	25.5	MR	10.7	R	18.4	R	19.3	R
9	56059	ARCH 781 BGII	22.8	R	10.5	R	19.5	R	17.9	R
11	56060	RCH 1039 BGII	24.8	R	10.4	R	19.2	R	17.8	R
7	56061	CORE 101 BGII	21.1	R	12.7	R	14.3	R	17.2	R
2	56062	Daftari 615 BG II (ZC 2)	21.8	R	10.4	R	16.2	R	19.2	R
5	56063	KCH 9226 BGII	21.9	R	10.8	R	15.3	R	18.7	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pest

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56051	7.29	0.67	2.19	5.16	3.83	BETL
56052	8.76	0.67	0.98	5.29	3.92	BETL
56053	8.00	1.00	1.65	16.28	6.73	BETL
56054	6.98	0.67	1.38	2.38	2.85	BETL
56055	6.57	0.67	1.46	10.32	4.75	BETL
56056	7.98	0.33	1.23	18.26	6.95	BETL
56057	9.40	0.67	1.10	0.93	3.02	BETL
56058	7.80	0.67	1.07	2.52	3.01	BETL
56059	9.20	0.67	0.87	9.71	5.11	BETL
56060	10.16	0.67	0.60	5.69	4.28	BETL
56061	7.91	0.67	0.73	7.15	4.11	BETL
56062	7.33	1.00	1.02	19.85	7.30	BETL
56063	7.98	1.00	1.30	12.97	5.81	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions –
Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56051	2.64	9.00	0.26	1.69	3.40	BETL
56052	3.40	10.00	0.29	2.70	4.10	BETL
56053	3.60	3.67	0.37	2.53	2.54	BETL
56054	3.16	8.67	0.42	3.88	4.03	BETL
56055	1.98	9.00	0.71	1.01	3.18	BETL
56056	2.51	12.33	1.02	2.36	4.56	BETL
56057	2.44	9.00	0.77	1.35	3.39	BETL
56058	2.91	6.33	0.53	1.35	2.78	BETL
56059	3.33	2.67	0.47	1.18	1.91	BETL
56060	2.47	5.00	0.75	0.68	2.22	BETL
56061	2.49	11.00	0.64	2.87	4.25	BETL
56062	2.27	5.67	0.89	2.36	2.80	BETL
56063	2.51	8.67	0.77	1.52	3.37	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	DH	PE	AD	MU	Mean	
56051	I	-	-	-	I	
56052	II	-	-	-	II	
56053	II	-	-	-	II	
56054	II	-	-	-	II	
56055	I	-	-	-	I	
56056	I	-	-	-	I	
56057	I	-	-	-	I	
56058	I	-	-	-	I	
56059	II	-	-	-	II	
56060	I	-	-	-	I	
56061	I	-	-	-	I	
56062	I	-	-	-	I	
56063	I	-	-	-	I	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56051	20.29	3.00	2.19	3.31	7.20	BETL
56052	16.24	1.67	2.15	1.06	5.28	BETL
56053	19.02	2.33	1.95	6.81	7.53	BETL
56054	15.04	2.00	3.19	3.50	5.93	BETL
56055	14.80	3.33	5.36	2.56	6.51	BETL
56056	15.00	2.00	3.23	6.42	6.66	BETL
56057	15.00	2.33	4.40	1.79	5.88	BETL
56058	16.76	3.00	4.06	3.53	6.84	BETL
56059	17.71	2.67	3.06	6.14	7.40	BETL
56060	22.64	2.33	2.90	1.13	7.25	BETL
56061	18.96	2.67	3.59	4.47	7.42	BETL
56062	15.33	2.00	2.50	2.25	5.52	BETL
56063	21.60	1.67	2.66	3.89	7.46	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56051	0.67	1.33	0.63	1.11	0.94	BETL
56052	0.78	0.67	0.67	0.42	0.63	BETL
56053	1.11	0.67	0.63	0.74	0.79	BETL
56054	1.56	1.00	0.60	0.48	0.91	BETL
56055	1.44	1.00	0.66	0.57	0.92	BETL
56056	1.22	1.33	0.43	0.58	0.89	BETL
56057	1.11	0.67	0.37	3.12	1.32	BETL
56058	0.56	1.33	0.23	0.85	0.74	BETL
56059	0.89	1.00	0.60	0.37	0.71	BETL
56060	0.78	1.00	0.67	1.06	0.88	BETL
56061	0.89	1.00	0.40	0.63	0.73	BETL
56062	0.78	1.00	0.26	0.69	0.68	BETL
56063	0.56	0.67	0.20	0.69	0.53	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	DH	PE	AD	MU	Mean	
56051	1.07	0.00	0.00	-	0.36	
56052	0.93	0.00	0.00	-	0.31	
56053	1.00	0.00	0.00	-	0.33	
56054	0.80	0.00	0.00	-	0.27	
56055	0.44	0.00	0.00	-	0.15	
56056	0.58	0.00	0.00	-	0.19	
56057	0.60	0.00	0.00	-	0.20	
56058	0.64	0.00	0.00	-	0.21	
56059	0.49	0.00	0.00	-	0.16	
56060	0.56	0.00	0.00	-	0.19	
56061	0.64	0.00	0.00	-	0.21	
56062	1.22	0.00	0.00	-	0.41	
56063	0.40	0.00	0.20	-	0.20	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No./5 plants)					Remark
	DH	PE	AD	MU	Mean	
56051	0.00	0.00	0.00	-	0.00	BETL
56052	0.00	0.00	0.00	-	0.00	BETL
56053	0.00	0.00	0.00	-	0.00	BETL
56054	0.00	0.00	0.00	-	0.00	BETL
56055	0.00	0.00	0.00	-	0.00	BETL
56056	0.00	0.00	0.00	-	0.00	BETL
56057	0.00	0.00	0.00	-	0.00	BETL
56058	0.00	0.00	0.00	-	0.00	BETL
56059	0.00	0.00	0.00	-	0.00	BETL
56060	0.00	0.00	0.00	-	0.00	BETL
56061	0.00	0.00	0.00	-	0.00	BETL
56062	0.00	0.00	0.00	-	0.00	BETL
56063	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No./5 plants)					Remark
	DH	PE	AD	MU	Mean	
56051	0.00	0.00	0.00	-	0.00	BETL
56052	0.00	0.00	0.00	-	0.00	BETL
56053	0.00	0.00	0.00	-	0.00	BETL
56054	0.00	0.00	0.00	-	0.00	BETL
56055	0.00	0.00	0.00	-	0.00	BETL
56056	0.00	0.00	0.00	-	0.00	BETL
56057	0.00	0.00	0.00	-	0.00	BETL
56058	0.00	0.00	0.00	-	0.00	BETL
56059	0.00	0.00	0.00	-	0.00	BETL
56060	0.00	0.00	0.00	-	0.00	BETL
56061	0.00	0.00	0.00	-	0.00	BETL
56062	0.00	0.00	0.00	-	0.00	BETL
56063	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 plants)					Remark
	DH	PE	AD	MU	Mean	
56051	0.00	0.00	0.00	-	0.00	BETL
56052	0.00	0.00	0.00	-	0.00	BETL
56053	0.00	0.00	0.00	-	0.00	BETL
56054	0.00	0.00	0.00	-	0.00	BETL
56055	0.00	0.00	0.00	-	0.00	BETL
56056	0.00	0.00	0.00	-	0.00	BETL
56057	0.00	0.00	0.00	-	0.00	BETL
56058	0.00	0.00	0.00	-	0.00	BETL
56059	0.00	0.00	0.00	-	0.00	BETL
56060	0.00	0.00	0.00	-	0.00	BETL
56061	0.00	0.00	0.00	-	0.00	BETL
56062	0.00	0.00	0.00	-	0.00	BETL
56063	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	DH	PE	AD#	MU	Mean	
56051	2.17	1.95	0.00	-	1.37	AETL
56052	2.33	2.15	0.00	-	1.49	AETL
56053	2.17	1.78	0.00	-	1.32	AETL
56054	1.50	1.45	0.40	-	1.12	AETL
56055	1.50	0.95	0.00	-	0.82	BETL
56056	3.33	1.78	0.60	-	1.90	AETL
56057	1.67	2.38	0.40	-	1.48	AETL
56058	1.67	0.78	0.00	-	0.82	BETL
56059	2.17	1.78	0.60	-	1.52	AETL
56060	1.83	2.45	0.40	-	1.56	AETL
56061	1.50	1.18	0.40	-	1.03	AETL
56062	2.50	1.18	0.40	-	1.36	AETL
56063	2.67	1.28	0.20	-	1.38	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # Based on 5 observations

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	DH	PE	AD	MU	Mean	
56051	0.00	-	0.00	-	0.00	BETL
56052	0.00	-	0.00	-	0.00	BETL
56053	0.00	-	0.00	-	0.00	BETL
56054	0.00	-	0.00	-	0.00	BETL
56055	0.00	-	0.00	-	0.00	BETL
56056	0.00	-	0.00	-	0.00	BETL
56057	0.00	-	0.00	-	0.00	BETL
56058	0.00	-	0.00	-	0.00	BETL
56059	0.00	-	0.00	-	0.00	BETL
56060	0.00	-	0.00	-	0.00	BETL
56061	0.00	-	0.00	-	0.00	BETL
56062	0.00	-	0.00	-	0.00	BETL
56063	0.00	-	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	DH	PE	AD	MU	Mean	
56051	16.67	-	14.00	-	15.34	AETL
56052	10.00	-	22.00	-	16.00	AETL
56053	13.33	-	22.00	-	17.67	AETL
56054	8.33	-	26.00	-	17.17	AETL
56055	6.67	-	16.00	-	11.34	AETL
56056	21.67	-	26.00	-	23.84	AETL
56057	6.67	-	22.00	-	14.34	AETL
56058	10.00	-	14.00	-	12.00	AETL
56059	20.00	-	18.00	-	19.00	AETL
56060	16.67	-	16.00	-	16.34	AETL
56061	13.33	-	18.00	-	15.67	AETL
56062	20.00	-	14.00	-	17.00	AETL
56063	25.00	-	20.00	-	22.50	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56051	11.05	10.00	8.00	-	9.68	
56052	9.13	12.00	15.00	-	12.04	
56053	10.57	11.00	15.00	-	12.19	
56054	10.41	9.00	20.00	-	13.14	
56055	8.51	10.00	5.00	-	7.84	
56056	14.25	9.00	15.00	-	12.75	
56057	6.49	8.00	14.00	-	9.50	
56058	7.19	9.00	5.00	-	7.06	
56059	13.70	6.00	10.00	-	9.90	
56060	13.43	11.00	7.00	-	10.48	
56061	10.75	7.00	10.00	-	9.25	
56062	13.20	10.00	5.00	-	9.40	
56063	28.19	6.00	10.00	-	14.73	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56051	14.50	5.00	12.50	-	10.67	
56052	11.05	4.00	16.50	-	10.52	
56053	5.67	4.00	17.50	-	9.06	
56054	17.72	3.00	20.50	-	13.74	
56055	5.78	3.00	10.50	-	6.43	
56056	16.55	2.00	21.00	-	13.18	
56057	5.89	2.00	16.50	-	8.13	
56058	8.55	3.00	10.50	-	7.35	
56059	10.33	2.00	15.00	-	9.11	
56060	10.55	3.00	14.50	-	9.35	
56061	8.33	2.00	15.00	-	8.44	
56062	9.17	4.00	14.00	-	9.06	
56063	21.16	3.00	20.50	-	14.89	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 13(b): Advanced Evaluation Trial- II of Intra-hirsutum Hybrids –Rainfed (AET-II Hybrids RF) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions							
			UAS, Dharwad							
			ALS		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
6	56051	SP7679 BGII (ZC 1)	23.3	R	11.6	R	14.8	R	12.1	R
10	56052	SRCH 369 BGII	24.7	R	12.3	R	14.9	R	12.0	R
1	56053	BIO 6720 BGII	25.1	MR	11.9	R	15.9	R	14.2	R
13	56054	DACH 85S85 BGII	24.5	R	13.1	R	16.3	R	10.8	R
3	56055	ARCH 771 BGII	26.0	MR	13.8	R	17.0	R	11.3	R
8	56056	C 9340 BGII	24.2	R	11.7	R	15.1	R	11.8	R
4	56057	RCH 1060 BGII	25.2	MR	12.4	R	14.4	R	11.5	R
12	56058	KCH 9227 BGII	25.1	MR	11.5	R	15.4	R	10.2	R
9	56059	ARCH 781 BGII	25.9	MR	11.9	R	16.6	R	12.2	R
11	56060	RCH 1039 BGII	25.4	MR	12.4	R	19.0	R	14.1	R
7	56061	CORE 101 BGII	26.3	MR	11.6	R	18.0	R	12.2	R
2	56062	Daftari 615 BG II (ZC 2)	27.0	MR	12.5	R	18.1	R	10.6	R
5	56063	KCH 9226 BGII	25.1	MR	12.3	R	16.7	R	11.2	R

Table 13(c): Advanced Evaluation Trial- II of Intra-hirsutum Hybrids –Rainfed (AET-II Hybrids RF) under Protected and Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): protected conditions												Average PDI & Disease Reaction: Unprotected conditions							
			Kaveri, Hyderabad								Ankur , Atmakur(Warangal)				Kaveri, Hyderabad							
			ALB		BLB		GM		TSV		TSV		HLS		ALB		BLB		GM		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
6	56051	SP7679 BGII (ZC 1)	9.3	R	3.9	R	9.4	R	2.4	R	12.1	R	14.3	R	15.5	R	10.5	R	17.5	R	4.0	R
10	56052	SRCH 369 BGII	7.8	R	2.6	R	5.1	R	1.7	R	15.1	R	15.4	R	16.3	R	9.8	R	15.4	R	3.4	R
1	56053	BIO 6720 BGII	6.3	R	4.2	R	8.2	R	2.5	R	11.6	R	29.4	MR	14.1	R	12.5	R	15.3	R	4.5	R
13	56054	DACH 85S85 BGII	2.7	R	1.8	R	11.3	R	2.6	R	17.9	R	7.2	R	14.8	R	10.0	R	19.2	R	4.0	R
3	56055	ARCH 771 BGII	7.5	R	2.6	R	9.3	R	2.3	R	7.1	R	6.6	R	15.1	R	9.5	R	17.0	R	3.9	R
8	56056	C 9340 BGII	7.8	R	2.5	R	7.9	R	1.5	R	11.1	R	5.1	R	14.8	R	8.8	R	13.3	R	3.5	R
4	56057	RCH 1060 BGII	7.3	R	2.5	R	11.1	R	1.5	R	10.8	R	12.5	R	13.6	R	9.3	R	15.8	R	3.1	R
12	56058	KCH 9227 BGII	2.2	R	1.5	R	4.3	R	0.5	R	13.5	R	5.4	R	10.3	R	8.0	R	10.8	R	2.0	R
9	56059	ARCH 781 BGII	3.7	R	3.2	R	10.1	R	1.9	R	14.1	R	16.4	R	13.0	R	9.5	R	16.2	R	3.7	R
11	56060	RCH 1039 BGII	9.5	R	3.4	R	6.6	R	2.3	R	9.6	R	6.2	R	14.0	R	11.5	R	13.0	R	3.5	R
7	56061	CORE 101 BGII	6.5	R	2.5	R	8.4	R	1.1	R	15.8	R	14.3	R	12.5	R	13.3	R	14.5	R	4.0	R
2	56062	Daftari 615 BG II (ZC 2)	10.2	R	3.8	R	12.1	R	3.2	R	14.2	R	31	MR	15.5	R	12.3	R	17.8	R	4.0	R
5	56063	KCH 9226 BGII	2.7	R	1.7	R	5.1	R	0.6	R	11.8	R	11.0	R	11.0	R	7.3	R	10.8	R	1.8	R

Agronomic Evaluation

DHARWAD

DHARWAD (RCH 1039 BGII)

The results of one season trial indicated that there is no difference in their growth parameters in response to different N levels (Table 53). RCH 1039 BGII records significantly higher number of bolls per plant (34.8) with planting geometry (90X45 cm) with higher N level (125% RDN) and significantly higher number of bolls per sq mtr (336) with planting geometry (90X15 cm) with higher N level (125% RDN). None of the interactions of S X N with respect to yield parameters were significant. Among the planting geometry 90 X 15 cm (S_1) recorded numerically higher seed cotton yield (2552 kg/ha) as compared to other levels and control Bt- hybrid (CCH 666 BGII – 1731 kg/ha). It may be attributed to higher no of bolls per sq. mtr. Increased N levels from 75% to 100% numerically increased seed cotton yield (from 2420 kg/ha to 2579 kg/ha), however further increase in N level (from N_2 - 100% RDN to N_3 - 125% RDN) decreased the yield level (2470 kg/ha). Thus, RCH 1039 BGII performed better with planting geometry of 90 X 15 cm with 100% N levels to produce higher no of bolls per sq mtr and seed cotton yield per hectare.

Table 53. Seed cotton yield (kg/ha) of RCH 1039 BGII as influenced by spacing levels and nutrient levels at Dharwad

Treatments	S_1 : 90x15 cm	S_2 : 90x30 cm	S_3 : 90x45 cm	Mean	ANOVA	SE d	CD (5%)	CV
N_1 : 75% RDN	2445	2468	2345	2420	Spacing	127.57	NS	10.43
N_2 : 100% RDN	2595	2660	2482	2579	Nitrogen	127.57	NS	
N_3 : 125% RDN	2617	2719	2581	2470	S X N	220.96	NS	
Mean (spacing)	2552	2616	2470					
Control (CCH 666 BGII)	1731							

Basic parameters: pH: 7.0, OC (%): 0.51, Available N: 240 kg/ha, Available P_2O_5 : 24.0 kg/ha, Available K_2O : 410 kg/ha, Recommended nutrients: 100:50:50 kg NPK/ha, Genotype: RCH 1039 BGII, Environment: Rainfed, Total rainfall during cropping period: 914.70 mm

DHARWAD (SRCH 369 BGII)

The results of one season trial on the agronomic requirements of promising pre-release SRCH- 369 BG-II hybrid revealed that among the planting geometry 90 X 45 cm (S_1) recorded numerically higher seed cotton yield (2560 kg/ha) as compared to other levels and control Bt- hybrid (CCH 666 BGII – 2038 kg/ha). It may be attributed to higher no of bolls per sq. mtr. Increased N levels from 75% to 125% numerically increased seed cotton yield (from 2070 kg/ha to 2288 kg/ha). Thus, SRCH 369 BGII performed better with planting geometry of 90 X 45 cm with 125% N levels to produce higher no of bolls per sq mtr and seed cotton yield per hectare (Table 55).

Table 55. Seed cotton yield (kg/ha) of SRCH 369 BGII as influenced by spacing levels and nutrient levels at Dharwad

Treatments	S ₁ : 90x45 cm	S ₂ : 90x60 cm	S ₃ : 90x75 cm	Mean	ANOVA	SE d	CD (5%)	CV
N ₁ : 75% RDN	2483	1973	1753	2070	Spacing	100.74	215.39	12.40
N ₂ : 100% RDN	2517	2032	1869	2139	Nitrogen	100.74	NS	
N ₃ : 125% RDN	2679	2225	1961	2288	S X N	174.48	NS	
Mean	2560	2077	1861					
Control (CCH 666 BGII)	2038							

Basic parameters: pH: 7.2, OC (%): 0.62, Available N: 295 kg/ha, Available P₂O₅: 28.0 kg/ha, Available K₂O: 560 kg/ha, Recommended nutrients: 100:50:50 kg NPK/ha, Genotype: SRCH 369 BGII, Total rainfall during cropping period: 914.70 mm

NANDYAL (KCH 9227 BGII)

The results of agronomic requirement studies conducted at Nandyal under rainfed conditions revealed (Table 56) that the effect of spacing and the interaction effect of spacing and nitrogen were found non-significant on seed cotton yield. However, significantly lower seed cotton yield (1602 kg/ha) was recorded with 75% recommended dose compared to other N treatments. The significantly highest seed cotton yield was recorded with N₃.125%RDN (1895 kg/ha);which was on par with 100 % RDN (1840 kg/ha)

Table 56: Seed cotton yield (kg/ha) of KCH 9227 BGII as influenced by spacing levels and nutrient level at Nandyal

Treatments	S ₁ - 90 x 30 cm	S ₂ - 90 x 45 cm	S ₃ : 90 x 60 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)	CV
N ₁ - 75% RDN	1657	1639	1515	1604	Spacing	57	NS	8.9%
N ₂ - 100% RDN	1811	1912	1797	1840	Nitrogen	57	120	
N ₃ - 125% RDN	1849	1913	1921	1895	S X N	100	NS	
N ₄ - 75%RDN+MC	1918	1938	1918	1925				
Mean (spacing)	1809	1850	1788					
Control (CCH 666 BGII)	1792							

MC : Microbial consortia as seed treatment and 25 days after sowing as soil application.

Basic parameters: pH: 8.53, EC: 0.47 dSm⁻¹, OC (%): 0.33, Bulk density: 1.13, Available N: 182 kg/ha, Available P₂O₅: 52.3 kg/ha, Available K₂O: 372.0 kg/ha, Recommended nutrients: 150:45:60 kg NPK/ha, Genotype: KCH 9227 BGII, Environment: Rainfed, Total rainfall during cropping period: 954.8 mm

NANDYAL (C 9340 BGII)

The results of agronomic requirement studies conducted at Nandyal under rainfed conditions revealed that the effect of spacings was non-significant on seed cotton yield (Table 57). However, significantly lower seed cotton yield (1768 kg/ha) was recorded with 75% recommended dose compared to other N treatments. The significantly highest seed cotton yield was recorded with N₂.100%RDN (1920 kg/ha) ;which was on par with 125 % RDN (1908 kg/ha). The interaction effect was found to be significant. The significantly highest seed cotton yield (1987 kg/ha) was registered with adopting spacing of S₁.90x 30 cm with application of N₂.100% RDN

Table 57: Seed cotton yield (kg/ha) of C 9340 BGII as influenced by spacing levels and nutrient levels at Nandyal

Treatments	S ₁ - 90 x 30 cm	S ₂ - 90 x 45 cm	S ₃ : 90 x 60 cm	Mean (Nitrogen)	ANOV A	SE d	CD (5%)	CV
N ₁ - 75% RDN	1590	1811	1902	1768	Spacine	47	NS	8.7 %
N ₂ - 100% RDN	1987	1907	1864	1920	Nitrogen	47	100	
N ₃ - 125% RDN	1981	1882	1862	1908	S X N	81	173	
Mean (spacing)	1853	1867	1876					
Control (CCH 666 BGII)	1910							

Basic parameters: pH: 8.53, EC: 0.47 dSm⁻¹, OC (%): 0.33, Bulk density: 1.13, Available N: 182 kg/ha, Available P₂O₅: 52.3 kg/ha, Available K₂O: 372.0 kg/ha, Recommended nutrients: 150:45:60 kg NPK/ha, Genotype: C 9340 BGII, Environment: Rainfed, Total rainfall during cropping period: 954.8 mm

NANDYAL (RCH 1060 BGII)

The results of agronomic requirement studies conducted at Nandyal under rainfed conditions revealed that the effect of spacings and interaction effect of spacing and N was non-significant on seed cotton yield (Table 58). However, significantly lower seed cotton yield (1761 kg/ha) was recorded with 75% recommended dose compared to other N treatments. The significantly highest seed cotton yield was recorded with N₃.125%RDN (1912 kg/ha); which was on par with 100 % RDN (1893 kg/ha).

Table 58. Seed cotton yield (kg/ha) of RCH 1060 BGII as influenced by spacing levels and nutrient levels at Nandyal

Treatments	S1.	S2.	S3.	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75% RDN	1602	1874	1808	1761	Spacing	44	NS
N ₂ - 100% RDN	1868	1901	1910	1893	Nitrogen	44	95
N ₃ - 125% RDN	1903	1946	1888	1912	S X N	77	NS
Mean (spacing)	1791	1907	1867				
Control (CCH 666 BGII)	1911						

Basic parameters: pH: 8.53, EC: 0.47 dSm⁻¹, OC (%): 0.33, Bulk density: 1.13, Available N: 182 kg/ha, Available P₂O₅: 52.3 kg/ha, Available K₂O: 372.0 kg/ha, Recommended nutrients: 150:45:60 kg NPK/ha, Genotype: RCH 1060 BGII, Environment: Rainfed, Total rainfall during cropping period: 954.8 mm

ADILABAD (ARCH-771 BG-II)

The results of agronomic requirement studies conducted at Adilabad under rainfed conditions shows that SCY was significantly recorded the highest (2532 kg/ha) with plant density (0.21 lakh ha⁻¹) i.e. with 75 x 60 cm spacing, which was found significantly superior over other wider spacing of 120 x 60 cm with plant density (0.13 lakh ha⁻¹) (2235 kg/ha) and 0.18 lakh ha⁻¹ i.e. at spacing of 90 x 60 cm (2455 kg/ha). (Table 59). The highest SCY (2579 kg/ha) was recorded with 125% RDN level, which was found significantly superior over 100% RDN (2390 kg/ha) and 75% RDN (2252 kg/ha). The interaction effect between plant geometry and fertilizer (N) levels with regards to all the growth parameters, yield attributes and SCY was found non-significant.

Table 59. Seed cotton yield (kg/ha) of ARCH-771 BG-II as influenced by spacing and nitrogen levels at Adilabad

Treatments	N levels				ANOVA	S.em _±	CD (at 5%)
Spacing	N ₁ - 75% RDN	N ₂ - 100% RDN	N ₃ - 125% RDN	Mean	Spacing (S)	56.0	220.0
S ₁ - 75 x 60 cm	2365	2497	2733	2532	N levels (N)	52.0	160.2
S ₂ - 90 x 60 cm	2285	2479	2600	2455	Interaction (S x N)	90.1	NS
S ₃ - 120 x 60 cm	2108	2193	2404	2235			
Mean	2252	2390	2579				

Basic parameters: pH: 7.8, EC: 0.38 dS m⁻¹, OC (%): 0.42, Available N: 118 kg/ha, Available P₂O₅: 47.8 kg/ha, Available K₂O: 310.9 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: ARCH 771 BGII, Environment: Rainfed, Total rainfall during cropping period: 1540.8 mm



ADILABAD (ARCH-781 BG-II)

The results of agronomic requirement studies conducted at Adilabad under rainfed conditions shows that SCY was recorded significantly highest (2914 kg/ha) with plant density (0.21 lakh ha⁻¹) i.e. with 75 x 60 cm spacing, which was found significantly superior over other wider spacing of 120 x 60 cm with plant density (0.13 lakh ha⁻¹) (2357 kg/ha) and 0.17 lakh ha⁻¹ i.e. at spacing of 90 x 60 cm (2554 kg/ha). (Table 60). The highest SCY (2978 kg/ha) was recorded with 125% RDN level, which was found significantly superior over 100% RDN (2529 kg/ha) and 75% RDN (2317 kg/ha). All the interaction effects between plant geometry and fertilizer (N) levels with regards to all the growth parameters, yield attributes and SCY were found non-significant.

Table 60. Seed cotton yield (kg/ha) of ARCH-781 BG-II as influenced by spacing and nitrogen levels at Adilabad

Treatments	N levels				ANOVA	S.em _±	CD (at 5%)
Spacing	N ₁ - 75% RDN	N ₂ - 100% RDN	N ₃ - 125% RDN	Mean	Spacing (S)	48.3	189.6
S ₁ - 75 x 60 cm	2674	2843	3224	2914	N levels (N)	56.1	172.8
S ₂ - 90 x 60 cm	2345	2497	2819	2554	Interaction (S x N)	97.1	NS
S ₃ - 120 x 60 cm	1933	2247	2889	2357			
Mean	2317	2529	2978				

Basic parameters: pH: 7.8, EC: 0.38 dS m⁻¹, OC (%): 0.42, Available N: 118 kg/ha, Available P₂O₅: 47.8 kg/ha, Available K₂O: 310.9 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: ARCH 781 BGII, Environment: Rainfed, Total rainfall during cropping period: 1540.8 mm

ADILABAD (BIO-6720 BG-II)

The results of agronomic requirement studies conducted at Adilabad under rainfed conditions shows that SCY was significantly highest (2610 kg/ha) with plant density (0.21 lakh ha⁻¹) i.e. with 75 x 60 cm spacing which was found significantly superior over wider spacing of 120 x 60 cm with plant density (0.13 lakh ha⁻¹) (1958 kg/ha) and 0.18 lakh ha⁻¹ i.e. at spacing of 90 x 60 cm (2308 kg/ha). (Table 61). Highest SCY (2551 kg/ha) was recorded with 125% RDN level which was found significantly superior over 100% RDN (2272 kg/ha) and 75% RDN (2053 kg/ha). All the interaction effect between plant geometry and fertilizer (N) levels with regards to all the growth parameters, yield attributes and SCY were found non-significant.

Table 61. Seed cotton yield (kg/ha) of Bio-6720 BG-II as influenced by spacing and nitrogen levels at Adilabad

Treatments	N levels				ANOVA	S.em _±	CD (at 5%)
Spacing	N ₁ - 75% RDN	N ₂ - 100% RDN	N ₃ - 125% RDN	Mean	Spacing (S)	52.4	205.7
S ₁ - 75 x 60 cm	2407	2522	2901	2610	N levels (N)	68.8	211.9
S ₂ - 90 x 60 cm	2128	2302	2493	2308	Interaction (S x N)	119.1	NS
S ₃ - 120 x 60 cm	1623	1992	2259	1958			
Mean	2053	2272	2551				

Basic parameters: pH: 7.8, EC: 0.38 dS m⁻¹, OC (%): 0.42, Available N: 118 kg/ha, Available P₂O₅: 47.8 kg/ha, Available K₂O: 310.9 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: BIO 6720 BGII, Environment: Rainfed, Total rainfall during cropping period: 1540.8 mm

MUDHOLE (KCH 9226)

The results of agronomic requirement studies conducted at Mudhole under rainfed conditions revealed that spacing and nitrogen levels significantly influenced the seed cotton yield (Table 63). With respect to spacing, the seed cotton yield (SCY) was significantly highest (2495 kg/ha) under closer spacing of 90 × 45 cm, followed by 90 × 60 cm (2315 kg/ha) and 90 × 75 cm (2197 kg/ha). Higher yield under closer spacing might be attributed to higher plant population and greater number of bolls per unit area. Amongst nitrogen levels, the highest seed cotton yield (2649 kg/ha) was recorded with 125% RDN, which was significantly superior over 75% RDN (2124 kg/ha) and 100% RDN (2233 kg/ha). The seed cotton yield was significantly influenced by the interaction between plant geometry and nitrogen levels. The seed cotton yield (SCY) was significantly highest (2719 kg/ha) under closer spacing of 90 × 45 cm along with 125% RDN

Table 63. Seed cotton yield (kg/ha) of KCH 9226 as influenced by spacing levels and nutrient levels at Mudhole

Treatments	S ₁ - 90 x 45 cm	S ₂ - 90 x 60 cm	S ₃ - 90 x 75 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	2237.7	2200.7	1934.7	2124	Spacing (S)	41.8	116.1
N ₂ - 100 %RDN	2527.7	2098.7	2073.3	2233	Nitrogen (N)	58.2	126.9
N ₃ -125 %RDN	2719.0	2644.3	2583.0	2649	S x N	100.9	219.8
Mean (Spacing)	2495	2315	2197				

Basic parameters: pH: 7.3, EC: 0.24 dSm⁻¹, OC (%): 0.4, Available N: 130 kg/ha, Available P₂O₅: 31.8 kg/ha, Available K₂O: 405 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: KCH 9226 BGII, Environment: Rainfed, Total rainfall during cropping period: 1551.9 mm

MUDHOLE (CORE-101)

The results of agronomic requirement studies conducted at Mudhole under rainfed conditions revealed that spacing and nitrogen levels significantly influenced the seed cotton yield. (Table 64). The seed cotton yield (SCY) was significantly highest (2206 kg/ha) under 90 × 45 cm spacing, followed by 90 × 60 cm (2058 kg/ha) and 90 × 75 cm (1932 kg/ha). Higher yield under closer spacing might be attributed to higher plant density and increased boll production per unit area. Amongst nitrogen levels, the highest seed cotton yield (2320 kg/ha) was recorded with 125% RDN, which was significantly superior to N₂. 100% RDN (1999 kg/ha) and 75%RDN (1877 kg/ha). The results indicated that the crop responded positively to higher nitrogen application. The interaction between plant geometry and nitrogen levels showed non-significant influence on seed cotton yield.

Table 64. Seed cotton yield (kg/ha) of CORE-101 as influenced by spacing levels and nutrient levels at Mudhole

Treatments	S ₁ - 90 x 45 cm	S ₂ - 90 x 60 cm	S ₃ - 90 x 75 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	1937.3	1960.3	1733.7	1877	Spacing (S)	55.2	153.2
N ₂ - 100 %RDN	2121.3	1955.3	1920.7	1999	Nitrogen (N)	60.8	132.4
N ₃ -125 %RDN	2560.3	2259.7	2141.0	2320	S x N	105. 2	229.3
Mean (Spacing)	2206	2058	1932				

Basic parameters: pH: 7.3, EC: 0.24 dSm⁻¹, OC (%): 0.4, Available N: 130 kg/ha, Available P₂O₅: 31.8 kg/ha, Available K₂O: 405 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: CORE 101 BGII, Environment: Rainfed, Total rainfall during cropping period: 1551.9 mm

MUDHOLE (DACH-85S85)

The results of agronomic requirement studies conducted at Mudhole under rainfed conditions revealed that spacing and nitrogen levels significantly influenced the seed cotton yield. (Table 65). With respect to spacing, the seed cotton yield (SCY) was significantly highest (2059 kg/ha) under 90 × 45 cm spacing, followed by 90 × 60 cm (1886 kg/ha) and 90 × 75 cm (1673 kg/ha). Amongst nitrogen levels, the highest seed cotton yield (2189 kg/ha) was recorded with 125% RDN, which was significantly superior over 100% RDN (1916 kg/ha) and 75% RDN (1514 kg/ha), indicating a positive response of the crop to higher nitrogen application. The interaction between plant geometry and nitrogen levels had a significant influence on seed cotton yield. The highest seed cotton yield (2509 kg/ha) was recorded with the combination of 90 × 45 cm spacing and 125% nitrogen, indicating that higher nitrogen application under closer spacing enhanced yield through improved nutrient utilization and higher boll production.

Table 65. Seed cotton yield (kg/ha) of DACH-85S85 as influenced by spacing levels and nutrient levels at Mudhole

Treatments	S ₁ - 90 x 45 cm	S ₂ - 90 x 60 cm	S ₃ - 90 x 75 cm	Mean (Nitrogen)	ANOVA	SE d	CD (5%)
N ₁ - 75 %RDN	1579.3	1583.8	1378.7	1514	Spacing (S)	31.5	87.6
N ₂ - 100 %RDN	2088.7	1977.8	1681.7	1916	Nitrogen (N)	46.3	100.8
N ₃ -125 %RDN	2508.7	2098.0	1960.0	2189	S x N	80.1	174.6
Mean (Spacing)	2059	1886	1673				

Basic parameters: pH: 7.3, EC: 0.24 dSm⁻¹, OC (%): 0.4, Available N: 130 kg/ha, Available P₂O₅: 31.8 kg/ha, Available K₂O: 405 kg/ha, Recommended nutrients: 120:60:60 kg NPK/ha, Genotype: DACH 85S85 BGII, Environment: Rainfed, Total rainfall during cropping period: 1551.9 mm

Initial Evaluation Trial of Compact Intra-Hirsutum Bt Hybrids - Rainfed

Constitution of Trial

The trial was constituted with 15 Bt cotton hybrids containing MON 15985 event sponsored by various organization along with two different check hybrids in closer spacing and one check hybrid in normal spacing as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	14	56071	DACH 91S19 BGII	Dharti
2	10	56072	DACH 84S48 BGII	Dharti
3	6	56073	GCH-5508 Bt2	Geenex
4	3	56074	CCH 527 BGII	Caspian seeds pvt ltd
5	1	56075	PCH 2997 Bt2	Prabhat Agri Biotech Limited
6	17	56076	ARCH 2527 BGII	Ankur Seeds
7	12	56077	ARCH 2526 BGII	Ankur Seeds
8	8	56078	CCH-501 Bt2	Caspian Seeds Pvt Ltd
9	5	56079	YASH-2222 BG II	Yashoda Hybrid Seeds
10	2	56080	C9404 BG-II	Mahyco Private Limited
11	16	56081	SP7679 BGII (ZC 1)	
12	13	56082	Daftari 615 BG II (ZC 2)	
13	11	56083	22 SS 44 BG II	Sri Sathya Agri Biotech
14	9	56084	YASH-8888 BG II	Yashoda Hybrid Seeds
15	7	56085	US 752 BGII	SeedWorks
16	4	56086	DC5302 BGII	Rallis India Limited
17	15	56087	NCS 2552 Bt2	Nuziveedu Seeds Limited
18			SP7679 BGII (ZC 1) (normal)	

The trial was conducted in seven locations viz., Mudhole, Adilabad, Nandyal*, Dharwad, Perambalur, Warangal (Ankur), and Parigi (Prabhat).

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: 90 x 15 cm was followed for the coded entries and the zonal check hybrid has been included under recommended spacing.

Number of rows: 6 rows of 6 meters per entry with three replications

Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Initial Evaluation Trial of H X H hybrids**

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	104.9	109.1	112.0	101.7	119.0	71.3	103.0
2	DACH 84S48 BGII	106.1	107.7	124.8	94.3	111.0	75.7	103.3
3	GCH-5508 Bt2	132.9	118.8	111.1	102.0	115.3	74.7	109.1
4	CCH 527 BGII	144.7	140.5	119.9	101.3	133.5	89.7	121.6
5	PCH 2997 Bt2	110.0	129.3	104.9	94.3	116.0	78.3	105.5
6	ARCH 2527 BGII	116.5	131.5	124.6	101.7	115.2	72.0	110.3
7	ARCH 2526 BGII	129.7	128.7	109.8	99.7	118.2	72.3	109.7
8	CCH-501 Bt2	148.7	134.5	120.1	112.7	122.7	80.7	119.9
9	YASH-2222 BG II	95.9	112.3	96.9	94.0	115.0	60.7	95.8
10	C9404 BG-II	122.4	127.1	107.1	106.3	112.2	86.0	110.2
11	SP7679 BGII (ZC 1)	124.5	120.3	107.4	101.3	110.0	75.3	106.5
12	Daftari 615 BG II (ZC 2)	137.3	118.0	116.2	92.7	117.0	85.0	111.0
13	22 SS 44 BG II	116.7	110.7	103.4	101.3	111.3	64.7	101.4
14	YASH-8888 BG II	112.5	116.7	101.4	92.3	102.0	74.7	99.9
15	US 752 BGII	128.1	109.7	119.0	98.7	112.3	66.7	105.8
16	DC5302 BGII	124.6	126.1	98.0	100.0	113.3	77.3	106.6
17	NCS 2552 Bt2	131.7	116.1	109.1	101.0	116.8	76.7	108.6
18	SP7679 BGII (ZC 1) (normal)	112.9	123.6	98.2	94.3	115.2	94.3	106.4
	CD @ 5%	16.3	13.7	20.6	18.7			
	CV %	8.0	6.8	11.3	11.7			

Number of monopodia in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	0.2	0.5	0.9	1.1	1.4	1.0	0.9
2	DACH 84S48 BGII	0.2	0.9	0.3	0.3	0.8	0.0	0.4
3	GCH-5508 Bt2	0.3	0.4	0.7	0.4	1.5	1.0	0.7
4	CCH 527 BGII	0.1	0.7	0.9	0.7	1.1	1.0	0.8
5	PCH 2997 Bt2	0.2	0.9	0.9	0.7	1.2	0.0	0.7
6	ARCH 2527 BGII	0.3	0.5	0.3	0.9	1.3	0.0	0.6
7	ARCH 2526 BGII	0.1	0.5	1.0	0.7	1.4	0.0	0.6
8	CCH-501 Bt2	0.3	0.5	2.7	0.7	1.3	1.0	1.1
9	YASH-2222 BG II	0.3	1.0	1.2	0.7	1.7	1.0	1.0
10	C9404 BG-II	0.1	0.8	0.3	0.9	1.2	1.0	0.7
11	SP7679 BGII (ZC 1)	0.7	1.5	1.3	1.6	1.4	1.0	1.3
12	Daftari 615 BG II (ZC 2)	0.2	0.6	0.2	0.2	1.1	1.0	0.6
13	22 SS 44 BG II	0.3	0.3	0.7	0.8	1.5	1.0	0.8
14	YASH-8888 BG II	0.2	0.9	1.7	0.6	1.6	0.0	0.8
15	US 752 BGII	0.2	0.6	2.0	1.1	1.2	0.0	0.9
16	DC5302 BGII	0.1	0.2	0.3	0.6	1.1	1.0	0.6
17	NCS 2552 Bt2	0.3	0.3	1.0	0.9	1.0	1.0	0.8
18	SP7679 BGII (ZC 1) (normal)	0.5	2.5	0.9	2.8	1.8	0.0	1.4
	CD @ 5%	0.1	0.7	0.2	0.8			
	CV %	32.5	56.1	11.5	54.8			

Number of sympodia in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	8.8	14.9	14.1	12.1	14.5	11.0	12.6
2	DACH 84S48 BGII	8.7	14.3	16.1	13.1	13.4	12.0	12.9
3	GCH-5508 Bt2	9.1	12.9	14.8	14.7	13.6	11.0	12.7
4	CCH 527 BGII	8.1	15.5	15.1	14.0	15.6	11.0	13.2
5	PCH 2997 Bt2	10.2	15.3	15.9	14.7	14.5	11.0	13.6
6	ARCH 2527 BGII	7.8	15.7	16.1	14.1	13.2	12.0	13.2
7	ARCH 2526 BGII	7.3	13.5	13.9	12.8	11.9	11.0	11.7
8	CCH-501 Bt2	9.8	13.1	14.4	14.1	13.2	12.0	12.8
9	YASH-2222 BG II	10.9	14.2	14.6	13.6	13.9	10.0	12.9
10	C9404 BG-II	11.3	15.7	13.8	13.2	14.7	10.0	13.1
11	SP7679 BGII (ZC 1)	8.9	15.5	13.7	14.4	14.1	12.0	13.1
12	Daftari 615 BG II (ZC 2)	10.4	12.7	14.7	10.8	13.6	10.0	12.0
13	22 SS 44 BG II	7.9	13.6	14.0	13.7	14.3	10.0	12.3
14	YASH-8888 BG II	8.9	13.5	14.0	13.2	13.4	11.0	12.3
15	US 752 BGII	9.9	14.1	16.4	14.3	12.5	12.0	13.2
16	DC5302 BGII	10.4	13.5	13.1	13.8	12.7	12.0	12.6
17	NCS 2552 Bt2	10.5	15.3	15.1	12.6	13.2	12.0	13.1
18	SP7679 BGII (ZC 1) (normal)	11.0	16.3	13.9	15.1	16.5	14.0	14.5
	CD @ 5%	1.6	NS	2.8	2.7			
	CV %	10.7	12.3	11.5	12.3			

Boll weight (g) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	4.8	5.2	5.0	5.0	4.5	6.1	5.1
2	DACH 84S48 BGII	4.4	5.0	5.3	5.6	4.7	6.2	5.2
3	GCH-5508 Bt2	5.5	5.6	5.3	5.3	4.9	7.3	5.7
4	CCH 527 BGII	5.3	5.9	5.3	5.5	5.0	6.8	5.6
5	PCH 2997 Bt2	5.1	6.1	5.3	5.5	4.4	6.5	5.5
6	ARCH 2527 BGII	5.2	5.2	5.2	4.5	4.5	6.0	5.1
7	ARCH 2526 BGII	5.5	5.7	5.3	5.2	5.4	6.7	5.6
8	CCH-501 Bt2	5.4	5.8	5.1	6.3	4.8	6.6	5.7
9	YASH-2222 BG II	3.7	5.2	4.4	4.6	4.4	5.5	4.6
10	C9404 BG-II	4.9	5.5	5.2	5.2	4.2	6.6	5.3
11	SP7679 BGII (ZC 1)	5.4	5.8	6.0	5.7	4.7	6.4	5.7
12	Daftari 615 BG II (ZC 2)	5.1	6.2	5.3	6.1	5.1	7.1	5.8
13	22 SS 44 BG II	5.4	6.5	5.1	5.9	5.4	7.0	5.9
14	YASH-8888 BG II	4.1	4.7	4.4	4.3	3.9	5.6	4.5
15	US 752 BGII	5.4	5.8	4.9	5.6	5.3	5.9	5.5
16	DC5302 BGII	4.5	5.1	4.9	5.1	4.5	6.0	5.0
17	NCS 2552 Bt2	4.7	5.3	4.2	5.1	4.8	6.0	5.0
18	SP7679 BGII (ZC 1) (normal)	5.6	6.0	6.0	6.2	4.6	6.2	5.8
	CD @ 5%	0.5	0.8	0.3	0.9			
	CV %	6.6	9.1	4.0	11.0			

Number of bolls / plant in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	10.1	11.1	8.2	11.7	15.0	11.2
2	DACH 84S48 BGII	9.1	10.8	9.0	9.2	13.0	10.2
3	GCH-5508 Bt2	10.0	8.5	8.7	8.7	12.0	9.6
4	CCH 527 BGII	10.8	9.6	8.6	9.4	11.0	9.9
5	PCH 2997 Bt2	14.1	10.3	8.5	12.1	15.0	12.0
6	ARCH 2527 BGII	9.9	10.0	8.6	9.7	14.0	10.4
7	ARCH 2526 BGII	8.9	8.9	7.2	10.8	11.0	9.4
8	CCH-501 Bt2	10.2	10.5	7.5	10.9	11.0	10.0
9	YASH-2222 BG II	11.4	12.0	8.6	14.7	12.0	11.7
10	C9404 BG-II	9.8	9.9	8.2	13.0	13.0	10.8
11	SP7679 BGII (ZC 1)	9.1	8.9	8.0	12.2	11.0	9.8
12	Daftari 615 BG II (ZC 2)	7.5	9.1	8.5	9.4	12.0	9.3
13	22 SS 44 BG II	9.5	8.0	7.5	10.4	11.0	9.3
14	YASH-8888 BG II	9.2	10.9	8.0	10.8	11.0	10.0
15	US 752 BGII	12.9	10.3	7.6	12.6	10.0	10.7
16	DC5302 BGII	12.5	10.3	8.5	13.9	14.0	11.8
17	NCS 2552 Bt2	10.1	10.7	8.7	16.2	15.0	12.1
18	SP7679 BGII (ZC 1) (normal)	13.9	16.2	7.4	17.3	20.0	15.0
	CD @ 5%	2.2	2.2	1.7	3.3		
	CV %	12.7	12.8	12.3	17.4		

Number of bolls / sq.m. in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	65.6	79.3	60.7	110.3	67.9	92.0	79.3
2	DACH 84S48 BGII	70.6	90.7	66.6	85.7	60.4	89.0	77.2
3	GCH-5508 Bt2	78.2	80.7	64.4	104.7	53.2	80.0	76.9
4	CCH 527 BGII	80.3	85.3	63.5	90.3	50.4	76.0	74.3
5	PCH 2997 Bt2	90.4	80.7	62.6	113.7	64.9	98.0	85.1
6	ARCH 2527 BGII	75.6	83.7	63.8	94.3	66.0	94.0	79.6
7	ARCH 2526 BGII	69.3	72.0	53.3	94.3	62.3	72.0	70.5
8	CCH-501 Bt2	83.7	77.0	55.2	98.0	49.7	76.0	73.3
9	YASH-2222 BG II	73.4	65.3	63.8	106.3	80.3	69.0	76.4
10	C9404 BG-II	79.2	98.0	60.7	101.3	63.5	83.0	81.0
11	SP7679 BGII (ZC 1)	71.2	80.0	59.5	88.3	52.3	60.0	68.6
12	Daftari 615 BG II (ZC 2)	64.7	82.3	62.9	80.3	58.1	82.0	71.7
13	22 SS 44 BG II	82.9	82.3	62.0	90.7	48.5	62.0	71.4
14	YASH-8888 BG II	62.9	88.0	59.2	104.0	52.5	73.0	73.3
15	US 752 BGII	84.3	75.0	56.4	114.0	56.5	69.0	75.9
16	DC5302 BGII	84.0	102.3	62.9	105.7	69.1	94.0	86.3
17	NCS 2552 Bt2	86.9	87.0	64.4	111.3	66.3	99.0	85.8
18	SP7679 BGII (ZC 1) (normal)	62.7	47.3	13.7	80.7	10.7	33.0	41.4
	CD @ 5%	8.5	18.5	12.3	22.7			
	CV %	6.7	13.7	12.7	14.4			

Lint Index (g) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	4.7	4.8	5.0	6.0	5.2	5.6	5.2
2	DACH 84S48 BGII	5.7	4.6	5.1	6.9	5.4	5.0	5.5
3	GCH-5508 Bt2	5.5	5.5	5.4	7.0	5.5	5.7	5.8
4	CCH 527 BGII	7.9	5.7	5.6	7.1	5.6	6.5	6.4
5	PCH 2997 Bt2	5.7	5.3	5.7	7.0	4.6	6.3	5.8
6	ARCH 2527 BGII	5.7	4.4	5.0	6.2	5.5	5.8	5.4
7	ARCH 2526 BGII	5.7	6.3	6.0	7.3	6.9	6.5	6.5
8	CCH-501 Bt2	7.2	5.4	5.5	7.1	6.6	6.2	6.3
9	YASH-2222 BG II	2.9	4.3	4.8	6.6	5.8	4.4	4.8
10	C9404 BG-II	7.3	5.0	6.1	7.4	4.7	6.0	6.1
11	SP7679 BGII (ZC 1)	6.9	6.4	6.9	6.9	6.3	7.2	6.8
12	Daftari 615 BG II (ZC 2)	3.9	4.9	5.7	7.8	5.9	6.1	5.7
13	22 SS 44 BG II	4.9	6.1	5.3	7.1	5.4	6.4	5.9
14	YASH-8888 BG II	4.0	4.8	4.9	5.8	4.8	5.6	5.0
15	US 752 BGII	5.1	5.6	5.1	6.3	6.7	6.7	5.9
16	DC5302 BGII	7.5	5.0	5.0	6.1	5.0	5.9	5.8
17	NCS 2552 Bt2	4.2	5.7	5.6	7.0	5.2	7.0	5.8
18	SP7679 BGII (ZC 1) (normal)	5.1	6.0	7.6	7.3	6.0	7.2	6.5
	CD @ 5%	1.0	0.5		0.7			
	CV %	10.6	5.9		6.2			

Seed Index (g) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	9.0	10.1	9.9	11.9	8.9	11.0	10.1
2	DACH 84S48 BGII	8.6	10.2	11.4	12.6	9.4	9.7	10.3
3	GCH-5508 Bt2	10.2	12.3	11.0	12.7	10.7	12.5	11.6
4	CCH 527 BGII	9.9	11.7	10.5	11.5	9.9	11.6	10.9
5	PCH 2997 Bt2	9.1	11.9	10.5	11.5	8.6	12.1	10.6
6	ARCH 2527 BGII	9.3	9.6	10.2	11.0	9.8	10.4	10.1
7	ARCH 2526 BGII	10.5	11.7	11.7	12.4	11.3	12.1	11.6
8	CCH-501 Bt2	9.8	11.0	10.4	12.7	11.5	11.2	11.1
9	YASH-2222 BG II	8.4	10.2	9.6	11.5	10.2	9.2	9.9
10	C9404 BG-II	8.4	9.8	10.1	11.6	8.2	10.8	9.8
11	SP7679 BGII (ZC 1)	10.0	11.5	11.5	13.5	10.0	11.3	11.3
12	Daftari 615 BG II (ZC 2)	10.5	11.5	12.1	13.4	10.7	14.4	12.1
13	22 SS 44 BG II	10.4	12.4	10.1	12.5	9.8	11.9	11.2
14	YASH-8888 BG II	8.0	9.1	8.9	10.7	8.2	9.9	9.1
15	US 752 BGII	9.6	11.3	11.0	12.5	10.6	11.7	11.1
16	DC5302 BGII	9.5	9.4	9.0	12.0	8.6	10.6	9.9
17	NCS 2552 Bt2	9.8	10.2	9.2	11.0	9.2	10.5	10.0
18	SP7679 BGII (ZC 1) (normal)	10.3	10.9	11.6	12.0	10.9	11.7	11.2
	CD @ 5%	0.7	1.1		1.0			
	CV %	5.0	6.4		5.6			

Ginning outturn (%) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	34.1	32.0	33.4	33.7	36.8	33.9	34.0
2	DACH 84S48 BGII	40.0	31.1	31.0	35.5	36.2	34.0	34.6
3	GCH-5508 Bt2	34.8	30.7	33.0	35.7	34.0	31.5	33.3
4	CCH 527 BGII	42.0	32.9	34.6	38.1	36.3	35.8	36.6
5	PCH 2997 Bt2	38.0	30.7	35.1	37.7	34.9	34.2	35.1
6	ARCH 2527 BGII	39.3	31.4	33.0	36.0	36.1	35.6	35.2
7	ARCH 2526 BGII	36.6	34.8	34.0	37.1	38.0	34.8	35.9
8	CCH-501 Bt2	41.9	32.9	34.4	35.9	36.6	35.5	36.2
9	YASH-2222 BG II	27.3	29.5	33.3	36.5	36.1	32.4	32.5
10	C9404 BG-II	43.0	33.9	37.8	38.9	36.2	35.8	37.6
11	SP7679 BGII (ZC 1)	39.2	35.7	37.6	34.0	38.7	38.8	37.3
12	Daftari 615 BG II (ZC 2)	27.3	29.9	31.9	36.9	35.5	29.6	31.9
13	22 SS 44 BG II	33.4	33.0	34.3	36.4	35.4	34.9	34.6
14	YASH-8888 BG II	33.3	34.5	35.5	35.0	36.8	36.2	35.2
15	US 752 BGII	34.8	33.1	31.9	33.6	38.6	36.3	34.7
16	DC5302 BGII	41.6	34.6	35.7	33.7	36.5	35.9	36.3
17	NCS 2552 Bt2	29.8	35.9	37.8	38.9	36.3	39.9	36.4
18	SP7679 BGII (ZC 1) (normal)	33.8	35.3	39.6	37.7	35.7	38.0	36.7
	CD @ 5%	2.5	1.5		3.1			
	CV %	4.2	2.8		5.3			

Upper Half Mean Length (mm) under HVI Mode in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	26.7	27.0	29.5	28.3	25.8	30.0	27.9
2	DACH 84S48 BGII	25.4	24.8	28.7	29.0	24.4	26.5	26.5
3	GCH-5508 Bt2	28.0	28.2	31.5	31.4	28.2	28.7	29.3
4	CCH 527 BGII	27.5	28.5	29.0	29.8	26.8	28.5	28.4
5	PCH 2997 Bt2	29.6	30.6	31.0	32.2	29.5	31.0	30.7
6	ARCH 2527 BGII	27.0	26.8	29.8	29.5	26.4	29.0	28.1
7	ARCH 2526 BGII	28.1	28.2	30.4	31.2	27.8	30.6	29.4
8	CCH-501 Bt2	28.2	28.1	29.6	30.2	27.4	28.5	28.7
9	YASH-2222 BG II	26.3	27.3	28.3	28.4	25.8	26.4	27.1
10	C9404 BG-II	28.2	26.9	29.8	30.0	27.0	28.6	28.4
11	SP7679 BGII (ZC 1)	26.3	27.7	29.7	29.0	25.9	28.0	27.8
12	Daftari 615 BG II (ZC 2)	30.2	29.9	34.0	33.9	29.3	33.4	31.8
13	22 SS 44 BG II	29.5	28.8	31.1	31.3	28.8	29.8	29.9
14	YASH-8888 BG II	26.8	26.2	29.5	29.1	25.8	26.6	27.3
15	US 752 BGII	26.4	27.4	28.4	28.5	26.0	26.4	27.2
16	DC5302 BGII	28.0	27.1	28.6	30.3	26.5	29.6	28.4
17	NCS 2552 Bt2	26.2	27.1	29.6	30.1	26.2	26.9	27.7
18	SP7679 BGII (ZC 1) (normal)	27.6	27.4	29.0	28.9	25.7	28.1	27.8

Uniformity index under HVI Mode in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	83.0	83.0	84.0	84.0	82.6	85.0	83.6
2	DACH 84S48 BGII	83.0	81.0	84.0	85.0	81.9	83.0	83.0
3	GCH-5508 Bt2	84.0	83.0	86.0	85.0	82.7	83.0	84.0
4	CCH 527 BGII	83.0	83.0	86.0	86.0	83.2	85.0	84.4
5	PCH 2997 Bt2	83.0	83.0	85.0	85.0	82.6	84.0	83.8
6	ARCH 2527 BGII	83.0	81.0	84.0	85.0	82.8	85.0	83.5
7	ARCH 2526 BGII	84.0	84.0	87.0	87.0	83.8	86.0	85.3
8	CCH-501 Bt2	84.0	82.0	86.0	84.0	83.4	85.0	84.1
9	YASH-2222 BG II	83.0	83.0	86.0	85.0	82.1	85.0	84.0
10	C9404 BG-II	84.0	83.0	86.0	87.0	83.0	85.0	84.7
11	SP7679 BGII (ZC 1)	82.0	83.0	85.0	86.0	83.3	85.0	84.1
12	Daftari 615 BG II (ZC 2)	83.0	84.0	87.0	86.0	82.2	84.0	84.4
13	22 SS 44 BG II	84.0	85.0	85.0	86.0	82.8	83.0	84.3
14	YASH-8888 BG II	83.0	83.0	86.0	85.0	82.0	83.0	83.7
15	US 752 BGII	84.0	83.0	85.0	86.0	83.2	83.0	84.0
16	DC5302 BGII	83.0	84.0	85.0	86.0	82.6	86.0	84.4
17	NCS 2552 Bt2	82.0	83.0	86.0	86.0	82.9	84.0	84.0
18	SP7679 BGII (ZC 1) (normal)	85.0	84.0	85.0	86.0	82.6	86.0	84.8

Micronaire under HVI Mode in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	4.1	4.8	4.3	5.2	5.2	4.1	4.6
2	DACH 84S48 BGII	4.6	4.7	5.0	5.5	5.1	4.3	4.9
3	GCH-5508 Bt2	3.8	3.9	4.0	4.6	4.7	4.3	4.2
4	CCH 527 BGII	4.1	4.3	4.3	4.7	4.7	4.2	4.4
5	PCH 2997 Bt2	3.9	4.2	4.0	5.2	4.7	4.0	4.3
6	ARCH 2527 BGII	4.3	4.7	4.5	4.5	5.2	4.6	4.6
7	ARCH 2526 BGII	3.9	4.9	4.8	4.3	4.8	3.9	4.4
8	CCH-501 Bt2	4.0	4.4	4.1	4.6	4.6	4.1	4.3
9	YASH-2222 BG II	4.4	4.3	4.2	5.4	4.6	4.5	4.6
10	C9404 BG-II	4.1	4.5	3.9	5.0	4.6	3.9	4.3
11	SP7679 BGII (ZC 1)	4.3	4.6	4.7	5.3	5.0	4.7	4.8
12	Daftari 615 BG II (ZC 2)	4.1	4.4	3.8	4.6	4.3	4.1	4.2
13	22 SS 44 BG II	4.0	4.2	3.4	4.6	4.8	3.8	4.1
14	YASH-8888 BG II	3.9	4.2	3.9	4.6	4.4	3.9	4.2
15	US 752 BGII	4.3	4.3	5.2	4.9	5.1	5.0	4.8
16	DC5302 BGII	4.1	5.0	4.1	4.5	4.5	4.1	4.4
17	NCS 2552 Bt2	4.2	4.8	4.2	4.8	5.3	4.4	4.6
18	SP7679 BGII (ZC 1) (normal)	4.5	4.9	4.8	5.4	5.0	4.8	4.9

Tenacity under HVI Mode in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	28.6	29.3	31.0	28.7	31.3	30.8	30.0
2	DACH 84S48 BGII	27.4	26.3	26.7	29.6	28.9	26.8	27.6
3	GCH-5508 Bt2	29.0	30.4	28.1	30.3	29.0	27.1	29.0
4	CCH 527 BGII	29.6	29.9	30.7	29.9	29.6	30.5	30.0
5	PCH 2997 Bt2	31.3	32.2	28.7	31.1	30.7	30.6	30.8
6	ARCH 2527 BGII	28.5	28.7	31.2	29.5	31.7	29.8	29.9
7	ARCH 2526 BGII	30.4	30.1	31.4	30.2	32.0	30.0	30.7
8	CCH-501 Bt2	29.5	30.4	28.9	31.8	30.3	30.2	30.2
9	YASH-2222 BG II	28.3	29.1	28.5	28.4	30.3	28.8	28.9
10	C9404 BG-II	30.5	29.1	30.7	29.6	30.6	26.3	29.5
11	SP7679 BGII (ZC 1)	28.2	29.5	29.1	29.9	29.7	28.8	29.2
12	Daftari 615 BG II (ZC 2)	31.5	31.2	32.1	30.1	29.8	31.4	31.0
13	22 SS 44 BG II	29.6	31.2	30.0	29.6	29.8	30.4	30.1
14	YASH-8888 BG II	28.9	28.1	29.6	31.0	29.5	27.3	29.1
15	US 752 BGII	28.2	29.5	27.2	28.8	27.5	25.8	27.8
16	DC5302 BGII	29.6	29.4	29.2	31.2	28.6	28.7	29.5
17	NCS 2552 Bt2	27.6	29.3	28.0	30.4	28.8	28.2	28.7
18	SP7679 BGII (ZC 1) (normal)	30.1	28.6	30.3	29.8	29.4	29.0	29.5

Seed Cotton Yield at 140 DAS (q/ha) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	19.72	23.32	9.33	14.34	14.95	15.28	16.16
2	DACH 84S48 BGII	18.33	23.37	8.32	12.52	14.58	11.88	14.83
3	GCH-5508 Bt2	19.03	23.25	6.80	14.74	9.62	15.64	14.85
4	CCH 527 BGII	22.51	24.66	6.38	12.01	7.76	15.33	14.78
5	PCH 2997 Bt2	27.32	24.06	11.07	15.66	10.72	19.08	17.99
6	ARCH 2527 BGII	22.60	23.74	7.71	14.02	14.49	13.07	15.94
7	ARCH 2526 BGII	20.74	25.91	7.79	15.23	15.26	14.97	16.65
8	CCH-501 Bt2	21.50	23.55	6.47	17.02	9.53	13.12	15.20
9	YASH-2222 BG II	23.29	20.99	14.14	17.55	14.18	13.58	17.29
10	C9404 BG-II	18.26	26.80	12.82	21.76	8.77	16.28	17.45
11	SP7679 BGII (ZC 1)	18.00	19.10	8.83	14.52	7.83	9.21	12.92
12	Daftari 615 BG II (ZC 2)	17.89	21.34	9.48	12.21	8.11	16.46	14.25
13	22 SS 44 BG II	20.27	26.20	11.63	16.49	9.75	9.36	15.62
14	YASH-8888 BG II	17.04	19.86	6.71	13.65	11.16	11.68	13.35
15	US 752 BGII	23.90	27.64	4.97	18.15	12.05	12.24	16.49
16	DC5302 BGII	21.32	24.24	16.81	20.15	10.56	21.71	19.13
17	NCS 2552 Bt2	18.61	28.36	11.37	23.37	8.96	19.42	18.35
18	SP7679 BGII (ZC 1) (normal)	13.74	15.51	4.54	8.25	6.37	8.23	9.44
	CD @ 5%	2.00	4.59	2.25	3.42			
	CV %	6.10	11.79	15.00	13.63			

Seed Cotton Yield at 165 DAS (q/ha) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean
1	DACH 91S19 BGII	2.43	3.62	10.86	2.08	0.55	14.71	5.71
2	DACH 84S48 BGII	1.85	4.36	8.63	2.74	0.31	8.18	4.35
3	GCH-5508 Bt2	2.41	4.96	7.99	1.51	1.16	9.52	4.59
4	CCH 527 BGII	2.00	4.05	10.60	1.49	2.00	9.16	4.88
5	PCH 2997 Bt2	2.26	3.06	10.11	1.39	0.63	11.83	4.88
6	ARCH 2527 BGII	1.95	4.28	12.07	1.68	0.62	12.04	5.44
7	ARCH 2526 BGII	2.17	2.69	8.56	1.59	0.87	9.10	4.16
8	CCH-501 Bt2	2.65	2.66	9.76	2.57	0.92	7.72	4.38
9	YASH-2222 BG II	2.28	2.06	7.00	0.97	0.85	6.48	3.27
10	C9404 BG-II	2.33	2.77	8.11	2.05	1.28	8.13	4.11
11	SP7679 BGII (ZC 1)	2.17	3.18	8.38	0.99	0.56	8.28	3.93
12	Daftari 615 BG II (ZC 2)	1.89	6.91	10.15	1.22	1.27	9.47	5.15
13	22 SS 44 BG II	2.72	2.48	9.97	2.34	1.39	8.85	4.63
14	YASH-8888 BG II	1.95	4.77	7.89	1.50	2.42	8.95	4.58
15	US 752 BGII	2.35	4.69	7.74	1.71	1.06	8.18	4.29
16	DC5302 BGII	2.06	3.70	6.87	2.21	2.19	10.39	4.57
17	NCS 2552 Bt2	1.82	3.14	7.91	1.77	1.29	10.56	4.42
18	SP7679 BGII (ZC 1) (normal)	1.31	2.31	2.92	0.87	0.41	5.81	2.27
	CD @ 5%	0.30	0.83	1.97	0.32			
	CV %	8.53	13.75	13.80	11.54			

Total Seed Cotton Yield (q/ha) in Initial Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Warangal (Ankur)	Parigi (PrabhatAgri Biotech)	Mean	Rank	% Inc over best check
1	DACH 91S19 BGII	22.15	26.94	20.19	16.42	15.50	29.99	21.87	4	12.7
2	DACH 84S48 BGII	20.17	27.73	16.95	15.26	14.89	20.06	19.18	15	-1.2
3	GCH-5508 Bt2	21.45	28.21	14.79	16.25	10.78	25.15	19.44	13	0.2
4	CCH 527 BGII	24.51	28.71	16.98	13.50	9.75	24.49	19.66	11	1.3
5	PCH 2997 Bt2	29.58	27.12	21.18	17.05	11.35	30.92	22.87	2	17.9
6	ARCH 2527 BGII	24.55	28.02	19.79	15.70	15.11	25.10	21.38	6	10.2
7	ARCH 2526 BGII	22.91	28.59	16.35	16.82	16.13	24.07	20.81	7	7.3
8	CCH-501 Bt2	24.16	26.21	16.22	19.59	10.44	20.83	19.58	12	0.9
9	YASH-2222 BG II	25.56	23.05	21.14	18.52	15.04	20.06	20.56	9	6.0
10	C9404 BG-II	20.58	29.57	20.93	23.81	10.04	24.40	21.56	5	11.1
11	SP7679 BGII (ZC 1)	20.17	22.28	17.21	15.51	8.38	17.49	16.84	17	-13.2
12	Daftari 615 BG II (ZC 2)	19.78	28.25	19.64	13.43	9.37	25.93	19.40	14	0.0
13	22 SS 44 BG II	22.98	28.68	21.60	18.83	11.14	18.21	20.24	10	4.3
14	YASH-8888 BG II	19.00	24.63	14.60	15.15	13.58	20.63	17.93	16	-7.6
15	US 752 BGII	26.25	32.34	12.72	19.86	13.11	20.42	20.78	8	7.1
16	DC5302 BGII	23.38	27.94	23.68	22.36	12.75	32.10	23.70	1	22.2
17	NCS 2552 Bt2	20.43	31.50	19.27	25.14	10.24	29.97	22.76	3	17.3
18	SP7679 BGII (ZC 1) (normal)	15.05	17.83	7.46	9.12	6.78	14.04	11.71	18	-39.6
	CD @ 5%	2.00	4.75	2.01	3.42	2.66				
	CV %	5.60	10.57	6.95	12.28	13.33				

Evaluation under Protected Condition for Insect pests Reaction to Insect Pest

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	1.76	-	3.69	13.20	6.22	BETL
56072	-	3.47	-	4.35	22.69	10.17	AETL
56073	-	1.61	-	3.80	13.89	6.43	BETL
56074	-	1.82	-	4.17	22.51	9.50	BETL
56075	-	2.11	-	3.47	31.22	12.27	AETL
56076	-	2.51	-	3.52	8.48	4.84	BETL
56077	-	1.49	-	2.90	16.00	6.80	BETL
56078	-	1.96	-	2.50	9.58	4.68	BETL
56079	-	3.20	-	2.15	16.41	7.25	BETL
56080	-	3.24	-	2.52	18.52	8.09	BETL
56081	-	1.02	-	2.79	8.89	4.23	BETL
56082	-	1.87	-	3.15	7.06	4.03	BETL
56083	-	1.82	-	2.28	27.00	10.37	AETL
56084	-	2.31	-	2.28	13.84	6.14	BETL
56085	-	2.51	-	3.10	10.13	5.25	BETL
56086	-	2.00	-	2.31	12.65	5.65	BETL
56087	-	1.56	-	2.12	5.32	3.00	BETL
SP7679	-	-	-	3.88	25.44	14.66	AETL

NA- Nandyal, DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions –Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	0.07	3.00	0.70	2.80	1.64	BETL
56072	-	0.22	2.00	0.94	1.23	1.10	BETL
56073	-	0.13	3.00	0.51	1.01	1.16	BETL
56074	-	0.24	3.33	0.56	3.16	1.82	BETL
56075	-	0.09	2.67	0.24	2.68	1.42	BETL
56076	-	0.07	4.33	0.29	0.67	1.34	BETL
56077	-	0.04	3.67	0.58	0.79	1.27	BETL
56078	-	0.22	3.00	1.03	1.12	1.34	BETL
56079	-	0.09	3.67	0.23	0.56	1.14	BETL
56080	-	0.22	5.67	0.28	0.90	1.77	BETL
56081	-	0.33	4.00	0.55	0.45	1.33	BETL
56082	-	0.27	6.33	0.17	0.15	1.73	BETL
56083	-	0.31	4.33	0.26	2.81	1.93	BETL
56084	-	0.51	5.00	0.13	0.57	1.55	BETL
56085	-	0.29	5.00	0.22	0.45	1.49	BETL
56086	-	0.33	5.00	0.45	1.58	1.84	BETL
56087	-	0.20	5.33	0.24	0.22	1.50	BETL
SP7679	-	-	4.67	1.97	0.45	2.36	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-		-	-	-		
56072	-		-	-	-		
56073	-		-	-	-		
56074	-		-	-	-		
56075	-		-	-	-		
56076	-		-	-	-		
56077	-		-	-	-		
56078	-		-	-	-		
56079	-		-	-	-		
56080	-		-	-	-		
56081	-		-	-	-		
56082	-		-	-	-		
56083	-		-	-	-		
56084	-		-	-	-		
56085	-		-	-	-		
56086	-		-	-	-		
56087	-		-	-	-		
SP7679	-	-	-	-	-		

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	3.58	0.00	1.03	0.57	1.29	BETL
56072	-	3.52	0.67	0.30	0.13	1.15	BETL
56073	-	3.18	0.00	1.47	0.08	1.18	BETL
56074	-	3.38	0.00	2.17	0.03	1.39	BETL
56075	-	3.45	0.00	1.47	0.03	1.24	BETL
56076	-	3.92	0.00	1.43	0.00	1.34	BETL
56077	-	3.52	0.00	1.10	0.41	1.26	BETL
56078	-	2.25	0.33	0.63	0.23	0.86	BETL
56079	-	3.25	0.00	1.37	0.20	1.21	BETL
56080	-	3.32	0.00	1.43	0.08	1.21	BETL
56081	-	4.45	0.00	1.63	0.00	1.52	BETL
56082	-	2.85	0.00	1.40	0.05	1.08	BETL
56083	-	4.12	0.00	1.87	0.00	1.50	BETL
56084	-	3.30	0.00	1.37	0.10	1.19	BETL
56085	-	3.58	0.00	1.67	0.03	1.32	BETL
56086	-	2.98	0.00	1.40	0.28	1.17	BETL
56087	-	2.52	0.00	1.97	0.00	1.12	BETL
SP7679	-	-	0.00	2.75	0.05	0.93	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	0.07	0.00	0.20	2.63	0.72	BETL
56072	-	0.11	0.00	0.17	1.85	0.53	BETL
56073	-	0.18	0.00	0.27	1.35	0.45	BETL
56074	-	0.00	0.33	0.50	2.27	0.78	BETL
56075	-	0.09	0.00	0.27	1.95	0.58	BETL
56076	-	0.00	0.00	0.37	1.07	0.36	BETL
56077	-	0.04	0.00	0.23	0.68	0.24	BETL
56078	-	0.09	0.67	0.27	1.03	0.51	BETL
56079	-	0.00	0.33	0.30	1.03	0.42	BETL
56080	-	0.13	1.00	0.20	1.10	0.61	BETL
56081	-	0.00	0.00	0.43	0.71	0.29	BETL
56082	-	0.00	1.00	0.23	0.43	0.41	BETL
56083	-	0.07	0.33	0.43	2.59	0.86	BETL
56084	-	0.09	1.00	0.40	0.39	0.47	BETL
56085	-	0.02	0.00	0.27	1.88	0.54	BETL
56086	-	0.16	0.00	0.30	1.81	0.57	BETL
56087	-	0.02	0.33	0.30	0.75	0.35	BETL
SP7679	-	-	0.67	0.30	0.71	0.56	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	0.40	0.00	-	-	0.20	
56072	-	0.40	0.00	-	-	0.20	
56073	-	0.22	0.00	-	-	0.11	
56074	-	0.34	0.00	-	-	0.17	
56075	-	0.50	0.00	-	-	0.25	
56076	-	0.50	0.00	-	-	0.25	
56077	-	0.10	0.00	-	-	0.05	
56078	-	0.40	0.00	-	-	0.20	
56079	-	0.74	0.00	-	-	0.37	
56080	-	0.94	0.00	-	-	0.47	
56081	-	0.30	0.00	-	-	0.15	
56082	-	0.78	0.00	-	-	0.39	
56083	-	0.67	0.00	-	-	0.34	
56084	-	0.54	0.00	-	-	0.27	
56085	-	0.64	0.00	-	-	0.32	
56086	-	0.58	0.00	-	-	0.29	
56087	-	0.71	0.00	-	-	0.35	
SP7679	-	-	0.00	-	-	0.00	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions: *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	0.00	0.00	0.00	-	0.00	BETL
56072	-	0.00	0.00	0.00	-	0.00	BETL
56073	-	0.00	0.00	0.00	-	0.00	BETL
56074	-	0.00	0.00	0.00	-	0.00	BETL
56075	-	0.00	0.00	0.00	-	0.00	BETL
56076	-	0.00	0.00	0.00	-	0.00	BETL
56077	-	0.00	0.00	0.00	-	0.00	BETL
56078	-	0.00	0.00	0.00	-	0.00	BETL
56079	-	0.00	0.00	0.00	-	0.00	BETL
56080	-	0.00	0.00	0.00	-	0.00	BETL
56081	-	0.00	0.00	0.00	-	0.00	BETL
56082	-	0.00	0.00	0.00	-	0.00	BETL
56083	-	0.00	0.00	0.00	-	0.00	BETL
56084	-	0.00	0.00	0.00	-	0.00	BETL
56085	-	0.00	0.00	0.00	-	0.00	BETL
56086	-	0.00	0.00	0.00	-	0.00	BETL
56087	-	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	-	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial H X H (Compact) trial in South Zone under Protected Conditions -Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	0.00	0.00	0.00	-	0.00	BETL
56072	-	0.00	0.00	0.00	-	0.00	BETL
56073	-	0.00	0.00	0.00	-	0.00	BETL
56074	-	0.00	0.00	0.00	-	0.00	BETL
56075	-	0.00	0.00	0.00	-	0.00	BETL
56076	-	0.00	0.00	0.00	-	0.00	BETL
56077	-	0.00	0.00	0.00	-	0.00	BETL
56078	-	0.00	0.00	0.00	-	0.00	BETL
56079	-	0.00	0.00	0.00	-	0.00	BETL
56080	-	0.00	0.00	0.00	-	0.00	BETL
56081	-	0.00	0.00	0.00	-	0.00	BETL
56082	-	0.00	0.00	0.00	-	0.00	BETL
56083	-	0.00	0.00	0.00	-	0.00	BETL
56084	-	0.00	0.00	0.00	-	0.00	BETL
56085	-	0.00	0.00	0.00	-	0.00	BETL
56086	-	0.00	0.00	0.00	-	0.00	BETL
56087	-	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	-	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	0.00	0.00	0.00	-	0.00	BETL
56072	-	0.00	0.00	0.00	-	0.00	BETL
56073	-	0.00	0.00	0.00	-	0.00	BETL
56074	-	0.00	0.00	0.00	-	0.00	BETL
56075	-	0.00	0.00	0.00	-	0.00	BETL
56076	-	0.00	0.00	0.00	-	0.00	BETL
56077	-	0.00	0.00	0.00	-	0.00	BETL
56078	-	0.00	0.00	0.00	-	0.00	BETL
56079	-	0.00	0.00	0.00	-	0.00	BETL
56080	-	0.00	0.00	0.00	-	0.00	BETL
56081	-	0.00	0.00	0.00	-	0.00	BETL
56082	-	0.00	0.00	0.00	-	0.00	BETL
56083	-	0.00	0.00	0.00	-	0.00	BETL
56084	-	0.00	0.00	0.00	-	0.00	BETL
56085	-	0.00	0.00	0.00	-	0.00	BETL
56086	-	0.00	0.00	0.00	-	0.00	BETL
56087	-	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	-	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Pink bollworm

Name of Entry	Pink bollworm Larva (No./10 bolls destructive sampling)						Remark
	NA	DH	PE	AD#	MU	Mean	
56071	-	0.50	2.18	0.53	-	1.07	AETL
56072	-	0.50	0.52	0.67	-	0.56	BETL
56073	-	0.33	1.18	0.53	-	0.68	BETL
56074	-	1.17	1.85	0.73	-	1.25	AETL
56075	-	0.67	0.85	0.60	-	0.71	BETL
56076	-	1.00	1.18	0.53	-	0.90	BETL
56077	-	0.50	1.85	0.80	-	1.05	AETL
56078	-	0.50	0.85	0.80	-	0.72	BETL
56079	-	0.50	1.18	0.67	-	0.78	BETL
56080	-	1.00	1.18	1.40	-	1.19	AETL
56081	-	1.17	1.18	0.93	-	1.09	AETL
56082	-	1.33	1.85	1.00	-	1.39	AETL
56083	-	0.33	1.18	1.20	-	0.90	BETL
56084	-	0.33	1.15	0.93	-	0.80	BETL
56085	-	0.33	1.55	0.65	-	0.84	BETL
56086	-	0.50	1.50	0.65	-	0.88	BETL
56087	-	0.33	1.20	0.85	-	0.79	BETL
SP7679	-	-	1.25	0.83	-	1.23	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # Based on 5 observations

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	0.00	-	0.00	-	0.00	BETL
56072	-	0.00	-	0.00	-	0.00	BETL
56073	-	0.00	-	0.00	-	0.00	BETL
56074	-	0.00	-	0.00	-	0.00	BETL
56075	-	0.00	-	0.00	-	0.00	BETL
56076	-	0.00	-	0.00	-	0.00	BETL
56077	-	0.00	-	0.00	-	0.00	BETL
56078	-	0.00	-	0.00	-	0.00	BETL
56079	-	0.00	-	0.00	-	0.00	BETL
56080	-	0.00	-	0.00	-	0.00	BETL
56081	-	0.00	-	0.00	-	0.00	BETL
56082	-	0.00	-	0.00	-	0.00	BETL
56083	-	0.00	-	0.00	-	0.00	BETL
56084	-	0.00	-	0.00	-	0.00	BETL
56085	-	0.00	-	0.00	-	0.00	BETL
56086	-	0.00	-	0.00	-	0.00	BETL
56087	-	0.00	-	0.00	-	0.00	BETL
SP7679	-	-	-	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll Damage (%) /10 bolls destructive sampling						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	6.67	-	20.00	-	13.34	AETL
56072	-	6.67	-	28.00	-	17.34	AETL
56073	-	8.33	-	20.00	-	14.17	AETL
56074	-	11.67	-	22.67	-	17.17	AETL
56075	-	10.00	-	16.67	-	13.34	AETL
56076	-	8.33	-	24.00	-	16.17	AETL
56077	-	8.33	-	21.33	-	14.83	AETL
56078	-	10.00	-	18.00	-	14.00	AETL
56079	-	8.33	-	18.67	-	13.50	AETL
56080	-	10.00	-	22.00	-	16.00	AETL
56081	-	15.00	-	24.67	-	19.84	AETL
56082	-	15.00	-	14.00	-	14.50	AETL
56083	-	5.00	-	13.33	-	9.17	BETL
56084	-	8.33	-	22.00	-	15.17	AETL
56085	-	6.67	-	20.50	-	13.59	AETL
56086	-	6.67	-	22.50	-	14.59	AETL
56087	-	10.00	-	23.75	-	16.88	AETL
SP7679	-	-	-	23.75	-	23.75	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	7.56	7.00	17.83	-	10.80	
56072	-	12.46	9.00	14.17	-	11.88	
56073	-	3.18	5.00	17.83	-	8.67	
56074	-	15.03	8.00	18.33	-	13.79	
56075	-	7.38	8.00	21.83	-	12.40	
56076	-	7.35	4.00	12.50	-	7.95	
56077	-	10.91	6.00	11.50	-	9.47	
56078	-	6.83	9.00	10.83	-	8.89	
56079	-	6.92	5.00	10.83	-	7.58	
56080	-	9.45	7.00	11.50	-	9.32	
56081	-	11.89	6.00	13.17	-	10.35	
56082	-	10.10	6.00	19.00	-	11.70	
56083	-	7.09	4.00	17.33	-	9.47	
56084	-	6.72	6.00	18.33	-	10.35	
56085	-	7.04	5.00	19.50	-	10.51	
56086	-	8.33	8.00	23.50	-	13.28	
56087	-	7.10	7.00	19.50	-	11.20	
SP7679	-	-	4.00	16.29	-	10.15	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	5.17	3.00	8.60	-	5.59	
56072	-	7.42	4.00	7.53	-	6.32	
56073	-	8.17	3.00	10.50	-	7.22	
56074	-	10.17	3.00	10.37	-	7.85	
56075	-	6.08	2.00	9.13	-	5.74	
56076	-	8.67	1.00	7.40	-	5.69	
56077	-	5.92	2.00	9.33	-	5.75	
56078	-	3.92	4.00	8.73	-	5.55	
56079	-	4.42	2.00	4.80	-	3.74	
56080	-	3.50	3.00	4.73	-	3.74	
56081	-	10.08	2.00	7.20	-	6.43	
56082	-	10.42	2.00	10.30	-	7.57	
56083	-	7.33	2.00	7.60	-	5.64	
56084	-	5.92	2.00	9.93	-	5.95	
56085	-	6.75	1.00	9.25	-	5.67	
56086	-	5.42	3.00	11.80	-	6.74	
56087	-	6.67	2.00	9.75	-	6.14	
SP7679	-	-	1.00	7.67	-	4.34	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests						Remark
	NA	DH	PE	AD	MU	Mean	
56071	-	5.00	6.00	4.00	4.00	4.75	
56072	-	5.00	6.00	4.00	4.00	4.75	
56073	-	5.00	6.00	4.00	4.00	4.75	
56074	-	5.00	6.00	4.00	4.00	4.75	
56075	-	5.00	6.00	4.00	4.00	4.75	
56076	-	5.00	6.00	4.00	4.00	4.75	
56077	-	5.00	6.00	4.00	4.00	4.75	
56078	-	5.00	6.00	4.00	4.00	4.75	
56079	-	5.00	6.00	4.00	4.00	4.75	
56080	-	5.00	6.00	4.00	4.00	4.75	
56081	-	5.00	6.00	4.00	4.00	4.75	
56082	-	5.00	6.00	4.00	4.00	4.75	
56083	-	5.00	6.00	4.00	4.00	4.75	
56084	-	5.00	6.00	4.00	4.00	4.75	
56085	-	5.00	6.00	4.00	4.00	4.75	
56086	-	5.00	6.00	4.00	4.00	4.75	
56087	-	5.00	6.00	4.00	4.00	4.75	
SP7679	-	-	6.00	4.00	4.00	4.67	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Reaction to Diseases

Table 14(a): Initial Evaluation Trial of Compact Intra-Hirsutum Hybrids – Rainfed (IET Compact RF) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions							
			UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
14	56071	DACH 91S19 BGII	22.0	R	10.8	R	15.5	R	18.3	R
10	56072	DACH 84S48 BGII	22.3	R	10.5	R	16.6	R	18.4	R
6	56073	GCH-5508 Bt2	22.0	R	10.8	R	15.7	R	18.2	R
3	56074	CCH 527 BGII	23.9	R	9.9	R	16.3	R	18.2	R
1	56075	PCH 2997 Bt2	22.3	R	8.8	R	15.5	R	18.7	R
17	56076	ARCH 2527 BGII	21.7	R	10.8	R	15.8	R	18.4	R
12	56077	ARCH 2526 BGII	22.3	R	10.7	R	14.8	R	17.9	R
8	56078	CCH-501 Bt2	22.7	R	10.7	R	15.4	R	19.2	R
5	56079	YASH-2222 BG II	22.7	R	10.4	R	14.7	R	17.6	R
2	56080	C9404 BG-II	22.6	R	10.9	R	15.4	R	18.6	R
16	56081	SP7679 BGII (ZC 1)	23.4	R	10.5	R	16.2	R	17.9	R
13	56082	Daftari 615 BG II (ZC 2)	23.2	R	9.6	R	15.3	R	17.9	R
11	56083	22 SS 44 BG II	22.8	R	10.7	R	18.3	R	18.8	R
9	56084	YASH-8888 BG II	23.3	R	9.5	R	18.4	R	19.1	R
7	56085	US 752 BGII	23.1	R	9.7	R	19.5	R	18.8	R
4	56086	DC5302 BGII	22.3	R	10.3	R	19.2	R	18.1	R
15	56087	NCS 2552 Bt2	21.9	R	11.1	R	14.3	R	16.7	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pest

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions
– Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56071	7.40	1.00	2.02	14.90	6.33	BETL
56072	7.11	0.33	2.86	25.61	8.98	BETL
56073	6.31	1.33	1.72	15.68	6.26	BETL
56074	6.22	1.00	1.70	25.40	8.58	BETL
56075	6.41	0.67	1.93	35.23	11.06	AETL
56076	5.93	1.33	1.08	9.57	4.48	BETL
56077	7.13	1.33	1.40	18.06	6.98	BETL
56078	5.76	0.67	1.31	10.81	4.64	BETL
56079	5.49	1.00	1.23	18.52	6.56	BETL
56080	5.93	0.67	1.65	20.90	7.29	BETL
56081	7.29	1.33	1.28	10.04	4.98	BETL
56082	8.76	1.33	1.49	7.97	4.89	BETL
56083	7.64	1.33	0.98	30.47	10.11	AETL
56084	7.89	1.33	1.57	15.62	6.60	BETL
56085	6.72	1.33	1.28	11.43	5.19	BETL
56086	5.93	0.67	1.61	14.28	5.62	BETL
56087	5.71	1.33	1.39	6.00	3.61	BETL
SP7679	-	1.00	1.44	28.71	10.38	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56071	2.11	10.33	0.24	4.47	4.29	BETL
56072	2.04	8.33	0.80	1.96	3.28	BETL
56073	3.13	9.00	0.42	1.61	3.54	BETL
56074	3.53	7.67	0.66	5.04	4.23	BETL
56075	3.49	5.33	0.47	4.28	3.39	BETL
56076	3.60	8.00	0.28	1.06	3.24	BETL
56077	1.93	7.67	0.87	1.26	2.93	BETL
56078	1.98	9.00	2.04	1.79	3.70	BETL
56079	2.51	9.00	0.41	0.89	3.20	BETL
56080	3.49	12.67	0.53	1.43	4.53	BETL
56081	3.58	10.33	0.78	0.72	3.85	BETL
56082	2.24	9.67	0.20	0.24	3.09	BETL
56083	2.20	9.00	0.45	4.48	4.03	BETL
56084	1.98	11.33	0.26	0.90	3.62	BETL
56085	2.18	11.67	0.55	0.71	3.78	BETL
56086	2.16	8.67	0.77	2.52	3.53	BETL
56087	2.04	8.33	0.37	0.36	2.78	BETL
SP7679		6.67	0.38	0.72	2.59	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	DH	PE	AD	MU	Mean	
56071	I	-	-	-	I	
56072	I	-	-	-	I	
56073	II	-	-	-	II	
56074	II	-	-	-	II	
56075	II	-	-	-	II	
56076	II	-	-	-	II	
56077	I	-	-	-	I	
56078	I	-	-	-	I	
56079	I	-	-	-	I	
56080	II	-	-	-	II	
56081	II	-	-	-	II	
56082	I	-	-	-	I	
56083	I	-	-	-	I	
56084	I	-	-	-	I	
56085	I	-	-	-	I	
56086	I	-	-	-	I	
56087	II	-	-	-	II	
SP7679	-	-	-	-	-	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56071	16.47	3.33	2.04	0.03	5.47	BETL
56072	15.78	3.00	0.18	0.15	4.78	BETL
56073	19.33	3.00	2.53	0.09	6.24	BETL
56074	17.58	1.33	2.71	0.03	5.41	BETL
56075	19.71	3.67	2.53	0.04	6.49	BETL
56076	18.31	4.00	2.22	0.00	6.13	BETL
56077	14.38	2.33	2.13	0.50	4.83	BETL
56078	15.69	2.33	0.89	0.28	4.80	BETL
56079	17.13	2.33	2.55	0.25	5.57	BETL
56080	18.42	2.00	2.33	0.09	5.71	BETL
56081	18.82	1.33	2.86	0.00	5.75	BETL
56082	20.29	1.67	3.43	0.06	6.36	BETL
56083	18.00	3.67	3.13	0.00	6.20	BETL
56084	20.00	2.00	1.00	0.12	5.78	BETL
56085	19.47	2.67	2.71	0.03	6.22	BETL
56086	18.40	1.33	2.60	0.34	5.67	BETL
56087	17.27	2.00	2.58	0.00	5.46	BETL
SP7679	-	1.33	3.13	0.06	1.51	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56071	1.00	0.33	0.13	3.79	1.31	BETL
56072	0.56	0.67	0.31	2.67	1.05	BETL
56073	1.33	1.00	0.46	1.95	1.19	BETL
56074	1.67	0.67	0.44	3.28	1.51	BETL
56075	1.56	1.00	0.38	2.82	1.44	BETL
56076	1.44	0.33	0.02	1.54	0.83	BETL
56077	1.11	1.00	0.31	0.97	0.85	BETL
56078	0.67	0.67	0.31	1.49	0.78	BETL
56079	1.00	0.33	0.07	1.49	0.72	BETL
56080	0.67	0.67	0.06	1.59	0.75	BETL
56081	0.67	0.67	0.45	1.03	0.70	BETL
56082	0.56	0.67	0.26	0.61	0.52	BETL
56083	0.89	0.33	0.42	3.74	1.35	BETL
56084	1.22	0.33	0.00	0.56	0.53	BETL
56085	0.78	0.67	0.24	2.72	1.10	BETL
56086	0.89	0.67	0.22	2.61	1.10	BETL
56087	1.11	0.67	0.53	1.08	0.85	BETL
SP7679	-	0.67	0.67	1.03	0.79	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	DH	PE	AD	MU	Mean	
56071	1.16	0.00	0.20	-	0.45	
56072	0.98	0.00	0.20	-	0.39	
56073	1.07	0.00	0.27	-	0.45	
56074	0.91	0.00	0.00	-	0.30	
56075	0.53	0.00	0.13	-	0.22	
56076	0.60	0.00	0.14	-	0.25	
56077	0.69	0.00	0.00	-	0.23	
56078	0.82	0.00	0.20	-	0.34	
56079	0.53	0.00	0.14	-	0.22	
56080	0.73	0.00	0.00	-	0.24	
56081	0.80	0.00	0.13	-	0.31	
56082	1.27	0.00	0.07	-	0.45	
56083	0.51	0.00	0.00	-	0.17	
56084	0.62	0.00	0.13	-	0.25	
56085	0.51	0.00	0.13	-	0.21	
56086	0.62	0.00	0.53	-	0.38	
56087	0.60	0.00	0.26	-	0.29	
SP7679	-	0.00	0.27	-	0.14	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56071	0.00	0.00	0.00	-	0.00	BETL
56072	0.00	0.00	0.00	-	0.00	BETL
56073	0.00	0.00	0.00	-	0.00	BETL
56074	0.00	0.00	0.00	-	0.00	BETL
56075	0.00	0.00	0.00	-	0.00	BETL
56076	0.00	0.00	0.00	-	0.00	BETL
56077	0.00	0.00	0.00	-	0.00	BETL
56078	0.00	0.00	0.00	-	0.00	BETL
56079	0.00	0.00	0.00	-	0.00	BETL
56080	0.00	0.00	0.00	-	0.00	BETL
56081	0.00	0.00	0.00	-	0.00	BETL
56082	0.00	0.00	0.00	-	0.00	BETL
56083	0.00	0.00	0.00	-	0.00	BETL
56084	0.00	0.00	0.00	-	0.00	BETL
56085	0.00	0.00	0.00	-	0.00	BETL
56086	0.00	0.00	0.00	-	0.00	BETL
56087	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions - Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56071	0.00	0.00	0.00	-	0.00	BETL
56072	0.00	0.00	0.00	-	0.00	BETL
56073	0.00	0.00	0.00	-	0.00	BETL
56074	0.00	0.00	0.00	-	0.00	BETL
56075	0.00	0.00	0.00	-	0.00	BETL
56076	0.00	0.00	0.00	-	0.00	BETL
56077	0.00	0.00	0.00	-	0.00	BETL
56078	0.00	0.00	0.00	-	0.00	BETL
56079	0.00	0.00	0.00	-	0.00	BETL
56080	0.00	0.00	0.00	-	0.00	BETL
56081	0.00	0.00	0.00	-	0.00	BETL
56082	0.00	0.00	0.00	-	0.00	BETL
56083	0.00	0.00	0.00	-	0.00	BETL
56084	0.00	0.00	0.00	-	0.00	BETL
56085	0.00	0.00	0.00	-	0.00	BETL
56086	0.00	0.00	0.00	-	0.00	BETL
56087	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions –
Spodoptera litura

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56071	0.00	0.00	0.00	-	0.00	BETL
56072	0.00	0.00	0.00	-	0.00	BETL
56073	0.00	0.00	0.00	-	0.00	BETL
56074	0.00	0.00	0.00	-	0.00	BETL
56075	0.00	0.00	0.00	-	0.00	BETL
56076	0.00	0.00	0.00	-	0.00	BETL
56077	0.00	0.00	0.00	-	0.00	BETL
56078	0.00	0.00	0.00	-	0.00	BETL
56079	0.00	0.00	0.00	-	0.00	BETL
56080	0.00	0.00	0.00	-	0.00	BETL
56081	0.00	0.00	0.00	-	0.00	BETL
56082	0.00	0.00	0.00	-	0.00	BETL
56083	0.00	0.00	0.00	-	0.00	BETL
56084	0.00	0.00	0.00	-	0.00	BETL
56085	0.00	0.00	0.00	-	0.00	BETL
56086	0.00	0.00	0.00	-	0.00	BETL
56087	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	DH	PE	AD#	MU	Mean	
56071	4.50	1.98	0.00	-	2.16	AETL
56072	1.67	0.98	1.00	-	1.22	AETL
56073	1.33	1.31	0.00	-	0.88	BETL
56074	2.50	1.31	0.40	-	1.40	AETL
56075	4.83	1.31	1.00	-	2.38	AETL
56076	1.33	1.98	0.40	-	1.24	AETL
56077	1.17	1.31	0.40	-	0.96	BETL
56078	1.00	2.31	0.00	-	1.10	AETL
56079	1.00	0.65	0.00	-	0.55	BETL
56080	1.17	1.31	0.40	-	0.96	BETL
56081	2.83	1.98	0.20	-	1.67	AETL
56082	3.00	0.98	1.00	-	1.66	AETL
56083	1.17	1.31	0.60	-	1.03	AETL
56084	1.83	1.28	0.60	-	1.24	AETL
56085	1.50	1.68	0.20	-	1.13	AETL
56086	2.17	1.63	0.40	-	1.40	AETL
56087	1.83	1.33	0.80	-	1.32	AETL
SP7679	-	1.38	0.80	-	1.09	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # Based on 5 observations

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	DH	PE	AD	MU	Mean	
56071	0.00	-	0.00	-	0.00	BETL
56072	0.00	-	0.00	-	0.00	BETL
56073	0.00	-	0.00	-	0.00	BETL
56074	0.00	-	0.00	-	0.00	BETL
56075	0.00	-	0.00	-	0.00	BETL
56076	0.00	-	0.00	-	0.00	BETL
56077	0.00	-	0.00	-	0.00	BETL
56078	0.00	-	0.00	-	0.00	BETL
56079	0.00	-	0.00	-	0.00	BETL
56080	0.00	-	0.00	-	0.00	BETL
56081	0.00	-	0.00	-	0.00	BETL
56082	0.00	-	0.00	-	0.00	BETL
56083	0.00	-	0.00	-	0.00	BETL
56084	0.00	-	0.00	-	0.00	BETL
56085	0.00	-	0.00	-	0.00	BETL
56086	0.00	-	0.00	-	0.00	BETL
56087	0.00	-	0.00	-	0.00	BETL
SP7679	-	-	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	DH	PE	AD	MU	Mean	
56071	18.33	-	18.00	-	18.17	AETL
56072	15.00	-	28.00	-	21.50	AETL
56073	8.33	-	24.00	-	16.17	AETL
56074	21.67	-	24.00	-	22.84	AETL
56075	26.67	-	28.00	-	27.34	AETL
56076	16.67	-	22.00	-	19.34	AETL
56077	15.00	-	22.00	-	18.50	AETL
56078	16.67	-	32.00	-	24.34	AETL
56079	11.67	-	30.00	-	20.84	AETL
56080	10.00	-	36.00	-	23.00	AETL
56081	28.33	-	30.00	-	29.17	AETL
56082	31.67	-	28.00	-	29.84	AETL
56083	11.67	-	28.00	-	19.84	AETL
56084	1.83	-	30.00	-	15.92	AETL
56085	1.50	-	28.00	-	14.75	AETL
56086	2.17	-	36.00	-	19.09	AETL
56087	1.83	-	22.00	-	11.92	AETL
SP7679	-	-	24.00	-	24.00	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56071	21.25	9.00	10.00	-	13.42	
56072	18.14	11.00	15.00	-	14.71	
56073	7.38	7.00	15.00	-	9.79	
56074	18.03	10.00	16.00	-	14.68	
56075	25.18	11.00	15.00	-	17.06	
56076	10.33	6.00	12.00	-	9.44	
56077	14.57	8.00	15.00	-	12.52	
56078	14.00	12.00	20.00	-	15.33	
56079	7.33	6.00	20.00	-	11.11	
56080	13.48	8.00	20.00	-	13.83	
56081	15.25	9.00	20.00	-	14.75	
56082	19.50	8.00	15.00	-	14.17	
56083	13.09	7.00	15.00	-	11.70	
56084	10.72	9.00	20.00	-	13.24	
56085	10.50	7.00	15.00	-	10.83	
56086	11.33	10.00	20.00	-	13.78	
56087	14.10	10.00	15.00	-	13.03	
SP7679	-	8.00	15.00	-	11.50	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial H X H (Compact) trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56071	19.41	4.00	12.50	-	11.97	
56072	12.75	4.00	21.00	-	12.58	
56073	14.17	3.00	19.00	-	12.06	
56074	15.75	3.00	16.50	-	11.75	
56075	20.58	2.00	18.50	-	13.69	
56076	13.42	3.00	15.00	-	10.47	
56077	10.42	3.00	10.50	-	7.97	
56078	9.42	4.00	19.50	-	10.97	
56079	7.92	2.00	21.50	-	10.47	
56080	6.75	3.00	22.50	-	10.75	
56081	16.67	3.00	23.50	-	14.39	
56082	15.42	2.00	13.50	-	10.31	
56083	11.92	3.00	15.00	-	9.97	
56084	6.25	5.00	15.50	-	8.92	
56085	11.25	3.00	19.00	-	11.08	
56086	9.42	4.00	24.50	-	12.64	
56087	12.08	3.00	18.50	-	11.19	
SP7679	-	2.00	17.00	-	9.50	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 14(b): Initial Evaluation Trial of Compact Intra-Hirsutum Hybrids- Rainfed (IET Compact RF) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions							
			UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
14	56071	DACH 91S19 BGII	24.0	R	12.4	R	16.2	R	18.8	R
10	56072	DACH 84S48 BGII	22.8	R	12.3	R	15.8	R	19.6	R
6	56073	GCH-5508 Bt2	23.3	R	11.9	R	17.4	R	14.5	R
3	56074	CCH 527 BGII	22.9	R	11.2	R	16.2	R	18.3	R
1	56075	PCH 2997 Bt2	22.8	R	11.8	R	15.7	R	19.3	R
17	56076	ARCH 2527 BGII	23.5	R	11.9	R	16.0	R	18.3	R
12	56077	ARCH 2526 BGII	23.5	R	11.2	R	17.4	R	19.1	R
8	56078	CCH-501 Bt2	23.6	R	11.5	R	14.1	R	17.6	R
5	56079	YASH-2222 BG II	22.6	R	11.1	R	18.3	R	17.8	R
2	56080	C9404 BG-II	23.6	R	11.5	R	16.2	R	18.9	R
16	56081	SP7679 BGII (ZC 1)	23.6	R	11.4	R	14.1	R	19.5	R
13	56082	Daftari 615 BG II (ZC 2)	23.8	R	13.1	R	16.1	R	19.4	R
11	56083	22 SS 44 BG II	23.1	R	11.9	R	14.9	R	19.3	R
9	56084	YASH-8888 BG II	23.5	R	12.5	R	13.3	R	18.0	R
7	56085	US 752 BGII	24.3	R	12.2	R	14.0	R	19.9	R
4	56086	DC5302 BGII	23.6	R	12.6	R	11.3	R	19.5	R
15	56087	NCS 2552 Bt2	25.2	R	12.5	R	11.9	R	19.1	R

Table 14(c): Initial Evaluation Trial of Compact Intra-Hirsutum Hybrids – Rainfed (IET Compact RF) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions			
			Ankur , Atmakur (Warangal)			
			TSV		HLS	
			PDI	DR	PDI	DR
14	56071	DACH 91S19 BGII	10.0	R	37.0	MR
10	56072	DACH 84S48 BGII	13.6	R	16.3	R
6	56073	GCH-5508 Bt2	13.9	R	15.8	R
3	56074	CCH 527 BGII	9.6	R	18.7	R
1	56075	PCH 2997 Bt2	11.3	R	10.5	R
17	56076	ARCH 2527 BGII	9.6	R	35.8	MR
12	56077	ARCH 2526 BGII	11.3	R	32.9	MR
8	56078	CCH-501 Bt2	13.2	R	19.0	R
5	56079	YASH-2222 BG II	13.0	R	16.3	R
2	56080	C9404 BG-II	12.0	R	29.4	MR
16	56081	SP7679 BGII (ZC 1)	9.8	R	32.5	MR
13	56082	Daftari 615 BG II (ZC 2)	8.8	R	27.1	MR
11	56083	22 SS 44 BG II	13.1	R	11.1	R
9	56084	YASH-8888 BG II	12.5	R	37.6	MR
7	56085	US 752 BGII	14.3	R	18.4	R
4	56086	DC5302 BGII	11.8	R	32.9	MR
15	56087	NCS 2552 Bt2	10.1	R	12.4	R

Advanced Evaluation Trial of Compact Intra-Hirsutum Bt Hybrids - Rainfed

Constitution of Trial

The trial was constituted with six Bt cotton hybrids containing MON 15985 event sponsored by various organization along with two different check hybrids at closer spacing and a zonal check hybrid at normal spacing as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	5	56091	KCH9287 BGII	Kaveri Seed Co Ltd
2	1	56092	NCS 9531 Bt2	Nuziveedu Seeds Limited
3	8	56093	Daftari 615 BG II (ZC 2)	
4	3	56094	BIO6910 BGII	Bioseeds
5	7	56095	PCH 7544 Bt2	Prabhat Agri Biotech Limited
6	2	56096	SP7679 BGII (ZC 1)	
7	4	56097	NCS 9955 Bt2	Nuziveedu Seeds Limited
8	6	56098	RCH 1119BGII	Rasi Seeds
9			SP7679 BGII (ZC 1) (normal)	

The trial was conducted in eight locations viz., Mudhole, Adilabad, Nandyal*, Dharwad, Perambalur, Hyderabad (Kaveri), Sripuram (Pravardhan), and Parigi (Nuziveedu).

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: 90 x 15 cm was followed for the coded entries and the zonal check hybrid has been included under recommended spacing.

Number of rows: 6 rows of 6 meters per entry with three replications

Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Advanced Evaluation Trial of H X H hybrids**

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	131.4	132.7	123.7	107.9	96.2	76.0	98.3	109.5
2	NCS 9531 Bt2	117.5	133.7	125.8	109.8	99.7	76.0	99.0	108.8
3	Daftari 615 BG II (ZC 2)	138.9	146.2	133.3	125.7	117.3	82.3	104.7	121.2
4	BIO6910 BGII	119.9	140.1	129.2	113.9	96.2	86.7	103.3	112.8
5	PCH 7544 Bt2	127.0	127.2	122.4	106.0	94.5	85.0	103.3	109.3
6	SP7679 BGII (ZC 1)	126.3	140.5	115.7	110.8	94.6	84.0	104.0	110.8
7	NCS 9955 Bt2	124.9	131.8	116.0	104.8	94.7	84.0	106.7	109.0
8	RCH 1119BGII	103.3	124.1	116.0	81.1	84.5	76.3	90.3	96.5
9	SP7679 BGII (ZC 1) (normal)	113.3	117.9	122.7	104.6	97.4	67.3	112.0	105.0
	CD @ 5%	18.5	NS	17.8	16.7	8.7			
	CV %	8.7	11.2	8.4	9.7	14.6			

Number of monopodia in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	0.4	1.5	1.2	1.1	1.5	10.0	0.0	2.2
2	NCS 9531 Bt2	0.5	1.4	2.0	1.3	1.1	14.0	1.0	3.0
3	Daftari 615 BG II (ZC 2)	0.5	1.1	0.7	1.3	1.1	12.0	0.0	2.4
4	BIO6910 BGII	0.2	0.8	1.0	0.4	1.1	13.0	1.0	2.5
5	PCH 7544 Bt2	0.6	1.1	1.0	0.9	1.1	12.0	1.0	2.5
6	SP7679 BGII (ZC 1)	0.7	2.2	1.1	0.9	1.2	13.0	0.0	2.7
7	NCS 9955 Bt2	0.3	0.9	0.9	1.0	1.1	12.0	1.0	2.5
8	RCH 1119BGII	0.5	1.1	0.8	1.1	2.0	11.0	1.0	2.5
9	SP7679 BGII (ZC 1) (normal)	1.3	2.5	0.9	1.9	2.5	17.0	1.0	3.9
	CD @ 5%	0.3	1.0	0.3	1.0	14.9			
	CV %	36.1	43.1	17.2	55.6	0.4			



Number of sympodia in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	7.3	12.3	15.6	15.6	10.1	1.0	13.0	10.7
2	NCS 9531 Bt2	8.9	14.5	16.7	16.0	12.1	1.0	16.0	12.2
3	Daftari 615 BG II (ZC 2)	7.7	13.9	16.2	16.0	10.5	0.0	12.0	10.9
4	BIO6910 BGII	9.7	14.7	15.8	15.8	10.7	0.0	15.0	11.7
5	PCH 7544 Bt2	9.1	13.7	17.4	15.7	10.5	1.0	15.0	11.8
6	SP7679 BGII (ZC 1)	8.5	14.2	15.2	16.1	11.5	0.0	13.0	11.2
7	NCS 9955 Bt2	8.7	14.5	16.9	16.6	12.4	0.0	15.0	12.0
8	RCH 1119BGII	8.3	13.1	15.6	12.2	11.7	0.0	13.0	10.6
9	SP7679 BGII (ZC 1) (normal)	12.6	14.4	17.1	16.5	18.3	1.0	17.0	13.8
	CD @ 5%	1.9	NS	1.9	1.9	12.5			
	CV %	12.1	13.1	6.8	7.5	2.6			

Boll weight (g) in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	4.4	5.6	5.1	5.6	6.1	6.2	6.3	5.6
2	NCS 9531 Bt2	4.5	5.8	5.2	6.1	5.4	6.3	6.0	5.6
3	Daftari 615 BG II (ZC 2)	4.3	6.4	6.0	6.6	5.6	6.6	6.3	6.0
4	BIO6910 BGII	4.5	5.5	5.2	5.8	5.9	6.0	5.8	5.5
5	PCH 7544 Bt2	4.9	5.7	4.8	5.3	5.5	6.0	5.8	5.4
6	SP7679 BGII (ZC 1)	4.5	5.6	6.7	6.2	5.4	6.2	5.8	5.8
7	NCS 9955 Bt2	4.8	6.1	5.7	6.3	5.8	6.5	5.7	5.8
8	RCH 1119BGII	4.8	5.7	5.4	5.1	5.6	5.8	5.5	5.4
9	SP7679 BGII (ZC 1) (normal)	5.4	6.2	6.7	6.7	5.4	5.8	5.8	6.0
	CD @ 5%	0.4	NS	0.4	0.8	3.7			
	CV %	4.9	7.9	4.5	8.6	0.4			



Number of bolls / plant in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	11.3	10.1	8.0	13.2	17.3	11.0	19.0	12.8
2	NCS 9531 Bt2	11.8	12.6	9.2	13.0	17.1	12.0	20.3	13.7
3	Daftari 615 BG II (ZC 2)	9.1	11.1	9.0	10.8	14.0	11.0	16.3	11.6
4	BIO6910 BGII	11.9	12.2	8.5	12.2	14.3	11.0	19.0	12.7
5	PCH 7544 Bt2	13.0	14.0	9.2	14.3	15.3	13.0	17.7	13.8
6	SP7679 BGII (ZC 1)	9.7	11.3	9.2	12.9	13.5	11.0	18.7	12.3
7	NCS 9955 Bt2	13.4	12.6	8.1	14.6	16.7	13.0	18.3	13.8
8	RCH 1119BGII	12.5	11.7	9.9	13.2	15.5	12.0	17.7	13.2
9	SP7679 BGII (ZC 1) (normal)	19.1	20.7	10.3	19.4	23.0	25.0	22.3	20.0
	CD @ 5%	2.7	2.8	1.8	3.7	11.3			
	CV %	12.5	12.6	11.7	16.8	3.2			

Number of bolls / sq.m. in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	71.7	98.7	59.5	131.3	128.4	76.0	126.0	98.8
2	NCS 9531 Bt2	67.0	102.7	68.1	110.0	126.4	85.0	146.0	100.7
3	Daftari 615 BG II (ZC 2)	57.3	89.3	66.3	116.7	103.7	79.0	110.0	88.9
4	BIO6910 BGII	69.3	87.7	62.6	119.0	105.7	71.0	134.0	92.8
5	PCH 7544 Bt2	79.7	90.3	68.1	124.3	113.1	89.0	129.0	99.1
6	SP7679 BGII (ZC 1)	64.7	103.7	68.1	118.0	99.8	65.0	127.0	92.3
7	NCS 9955 Bt2	95.7	91.7	59.8	116.0	124.0	93.0	134.0	102.0
8	RCH 1119BGII	92.7	102.7	73.1	118.0	115.1	80.0	120.0	100.2
9	SP7679 BGII (ZC 1) (normal)	71.0	82.3	19.0	68.0	170.4	44.0	40.0	70.7
	CD @ 5%	8.6	NS	13.6	23.9	11.3			
	CV %	11.0	13.9	13.0	13.2	23.7			



Lint Index (g) in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	5.2	5.7	6.7	7.2	7.3	6.8	7.2	6.6
2	NCS 9531 Bt2	5.3	5.4	6.5	8.3	5.5	7.0	6.7	6.4
3	Daftari 615 BG II (ZC 2)	5.2	5.2	6.1	6.8	4.6	5.7	4.8	5.5
4	BIO6910 BGII	4.2	5.0	5.8	7.6	4.9	5.5	6.8	5.7
5	PCH 7544 Bt2	6.9	5.5	6.1	6.7	6.4	6.5	7.8	6.6
6	SP7679 BGII (ZC 1)	6.5	6.3	7.9	8.4	6.3	7.5	7.2	7.2
7	NCS 9955 Bt2	5.5	5.3	6.0	6.8	5.5	6.1	7.1	6.0
8	RCH 1119BGII	4.9	6.0	6.9	7.7	5.6	7.2	7.3	6.5
9	SP7679 BGII (ZC 1) (normal)	5.7	6.4	7.9	8.8	6.5	6.9	7.0	7.0
	CD @ 5%	0.9	0.6		0.8	4.9			
	CV %	10.1	5.9		6.5	0.5			

Seed Index (g) in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	8.2	9.4	10.3	10.8	11.3	10.1	12.1	10.3
2	NCS 9531 Bt2	9.0	10.0	10.3	12.2	9.3	10.7	11.7	10.5
3	Daftari 615 BG II (ZC 2)	10.1	13.6	13.0	14.4	11.3	13.2	11.2	12.4
4	BIO6910 BGII	8.4	9.5	10.4	12.6	9.7	10.5	12.5	10.5
5	PCH 7544 Bt2	9.1	10.0	9.6	11.5	10.7	10.4	12.4	10.5
6	SP7679 BGII (ZC 1)	10.4	12.0	13.1	13.6	11.0	11.6	12.6	12.0
7	NCS 9955 Bt2	9.8	11.9	11.2	12.9	10.7	12.0	13.0	11.6
8	RCH 1119BGII	10.4	11.1	10.4	12.3	9.0	11.2	12.2	10.9
9	SP7679 BGII (ZC 1) (normal)	10.3	12.2	12.5	13.9	11.3	11.2	12.2	11.9
	CD @ 5%	1.2	1.3		0.7	4.9			
	CV %	7.3	6.7		3.5	0.9			



Ginning outturn (%) in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	37.1	37.8	39.5	40.1	39.1	40.3	37.3	38.7
2	NCS 9531 Bt2	37.1	34.9	38.8	40.4	37.2	39.4	36.4	37.7
3	Daftari 615 BG II (ZC 2)	35.8	27.8	32.0	32.2	28.7	30.1	29.8	30.9
4	BIO6910 BGII	33.1	34.4	35.8	37.6	33.5	34.5	35.1	34.9
5	PCH 7544 Bt2	41.2	35.5	38.8	36.8	37.6	38.3	38.5	38.1
6	SP7679 BGII (ZC 1)	39.2	34.4	37.7	38.2	36.3	39.3	36.4	37.4
7	NCS 9955 Bt2	35.0	30.9	35.1	34.5	34.1	33.7	35.4	34.1
8	RCH 1119BGII	32.2	35.2	39.7	38.6	38.2	39.1	37.3	37.2
9	SP7679 BGII (ZC 1) (normal)	35.1	34.4	38.8	38.8	36.6	38.0	36.4	36.9
	CD @ 5%	2.3	1.8		2.7	1.5			
	CV %	3.7	3.1		4.4	0.9			

Upper Half Mean Length (mm) under HVI Mode in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	25.6	26.6	28.6	27.8	24.9	25.8	27.9	26.7
2	NCS 9531 Bt2	27.4	28.1	30.3	29.7	27.8	29.1	29.1	28.8
3	Daftari 615 BG II (ZC 2)	30.1	31.2	33.7	33.9	29.4	31.4	32.5	31.7
4	BIO6910 BGII	26.3	26.0	28.5	28.8	25.5	27.4	27.6	27.2
5	PCH 7544 Bt2	27.2	27.4	29.7	29.5	27.2	27.8	29.2	28.3
6	SP7679 BGII (ZC 1)	28.0	27.5	30.1	29.2	27.3	27.5	27.9	28.2
7	NCS 9955 Bt2	30.6	32.6	33.4	32.8	29.9	31.1	33.2	31.9
8	RCH 1119BGII	27.4	27.2	28.2	28.3	27.0	27.5	28.2	27.7
9	SP7679 BGII (ZC 1) (normal)	28.1	27.4	30.0	28.5	27.2	28.1	28.3	28.2



Uniformity index under HVI Mode in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	83.0	82.0	86.0	85.0	83.0	83.0	86.0	84.0
2	NCS 9531 Bt2	82.0	84.0	86.0	85.0	84.0	84.0	84.0	84.1
3	Daftari 615 BG II (ZC 2)	84.0	84.0	86.0	85.0	81.0	85.0	85.0	84.3
4	BIO6910 BGII	83.0	82.0	86.0	86.0	82.0	83.0	86.0	84.0
5	PCH 7544 Bt2	84.0	84.0	86.0	86.0	84.0	83.0	86.0	84.7
6	SP7679 BGII (ZC 1)	84.0	83.0	86.0	86.0	84.0	84.0	86.0	84.7
7	NCS 9955 Bt2	84.0	85.0	87.0	85.0	82.0	85.0	85.0	84.7
8	RCH 1119BGII	83.0	83.0	86.0	85.0	84.0	83.0	86.0	84.3
9	SP7679 BGII (ZC 1) (normal)	84.0	84.0	86.0	85.0	84.0	84.0	85.0	84.6

Micronaire under HVI Mode in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	4.5	5.0	5.2	5.1	4.4	5.1	4.9	4.9
2	NCS 9531 Bt2	3.9	4.8	4.1	4.6	3.7	3.8	4.4	4.2
3	Daftari 615 BG II (ZC 2)	3.9	4.4	3.7	4.2	3.1	3.7	4.2	3.9
4	BIO6910 BGII	4.2	4.5	3.7	4.5	3.5	4.1	4.2	4.1
5	PCH 7544 Bt2	4.4	4.5	4.6	4.9	3.9	4.1	4.4	4.4
6	SP7679 BGII (ZC 1)	4.5	4.7	4.8	5.1	4.4	4.6	4.7	4.7
7	NCS 9955 Bt2	4.0	4.4	4.1	4.4	3.9	4.0	4.6	4.2
8	RCH 1119BGII	4.3	4.6	4.4	4.7	4.4	4.6	4.6	4.5
9	SP7679 BGII (ZC 1) (normal)	4.8	4.4	5.3	5.4	4.5	4.5	4.7	4.8

Tenacity under HVI Mode in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	26.3	28.3	28.4	27.8	24.7	25.0	28.5	27.0
2	NCS 9531 Bt2	29.2	28.1	30.0	29.5	26.9	29.4	28.2	28.8
3	Daftari 615 BG II (ZC 2)	30.8	33.6	32.3	30.4	27.3	31.7	30.3	30.9
4	BIO6910 BGII	26.5	27.1	32.8	29.2	24.6	26.2	28.7	27.9
5	PCH 7544 Bt2	28.4	29.1	31.1	28.7	27.0	29.4	29.8	29.1
6	SP7679 BGII (ZC 1)	28.9	29.7	31.2	29.8	27.3	29.2	28.9	29.3
7	NCS 9955 Bt2	31.1	32.3	31.3	30.1	28.1	30.8	30.0	30.5
8	RCH 1119BGII	28.0	28.2	28.7	29.2	26.5	27.9	30.2	28.4
9	SP7679 BGII (ZC 1) (normal)	29.4	29.5	29.1	30.0	27.7	30.9	29.4	29.4

Seed Cotton Yield at 140 DAS (q/ha) in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	17.27	27.78	6.69	19.03	26.72	17.08	11.93	18.07
2	NCS 9531 Bt2	20.51	26.71	8.19	19.55	23.96	15.23	14.71	18.41
3	Daftari 615 BG II (ZC 2)	15.70	21.04	9.89	19.91	18.11	13.43	10.80	15.55
4	BIO6910 BGII	19.52	28.30	7.06	19.86	19.67	13.48	9.88	16.82
5	PCH 7544 Bt2	22.34	31.57	14.02	26.85	24.98	18.00	13.37	21.59
6	SP7679 BGII (ZC 1)	15.29	23.37	10.39	21.30	20.79	14.26	6.61	16.00
7	NCS 9955 Bt2	27.61	30.20	15.63	21.71	25.05	20.63	13.43	22.04
8	RCH 1119BGII	24.87	34.24	17.15	25.57	21.14	19.96	13.84	22.40
9	SP7679 BGII (ZC 1) (normal)	15.07	18.85	6.03	9.41	15.28	9.67	4.47	11.25
	CD @ 5%	2.90	5.41	2.41	2.89	7.17			
	CV %	8.60	11.61	13.20	8.87	2.70			



Seed Cotton Yield at 165 DAS (q/ha) in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean
1	KCH9287 BGII	2.45	2.61	11.16	2.26	8.24	4.94	2.98	4.95
2	NCS 9531 Bt2	2.05	3.16	11.92	3.55	7.35	6.48	3.19	5.39
3	Daftari 615 BG II (ZC 2)	1.46	6.47	11.37	2.83	6.64	4.32	2.98	5.15
4	BIO6910 BGII	1.58	3.23	8.83	4.17	6.58	4.12	2.16	4.38
5	PCH 7544 Bt2	2.35	1.68	8.40	3.91	6.53	5.68	3.40	4.56
6	SP7679 BGII (ZC 1)	1.30	3.92	10.33	2.93	6.43	6.43	4.50	5.12
7	NCS 9955 Bt2	3.11	4.77	9.51	2.42	8.13	7.66	3.03	5.52
8	RCH 1119BGII	2.86	1.17	7.05	2.47	8.97	4.99	2.52	4.29
9	SP7679 BGII (ZC 1) (normal)	1.99	1.43	6.70	2.01	7.62	4.99	2.73	3.92
	CD @ 5%	0.52	0.75	1.92	0.93	13.18			
	CV %	14.10	13.75	11.70	19.84	1.69			

Total Seed Cotton Yield (q/ha) in Advanced Evaluation Trial of H X H hybrids

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Hyderabad (Kaveri)	Parigi (Nuziveedu)	Sripuram (Pravardhan)	Mean	Rank	% Inc over best check
1	KCH9287 BGII	19.73	30.39	17.85	21.30	34.96	22.02	14.92	23.02	5	9.0
2	NCS 9531 Bt2	22.56	29.87	20.11	23.10	31.31	21.71	17.90	23.79	4	12.7
3	Daftari 615 BG II (ZC 2)	17.16	27.51	21.26	22.74	24.75	17.75	13.79	20.71	8	-1.9
4	BIO6910 BGII	21.10	31.52	15.89	24.02	26.24	17.59	12.04	21.20	6	0.4
5	PCH 7544 Bt2	24.69	33.26	22.42	30.76	31.52	23.68	16.77	26.16	3	23.9
6	SP7679 BGII (ZC 1)	16.59	27.30	20.72	24.23	27.23	20.69	11.10	21.12	7	0.0
7	NCS 9955 Bt2	30.71	34.97	25.14	24.13	33.18	28.29	16.46	27.55	1	30.5
8	RCH 1119BGII	27.73	35.41	24.20	28.03	30.11	24.95	16.36	26.68	2	26.3
9	SP7679 BGII (ZC 1) (normal)	17.06	20.28	12.73	11.42	22.91	14.66	7.20	15.18	9	-28.1
	CD @ 5%	3.20	5.66	2.31	2.97	6.79					
	CV %	8.40	10.87	6.70	7.98	3.42					

Evaluation under Protected Condition for Insect pests

Reaction to Insect Pests

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	1.17	-	0.50	2.72	1.46	BETL
56092	-	1.33	-	0.61	3.67	1.87	BETL
56093	-	1.39	-	0.38	4.15	1.97	BETL
56094	-	1.81	-	0.34	2.72	1.62	BETL
56095	-	1.44	-	0.25	2.52	1.40	BETL
56096	-	2.66	-	0.41	3.40	2.16	BETL
56097	-	1.06	-	0.60	3.33	1.66	BETL
56098	-	1.30	-	0.31	3.40	1.67	BETL
SP7679	-	-	-	0.36	6.67	3.51	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions –Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	1.50	2.00	0.36	2.39	1.56	BETL
56092	-	1.40	4.00	0.44	1.24	1.77	BETL
56093	-	1.71	7.00	0.37	1.78	2.71	BETL
56094	-	1.53	4.67	0.96	1.33	2.12	BETL
56095	-	1.91	3.67	0.55	1.42	1.89	BETL
56096	-	1.28	5.00	0.39	1.96	2.16	BETL
56097	-	1.88	3.33	0.83	1.86	1.98	BETL
56098	-	1.39	3.00	0.75	1.06	1.55	BETL
SP7679	-	-	4.33	0.31	1.51	2.05	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-		-	-	-		
56092	-		-	-	-		
56093	-		-	-	-		
56094	-		-	-	-		
56095	-		-	-	-		
56096	-		-	-	-		
56097	-		-	-	-		
56098	-		-	-	-		
SP7679	-	-	-	-	-		

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions –Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	3.25	0.00	1.37	1.35	1.49	BETL
56092	-	4.12	0.00	1.40	1.81	1.83	BETL
56093	-	4.02	0.00	1.33	1.27	1.65	BETL
56094	-	3.92	0.00	0.83	1.93	1.67	BETL
56095	-	4.46	0.00	1.70	3.99	2.54	BETL
56096	-	4.27	0.00	1.50	0.77	1.64	BETL
56097	-	4.11	0.00	2.10	1.37	1.90	BETL
56098	-	4.69	0.00	1.47	4.17	2.58	BETL
SP7679	-	-	0.00	1.60	4.70	2.10	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	0.70	0.33	0.30	0.93	0.57	BETL
56092	-	0.65	0.33	0.23	0.22	0.36	BETL
56093	-	0.64	0.00	0.20	0.26	0.27	BETL
56094	-	0.77	0.00	0.23	0.56	0.39	BETL
56095	-	0.59	0.33	0.30	0.33	0.39	BETL
56096	-	0.71	0.67	0.37	0.45	0.55	BETL
56097	-	0.67	0.33	0.77	0.37	0.54	BETL
56098	-	0.67	0.33	0.43	0.67	0.53	BETL
SP7679	-	-	0.00	0.37	0.56	0.31	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	0.56	0.00	-	-	0.28	
56092	-	0.59	0.00	-	-	0.30	
56093	-	0.58	0.00	-	-	0.29	
56094	-	0.73	0.00	-	-	0.37	
56095	-	0.65	0.00	-	-	0.32	
56096	-	0.87	0.00	-	-	0.43	
56097	-	0.96	0.00	-	-	0.48	
56098	-	0.64	0.00	-	-	0.32	
SP7679	-	-	0.00	-	-	0.00	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions– *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	0.00	0.00	0.00	-	0.00	BETL
56092	-	0.00	0.00	0.00	-	0.00	BETL
56093	-	0.00	0.00	0.00	-	0.00	BETL
56094	-	0.00	0.00	0.00	-	0.00	BETL
56095	-	0.00	0.00	0.00	-	0.00	BETL
56096	-	0.00	0.00	0.00	-	0.00	BETL
56097	-	0.00	0.00	0.00	-	0.00	BETL
56098	-	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	-	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	0.00	0.00	0.00	-	0.00	BETL
56092	-	0.00	0.00	0.00	-	0.00	BETL
56093	-	0.00	0.00	0.00	-	0.00	BETL
56094	-	0.00	0.00	0.00	-	0.00	BETL
56095	-	0.00	0.00	0.00	-	0.00	BETL
56096	-	0.00	0.00	0.00	-	0.00	BETL
56097	-	0.00	0.00	0.00	-	0.00	BETL
56098	-	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	-	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	0.00	0.00	0.00	-	0.00	BETL
56092	-	0.00	0.00	0.00	-	0.00	BETL
56093	-	0.00	0.00	0.00	-	0.00	BETL
56094	-	0.00	0.00	0.00	-	0.00	BETL
56095	-	0.00	0.00	0.00	-	0.00	BETL
56096	-	0.00	0.00	0.00	-	0.00	BETL
56097	-	0.00	0.00	0.00	-	0.00	BETL
56098	-	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	-	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)						Remark
	NA	DH	PE	AD#	MU	Mean	
56091	-	0.67	1.20	0.73	-	0.87	BETL
56092	-	0.44	1.33	0.60	-	0.79	BETL
56093	-	0.89	1.33	1.13	-	1.12	BETL
56094	-	0.67	2.33	1.40	-	1.47	BETL
56095	-	0.44	0.67	0.87	-	0.66	BETL
56096	-	1.00	1.33	0.80	-	1.04	BETL
56097	-	0.33	1.30	0.80	-	0.81	BETL
56098	-	1.00	1.33	0.27	-	0.87	BETL
SP7679	-	-	2.00	1.00	-	1.50	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # Based on 5 observations

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	0.00	-	0.00	-	0.00	BETL
56092	-	0.00	-	0.00	-	0.00	BETL
56093	-	0.00	-	0.00	-	0.00	BETL
56094	-	0.00	-	0.00	-	0.00	BETL
56095	-	0.00	-	0.00	-	0.00	BETL
56096	-	0.00	-	0.00	-	0.00	BETL
56097	-	0.00	-	0.00	-	0.00	BETL
56098	-	0.00	-	0.00	-	0.00	BETL
SP7679	-	-	-	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll Damage (%) /10 bolls destructive sampling						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	5.56	-	25.33	-	15.45	AETL
56092	-	7.78	-	24.67	-	16.23	AETL
56093	-	12.22	-	26.67	-	19.45	AETL
56094	-	6.67	-	32.00	-	19.34	AETL
56095	-	8.89	-	30.00	-	19.45	AETL
56096	-	13.33	-	25.33	-	19.33	AETL
56097	-	5.56	-	22.00	-	13.78	AETL
56098	-	11.11	-	14.00	-	12.56	AETL
SP7679	-	-	-	28.67	-	28.67	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	9.35	3.00	16.67	-	9.67	
56092	-	8.10	7.00	15.00	-	10.03	
56093	-	10.19	6.00	16.67	-	10.95	
56094	-	8.75	2.00	18.33	-	9.69	
56095	-	9.78	7.00	20.00	-	12.26	
56096	-	11.58	4.00	16.67	-	10.75	
56097	-	6.01	3.00	16.67	-	8.56	
56098	-	10.33	3.00	10.00	-	7.78	
SP7679	-	-	3.00	17.50	-	10.25	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	7.16	1.00	7.33	-	5.16	
56092	-	5.11	3.00	7.50	-	5.20	
56093	-	6.94	2.00	8.17	-	5.70	
56094	-	6.28	1.00	5.17	-	4.15	
56095	-	5.83	3.00	6.33	-	5.05	
56096	-	10.44	2.00	8.67	-	7.04	
56097	-	4.39	1.00	7.50	-	4.30	
56098	-	7.66	1.00	2.67	-	3.78	
SP7679	-	-	1.00	8.00	-	4.50	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests						Remark
	NA	DH	PE	AD	MU	Mean	
56091	-	5.00	6.00	4.00	4.00	4.75	
56092	-	5.00	6.00	4.00	4.00	4.75	
56093	-	5.00	6.00	4.00	4.00	4.75	
56094	-	5.00	6.00	4.00	4.00	4.75	
56095	-	5.00	6.00	4.00	4.00	4.75	
56096	-	5.00	6.00	4.00	4.00	4.75	
56097	-	5.00	6.00	4.00	4.00	4.75	
56098	-	5.00	6.00	4.00	4.00	4.75	
SP7679	-	-	6.00	4.00	4.00	4.67	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Reaction to Diseases

Table 15(a): Advanced Evaluation Trial-I of Compact Intra-Hirsutum Hybrids – Rainfed (AET Compact RF) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): protected conditions							
			UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
5	56091	KCH9287 BGII	23.3	R	10.0	R	16.3	R	17.9	R
1	56092	NCS 9531 Bt2	22.8	R	8.5	R	16.3	R	17.8	R
8	56093	Daftari 615 BG II (ZC 2)	22.5	R	10.0	R	17.2	R	17.2	R
3	56094	BIO6910 BGII	21.5	R	9.7	R	18.8	R	19.2	R
7	56095	PCH 7544 Bt2	21.9	R	10.0	R	17.3	R	18.7	R
2	56096	SP7679 BGII (ZC 1)	21.8	R	9.5	R	16.6	R	18.3	R
4	56097	NCS 9955 Bt2	23.5	R	8.3	R	19.2	R	18.1	R
6	56098	RCH 1119BGII	21.9	R	9.3	R	16.7	R	17.9	R

Evaluation under Unprotected Condition for Insect pests

Reaction to Insect Pests

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56091	7.64	1.00	1.25	4.44	3.58	BETL
56092	8.51	1.00	1.49	6.00	4.25	BETL
56093	8.76	1.00	1.38	6.77	4.48	BETL
56094	8.33	1.33	1.60	4.44	3.93	BETL
56095	8.76	1.00	1.37	4.11	3.81	BETL
56096	10.22	0.33	1.20	5.55	4.33	BETL
56097	9.02	1.00	2.25	5.44	4.43	BETL
56098	8.33	1.33	1.22	5.55	4.11	BETL
SP7679	-	1.33	0.87	10.88	4.36	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56091	2.36	6.33	0.31	3.88	3.22	BETL
56092	2.27	6.00	0.63	1.69	2.65	BETL
56093	3.56	5.67	0.44	2.70	3.09	BETL
56094	2.49	5.33	0.69	1.86	2.59	BETL
56095	2.49	6.33	0.33	2.03	2.79	BETL
56096	3.67	9.33	0.31	3.05	4.09	BETL
56097	3.30	7.33	0.69	2.87	3.55	BETL
56098	1.76	5.00	0.43	1.35	2.13	BETL
SP7679	-	8.00	0.31	2.19	3.50	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	DH	PE	AD	MU	Mean	
56091	I	-	-	-	I	
56092	I	-	-	-	I	
56093	I	-	-	-	I	
56094	I	-	-	-	I	
56095	I	-	-	-	I	
56096	II	-	-	-	II	
56097	II	-	-	-	II	
56098	I	-	-	-	I	
SP7679	-	-	-	-	-	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56091	15.53	1.67	2.21	1.63	5.26	BETL
56092	22.73	3.33	2.55	2.19	7.70	BETL
56093	18.73	2.33	1.97	1.54	6.14	BETL
56094	17.38	2.33	1.00	2.34	5.76	BETL
56095	20.33	3.00	2.55	4.84	7.68	BETL
56096	16.38	2.00	2.99	3.55	6.23	BETL
56097	19.22	3.33	2.87	1.67	6.77	BETL
56098	16.51	3.67	2.74	5.06	6.99	BETL
SP7679	-	3.67	0.80	5.70	3.39	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56091	0.98	0.33	0.20	1.32	0.71	BETL
56092	1.03	0.67	0.22	0.32	0.56	BETL
56093	0.56	0.00	0.15	0.37	0.27	BETL
56094	0.93	0.67	0.27	0.79	0.67	BETL
56095	0.93	0.33	0.35	0.48	0.52	BETL
56096	0.56	1.00	0.27	0.63	0.62	BETL
56097	1.22	0.33	0.22	0.53	0.58	BETL
56098	1.13	0.33	0.15	0.95	0.64	BETL
SP7679	-	0.33	0.13	0.79	0.42	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	DH	PE	AD	MU	Mean	
56091	1.03	0.00	0.07	-	0.37	
56092	1.19	0.00	0.07	-	0.42	
56093	0.89	0.00	0.07	-	0.32	
56094	0.80	0.00	0.07	-	0.29	
56095	0.93	0.00	0.00	-	0.31	
56096	1.33	0.00	0.07	-	0.47	
56097	1.59	0.00	0.00	-	0.53	
56098	1.21	0.00	0.07	-	0.43	
SP7679	-	0.00	0.00	-	0.00	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56091	0.00	0.00	0.00	-	0.00	BETL
56092	0.00	0.00	0.00	-	0.00	BETL
56093	0.00	0.00	0.00	-	0.00	BETL
56094	0.00	0.00	0.00	-	0.00	BETL
56095	0.00	0.00	0.00	-	0.00	BETL
56096	0.00	0.00	0.00	-	0.00	BETL
56097	0.00	0.00	0.00	-	0.00	BETL
56098	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56091	0.00	0.00	0.00	-	0.00	BETL
56092	0.00	0.00	0.00	-	0.00	BETL
56093	0.00	0.00	0.00	-	0.00	BETL
56094	0.00	0.00	0.00	-	0.00	BETL
56095	0.00	0.00	0.00	-	0.00	BETL
56096	0.00	0.00	0.00	-	0.00	BETL
56097	0.00	0.00	0.00	-	0.00	BETL
56098	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56091	0.00	0.00	0.00	-	0.00	BETL
56092	0.00	0.00	0.00	-	0.00	BETL
56093	0.00	0.00	0.00	-	0.00	BETL
56094	0.00	0.00	0.00	-	0.00	BETL
56095	0.00	0.00	0.00	-	0.00	BETL
56096	0.00	0.00	0.00	-	0.00	BETL
56097	0.00	0.00	0.00	-	0.00	BETL
56098	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					
	DH	PE	AD#	MU	Mean	Remark
56091	3.89	1.45	0.00	-	1.78	AETL
56092	2.11	2.45	0.00	-	1.52	AETL
56093	2.22	0.79	1.40	-	1.47	AETL
56094	1.33	1.45	0.60	-	1.13	AETL
56095	1.78	1.32	1.20	-	1.43	AETL
56096	3.89	1.45	0.80	-	2.05	AETL
56097	2.33	1.42	0.40	-	1.38	AETL
56098	2.22	1.45	0.20	-	1.29	AETL
SP7679	-	2.12	0.40	-	1.26	AETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole, # Based on 5 observations

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	DH	PE	AD	MU	Mean	
56091	0.00	-	0.00	-	0.00	BETL
56092	0.00	-	0.00	-	0.00	BETL
56093	0.00	-	0.00	-	0.00	BETL
56094	0.00	-	0.00	-	0.00	BETL
56095	0.00	-	0.00	-	0.00	BETL
56096	0.00	-	0.00	-	0.00	BETL
56097	0.00	-	0.00	-	0.00	BETL
56098	0.00	-	0.00	-	0.00	BETL
SP7679	-	-	0.00	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	DH	PE	AD	MU	Mean	
56091	18.89	-	16.00	-	17.45	AETL
56092	17.78	-	26.00	-	21.89	AETL
56093	17.78	-	20.00	-	18.89	AETL
56094	12.22	-	32.00	-	22.11	AETL
56095	17.78	-	26.00	-	21.89	AETL
56096	23.33	-	30.00	-	26.67	AETL
56097	13.33	-	36.00	-	24.67	AETL
56098	22.22	-	20.00	-	21.11	AETL
SP7679	-	-	28.00	-	28.00	AETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56091	12.45	5.00	10.00	-	9.15	
56092	10.07	9.00	18.00	-	12.36	
56093	12.82	10.00	12.00	-	11.61	
56094	13.20	5.00	15.00	-	11.07	
56095	12.02	8.00	15.00	-	11.67	
56096	14.39	6.00	18.00	-	12.80	
56097	9.34	7.00	20.00	-	12.11	
56098	13.34	9.00	10.00	-	10.78	
SP7679	-	7.00	15.00	-	11.00	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced H X H (Compact) trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56091	10.20	3.00	9.50	-	7.57	
56092	10.61	4.00	16.00	-	10.20	
56093	12.16	5.00	13.00	-	10.05	
56094	10.55	2.00	21.00	-	11.18	
56095	11.67	3.00	18.50	-	11.06	
56096	14.89	2.00	17.50	-	11.46	
56097	7.44	4.00	24.50	-	11.98	
56098	11.33	3.00	14.50	-	9.61	
SP7679	-	3.00	17.00	-	10.00	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 15(b): Advanced Evaluation Trial-I of Compact Intra-Hirsutum Hybrids – Rainfed (AET Compact RF) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions							
			UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
5	56091	KCH9287 BGII	25.3	MR	9.6	R	13.1	R	15.9	R
1	56092	NCS 9531 Bt2	25.1	MR	8.8	R	13.7	R	16.8	R
8	56093	Daftari 615 BG II (2)	26.1	MR	9.5	R	12.7	R	16.8	R
3	56094	BIO6910 BGII	24.5	R	10.0	R	13.3	R	16.8	R
7	56095	PCH 7544 Bt2	24.5	R	9.5	R	14.0	R	13.3	R
2	56096	SP7679 BGII (ZC 1)	26.1	MR	9.5	R	15.3	R	16.9	R
4	56097	NCS 9955 Bt2	25.6	MR	8.1	R	14.9	R	16.7	R
6	56098	RCH 1119BGII	26.4	MR	8.6	R	13.3	R	16.6	R

Table 15(c): Advanced Evaluation Trial-I of Compact Intra-Hirsutum Hybrids- Rainfed (AET Compact RF) under Protected and Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions								Average PDI & Disease Reaction (DR): Unprotected conditions							
			Kaveri, Hyderabad								Kaveri, Hyderabad							
			ALB		BLB		GM		TSV		ALB		BLB		GM		TSV	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR	PDI	DR
5	56091	KCH9287 BGII	4.7	R	1.8	R	2.6	R	0.8	R	11.8	R	7.4	R	10.4	R	3.0	R
1	56092	NCS 9531 Bt2	8.4	R	6.7	R	5.3	R	1.5	R	15.0	R	12.0	R	12.4	R	3.5	R
8	56093	Daftari 615 BG II (ZC 2)	9.1	R	5.2	R	7.7	R	2.0	R	17.5	R	9.5	R	13.9	R	4.7	R
3	56094	BIO6910 BGII	9.8	R	5.3	R	2.8	R	1.5	R	17.0	R	10.6	R	11.3	R	3.5	R
7	56095	PCH 7544 Bt2	11.1	R	3.0	R	8.2	R	1.3	R	19.0	R	8.6	R	15.9	R	3.8	R
2	56096	SP7679 BGII (ZC 1)	9.2	R	4.7	R	11.1	R	3.0	R	17.3	R	8.6	R	17.5	R	5.8	R
4	56097	NCS 9955 Bt2	5.0	R	2.1	R	7.3	R	1.5	R	17.5	R	11.0	R	14.3	R	4.3	R
6	56098	RCH 1119BGII	7.3	R	4.3	R	4.1	R	1.4	R	14.0	R	9.2	R	10.8	R	3.7	R

Agronomic Evaluation

PERAMBALUR (KCH 9287 BG II)

The results of agronomic requirement studies conducted at Perambalur under rainfed conditions shows that plant height, number of monopodia and number of sympodia were not significantly affected by spacing and nitrogen levels (Table 66). Number of bolls per plant increased significantly at wider spacing, recording 20.7 bolls plant⁻¹ at 90 × 20 cm compared to 9.8 at 90 × 10 cm. Boll weight was significantly affected by nitrogen levels with 125% N producing heavier bolls. Seed cotton yield was significantly higher at 90 × 20 cm (1924 kg/ha) and was followed by 90 × 15 cm (1784 kg/ha). Among nitrogen levels, 125% N recorded higher yield (1925 kg/ha) and was followed by 100% N (1687 kg/ha).

Table 66. Seed cotton yield (kg/ha) of KCH 9287 BG II as influenced by spacing levels and nutrient levels at Perambalur

Treatments	N ₁ - 75% RDN	N ₂ - 100% RDN	N ₃ - 125% RDN	Mean (Spacing)	ANOVA	SE d	CD (5%)
S ₁ - 90 X 10 cm	1621	1531	1822	1658	Spacing	64	138
S ₂ - 90 X 15 cm	1735	1669	1949	1784	Nitrogen	64	138
S ₃ - 90 X 20 cm	1909	1860	2003	1924	S x N	111	NS
Mean (Nitrogen)	1755	1687	1925				

Basic parameters: pH: 7.05, EC: 0.24 dS m⁻¹, OC (%): 3.7, Available N: 159 kg/ha, Available P₂O₅: 15.8 kg/ha, Available K₂O: 267 kg/ha, Recommended nutrients: 100:50:60 kg NPK/ha, Genotype: KCH 9287 BG II, Environment: Rainfed, Total rainfall during cropping period: 821 mm

PERAMBALUR (NCS 9531 Bt2)

The results of agronomic requirement studies conducted at Perambalur under rainfed conditions shows that plant height, number of monopodia and number of sympodia were not significantly affected by spacing and nitrogen levels (Table 67). Number of bolls per plant and per square meter increased significantly at wider spacing and higher N levels. Boll weight was significantly affected by nitrogen levels with 125% N producing heavier bolls (5.83 g). Seed cotton yield was significantly higher at 90 × 20 cm (2235 kg/ha) and was comparable with 90 × 15 cm (2189 kg/ha). Among nitrogen levels, 125% N recorded a higher yield (2546 kg/ha) and was followed by 100% N (1972 kg/ha).

Table 67. Seed cotton yield (kg/ha) of NCS 9531 Bt2 as influenced by spacing levels and nutrient levels at Perambalur

Treatments	N ₁ - 75% RDN	N ₂ - 100% RDN	N ₃ - 125% RDN	Mean (Spacing)	ANOVA	SE d	CD (5%)
S ₁ - 90 X 10 cm	1685	1881	2181	1916	Spacing	116	250
S ₂ - 90 X 15 cm	1955	2053	2559	2189	Nitrogen	116	250
S ₃ - 90 X 20 cm	1823	1983	2900	2235	S x N	202	NS
Mean (Nitrogen)	1821	1972	2546				

Basic parameters: pH: 7.27, EC: 0.29 dS m⁻¹, OC (%): 3.6, Available N: 159 kg/ha, Available P₂O₅: 15.4 kg/ha, Available K₂O: 269 kg/ha, Recommended nutrients: 100:50:60 kg NPK/ha, Genotype: NCS 9531 Bt2, Environment: Rainfed, Total rainfall during cropping period: 821 mm

PERAMBALUR (NCS 9955 Bt2)

The results of agronomic requirement studies conducted at Perambalur under rainfed conditions shows that plant height, number of monopodia and number of sympodia were not significantly affected by spacing and nitrogen levels (Table 68). Number of bolls per plant and per square meter increased significantly at wider spacing and higher N levels. Boll weight was significantly increased with wider spacing and higher nitrogen levels, with 125% N producing heavier bolls (6.08 g). Seed cotton yield was significantly higher at 90 × 20 cm (2417 kg/ha) and was followed by 90 × 15 cm (2124 kg/ha). Among nitrogen levels, 125% N recorded a higher yield (2475 kg/ha) and was followed by 100% N (2158 kg/ha).

Table 68. Seed cotton yield (kg/ha) of NCS 9955 Bt2 as influenced by spacing levels and nutrient levels at Perambalur

Treatments	N ₁ - 75% RDN	N ₂ - 100% RDN	N ₃ - 125% RDN	Mean (Spacing)	ANOVA	SE d	CD (5%)
S ₁ - 90 X 10 cm	1892	2116	2206	2071	Spacing	64	138
S ₂ - 90 X 15 cm	1730	2004	2639	2124	Nitrogen	64	138
S ₃ - 90 X 20 cm	2313	2356	2581	2417	S x N	112	240
Mean (Nitrogen)	1978	2158	2475				

Basic parameters: pH: 7.42, EC: 0.24 dS m⁻¹, OC (%): 4.0, Available N: 159 kg/ha, Available P₂O₅: 15.70 kg/ha, Available K₂O: 260 kg/ha, Recommended nutrients: 100:50:60 kg NPK/ha, Genotype: NCS 9955 Bt2, Environment: Rainfed, Total rainfall during cropping period: 821 mm

PERAMBALUR (PCH 7544 Bt2)

The results of agronomic requirement studies conducted at Perambalur under rainfed conditions shows that plant height, was not affected by spacing and nitrogen levels. Number of bolls per plant increased significantly at wider spacing and higher N levels. (Table 69). Number of bolls per square meter increased significantly with higher N levels Boll weight was significantly increased with wider spacing (5.95 at 90 x 20 cm) and higher nitrogen levels with 125% N producing heavier bolls (6.06 g). Seed cotton yield was significantly higher at 90 × 20 cm (2759 kg/ha). Among nitrogen levels, 125% N recorded higher yield (2925 kg/ha) and was followed by 100% N (2600 kg/ha).

Table 69. Seed cotton yield (kg/ha) of PCH 7544 Bt2 as influenced by spacing levels and nutrient levels at Perambalur

Treatments	N ₁ - 75% RDN	N ₂ - 100% RDN	N ₃ - 125% RDN	Mean (Spacing)	ANOVA	SE d	CD (5%)
S ₁ - 90 X 10 cm	2612	2640	2848	2700	Spacing	74	159
S ₂ - 90 X 15 cm	2370	2478	2761	2536	Nitrogen	74	159
S ₃ - 90 X 20 cm	2431	2681	3165	2759	S x N	129	NS
Mean (Nitrogen)	2471	2600	2925				



Perambalur (RCH 1119 BGII)

The results of agronomic requirement studies conducted at Perambalur under rainfed conditions shows that plant height and no of sympodia was not affected by spacing and nitrogen levels. (Table 70). Number of bolls per plant increased significantly at wider spacing. Number of bolls per square meter increased significantly with closer spacing with 90x10 cm recording 102.9 bolls. Seed cotton yield was significantly higher at 90 × 10 cm (3157 kg/ha) and was followed by 90 × 15 cm (2841 kg/ha). Among nitrogen levels, 100% N recorded higher yield (3146 kg/ha) and was comparable with 100% N (2991kg/ha).

Table 70. Seed cotton yield (kg/ha) of RCH 1119 BGII as influenced by spacing levels and nutrient levels at Perambalur

Treatments	N ₁ - 75% RDN	N ₂ - 100% RDN	N ₃ - 125% RDN	Mean (Spacing)	ANOVA	SE d	CD (5%)
S ₁ - 90 X 10 cm	2866	3389	3217	3157	Spacing	107	229
S ₂ - 90 X 15 cm	2611	3037	2874	2841	Nitrogen	107	229
S ₃ - 90 X 20 cm	2301	3013	2883	2732	S x N	186	NS
Mean (Nitrogen)	2593	3146	2991				

Basic parameters: pH: 7.05, EC: 0.23 dS m⁻¹, OC (%): 3.7, Available N: 153 kg/ha, Available P₂O₅: 14.9 kg/ha, Available K₂O: 265 kg/ha, Recommended nutrients: 100:50:60 kg NPK/ha, Genotype: PCH 7544 Bt2, Environment: Rainfed, Total rainfall during cropping period: 821 mm

Initial Evaluation Trial of Hirsutum Varieties - Rainfed

Constitution of Trial

The trial was constituted with 15 Bt cotton varieties containing deregulated event along with three different check varieties as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	11	56101	LRA 5166 Bt	CICR, Coimbatore
2	16	56102	Anjali Bt	CICR, Coimbatore
3	8	56103	LHBt 2203	ANGRAU-Lam-Guntur
4	4	56104	LHBt 23108	ANGRAU-Lam-Guntur
5	17	56105	NH 22095 Bt	CRS, Nanded
6	2	56106	WGCv Bt 129	CRS, Warangal
7	7	56107	Sumangala Bt	CICR, Coimbatore
8	1	56108	NH 22107 Bt	CRS, Nanded
9	6	56109	CPDBt-2552	UAS Dharwad
10	10	56110	CICR 23 Bt (ZC Bt-1)	
11	15	56111	CCH 2623 Bt	CICR, Coimbatore
12	3	56112	PKV 081 Bt (ZC Bt-2)	
13	9	56113	NH 22076 Bt	CRS, Nanded
14	5	56114	LHBt 23105	ANGRAU-Lam-Guntur
15	13	56115	CPDBt-2551	UAS Dharwad
16	14	56116	LHBt 23110	ANGRAU-Lam-Guntur
17	12	56117	WGCv Bt 128	CRS, Warangal

The trial was conducted in five locations viz., Mudhole, Adilabad, Nandyal*, Dharwad, and Perambalur.

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Recommended spacing for the variety has been followed.

Number of rows: 4 rows of 6 meters per entry with three replications



Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Initial Evaluation Trial of Hirsutum Variety**

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	131.8	186.5	124.7	191.2	158.6
2	Anjali Bt	110.6	144.9	107.7	149.3	128.1
3	LHBt 2203	110.9	150.3	98.4	171.3	132.7
4	LHBt 23108	120.3	178.7	90.9	170.9	140.2
5	NH 22095 Bt	120.3	161.3	99.1	164.2	136.2
6	WGCV Bt 129	125.7	149.5	118.7	135.8	132.4
7	Sumangala Bt	128.3	172.5	118.0	195.0	153.5
8	NH 22107 Bt	124.9	167.8	106.9	168.7	142.1
9	CPDBt-2552	119.7	163.7	115.0	187.3	146.4
10	CICR 23 Bt (ZC Bt-1)	114.3	164.7	104.9	185.3	142.3
11	CCH 2623 Bt	135.5	179.3	114.3	208.7	159.5
12	PKV 081 Bt (ZC Bt-2)	138.9	157.6	107.3	188.8	148.2
13	NH 22076 Bt	119.2	151.9	103.1	184.1	139.6
14	LHBt 23105	137.5	188.2	115.8	208.2	162.4
15	CPDBt-2551	113.5	160.0	114.4	178.4	141.6
16	LHBt 23110	125.6	156.6	98.2	175.8	139.1
17	WGCV Bt 128	107.1	128.3	101.7	172.9	127.5
	CD @ 5%	18.6	22.5	21.0	20.2	
	CV %	9.1	8.3	11.7	7.1	

Number of monopodia in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	1.5	1.1	0.3	3.1	1.5
2	Anjali Bt	1.4	1.5	2.1	3.5	2.1
3	LHBt 2203	0.3	1.3	1.7	2.7	1.5
4	LHBt 23108	0.3	0.6	0.6	2.5	1.0
5	NH 22095 Bt	0.7	0.9	0.8	1.9	1.1
6	WGCV Bt 129	0.9	1.3	3.1	3.7	2.3
7	Sumangala Bt	0.9	1.6	1.3	2.8	1.7
8	NH 22107 Bt	0.5	1.5	1.8	3.0	1.7
9	CPDBt-2552	0.8	1.2	1.4	2.5	1.5
10	CICR 23 Bt (ZC Bt-1)	1.1	1.5	1.6	1.9	1.5
11	CCH 2623 Bt	1.3	1.1	0.6	2.5	1.4
12	PKV 081 Bt (ZC Bt-2)	1.1	0.7	1.0	1.9	1.2
13	NH 22076 Bt	0.3	0.8	1.6	1.7	1.1
14	LHBt 23105	0.5	1.5	1.3	2.4	1.4
15	CPDBt-2551	0.5	1.0	1.2	1.8	1.1
16	LHBt 23110	1.1	1.3	1.0	1.8	1.3
17	WGCV Bt 128	1.1	1.7	1.2	2.9	1.7
	CD @ 5%	0.2	NS	0.4	0.7	
	CV %	18.8	39.5	18.4	16.9	



Number of sympodia in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	10.3	16.3	18.0	23.3	17.0
2	Anjali Bt	12.1	14.5	13.3	25.7	16.4
3	LHBt 2203	11.0	14.9	15.7	24.8	16.6
4	LHBt 23108	7.9	18.2	14.9	24.0	16.3
5	NH 22095 Bt	11.9	15.9	17.2	26.7	17.9
6	WGCV Bt 129	13.0	14.3	15.2	24.1	16.7
7	Sumangala Bt	9.0	14.9	18.3	24.6	16.7
8	NH 22107 Bt	12.7	17.3	17.3	26.1	18.4
9	CPDBt-2552	11.6	15.3	18.4	25.5	17.7
10	CICR 23 Bt (ZC Bt-1)	11.6	16.9	16.8	27.8	18.3
11	CCH 2623 Bt	12.8	16.5	16.7	26.4	18.1
12	PKV 081 Bt (ZC Bt-2)	13.0	14.5	17.4	22.4	16.8
13	NH 22076 Bt	13.9	14.6	16.3	26.3	17.8
14	LHBt 23105	12.2	15.3	18.3	25.8	17.9
15	CPDBt-2551	11.9	14.3	15.7	24.7	16.7
16	LHBt 23110	9.9	15.2	15.4	22.1	15.7
17	WGCV Bt 128	12.4	13.5	16.2	24.0	16.5
	CD @ 5%	2.2	2.5	2.4	3.1	
	CV %	11.2	9.9	8.8	7.8	

Boll weight (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	4.2	3.9	5.0	5.0	4.5
2	Anjali Bt	4.0	4.1	5.0	4.4	4.4
3	LHBt 2203	4.1	4.3	4.7	6.3	4.9
4	LHBt 23108	3.0	3.1	3.6	3.6	3.3
5	NH 22095 Bt	4.1	4.7	5.0	5.1	4.7
6	WGCV Bt 129	3.9	4.3	4.5	4.2	4.2
7	Sumangala Bt	4.2	4.3	4.6	5.2	4.6
8	NH 22107 Bt	4.3	4.7	4.6	4.9	4.6
9	CPDBt-2552	4.1	4.2	4.2	4.2	4.2
10	CICR 23 Bt (ZC Bt-1)	3.1	3.1	3.8	3.6	3.4
11	CCH 2623 Bt	4.0	4.1	4.6	4.7	4.4
12	PKV 081 Bt (ZC Bt-2)	3.9	3.6	4.3	4.5	4.1
13	NH 22076 Bt	3.4	3.9	4.4	4.4	4.0
14	LHBt 23105	3.8	4.5	4.9	5.7	4.7
15	CPDBt-2551	3.8	3.8	4.3	4.3	4.1
16	LHBt 23110	4.6	5.0	5.1	5.6	5.1
17	WGCV Bt 128	4.3	4.0	4.9	5.0	4.6
	CD @ 5%	0.6	0.8	0.3	0.8	
	CV %	10.5	12.3	3.6	10.5	



Number of bolls / plant in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	15.4	12.7	8.5	47.3	21.0
2	Anjali Bt	19.0	12.7	9.6	42.4	20.9
3	LHBt 2203	13.7	10.5	6.2	34.3	16.2
4	LHBt 23108	11.9	4.3	9.5	34.9	15.2
5	NH 22095 Bt	17.5	12.6	8.6	42.9	20.4
6	WGCV Bt 129	23.9	14.9	8.2	44.3	22.8
7	Sumangala Bt	12.5	14.2	9.9	41.6	19.6
8	NH 22107 Bt	15.1	11.2	9.6	42.5	19.6
9	CPDBt-2552	18.2	15.1	9.7	45.7	22.2
10	CICR 23 Bt (ZC Bt-1)	15.1	9.1	7.6	36.1	17.0
11	CCH 2623 Bt	20.8	9.1	8.2	41.7	20.0
12	PKV 081 Bt (ZC Bt-2)	18.5	11.7	8.5	40.1	19.7
13	NH 22076 Bt	24.5	13.4	11.1	48.5	24.4
14	LHBt 23105	12.8	7.7	6.3	38.4	16.3
15	CPDBt-2551	17.2	13.5	9.8	40.5	20.3
16	LHBt 23110	20.4	10.9	8.1	30.6	17.5
17	WGCV Bt 128	18.8	19.7	9.6	45.3	23.4
	CD @ 5%	4.4	4.7	2.0	9.7	
	CV %	15.4	23.6	14.0	14.7	

Number of bolls / sq. m. in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	62.3	57.7	47.3	169.3	84.2
2	Anjali Bt	93.3	70.0	53.4	164.0	95.2
3	LHBt 2203	57.7	53.0	34.3	135.7	70.2
4	LHBt 23108	46.0	40.0	52.8	140.7	69.9
5	NH 22095 Bt	79.3	55.7	47.6	183.3	91.5
6	WGCV Bt 129	75.3	75.0	45.4	171.3	91.8
7	Sumangala Bt	66.0	52.0	55.3	161.0	83.6
8	NH 22107 Bt	71.7	61.3	53.1	168.0	88.5
9	CPDBt-2552	92.7	69.0	54.1	174.3	97.5
10	CICR 23 Bt (ZC Bt-1)	51.7	34.0	42.3	141.0	67.3
11	CCH 2623 Bt	85.7	46.0	45.4	162.7	85.0
12	PKV 081 Bt (ZC Bt-2)	57.0	63.7	47.3	149.7	79.4
13	NH 22076 Bt	89.3	65.7	61.8	185.3	100.5
14	LHBt 23105	51.7	36.0	35.2	148.7	67.9
15	CPDBt-2551	69.3	60.7	54.7	155.3	85.0
16	LHBt 23110	91.7	44.0	44.8	123.0	75.9
17	WGCV Bt 128	72.3	76.3	53.1	175.7	94.4
	CD @ 5%	11.3	23.2	11.3	27.1	
	CV %	9.5	24.7	14.0	10.6	



Lint Index (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	3.3	4.9	5.7	7.0	5.2
2	Anjali Bt	3.1	4.4	6.3	6.4	5.1
3	LHBt 2203	3.0	4.2	4.2	6.4	4.5
4	LHBt 23108	3.0	4.3	4.4	5.9	4.4
5	NH 22095 Bt	2.9	4.7	5.5	6.5	4.9
6	WGCV Bt 129	2.6	4.3	5.1	5.5	4.4
7	Sumangala Bt	4.9	5.0	6.6	6.3	5.7
8	NH 22107 Bt	5.1	5.3	6.0	6.7	5.8
9	CPDBt-2552	3.3	4.3	6.0	5.5	4.8
10	CICR 23 Bt (ZC Bt-1)	2.5	3.2	4.4	4.6	3.7
11	CCH 2623 Bt	3.9	5.5	6.1	6.6	5.5
12	PKV 081 Bt (ZC Bt-2)	2.7	4.0	5.5	5.4	4.4
13	NH 22076 Bt	3.0	4.3	5.3	5.3	4.5
14	LHBt 23105	1.9	4.4	4.0	6.4	4.2
15	CPDBt-2551	2.7	4.6	5.5	4.7	4.4
16	LHBt 23110	4.3	4.4	5.2	6.5	5.1
17	WGCV Bt 128	3.7	4.3	5.7	6.5	5.1
	CD @ 5%	0.5	0.7		0.9	
	CV %	8.5	9.4		9.5	

Seed Index (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	9.6	11.0	11.5	11.8	11.0
2	Anjali Bt	9.6	9.1	11.1	10.7	10.1
3	LHBt 2203	9.4	10.1	11.2	12.0	10.7
4	LHBt 23108	8.3	8.1	8.7	8.8	8.5
5	NH 22095 Bt	9.0	10.8	9.4	10.8	10.0
6	WGCV Bt 129	8.4	8.8	9.9	9.3	9.1
7	Sumangala Bt	10.1	10.6	9.8	11.7	10.6
8	NH 22107 Bt	9.4	10.6	10.2	10.5	10.2
9	CPDBt-2552	8.3	8.6	9.1	9.4	8.9
10	CICR 23 Bt (ZC Bt-1)	7.2	7.7	8.4	8.5	8.0
11	CCH 2623 Bt	10.4	9.3	10.2	10.5	10.1
12	PKV 081 Bt (ZC Bt-2)	8.1	9.0	9.8	9.1	9.0
13	NH 22076 Bt	7.3	7.9	9.0	9.2	8.4
14	LHBt 23105	7.4	8.6	9.0	10.9	9.0
15	CPDBt-2551	7.7	8.3	7.9	8.7	8.2
16	LHBt 23110	10.0	10.4	11.5	12.9	11.2
17	WGCV Bt 128	8.5	9.6	10.7	11.6	10.1
	CD @ 5%	0.8	1.3		1.1	
	CV %	5.5	8.3		6.4	



Ginning outturn (%) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	25.4	30.9	33.3	37.2	31.7
2	Anjali Bt	24.7	32.9	36.1	37.2	32.7
3	LHBt 2203	24.0	29.2	27.4	34.6	28.8
4	LHBt 23108	26.3	34.4	33.4	40.1	33.6
5	NH 22095 Bt	24.7	30.1	37.0	37.5	32.3
6	WGCV Bt 129	23.6	32.7	34.0	37.4	31.9
7	Sumangala Bt	32.8	32.2	40.0	35.1	35.0
8	NH 22107 Bt	35.2	33.2	36.8	39.0	36.1
9	CPDBt-2552	28.0	33.1	39.7	37.1	34.5
10	CICR 23 Bt (ZC Bt-1)	25.8	29.4	34.7	35.0	31.2
11	CCH 2623 Bt	27.0	37.1	37.7	38.6	35.1
12	PKV 081 Bt (ZC Bt-2)	24.8	30.8	36.0	37.1	32.2
13	NH 22076 Bt	29.0	35.5	37.1	36.7	34.6
14	LHBt 23105	20.8	34.1	31.0	37.1	30.8
15	CPDBt-2551	25.7	35.6	41.1	35.2	34.4
16	LHBt 23110	30.0	29.9	31.0	33.6	31.1
17	WGCV Bt 128	30.4	31.1	34.8	35.7	33.0
	CD @ 5%	3.3	2.3		3.7	
	CV %	7.4	4.5		6.2	

Upper Half Mean Length (mm) under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	28.7	30.6	32.5	30.2	30.5
2	Anjali Bt	26.8	28.4	30.3	28.8	28.6
3	LHBt 2203	30.0	30.4	31.5	30.3	30.6
4	LHBt 23108	27.5	27.0	26.9	26.2	26.9
5	NH 22095 Bt	26.8	28.1	28.9	28.3	28.0
6	WGCV Bt 129	27.1	27.3	29.7	25.8	27.5
7	Sumangala Bt	27.3	28.2	28.3	28.7	28.1
8	NH 22107 Bt	27.4	27.0	30.1	27.4	28.0
9	CPDBt-2552	27.7	26.2	28.1	26.0	27.0
10	CICR 23 Bt (ZC Bt-1)	26.9	26.5	28.3	26.5	27.1
11	CCH 2623 Bt	27.1	27.1	28.9	26.0	27.3
12	PKV 081 Bt (ZC Bt-2)	27.5	26.5	27.5	26.4	27.0
13	NH 22076 Bt	26.9	27.1	28.6	26.9	27.4
14	LHBt 23105	27.0	28.9	31.4	28.1	28.9
15	CPDBt-2551	25.4	26.7	28.4	25.9	26.6
16	LHBt 23110	28.0	28.1	30.3	29.0	28.9
17	WGCV Bt 128	28.1	29.9	30.9	28.4	29.3



Uniformity index under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	82.0	83.0	88.0	86.0	84.8
2	Anjali Bt	81.0	83.0	87.0	84.0	83.8
3	LHBt 2203	84.0	83.0	85.0	85.0	84.3
4	LHBt 23108	82.0	83.0	83.0	81.0	82.3
5	NH 22095 Bt	82.0	82.0	84.0	84.0	83.0
6	WGCV Bt 129	83.0	83.0	86.0	82.0	83.5
7	Sumangala Bt	83.0	84.0	83.0	84.0	83.5
8	NH 22107 Bt	84.0	81.0	85.0	84.0	83.5
9	CPDBt-2552	81.0	83.0	83.0	83.0	82.5
10	CICR 23 Bt (ZC Bt-1)	83.0	82.0	84.0	82.0	82.8
11	CCH 2623 Bt	82.0	82.0	86.0	82.0	83.0
12	PKV 081 Bt (ZC Bt-2)	81.0	83.0	85.0	85.0	83.5
13	NH 22076 Bt	84.0	82.0	85.0	84.0	83.8
14	LHBt 23105	82.0	84.0	87.0	83.0	84.0
15	CPDBt-2551	82.0	82.0	85.0	81.0	82.5
16	LHBt 23110	82.0	83.0	85.0	85.0	83.8
17	WGCV Bt 128	84.0	81.0	83.0	83.0	82.8

Micronaire under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	3.7	3.6	4.0	4.0	3.8
2	Anjali Bt	4.1	3.7	4.1	4.2	4.0
3	LHBt 2203	3.4	3.4	3.6	3.6	3.5
4	LHBt 23108	4.2	4.8	5.4	5.3	4.9
5	NH 22095 Bt	4.2	3.9	4.5	4.4	4.3
6	WGCV Bt 129	4.2	4.1	4.0	4.9	4.3
7	Sumangala Bt	4.3	4.2	4.6	4.4	4.4
8	NH 22107 Bt	4.0	3.7	3.8	4.1	3.9
9	CPDBt-2552	3.7	4.3	4.2	4.5	4.2
10	CICR 23 Bt (ZC Bt-1)	3.8	3.6	4.0	4.3	3.9
11	CCH 2623 Bt	4.2	4.0	4.5	4.6	4.3
12	PKV 081 Bt (ZC Bt-2)	3.8	3.1	4.1	4.2	3.8
13	NH 22076 Bt	4.3	4.2	4.6	4.8	4.5
14	LHBt 23105	3.9	3.6	3.8	4.7	4.0
15	CPDBt-2551	4.2	4.0	4.4	4.3	4.2
16	LHBt 23110	3.9	3.7	3.9	4.0	3.9
17	WGCV Bt 128	3.9	4.3	4.1	3.9	4.1

Tenacity under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	29.0	33.3	32.3	32.7	31.8
2	Anjali Bt	27.2	30.6	33.3	30.1	30.3
3	LHBt 2203	30.2	32.1	31.5	30.1	31.0
4	LHBt 23108	29.0	29.0	27.3	26.7	28.0
5	NH 22095 Bt	29.0	29.7	27.5	29.0	28.8
6	WGCV Bt 129	27.3	28.6	28.2	27.6	27.9
7	Sumangala Bt	29.0	30.3	30.1	30.2	29.9
8	NH 22107 Bt	27.9	27.3	30.0	27.7	28.2
9	CPDBt-2552	27.9	27.3	27.4	28.2	27.7
10	CICR 23 Bt (ZC Bt-1)	27.3	28.6	28.9	28.1	28.2
11	CCH 2623 Bt	28.6	28.9	29.1	28.3	28.7
12	PKV 081 Bt (ZC Bt-2)	28.0	28.5	28.7	27.7	28.2
13	NH 22076 Bt	29.1	28.4	29.7	27.6	28.7
14	LHBt 23105	28.0	29.9	31.7	29.7	29.8
15	CPDBt-2551	27.1	27.5	29.7	27.4	27.9
16	LHBt 23110	28.0	28.0	28.3	29.0	28.3
17	WGCV Bt 128	28.7	31.4	29.2	29.1	29.6

Seed Cotton Yield at 140 DAS (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	12.23	13.29	8.88	8.37	10.69
2	Anjali Bt	19.68	18.50	13.80	12.80	16.20
3	LHBt 2203	11.27	12.48	3.72	7.31	8.70
4	LHBt 23108	11.13	3.94	2.61	5.81	5.87
5	NH 22095 Bt	16.45	15.16	11.09	7.05	12.44
6	WGCV Bt 129	20.34	16.81	6.04	13.11	14.08
7	Sumangala Bt	12.52	10.79	13.05	10.52	11.72
8	NH 22107 Bt	14.31	14.91	11.87	10.31	12.85
9	CPDBt-2552	17.47	18.56	15.13	6.77	14.48
10	CICR 23 Bt (ZC Bt-1)	11.50	4.63	2.00	6.95	6.27
11	CCH 2623 Bt	17.95	11.34	10.54	7.79	11.91
12	PKV 081 Bt (ZC Bt-2)	13.31	15.42	7.71	9.54	11.50
13	NH 22076 Bt	19.71	15.69	9.11	8.41	13.23
14	LHBt 23105	13.25	7.99	2.66	7.56	7.87
15	CPDBt-2551	15.12	18.08	13.03	8.87	13.78
16	LHBt 23110	17.08	12.13	3.46	8.06	10.18
17	WGCV Bt 128	14.28	15.32	4.21	8.30	10.53
	CD @ 5%	0.50	2.81	1.53	2.13	
	CV %	13.90	12.75	11.00	15.39	



Seed Cotton Yield at 165 DAS (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	LRA 5166 Bt	3.43	4.12	7.45	4.04	4.76
2	Anjali Bt	2.61	3.66	4.52	3.16	3.49
3	LHBt 2203	2.80	5.28	4.43	1.64	3.54
4	LHBt 23108	2.75	5.07	6.19	4.52	4.63
5	NH 22095 Bt	2.88	4.95	6.35	3.57	4.44
6	WGCV Bt 129	2.20	6.48	8.12	3.58	5.10
7	Sumangala Bt	3.26	5.21	8.75	3.53	5.19
8	NH 22107 Bt	3.24	6.48	5.52	2.35	4.40
9	CPDBt-2552	2.89	4.77	5.24	4.00	4.23
10	CICR 23 Bt (ZC Bt-1)	2.96	3.98	8.53	4.09	4.89
11	CCH 2623 Bt	3.52	5.32	7.46	3.42	4.93
12	PKV 081 Bt (ZC Bt-2)	3.66	5.93	7.10	3.46	5.04
13	NH 22076 Bt	2.64	5.02	6.54	4.37	4.64
14	LHBt 23105	2.22	4.31	5.18	5.07	4.20
15	CPDBt-2551	3.22	3.87	6.18	4.26	4.38
16	LHBt 23110	2.99	6.55	4.30	4.17	4.50
17	WGCV Bt 128	3.29	5.46	5.41	4.53	4.67
	CD @ 5%	0.10	1.16	1.49	0.98	
	CV %	14.40	13.76	14.22	16.38	

Total Seed Cotton Yield (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean	Rank	% Inc over best check
1	LRA 5166 Bt	15.84	17.41	16.32	12.40	15.49	11	-5.8
2	Anjali Bt	22.23	22.15	18.32	16.00	19.68	1	19.7
3	LHBt 2203	14.07	17.75	8.15	9.00	12.24	14	-25.5
4	LHBt 23108	13.89	9.00	8.80	10.30	10.50	17	-36.1
5	NH 22095 Bt	19.33	20.12	17.45	10.60	16.88	8	2.6
6	WGCV Bt 129	22.53	23.29	14.15	16.70	19.17	2	16.6
7	Sumangala Bt	15.79	16.00	21.81	14.10	16.93	7	3.0
8	NH 22107 Bt	17.22	21.39	17.39	12.70	17.18	6	4.5
9	CPDBt-2552	20.20	23.33	20.37	10.80	18.68	3	13.6
10	CICR 23 Bt (ZC Bt-1)	14.47	8.61	10.52	11.00	11.15	16	-32.2
11	CCH 2623 Bt	21.31	16.67	18.00	11.20	16.80	9	2.2
12	PKV 081 Bt (ZC Bt-2)	16.60	21.34	14.82	13.00	16.44	10	0.0
13	NH 22076 Bt	21.98	20.72	15.65	12.80	17.79	5	8.2
14	LHBt 23105	15.47	12.29	7.84	12.60	12.05	15	-26.7
15	CPDBt-2551	18.33	21.94	19.21	13.10	18.15	4	10.4
16	LHBt 23110	20.07	18.68	7.75	12.20	14.68	13	-10.7
17	WGCV Bt 128	17.34	20.79	9.62	12.80	15.14	12	-7.9
	CD @ 5%	3.50	3.16	2.26	2.18			
	CV %	11.80	10.40	9.40	10.97			

Evaluation under Protected Condition for Insect pests
Reaction to Insect Pests

Table: Initial Variety trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	0.72	-	0.57	1.91	1.06	BETL
56102	-	0.58	-	0.67	2.18	1.14	BETL
56103	-	0.49	-	0.62	3.54	1.55	BETL
56104	-	1.20	-	0.62	6.60	2.81	BETL
56105	-	0.65	-	0.63	2.73	1.34	BETL
56106	-	0.83	-	0.58	2.99	1.47	BETL
56107	-	0.60	-	0.83	2.72	1.39	BETL
56108	-	0.44	-	0.64	5.04	2.04	BETL
56109	-	0.50	-	0.64	1.63	0.93	BETL
56110	-	1.27	-	1.26	3.40	1.98	BETL
56111	-	1.02	-	0.48	2.31	1.27	BETL
56112	-	0.42	-	0.69	2.79	1.30	BETL
56113	-	0.48	-	0.67	6.46	2.54	BETL
56114	-	0.84	-	1.04	2.18	1.35	BETL
56115	-	0.72	-	0.75	1.50	0.99	BETL
56116	-	0.46	-	0.31	1.97	0.91	BETL
56117	-	0.52	-	0.77	1.91	1.07	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	1.13	9.00	0.21	0.81	2.79	BETL
56102	-	1.21	7.33	0.16	0.71	2.35	BETL
56103	-	1.37	7.67	0.21	0.51	2.44	BETL
56104	-	1.67	5.67	0.26	0.61	2.05	BETL
56105	-	1.41	8.00	0.22	2.34	2.99	BETL
56106	-	1.94	4.67	0.22	1.32	2.04	BETL
56107	-	1.15	6.33	0.28	1.63	2.35	BETL
56108	-	1.28	4.67	0.24	0.61	1.70	BETL
56109	-	0.71	7.67	0.17	0.81	2.34	BETL
56110	-	1.34	6.00	0.19	1.22	2.19	BETL
56111	-	1.49	8.00	0.21	0.71	2.60	BETL
56112	-	1.44	7.00	0.26	0.40	2.28	BETL
56113	-	1.91	5.67	0.27	0.20	2.01	BETL
56114	-	0.51	4.33	0.25	1.53	1.66	BETL
56115	-	2.08	4.00	0.29	0.81	1.80	BETL
56116	-	0.59	7.00	0.36	0.31	2.06	BETL
56117	-	1.18	6.00	0.30	1.32	2.20	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-		-	-	-		
56102	-		-	-	-		
56103	-		-	-	-		
56104	-		-	-	-		
56105	-		-	-	-		
56106	-		-	-	-		
56107	-		-	-	-		
56108	-		-	-	-		
56109	-		-	-	-		
56110	-		-	-	-		
56111	-		-	-	-		
56112	-		-	-	-		
56113	-		-	-	-		
56114	-		-	-	-		
56115	-		-	-	-		
56116	-		-	-	-		
56117	-		-	-	-		

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	0.92	0.00	0.37	1.78	0.77	BETL
56102	-	0.90	0.67	0.73	1.47	0.94	BETL
56103	-	0.50	0.00	0.47	2.24	0.80	BETL
56104	-	0.50	0.00	0.6	0.51	0.40	BETL
56105	-	1.06	0.00	0.77	1.25	0.77	BETL
56106	-	1.38	0.67	0.67	0.58	0.82	BETL
56107	-	1.18	0.00	0.6	0.58	0.59	BETL
56108	-	1.62	0.00	0.43	0.26	0.58	BETL
56109	-	2.08	0.00	0.63	0.51	0.80	BETL
56110	-	0.73	0.00	0.7	1.04	0.62	BETL
56111	-	0.50	0.00	0.53	1.12	0.54	BETL
56112	-	1.07	0.00	0.53	0.58	0.55	BETL
56113	-	0.93	0.00	0.6	2.54	1.02	BETL
56114	-	1.33	0.00	0.8	1.30	0.86	BETL
56115	-	0.97	0.67	0.9	3.38	1.48	BETL
56116	-	1.38	0.00	0.87	1.17	0.85	BETL
56117	-	1.86	0.00	0.67	0.76	0.82	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	0.18	0.33	0.23	1.08	0.45	BETL
56102	-	0.16	0.00	0.27	0.63	0.26	BETL
56103	-	0.21	0.33	0.33	0.71	0.40	BETL
56104	-	0.13	0.00	0.23	0.30	0.17	BETL
56105	-	0.15	0.00	0.20	0.30	0.16	BETL
56106	-	0.19	0.00	0.40	0.82	0.35	BETL
56107	-	0.13	0.00	0.40	0.89	0.36	BETL
56108	-	0.16	0.00	0.43	0.48	0.27	BETL
56109	-	0.42	1.00	0.37	1.08	0.72	BETL
56110	-	0.09	1.33	0.30	0.41	0.53	BETL
56111	-	0.06	0.00	0.33	1.15	0.38	BETL
56112	-	0.40	0.33	0.30	0.59	0.41	BETL
56113	-	0.11	2.00	0.23	0.85	0.80	BETL
56114	-	0.02	2.00	0.40	1.23	0.91	BETL
56115	-	0.00	1.00	0.37	1.45	0.70	BETL
56116	-	0.15	0.67	0.33	1.19	0.58	BETL
56117	-	0.17	0.00	0.37	0.67	0.30	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No. / plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	0.29	0.00	-	-	0.14	
56102	-	0.22	0.00	-	-	0.11	
56103	-	0.49	0.00	-	-	0.25	
56104	-	0.53	0.00	-	-	0.26	
56105	-	0.54	0.00	-	-	0.27	
56106	-	0.46	0.00	-	-	0.23	
56107	-	0.40	0.00	-	-	0.20	
56108	-	0.29	0.00	-	-	0.15	
56109	-	0.46	0.00	-	-	0.23	
56110	-	0.63	0.00	-	-	0.31	
56111	-	0.44	0.00	-	-	0.22	
56112	-	0.29	0.00	-	-	0.15	
56113	-	0.60	0.00	-	-	0.30	
56114	-	0.56	0.00	-	-	0.28	
56115	-	0.48	0.00	-	-	0.24	
56116	-	0.47	0.00	-	-	0.23	
56117	-	0.20	0.00	-	-	0.10	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Protected Conditions– *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	0.00	0.00	0.00	-	0.00	BETL
56102	-	0.00	0.00	0.00	-	0.00	BETL
56103	-	0.00	0.00	0.00	-	0.00	BETL
56104	-	0.00	0.00	0.00	-	0.00	BETL
56105	-	0.00	0.00	0.00	-	0.00	BETL
56106	-	0.00	0.00	0.00	-	0.00	BETL
56107	-	0.00	0.00	0.00	-	0.00	BETL
56108	-	0.00	0.00	0.00	-	0.00	BETL
56109	-	0.00	0.00	0.00	-	0.00	BETL
56110	-	0.00	0.00	0.00	-	0.00	BETL
56111	-	0.00	0.00	0.00	-	0.00	BETL
56112	-	0.00	0.00	0.00	-	0.00	BETL
56113	-	0.00	0.00	0.00	-	0.00	BETL
56114	-	0.00	0.00	0.00	-	0.00	BETL
56115	-	0.00	0.00	0.00	-	0.00	BETL
56116	-	0.00	0.00	0.00	-	0.00	BETL
56117	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Protected Conditions –Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	0.00	0.00	0.00	-	0.00	BETL
56102	-	0.00	0.00	0.00	-	0.00	BETL
56103	-	0.00	0.00	0.00	-	0.00	BETL
56104	-	0.00	0.00	0.00	-	0.00	BETL
56105	-	0.00	0.00	0.00	-	0.00	BETL
56106	-	0.00	0.00	0.00	-	0.00	BETL
56107	-	0.00	0.00	0.00	-	0.00	BETL
56108	-	0.00	0.00	0.00	-	0.00	BETL
56109	-	0.00	0.00	0.00	-	0.00	BETL
56110	-	0.00	0.00	0.00	-	0.00	BETL
56111	-	0.00	0.00	0.00	-	0.00	BETL
56112	-	0.00	0.00	0.00	-	0.00	BETL
56113	-	0.00	0.00	0.00	-	0.00	BETL
56114	-	0.00	0.00	0.00	-	0.00	BETL
56115	-	0.00	0.00	0.00	-	0.00	BETL
56116	-	0.00	0.00	0.00	-	0.00	BETL
56117	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	0.00	0.00	0.00	-	0.00	BETL
56102	-	0.00	0.00	0.00	-	0.00	BETL
56103	-	0.00	0.00	0.00	-	0.00	BETL
56104	-	0.00	0.00	0.00	-	0.00	BETL
56105	-	0.00	0.00	0.00	-	0.00	BETL
56106	-	0.00	0.00	0.00	-	0.00	BETL
56107	-	0.00	0.00	0.00	-	0.00	BETL
56108	-	0.00	0.00	0.00	-	0.00	BETL
56109	-	0.00	0.00	0.00	-	0.00	BETL
56110	-	0.00	0.00	0.00	-	0.00	BETL
56111	-	0.00	0.00	0.00	-	0.00	BETL
56112	-	0.00	0.00	0.00	-	0.00	BETL
56113	-	0.00	0.00	0.00	-	0.00	BETL
56114	-	0.00	0.00	0.00	-	0.00	BETL
56115	-	0.00	0.00	0.00	-	0.00	BETL
56116	-	0.00	0.00	0.00	-	0.00	BETL
56117	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Protected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)						Remark
	NA	DH	PE	AD#	MU	Mean	
56101	-	0.50	1.80	0.73	-	1.01	AETL
56102	-	1.83	1.30	0.00	-	1.04	AETL
56103	-	0.50	1.15	0.27	-	0.64	BETL
56104	-	0.50	1.30	0.00	-	0.60	BETL
56105	-	0.67	1.97	0.27	-	0.97	BETL
56106	-	1.00	0.64	0.60	-	0.75	BETL
56107	-	0.33	0.97	0.87	-	0.72	BETL
56108	-	0.83	2.33	0.93	-	1.36	AETL
56109	-	0.50	1.15	0.07	-	0.57	BETL
56110	-	0.33	1.20	0.60	-	0.71	BETL
56111	-	0.33	1.27	0.27	-	0.62	BETL
56112	-	0.67	1.17	0.80	-	0.88	BETL
56113	-	0.67	1.57	0.20	-	0.81	BETL
56114	-	2.17	1.30	0.00	-	1.16	AETL
56115	-	0.50	1.77	0.00	-	0.76	BETL
56116	-	1.17	1.66	0.73	-	1.19	AETL
56117	-	1.67	0.87	0.53	-	1.02	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # Based on 5 observations

Table: Initial Variety trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	0.00	-	0.00	-	0.00	BETL
56102	-	0.00	-	0.00	-	0.00	BETL
56103	-	0.00	-	0.00	-	0.00	BETL
56104	-	0.00	-	0.00	-	0.00	BETL
56105	-	0.00	-	0.00	-	0.00	BETL
56106	-	0.00	-	0.00	-	0.00	BETL
56107	-	0.00	-	0.00	-	0.00	BETL
56108	-	0.00	-	0.00	-	0.00	BETL
56109	-	0.00	-	0.00	-	0.00	BETL
56110	-	0.00	-	0.00	-	0.00	BETL
56111	-	0.00	-	0.00	-	0.00	BETL
56112	-	0.00	-	0.00	-	0.00	BETL
56113	-	0.00	-	0.00	-	0.00	BETL
56114	-	0.00	-	0.00	-	0.00	BETL
56115	-	0.00	-	0.00	-	0.00	BETL
56116	-	0.00	-	0.00	-	0.00	BETL
56117	-	0.00	-	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Protected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	5.00	-	20.67	-	12.84	BETL
56102	-	16.67	-	20.67	-	18.67	AETL
56103	-	8.33	-	24.00	-	16.17	AETL
56104	-	8.33	-	22.00	-	15.17	AETL
56105	-	10.00	-	24.00	-	17.00	AETL
56106	-	10.00	-	22.67	-	16.34	AETL
56107	-	5.00	-	34.00	-	19.50	AETL
56108	-	10.00	-	34.00	-	22.00	AETL
56109	-	5.00	-	31.33	-	18.17	AETL
56110	-	10.00	-	23.33	-	16.67	AETL
56111	-	8.33	-	22.67	-	15.50	AETL
56112	-	6.67	-	24.00	-	15.34	AETL
56113	-	10.00	-	24.67	-	17.34	AETL
56114	-	15.00	-	26.00	-	20.50	AETL
56115	-	5.00	-	26.00	-	15.50	AETL
56116	-	8.33	-	26.00	-	17.17	AETL
56117	-	8.33	-	28.00	-	18.17	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	4.08	6.00	14.00	-	8.03	
56102	-	11.09	5.00	14.00	-	10.03	
56103	-	12.68	7.00	15.00	-	11.56	
56104	-	7.69	6.00	12.00	-	8.56	
56105	-	12.17	4.00	14.00	-	10.06	
56106	-	12.15	7.00	13.33	-	10.83	
56107	-	8.66	6.00	16.67	-	10.44	
56108	-	8.33	6.00	19.00	-	11.11	
56109	-	7.27	8.00	20.00	-	11.76	
56110	-	10.51	5.00	15.00	-	10.17	
56111	-	12.90	4.00	15.00	-	10.63	
56112	-	8.75	7.00	20.00	-	11.92	
56113	-	11.55	5.00	18.33	-	11.63	
56114	-	15.42	7.00	20.00	-	14.14	
56115	-	2.74	6.00	18.33	-	9.02	
56116	-	6.07	5.00	15.00	-	8.69	
56117	-	6.44	4.00	20.00	-	10.15	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	6.42	3.00	6.67	-	5.36	
56102	-	10.17	2.00	5.83	-	6.00	
56103	-	12.33	2.00	6.33	-	6.89	
56104	-	12.42	2.00	5.33	-	6.58	
56105	-	7.58	1.00	7.67	-	5.42	
56106	-	7.33	3.00	12.83	-	7.72	
56107	-	5.42	2.00	6.50	-	4.64	
56108	-	5.67	3.00	9.83	-	6.17	
56109	-	5.75	4.00	8.17	-	5.97	
56110	-	9.25	2.00	6.67	-	5.97	
56111	-	10.17	1.00	7.67	-	6.28	
56112	-	10.67	3.00	9.33	-	7.67	
56113	-	9.42	3.00	10.50	-	7.64	
56114	-	14.17	3.00	8.00	-	8.39	
56115	-	5.92	2.00	9.67	-	5.86	
56116	-	7.08	2.00	6.33	-	5.14	
56117	-	8.58	1.00	8.17	-	5.92	

NA- Nandyal, DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests						Remark
	NA	DH	PE	AD	MU	Mean	
56101	-	5.00	6.00	4.00	4.00	4.75	
56102	-	5.00	6.00	4.00	4.00	4.75	
56103	-	5.00	6.00	4.00	4.00	4.75	
56104	-	5.00	6.00	4.00	4.00	4.75	
56105	-	5.00	6.00	4.00	4.00	4.75	
56106	-	5.00	6.00	4.00	4.00	4.75	
56107	-	5.00	6.00	4.00	4.00	4.75	
56108	-	5.00	6.00	4.00	4.00	4.75	
56109	-	5.00	6.00	4.00	4.00	4.75	
56110	-	5.00	6.00	4.00	4.00	4.75	
56111	-	5.00	6.00	4.00	4.00	4.75	
56112	-	5.00	6.00	4.00	4.00	4.75	
56113	-	5.00	6.00	4.00	4.00	4.75	
56114	-	5.00	6.00	4.00	4.00	4.75	
56115	-	5.00	6.00	4.00	4.00	4.75	
56116	-	5.00	6.00	4.00	4.00	4.75	
56117	-	5.00	6.00	4.00	4.00	4.75	

NA- Nandyal, DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Reaction to Diseases

Table 16(a): Initial Evaluation Trial of Hirsutum Varieties – Rainfed (IET Variety RF) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions: UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
11	56101	LRA 5166 Bt	22.8	R	10.2	R	14.1	R	18.3	R
16	56102	Anjali Bt	21.8	R	9.9	R	12.5	R	18.4	R
8	56103	LHBt 2203	21.3	R	10.1	R	14.3	R	18.2	R
4	56104	LHBt 23108	23.5	R	10.8	R	13.9	R	18.2	R
17	56105	NH 22095 Bt	23.7	R	9.9	R	14.3	R	18.7	R
2	56106	WGCV Bt 129	23.5	R	10.3	R	13.0	R	18.4	R
7	56107	Sumangala Bt	21.9	R	10.3	R	13.6	R	17.9	R
1	56108	NH 22107 Bt	21.9	R	9.8	R	11.8	R	19.2	R
6	56109	CPDBt-2552	22.5	R	9.6	R	12.6	R	17.6	R
10	56110	CICR 23 Bt (ZC Bt-1)	21.8	R	10.7	R	12.5	R	18.6	R
15	56111	CCH 2623 Bt	20.8	R	9.5	R	13.1	R	17.9	R
3	56112	PKV 081 Bt (ZC Bt-2)	21.4	R	9.7	R	12.5	R	17.9	R
9	56113	NH 22076 Bt	22.4	R	10.3	R	12.3	R	18.8	R
5	56114	LHBt 23105	20.9	R	11.1	R	12.1	R	19.1	R
13	56115	CPDBt-2551	21.4	R	9.8	R	12.7	R	18.8	R
14	56116	LHBt 23110	22.8	R	8.8	R	16.8	R	18.1	R
12	56117	WGCV Bt 128	21.3	R	10.8	R	17.2	R	16.7	R

Evaluation under Unprotected Condition for Insect pests

Reaction to Insect Pests

Table: Initial Variety trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56101	8.33	1.33	0.49	3.13	3.32	BETL
56102	7.82	0.67	0.51	3.57	3.14	BETL
56103	7.27	1.33	0.31	5.81	3.68	BETL
56104	8.18	1.00	0.44	10.84	5.11	BETL
56105	8.78	1.00	0.22	3.96	3.49	BETL
56106	8.18	0.00	0.26	4.92	3.34	BETL
56107	8.87	0.33	0.69	4.47	3.59	BETL
56108	7.69	1.00	0.38	8.27	4.33	BETL
56109	8.56	1.00	0.60	2.68	3.21	BETL
56110	6.20	0.33	0.71	5.59	3.21	BETL
56111	7.51	1.00	0.31	3.80	3.15	BETL
56112	9.13	0.67	0.47	4.57	3.71	BETL
56113	6.71	0.67	0.51	9.01	4.22	BETL
56114	7.02	0.67	0.84	3.57	3.03	BETL
56115	8.36	0.33	0.64	2.46	2.95	BETL
56116	6.87	0.33	0.17	3.24	2.65	BETL
56117	7.56	1.50	0.69	3.13	3.22	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Unprotected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56101	1.84	13.00	0.24	1.35	4.11	BETL
56102	3.27	5.67	0.15	1.18	2.57	BETL
56103	2.77	7.00	0.66	0.85	2.82	BETL
56104	2.71	10.00	0.35	1.01	3.52	BETL
56105	3.07	10.67	0.31	3.88	4.48	BETL
56106	1.78	6.67	0.51	2.19	2.79	BETL
56107	2.09	7.67	0.48	2.70	3.23	BETL
56108	1.98	7.00	0.40	1.01	2.60	BETL
56109	2.71	3.67	0.29	1.35	2.00	BETL
56110	1.67	4.33	0.31	2.02	2.08	BETL
56111	3.20	10.33	0.28	1.18	3.75	BETL
56112	1.53	6.00	0.33	0.67	2.13	BETL
56113	1.84	4.33	0.46	0.34	1.74	BETL
56114	2.73	7.00	0.64	2.53	3.23	BETL
56115	3.02	5.67	0.60	1.35	2.66	BETL
56116	2.98	9.00	0.64	0.51	3.28	BETL
56117	2.93	8.33	0.46	2.19	3.48	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	DH	PE	AD	MU	Mean	
56101	I	-	-	-	I	
56102	II	-	-	-	II	
56103	II	-	-	-	II	
56104	II	-	-	-	II	
56105	II	-	-	-	II	
56106	I	-	-	-	I	
56107	I	-	-	-	I	
56108	I	-	-	-	I	
56109	I	-	-	-	I	
56110	II	-	-	-	II	
56111	II	-	-	-	II	
56112	I	-	-	-	I	
56113	I	-	-	-	I	
56114	II	-	-	-	II	
56115	II	-	-	-	II	
56116	II	-	-	-	II	
56117	II	-	-	-	II	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56101	22.60	1.67	1.44	2.16	6.97	BETL
56102	16.56	3.33	1.13	1.79	5.70	BETL
56103	15.38	4.00	1.11	2.71	5.80	BETL
56104	16.22	1.67	1.17	0.62	4.92	BETL
56105	15.47	3.67	1.11	1.51	5.44	BETL
56106	22.18	2.67	1.45	0.71	6.75	BETL
56107	16.84	3.00	1.66	0.71	5.55	BETL
56108	16.82	3.00	1.35	1.26	5.61	BETL
56109	17.13	3.33	1.38	0.62	5.62	BETL
56110	16.73	1.33	1.33	1.26	5.17	BETL
56111	21.76	3.33	1.53	1.36	6.99	BETL
56112	18.24	2.00	1.2	0.71	5.54	BETL
56113	16.89	2.00	1.26	3.08	5.81	BETL
56114	16.02	2.00	1.42	1.57	5.25	BETL
56115	15.42	3.00	1.17	4.10	5.92	BETL
56116	16.60	3.33	1.35	1.42	5.68	BETL
56117	20.24	3.33	1.04	0.93	6.39	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56101	0.84	1.00	0.15	1.53	0.88	BETL
56102	0.70	0.00	0.18	0.90	0.44	BETL
56103	0.80	0.33	0.31	1.00	0.61	BETL
56104	0.84	1.00	0.24	0.42	0.63	BETL
56105	0.84	1.00	0.22	0.42	0.62	BETL
56106	1.10	0.67	0.57	1.16	0.88	BETL
56107	1.24	0.67	0.33	1.27	0.88	BETL
56108	0.62	1.00	0.44	0.69	0.69	BETL
56109	0.97	1.00	0.35	1.53	0.96	BETL
56110	0.87	1.00	0.33	0.58	0.69	BETL
56111	1.20	1.00	0.33	1.64	1.04	BETL
56112	0.72	0.67	0.37	0.85	0.65	BETL
56113	1.06	0.33	0.33	1.22	0.73	BETL
56114	0.73	0.33	0.35	1.75	0.79	BETL
56115	1.09	0.67	0.38	2.06	1.05	BETL
56116	0.69	1.00	0.29	1.69	0.92	BETL
56117	0.38	0.00	0.15	0.95	0.37	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No. / plant)					Remark
	DH	PE	AD	MU	Mean	
56101	0.83	0.00	0.33	-	0.39	
56102	0.92	0.00	0.20	-	0.37	
56103	1.26	0.00	0.13	-	0.46	
56104	1.69	0.00	0.27	-	0.65	
56105	0.98	0.00	0.26	-	0.41	
56106	1.24	0.00	0.13	-	0.46	
56107	0.84	0.00	0.27	-	0.37	
56108	1.45	0.00	0.07	-	0.51	
56109	1.42	0.00	0.14	-	0.52	
56110	0.96	0.00	0.11	-	0.36	
56111	1.63	0.00	0.13	-	0.59	
56112	1.60	0.00	0.33	-	0.64	
56113	1.02	0.00	0.20	-	0.41	
56114	0.94	0.00	0.07	-	0.34	
56115	1.53	0.00	0.27	-	0.60	
56116	1.57	0.00	0.07	-	0.55	
56117	0.96	0.00	0.33	-	0.43	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Unprotected Conditions– *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56101	0.00	0.00	0.00	-	0.00	BETL
56102	0.00	0.00	0.00	-	0.00	BETL
56103	0.00	0.00	0.00	-	0.00	BETL
56104	0.00	0.00	0.00	-	0.00	BETL
56105	0.00	0.00	0.00	-	0.00	BETL
56106	0.00	0.00	0.00	-	0.00	BETL
56107	0.00	0.00	0.00	-	0.00	BETL
56108	0.00	0.00	0.00	-	0.00	BETL
56109	0.00	0.00	0.00	-	0.00	BETL
56110	0.00	0.00	0.00	-	0.00	BETL
56111	0.00	0.00	0.00	-	0.00	BETL
56112	0.00	0.00	0.00	-	0.00	BETL
56113	0.00	0.00	0.00	-	0.00	BETL
56114	0.00	0.00	0.00	-	0.00	BETL
56115	0.00	0.00	0.00	-	0.00	BETL
56116	0.00	0.00	0.00	-	0.00	BETL
56117	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56101	0.00	0.00	0.00	-	0.00	BETL
56102	0.00	0.00	0.00	-	0.00	BETL
56103	0.00	0.00	0.00	-	0.00	BETL
56104	0.00	0.00	0.00	-	0.00	BETL
56105	0.00	0.00	0.00	-	0.00	BETL
56106	0.00	0.00	0.00	-	0.00	BETL
56107	0.00	0.00	0.00	-	0.00	BETL
56108	0.00	0.00	0.00	-	0.00	BETL
56109	0.00	0.00	0.00	-	0.00	BETL
56110	0.00	0.00	0.00	-	0.00	BETL
56111	0.00	0.00	0.00	-	0.00	BETL
56112	0.00	0.00	0.00	-	0.00	BETL
56113	0.00	0.00	0.00	-	0.00	BETL
56114	0.00	0.00	0.00	-	0.00	BETL
56115	0.00	0.00	0.00	-	0.00	BETL
56116	0.00	0.00	0.00	-	0.00	BETL
56117	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56101	0.00	0.00	0.00	-	0.00	BETL
56102	0.00	0.00	0.00	-	0.00	BETL
56103	0.00	0.00	0.00	-	0.00	BETL
56104	0.00	0.00	0.00	-	0.00	BETL
56105	0.00	0.00	0.00	-	0.00	BETL
56106	0.00	0.00	0.00	-	0.00	BETL
56107	0.00	0.00	0.00	-	0.00	BETL
56108	0.00	0.00	0.00	-	0.00	BETL
56109	0.00	0.00	0.00	-	0.00	BETL
56110	0.00	0.00	0.00	-	0.00	BETL
56111	0.00	0.00	0.00	-	0.00	BETL
56112	0.00	0.00	0.00	-	0.00	BETL
56113	0.00	0.00	0.00	-	0.00	BETL
56114	0.00	0.00	0.00	-	0.00	BETL
56115	0.00	0.00	0.00	-	0.00	BETL
56116	0.00	0.00	0.00	-	0.00	BETL
56117	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink bollworm Larva (No./10 bolls destructive sampling)					Remark
	DH	PE	AD#	MU	Mean	
56101	1.17	1.39	1.60	-	1.39	AETL
56102	3.00	1.29	0.40	-	1.56	AETL
56103	2.00	1.69	2.20	-	1.96	AETL
56104	3.50	1.42	0.60	-	1.84	AETL
56105	1.83	1.89	0.80	-	1.51	AETL
56106	3.00	1.78	1.60	-	2.13	AETL
56107	1.33	0.99	1.20	-	1.17	AETL
56108	1.50	1.42	2.00	-	1.64	AETL
56109	1.00	1.27	0.40	-	0.89	BETL
56110	2.00	1.42	1.20	-	1.54	AETL
56111	1.67	2.09	1.00	-	1.59	AETL
56112	1.17	0.76	0.40	-	0.78	BETL
56113	2.00	1.92	0.40	-	1.44	AETL
56114	3.33	1.09	2.80	-	2.41	AETL
56115	1.00	2.45	0.00	-	1.15	AETL
56116	3.33	1.27	0.80	-	1.80	AETL
56117	2.50	1.32	0.20	-	1.34	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # Based on 5 observations



**Table: Initial Variety trial in South Zone under Unprotected Conditions – Green Boll
Damage due to ABW/SBW/TC**

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	DH	PE	AD	MU	Mean	
56101	0.00	-	0.00	-	0.00	BETL
56102	0.00	-	0.00	-	0.00	BETL
56103	0.00	-	0.00	-	0.00	BETL
56104	0.00	-	0.00	-	0.00	BETL
56105	0.00	-	0.00	-	0.00	BETL
56106	0.00	-	0.00	-	0.00	BETL
56107	0.00	-	0.00	-	0.00	BETL
56108	0.00	-	0.00	-	0.00	BETL
56109	0.00	-	0.00	-	0.00	BETL
56110	0.00	-	0.00	-	0.00	BETL
56111	0.00	-	0.00	-	0.00	BETL
56112	0.00	-	0.00	-	0.00	BETL
56113	0.00	-	0.00	-	0.00	BETL
56114	0.00	-	0.00	-	0.00	BETL
56115	0.00	-	0.00	-	0.00	BETL
56116	0.00	-	0.00	-	0.00	BETL
56117	0.00	-	0.00	-	0.00	BETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

**Table: Initial Variety trial in South Zone under Unprotected Conditions – Green Boll
Damage (Pink Bollworm)**

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	DH	PE	AD	MU	Mean	
56101	10.00	-	26.00	-	18.00	AETL
56102	26.67	-	14.00	-	20.34	AETL
56103	16.67	-	28.00	-	22.34	AETL
56104	8.33	-	14.00	-	11.17	AETL
56105	18.33	-	22.00	-	20.17	AETL
56106	23.33	-	18.00	-	20.67	AETL
56107	11.67	-	24.00	-	17.84	AETL
56108	20.00	-	22.00	-	21.00	AETL
56109	10.00	-	24.00	-	17.00	AETL
56110	11.67	-	20.00	-	15.84	AETL
56111	15.00	-	22.00	-	18.50	AETL
56112	8.33	-	10.00	-	9.17	BETL
56113	16.67	-	18.00	-	17.34	AETL
56114	30.00	-	34.00	-	32.00	AETL
56115	16.67	-	12.00	-	14.34	AETL
56116	18.33	-	18.00	-	18.17	AETL
56117	13.33	-	26.00	-	19.67	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56101	6.14	8.00	15.00	-	9.71	
56102	15.11	7.00	12.00	-	11.37	
56103	20.22	9.00	15.00	-	14.74	
56104	12.25	10.00	10.00	-	10.75	
56105	20.01	6.00	8.00	-	11.34	
56106	12.15	9.00	10.00	-	10.38	
56107	11.42	9.00	15.00	-	11.81	
56108	10.31	8.00	10.00	-	9.44	
56109	11.83	10.00	10.00	-	10.61	
56110	14.51	9.00	12.00	-	11.84	
56111	13.23	8.00	15.00	-	12.08	
56112	8.75	9.00	10.00	-	9.25	
56113	11.55	9.00	15.00	-	11.85	
56114	22.04	10.00	14.00	-	15.35	
56115	15.56	9.00	10.00	-	11.52	
56116	12.05	7.00	10.00	-	9.68	
56117	12.66	8.00	15.00	-	11.89	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Initial Variety trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56101	9.83	4.00	18.50	-	10.78	
56102	15.67	3.00	11.50	-	10.06	
56103	22.33	4.00	20.50	-	15.61	
56104	25.08	5.00	12.00	-	14.03	
56105	15.17	2.00	17.50	-	11.56	
56106	15.67	3.00	14.50	-	11.06	
56107	15.67	3.00	16.50	-	11.72	
56108	12.17	2.00	16.50	-	10.22	
56109	14.08	4.00	18.50	-	12.19	
56110	16.92	3.00	15.50	-	11.81	
56111	15.17	2.00	14.50	-	10.56	
56112	8.58	3.00	7.00	-	6.19	
56113	17.42	4.00	12.50	-	11.31	
56114	23.92	5.00	28.00	-	18.97	
56115	12.83	3.00	7.00	-	7.61	
56116	14.25	2.00	14.00	-	10.08	
56117	16.17	2.00	15.50	-	11.22	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Reaction to Diseases

Table 16(b): Initial Evaluation Trial of Hirsutum Varieties – Rainfed (IET Variety RF) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
11	56101	LRA 5166 Bt	25.7	MR	11.4	R	15.3	R	19.0	R
16	56102	Anjali Bt	25.8	MR	12.3	R	16.4	R	20.9	R
8	56103	LHBt 2203	25.3	MR	10.9	R	15.9	R	19.5	R
4	56104	LHBt 23108	24.7	R	12.1	R	15.8	R	20.2	R
17	56105	NH 22095 Bt	25.4	MR	13.1	R	16.3	R	17.7	R
2	56106	WGCV Bt 129	25.2	MR	10.0	R	13.9	R	21.3	R
7	56107	Sumangala Bt	26.3	MR	11.8	R	14.9	R	19.8	R
1	56108	NH 22107 Bt	26.8	MR	10.9	R	15.9	R	20.6	R
6	56109	CPDBt-2552	26.6	MR	10.4	R	13.8	R	20.4	R
10	56110	CICR 23 Bt (ZC Bt-1)	25.8	MR	11.7	R	15.6	R	20.6	R
15	56111	CCH 2623 Bt	26.0	MR	12.1	R	16.1	R	19.0	R
3	56112	PKV 081 Bt (ZC Bt-2)	25.4	MR	11.8	R	14.9	R	20.9	R
9	56113	NH 22076 Bt	25.2	MR	12.2	R	13.3	R	19.5	R
5	56114	LHBt 23105	24.9	MR	11.9	R	14.0	R	20.2	R
13	56115	CPDBt-2551	25.1	MR	9.1	R	11.3	R	17.7	R
14	56116	LHBt 23110	25.1	MR	12.8	R	11.9	R	17.0	R
12	56117	WGCV Bt 128	24.4	R	11.8	R	13.1	R	18.3	R

Advanced Evaluation Trial of Hirsutum Varieties (I)- Rainfed

Constitution of Trial

The trial was constituted with two Bt cotton varieties containing deregulated event along with three different check varieties as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	3	56121	Sahana (Non Bt ZC)	
2	5	56122	CICR 23 Bt (Bt ZC)	
3	4	56123	CPDBt 2451	Dharwad
4	2	56124	CPDBt 2452	Dharwad
5	1	56125	Local Check	

The trial was conducted in five locations viz., Mudhole, Adilabad, Nandyal*, Dharwad, and Perambalur.

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Two separate trials viz., one with recommended spacing for the variety and another with half the spacing between plants have been followed.

Number of rows: 4 rows of 6 meters per entry with three replications

Data recorded:

Biometric evaluation

Plant height (cm) at harvest in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	122.2	170.9	107.5	169.9	142.6
2	CICR 23 Bt (Bt ZC)	105.3	169.5	96.7	174.6	136.5
3	CPDBt 2451	113.0	160.7	104.7	147.9	131.6
4	CPDBt 2452	115.6	164.5	102.1	157.9	135.0
5	Local Check	119.3	172.6	110.9	157.2	140.0
	CD @ 5%	10.8	NS	10.4	16.9	
	CV %	6.1	7.3	6.5	7.4	



Number of monopodia in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	0.7	1.8	2.2	2.9	1.9
2	CICR 23 Bt (Bt ZC)	0.6	1.7	2.2	1.7	1.6
3	CPDBt 2451	0.4	0.7	1.1	2.4	1.2
4	CPDBt 2452	0.2	0.3	1.3	1.9	0.9
5	Local Check	0.3	1.3	2.3	2.9	1.7
	CD @ 5%	0.1	1.0	0.4	0.6	
	CV %	23.1	55.4	14.4	19.4	

Number of sympodia in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	13.2	17.0	15.5	25.2	17.7
2	CICR 23 Bt (Bt ZC)	10.8	17.1	15.8	24.9	17.2
3	CPDBt 2451	12.4	16.5	16.6	23.7	17.3
4	CPDBt 2452	13.6	15.6	14.9	24.3	17.1
5	Local Check	11.8	17.5	16.3	23.8	17.4
	CD @ 5%	1.8	2.3	1.8	3.3	
	CV %	9.8	9.0	7.5	9.5	

Boll weight (g) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	3.8	4.2	4.4	4.1	4.1
2	CICR 23 Bt (Bt ZC)	3.1	3.1	3.7	3.5	3.4
3	CPDBt 2451	3.4	3.4	4.3	3.9	3.8
4	CPDBt 2452	3.7	3.7	4.2	4.2	4.0
5	Local Check	4.0	4.0	4.3	3.7	4.0
	CD @ 5%	0.2	NS	0.1	0.5	
	CV %	4.7	13.6	2.1	8.7	

Number of bolls / plant in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	23.9	15.1	10.3	37.8	21.8
2	CICR 23 Bt (Bt ZC)	18.7	8.3	7.2	33.5	16.9
3	CPDBt 2451	22.9	18.2	15.0	34.4	22.6
4	CPDBt 2452	25.4	14.0	9.8	38.0	21.8
5	Local Check	20.7	15.0	10.5	39.7	21.5
	CD @ 5%	3.7	2.7	2.2	6.7	
	CV %	10.8	12.6	13.4	13.0	

Number of bolls / sq. m. in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	88.5	60.5	57.5	151.3	89.5
2	CICR 23 Bt (Bt ZC)	62.3	33.8	39.8	125.4	65.3
3	CPDBt 2451	83.0	70.3	83.2	137.1	93.4
4	CPDBt 2452	91.5	56.8	54.4	148.5	87.8
5	Local Check	67.0	49.0	58.4	153.8	82.1
	CD @ 5%	9.7	10.0	12.1	20.9	
	CV %	7.9	12.0	13.4	10.3	

Lint Index (g) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	4.9	4.7	6.2	5.7	5.4
2	CICR 23 Bt (Bt ZC)	4.4	3.2	4.3	4.3	4.1
3	CPDBt 2451	5.1	4.4	6.1	5.4	5.3
4	CPDBt 2452	4.3	4.2	5.7	5.8	5.0
5	Local Check	4.5	4.2	6.5	5.0	5.1
	CD @ 5%	0.2	0.7		0.5	
	CV %	2.9	10.6		7.2	

Seed Index (g) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	8.7	8.9	9.3	9.1	9.0
2	CICR 23 Bt (Bt ZC)	7.6	8.5	8.0	8.4	8.1
3	CPDBt 2451	7.5	7.1	8.1	8.8	7.9
4	CPDBt 2452	6.8	7.9	7.8	8.9	7.9
5	Local Check	9.6	7.9	9.8	8.5	9.0
	CD @ 5%	0.5	NS		0.8	
	CV %	4.4	11.2		6.4	

Ginning outturn (%) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	35.9	34.7	39.9	38.8	37.3
2	CICR 23 Bt (Bt ZC)	36.6	27.6	35.0	34.8	33.5
3	CPDBt 2451	40.1	38.2	43.0	38.4	39.9
4	CPDBt 2452	38.9	34.9	42.3	38.8	38.7
5	Local Check	31.9	34.8	40.0	37.4	36.0
	CD @ 5%	2.4	3.2		2.6	
	CV %	4.2	6.0		4.8	

Upper Half Mean Length (mm) under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	27.9	27.0	27.3	27.4	27.4
2	CICR 23 Bt (Bt ZC)	27.4	26.3	29.1	26.8	27.4
3	CPDBt 2451	25.0	24.8	27.8	25.2	25.7
4	CPDBt 2452	25.5	26.3	27.4	26.4	26.4
5	Local Check	27.7	27.4	28.1	26.3	27.4

Uniformity index under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	82.0	83.0	84.0	83.0	83.0
2	CICR 23 Bt (Bt ZC)	83.0	82.0	84.0	81.0	82.5
3	CPDBt 2451	82.0	81.0	84.0	81.0	82.0
4	CPDBt 2452	82.0	80.0	83.0	81.0	81.5
5	Local Check	83.0	82.0	84.0	82.0	82.8

Micronaire under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	4.3	3.9	4.4	4.3	4.2
2	CICR 23 Bt (Bt ZC)	3.7	3.7	4.1	4.3	4.0
3	CPDBt 2451	4.5	4.2	4.4	4.7	4.5
4	CPDBt 2452	4.4	4.3	4.4	5.4	4.6
5	Local Check	4.1	4.4	4.2	5.0	4.4

Tenacity under HVI Mode in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	28.9	29.2	27.6	28.4	28.5
2	CICR 23 Bt (Bt ZC)	30.0	27.8	30.9	27.7	29.1
3	CPDBt 2451	26.7	26.0	26.4	26.2	26.3
4	CPDBt 2452	27.3	27.9	28.8	28.0	28.0
5	Local Check	29.7	29.7	29.0	28.4	29.2

Seed Cotton Yield at 140 DAS (q/ha) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	16.09	18.70	13.99	9.88	14.67
2	CICR 23 Bt (Bt ZC)	10.30	5.66	3.13	9.43	7.13
3	CPDBt 2451	14.67	21.67	18.37	10.97	16.42
4	CPDBt 2452	15.77	15.07	16.46	9.02	14.08
5	Local Check	12.44	12.55	14.35	10.70	12.51
	CD @ 5%	2.10	2.30	3.10	2.10	
	CV %	10.00	10.16	15.17	14.87	



Seed Cotton Yield at 165 DAS (q/ha) in Advanced Evaluation Trial of Hirsutum Varieties (I)

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	Sahana (Non Bt ZC)	3.56	5.23	6.35	4.33	4.87
2	CICR 23 Bt (Bt ZC)	4.60	2.88	6.88	5.28	4.91
3	CPDBt 2451	3.11	4.38	3.65	5.56	4.18
4	CPDBt 2452	4.13	3.18	4.87	4.64	4.21
5	Local Check	2.80	4.93	5.84	5.13	4.68
	CD @ 5%	1.10	0.93	1.37	0.90	
	CV %	20.00	14.65	16.10	12.86	

Total Seed Cotton Yield (q/ha) in Advanced Evaluation Trial of Hirsutum Varieties (I) under

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean	Rank	% Inc over best check
1	Sahana (Non Bt ZC)	19.65	23.92	20.35	14.21	19.53	2	0.0
2	CICR 23 Bt (Bt ZC)	14.90	8.54	10.01	14.71	12.04	5	-38.4
3	CPDBt 2451	17.78	26.04	22.02	16.53	20.59	1	5.4
4	CPDBt 2452	19.90	18.25	21.33	13.66	18.29	3	-6.4
5	Local Check	15.23	17.48	20.19	15.83	17.18	4	-12.0
	CD @ 5%	2.40	2.67	3.45	2.35			
	CV %	9.40	9.20	11.90	11.12			

Evaluation under Protected Condition for Insect pests

Reaction to Insect Pests

Table: Advanced Variety trial in South Zone under Protected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	1.03	-	0.71	1.43	1.06	BETL
56122	-	1.42	-	0.78	5.65	2.62	BETL
56123	-	1.29	-	0.87	5.17	2.44	BETL
56124	-	0.50	-	0.73	2.11	1.11	BETL
56125	-	1.07	-	0.67	6.46	2.74	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	1.44	5.67	0.14	2.14	2.48	BETL
56122	-	2.13	4.33	0.26	1.42	2.30	BETL
56123	-	2.19	5.33	0.34	2.65	2.83	BETL
56124	-	2.46	5.33	0.29	2.85	2.72	BETL
56125	-	2.97	3.67	0.25	1.33	2.24	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-		-	-	-		
56122	-		-	-	-		
56123	-		-	-	-		
56124	-		-	-	-		
56125	-		-	-	-		

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	0.96	0.00	0.97	1.13	0.76	BETL
56122	-	1.25	1.67	1.13	1.38	1.36	BETL
56123	-	1.41	0.67	1.20	1.86	1.28	BETL
56124	-	1.23	0.00	0.93	0.94	0.78	BETL
56125	-	2.16	0.00	1.27	1.50	1.23	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced Variety trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	0.69	0.67	0.30	0.89	0.64	BETL
56122	-	0.40	0.67	0.23	1.05	0.59	BETL
56123	-	0.29	0.67	0.40	0.63	0.50	BETL
56124	-	0.51	0.00	0.27	0.37	0.29	BETL
56125	-	0.05	0.33	0.37	1.30	0.51	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./ plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	0.69	0.00	-	-	0.35	
56122	-	0.31	0.00	-	-	0.16	
56123	-	0.52	0.00	-	-	0.26	
56124	-	0.45	0.00	-	-	0.22	
56125	-	0.55	0.00	-	-	0.27	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	0.00	0.00	0.00	-	0.00	BETL
56122	-	0.00	0.00	0.00	-	0.00	BETL
56123	-	0.00	0.00	0.00	-	0.00	BETL
56124	-	0.00	0.00	0.00	-	0.00	BETL
56125	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – Spotted/ Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	0.00	0.00	0.00	-	0.00	BETL
56122	-	0.00	0.00	0.00	-	0.00	BETL
56123	-	0.00	0.00	0.00	-	0.00	BETL
56124	-	0.00	0.00	0.00	-	0.00	BETL
56125	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Advanced Variety trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No./5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	0.00	0.00	0.00	-	0.00	BETL
56122	-	0.00	0.00	0.00	-	0.00	BETL
56123	-	0.00	0.00	0.00	-	0.00	BETL
56124	-	0.00	0.00	0.00	-	0.00	BETL
56125	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)						Remark
	NA	DH	PE	AD#	MU	Mean	
56121	-	1.42	1.80	0.80	-	1.34	AETL
56122	-	1.17	1.73	0.67	-	1.19	AETL
56123	-	1.33	1.66	0.00	-	1.00	AETL
56124	-	1.17	1.33	0.40	-	0.97	BETL
56125	-	0.75	1.50	0.40	-	0.88	BETL

NA- Nandyal, DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole, # Based on 5 Observations

Table: Advanced Variety trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	0.00	-	0.00	-	0.00	BETL
56122	-	0.00	-	0.00	-	0.00	BETL
56123	-	0.00	-	0.00	-	0.00	BETL
56124	-	0.00	-	0.00	-	0.00	BETL
56125	-	0.00	-	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll Damage (%) /10 bolls destructive sampling						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	7.50	-	20.00	-	13.75	AETL
56122	-	8.33	-	26.00	-	17.17	AETL
56123	-	8.33	-	25.33	-	16.83	AETL
56124	-	9.17	-	24.67	-	16.92	AETL
56125	-	5.00	-	21.33	-	13.17	AETL

NA- Nandyal, DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Advanced Variety trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	4.92	13.00	15.00	-	10.97	
56122	-	8.97	11.00	20.00	-	13.32	
56123	-	10.20	7.00	16.33	-	11.18	
56124	-	11.05	6.00	16.67	-	11.24	
56125	-	7.00	10.00	11.67	-	9.56	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	7.42	2.00	5.17	-	4.86	
56122	-	12.25	3.00	8.67	-	7.97	
56123	-	10.08	3.00	9.17	-	7.42	
56124	-	8.79	2.00	7.67	-	6.15	
56125	-	6.58	4.00	4.83	-	5.14	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests						Remark
	NA	DH	PE	AD	MU	Mean	
56121	-	5.00	6.00	4.00	4.00	4.75	
56122	-	5.00	6.00	4.00	4.00	4.75	
56123	-	5.00	6.00	4.00	4.00	4.75	
56124	-	5.00	6.00	4.00	4.00	4.75	
56125	-	5.00	6.00	4.00	4.00	4.75	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 17 (a): Advanced Evaluation Trial of Hirsutum Varieties – I – Rainfed (AET-I Variety RF) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	56121	Sahana (Non Bt Zonal Check)	20.1	R	9.7	R	14.3	R	19.3	R
5	56122	CICR 23 Bt (Bt Zonal Check)	19.1	R	9.5	R	14.1	R	19.2	R
4	56123	CPDBt 2451	18.4	R	9.8	R	13.0	R	18.0	R
2	56124	CPDBt 2452	18.5	R	9.5	R	13.7	R	18.2	R
1	56125	Local Check	19.1	R	9.9	R	12.9	R	17.9	R

Evaluation under Unprotected Condition for Insect pests Reaction to Insect Pests

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Aphid

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56121	8.33	1.33	0.73	2.34	3.18	BETL
56122	8.88	1.67	0.73	5.39	4.17	BETL
56123	11.04	1.00	0.69	8.49	5.31	BETL
56124	8.82	1.67	0.40	3.46	3.59	BETL
56125	10.40	1.00	0.74	10.61	5.69	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

**Table: Advanced Variety trial in South Zone under Unprotected Conditions –
Leafhopper**

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56121	2.62	4.67	0.42	3.54	2.81	BETL
56122	2.53	3.33	0.44	2.36	2.17	BETL
56123	3.79	5.67	0.53	4.39	3.59	BETL
56124	2.72	5.67	0.54	4.73	3.41	BETL
56125	3.88	3.67	0.20	2.20	2.49	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	DH	PE	AD	MU	Mean	
56121	I	-	-	-	I	
56122	I	-	-	-	I	
56123	II	-	-	-	I	
56124	I	-	-	-	I	
56125	II	-	-	-	I	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56121	14.44	2.67	1.53	1.36	5.00	BETL
56122	13.23	2.00	2.24	1.67	4.78	BETL
56123	15.43	1.67	2.04	2.25	5.35	BETL
56124	20.03	1.67	1.80	3.02	6.63	BETL
56125	20.49	1.33	2.20	1.82	6.46	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: -Advanced Variety trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56121	1.08	0.67	0.38	1.27	0.85	BETL
56122	0.85	0.33	0.18	1.48	0.71	BETL
56123	1.43	1.00	0.33	0.90	0.92	BETL
56124	0.83	1.00	0.22	0.53	0.65	BETL
56125	1.47	1.33	0.67	1.85	1.33	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No. / plant)					Remark
	DH	PE	AD	MU	Mean	
56121	0.82	0.00	0.38	-	0.40	
56122	0.55	0.00	0.31	-	0.29	
56123	0.83	0.00	0.33	-	0.39	
56124	0.75	0.00	0.22	-	0.32	
56125	0.90	0.00	0.82	-	0.57	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56121	0.00	0.00	0.00	-	0.00	BETL
56122	0.00	0.00	0.00	-	0.00	BETL
56123	0.00	0.00	0.00	-	0.00	BETL
56124	0.00	0.00	0.00	-	0.00	BETL
56125	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Spotted/ Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56121	0.00	0.00	0.00	-	0.00	BETL
56122	0.00	0.00	0.00	-	0.00	BETL
56123	0.00	0.00	0.00	-	0.00	BETL
56124	0.00	0.00	0.00	-	0.00	BETL
56125	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Advanced Variety trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56121	0.00	0.00	0.00	-	0.00	BETL
56122	0.00	0.00	0.00	-	0.00	BETL
56123	0.00	0.00	0.00	-	0.00	BETL
56124	0.00	0.00	0.00	-	0.00	BETL
56125	0.00	0.00	0.00	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	DH	PE	AD#	MU	Mean	
56121	2.50	1.81	0.40	-	1.57	AETL
56122	2.17	1.48	0.20	-	1.28	AETL
56123	2.33	1.65	2.20	-	2.06	AETL
56124	2.00	1.95	1.20	-	1.72	AETL
56125	2.33	1.88	0.40	-	1.54	AETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole, # Based on 5 Observations

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	DH	PE	AD	MU	Mean	
56121	0.00	-	0.00	-	0.00	BETL
56122	0.00	-	0.00	-	0.00	BETL
56123	0.00	-	0.00	-	0.00	BETL
56124	0.00	-	0.00	-	0.00	BETL
56125	0.00	-	0.00	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	DH	PE	AD	MU	Mean	
56121	13.33	-	22.00	-	17.67	AETL
56122	20.83	-	20.00	-	20.42	AETL
56123	17.50	-	20.00	-	18.75	AETL
56124	20.83	-	18.00	-	19.42	AETL
56125	18.33	-	12.00	-	15.17	AETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Advanced Variety trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56121	12.65	7.00	15.00	-	11.55	
56122	14.64	9.00	15.00	-	12.88	
56123	16.29	10.00	10.00	-	12.10	
56124	13.43	8.00	12.00	-	11.14	
56125	10.25	14.00	9.00	-	11.08	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Advanced Variety trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56121	12.25	3.00	16.50	-	10.58	
56122	23.79	2.00	15.50	-	13.76	
56123	18.62	4.00	14.50	-	12.37	
56124	16.50	3.00	14.00	-	11.17	
56125	11.75	5.00	8.50	-	8.42	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 17(b): Advanced Evaluation Trial of Hirsutum Varieties – I – Rainfed (AET-I Variety RF) under Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions							
			UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
3	56121	Sahana (Non Bt Zonal Check)	24.3	R	10.9	R	16.9	R	16.2	R
5	56122	CICR 23 Bt (Bt Zonal Check)	24.0	R	8.8	R	15.9	R	15.8	R
4	56123	CPDBt 2451	23.3	R	9.5	R	15.9	R	17.4	R
2	56124	CPDBt 2452	22.8	R	8.1	R	15.5	R	16.2	R
1	56125	Local Check	22.4	R	9.3	R	14.8	R	15.7	R

Initial Evaluation Trial of Compact Hirsutum Varieties - Rainfed

Constitution of Trial

The trial was constituted with 16 Bt cotton varieties containing deregulated event along with three different check varieties as furnished below.

S. No.	Code-I	Code -II	Entries	Sponsored by
1	7	56131	CPDBt(HD)-2555	UAS Dharwad
2	14	56132	CPDBt(HD)-2554	UAS Dharwad
3	17	56133	CCH 25-1 Bt II	CICR, Coimbatore
4	1	56134	Suraksha Bt	CICR, Coimbatore
5	5	56135	CCH 25-3 Bt II	CICR, Coimbatore
6	10	56136	Subiksha Bt	CICR, Coimbatore
7	13	56137	Nano Bt	CICR, Coimbatore
8	18	56138	CICR Bt 25-24 Bt II	ICAR-CICR, Nagpur
9	12	56139	CICR Bt 142	ICAR-CICR, Nagpur
10	9	56140	NH 22012 Bt	CRS, Nanded
11	6	56141	NH 22003 Bt	CRS, Nanded
12	4	56142	CICR 25-22 Bt II	ICAR-CICR, Nagpur
13	2	56143	ADB-791Bt	ARS, Adilabad, PJTAU
14	8	56144	CICR 23 Bt (ZC Bt-1)	
15	11	56145	CCH 25-4 Bt II	CICR, Coimbatore
16	15	56146	CICR 25-21 Bt II	ICAR CICR, Nagpur
17	3	56147	PKV 081 Bt (ZC Bt-2)	
18	16	56148	CCH 25-2 Bt II	CICR, Coimbatore

The trial was conducted in five locations viz., Mudhole, Adilabad, Nandyal*, Dharwad, and Perambalur.

*As per the recommendation of Monitoring Committee, the trial was vitiated and the data was not included in the report

Spacing: Closer spacing of 90 cm x 15 cm has been followed.

Number of rows: 4 rows of 6 meters per entry with three replications



Data recorded:**Biometric evaluation****Plant height (cm) at harvest in Initial Evaluation Trial of Hirsutum Variety**

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	103.5	117.7	95.2	67.5	96.0
2	CPDBt(HD)-2554	112.4	138.1	110.0	91.3	113.0
3	CCH 25-1 Bt II	100.2	123.7	95.0	90.8	102.4
4	Suraksha Bt	109.7	132.7	101.0	84.0	106.9
5	CCH 25-3 Bt II	114.8	133.2	97.2	91.9	109.3
6	Subiksha Bt	124.7	129.8	98.6	110.0	115.8
7	Nano Bt	112.7	120.7	106.4	97.1	109.2
8	CICR Bt 25-24 Bt II	115.5	113.1	86.0	88.0	100.7
9	CICR Bt 142	108.4	113.9	89.2	79.6	97.8
10	NH 22012 Bt	116.8	104.9	99.4	98.3	104.9
11	NH 22003 Bt	116.5	101.1	110.2	86.0	103.5
12	CICR 25-22 Bt II	109.5	94.5	95.7	83.8	95.9
13	ADB-791Bt	105.3	101.5	85.1	81.8	93.4
14	CICR 23 Bt (ZC Bt-1)	107.3	124.2	96.4	86.4	103.6
15	CCH 25-4 Bt II	113.7	119.0	86.2	76.3	98.8
16	CICR 25-21 Bt II	116.2	115.7	92.2	84.9	102.3
17	PKV 081 Bt (ZC Bt-2)	132.0	126.6	93.2	88.4	110.1
18	CCH 25-2 Bt II	106.1	133.1	96.3	93.3	107.2
	CD @ 5%	13.8	25.4	15.3	17.4	
	CV %	7.4	12.9	9.6	12.4	

Number of monopodia in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	0.5	1.5	1.2	1.0	1.1
2	CPDBt(HD)-2554	0.2	0.8	0.9	1.2	0.8
3	CCH 25-1 Bt II	0.3	0.3	0.9	0.3	0.5
4	Suraksha Bt	0.7	1.5	2.2	1.0	1.4
5	CCH 25-3 Bt II	0.3	1.5	2.3	0.4	1.1
6	Subiksha Bt	0.6	1.3	1.4	0.8	1.0
7	Nano Bt	0.4	0.9	2.7	1.2	1.3
8	CICR Bt 25-24 Bt II	0.2	0.3	1.1	0.8	0.6
9	CICR Bt 142	0.3	1.0	1.2	0.7	0.8
10	NH 22012 Bt	0.2	1.0	1.3	1.6	1.0
11	NH 22003 Bt	0.3	0.1	0.7	0.7	0.5
12	CICR 25-22 Bt II	0.3	1.3	0.9	1.2	0.9
13	ADB-791Bt	0.5	0.9	1.2	0.7	0.8
14	CICR 23 Bt (ZC Bt-1)	0.5	1.1	2.0	0.4	1.0
15	CCH 25-4 Bt II	0.3	1.3	1.9	0.6	1.0
16	CICR 25-21 Bt II	0.5	0.9	1.1	0.8	0.8
17	PKV 081 Bt (ZC Bt-2)	0.7	1.1	0.4	1.2	0.9
18	CCH 25-2 Bt II	0.1	1.2	2.2	1.3	1.2
	CD @ 5%	0.2	0.8	0.5	0.8	
	CV %	33.6	47.9	18.4	56.9	

Number of sympodia in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	8.1	16.0	14.1	12.9	12.8
2	CPDBt(HD)-2554	9.5	19.0	15.6	14.2	14.6
3	CCH 25-1 Bt II	6.2	12.6	13.6	13.3	11.4
4	Suraksha Bt	5.6	15.5	13.7	14.0	12.2
5	CCH 25-3 Bt II	8.6	13.8	12.7	14.0	12.3
6	Subiksha Bt	7.2	15.7	12.7	13.8	12.4
7	Nano Bt	7.8	12.7	12.9	14.9	12.1
8	CICR Bt 25-24 Bt II	7.3	16.7	13.9	14.2	13.0
9	CICR Bt 142	7.9	14.6	12.1	12.1	11.7
10	NH 22012 Bt	10.5	14.7	15.8	15.4	14.1
11	NH 22003 Bt	8.1	12.6	16.6	15.8	13.3
12	CICR 25-22 Bt II	7.2	13.5	15.6	12.8	12.3
13	ADB-791Bt	7.8	14.1	14.0	14.0	12.5
14	CICR 23 Bt (ZC Bt-1)	6.6	18.6	14.9	14.5	13.7
15	CCH 25-4 Bt II	7.3	14.6	11.9	12.0	11.5
16	CICR 25-21 Bt II	7.3	15.1	14.8	14.0	12.8
17	PKV 081 Bt (ZC Bt-2)	7.9	15.9	13.1	12.4	12.3
18	CCH 25-2 Bt II	6.8	15.5	14.4	14.0	12.7
	CD @ 5%	1.4	3.4	3.1	2.2	
	CV %	11.6	13.7	13.4	9.9	

Boll weight (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	3.1	3.4	4.5	3.3	3.6
2	CPDBt(HD)-2554	3.7	4.3	4.6	4.3	4.2
3	CCH 25-1 Bt II	4.4	5.8	5.8	4.8	5.2
4	Suraksha Bt	2.9	4.4	4.5	4.6	4.1
5	CCH 25-3 Bt II	3.8	4.5	5.3	4.2	4.5
6	Subiksha Bt	3.7	4.4	4.9	3.9	4.2
7	Nano Bt	3.8	3.9	4.9	3.7	4.1
8	CICR Bt 25-24 Bt II	4.4	4.6	4.6	3.7	4.3
9	CICR Bt 142	4.2	4.6	4.8	4.7	4.6
10	NH 22012 Bt	4.3	4.5	4.5	4.3	4.4
11	NH 22003 Bt	3.8	4.8	5.0	4.5	4.5
12	CICR 25-22 Bt II	4.3	4.7	4.6	4.6	4.6
13	ADB-791Bt	4.1	4.2	4.5	4.4	4.3
14	CICR 23 Bt (ZC Bt-1)	3.0	3.7	3.7	3.6	3.5
15	CCH 25-4 Bt II	4.0	5.3	5.3	5.1	4.9
16	CICR 25-21 Bt II	3.4	4.8	4.6	4.7	4.4
17	PKV 081 Bt (ZC Bt-2)	3.4	3.4	4.3	3.6	3.7
18	CCH 25-2 Bt II	4.5	4.9	5.3	5.3	5.0
	CD @ 5%	0.3	0.4	0.4	1.0	
	CV %	6.3	6.0	5.6	14.5	

Number of bolls / plant in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	12.1	15.9	8.6	11.3	12.0
2	CPDBt(HD)-2554	12.9	17.8	7.0	13.5	12.8
3	CCH 25-1 Bt II	8.1	7.7	4.6	8.7	7.3
4	Suraksha Bt	9.3	11.2	6.2	10.2	9.2
5	CCH 25-3 Bt II	10.2	13.9	5.6	10.7	10.1
6	Subiksha Bt	9.9	9.9	6.5	10.1	9.1
7	Nano Bt	11.0	10.2	6.3	9.7	9.3
8	CICR Bt 25-24 Bt II	11.0	8.6	7.0	11.6	9.6
9	CICR Bt 142	12.2	10.3	6.7	9.9	9.8
10	NH 22012 Bt	14.5	14.5	6.9	13.3	12.3
11	NH 22003 Bt	14.0	11.4	6.6	15.9	12.0
12	CICR 25-22 Bt II	11.0	11.6	6.7	8.9	9.6
13	ADB-791Bt	12.1	12.0	5.7	9.4	9.8
14	CICR 23 Bt (ZC Bt-1)	11.5	11.9	5.6	11.1	10.0
15	CCH 25-4 Bt II	7.9	8.8	4.6	8.3	7.4
16	CICR 25-21 Bt II	11.5	9.7	5.8	9.2	9.1
17	PKV 081 Bt (ZC Bt-2)	12.8	13.9	5.5	9.8	10.5
18	CCH 25-2 Bt II	8.5	9.9	5.5	10.2	8.5
	CD @ 5%	2.5	2.7	1.6	3.4	
	CV %	13.6	14.2	15.1	19.9	

Number of bolls / sq. m. in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	67.0	86.7	63.5	72.7	72.5
2	CPDBt(HD)-2554	71.0	107.0	52.1	81.0	77.8
3	CCH 25-1 Bt II	69.7	54.7	34.2	71.7	57.6
4	Suraksha Bt	55.0	78.0	45.9	80.7	64.9
5	CCH 25-3 Bt II	62.3	95.0	41.6	85.0	71.0
6	Subiksha Bt	60.3	60.0	48.4	71.0	59.9
7	Nano Bt	66.0	75.0	46.9	73.0	65.2
8	CICR Bt 25-24 Bt II	60.0	70.7	51.5	78.0	65.1
9	CICR Bt 142	65.3	61.3	49.6	75.7	63.0
10	NH 22012 Bt	80.3	77.3	51.2	91.3	75.0
11	NH 22003 Bt	66.3	101.0	49.0	108.7	81.3
12	CICR 25-22 Bt II	67.7	78.0	49.6	71.3	66.7
13	ADB-791Bt	60.0	92.0	41.9	62.0	64.0
14	CICR 23 Bt (ZC Bt-1)	57.7	74.0	41.3	91.7	66.2
15	CCH 25-4 Bt II	65.0	63.3	33.9	74.0	59.1
16	CICR 25-21 Bt II	67.7	66.7	42.6	77.0	63.5
17	PKV 081 Bt (ZC Bt-2)	68.0	98.7	41.0	106.0	78.4
18	CCH 25-2 Bt II	59.0	65.0	40.7	65.3	57.5
	CD @ 5%	9.7	18.2	11.2	16.9	
	CV %	9.0	14.1	14.7	13.2	

Lint Index (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	4.4	4.2	5.1	5.2	4.7
2	CPDBt(HD)-2554	4.5	4.2	4.4	5.7	4.7
3	CCH 25-1 Bt II	5.7	5.6	5.3	7.0	5.9
4	Suraksha Bt	5.0	4.8	5.2	6.5	5.4
5	CCH 25-3 Bt II	4.8	3.9	5.2	6.0	5.0
6	Subiksha Bt	5.4	4.8	5.1	6.4	5.4
7	Nano Bt	6.2	4.6	5.8	7.2	6.0
8	CICR Bt 25-24 Bt II	5.7	4.5	5.1	5.7	5.3
9	CICR Bt 142	5.8	4.3	4.6	6.3	5.3
10	NH 22012 Bt	5.6	4.9	5.1	5.7	5.3
11	NH 22003 Bt	4.9	5.2	5.9	5.3	5.3
12	CICR 25-22 Bt II	5.5	4.7	5.1	6.4	5.4
13	ADB-791Bt	5.4	4.5	4.5	5.7	5.0
14	CICR 23 Bt (ZC Bt-1)	4.6	3.6	4.4	5.1	4.4
15	CCH 25-4 Bt II	5.6	4.6	4.7	6.8	5.4
16	CICR 25-21 Bt II	5.4	4.5	5.1	5.7	5.2
17	PKV 081 Bt (ZC Bt-2)	3.6	3.5	5.4	6.0	4.6
18	CCH 25-2 Bt II	5.4	5.8	5.6	8.0	6.2
	CD @ 5%	0.5	0.6		0.9	
	CV %	6.6	8.2		9.6	

Seed Index (g) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	6.6	6.7	6.7	9.0	7.3
2	CPDBt(HD)-2554	7.7	8.8	8.1	10.0	8.7
3	CCH 25-1 Bt II	9.6	12.5	12.6	12.7	11.9
4	Suraksha Bt	9.0	10.3	10.0	12.3	10.4
5	CCH 25-3 Bt II	8.5	9.6	10.5	11.6	10.1
6	Subiksha Bt	9.4	10.3	11.1	11.7	10.6
7	Nano Bt	9.0	9.9	11.3	12.3	10.6
8	CICR Bt 25-24 Bt II	8.8	9.8	10.0	11.1	9.9
9	CICR Bt 142	9.0	10.3	9.8	11.5	10.2
10	NH 22012 Bt	8.5	10.9	10.2	11.3	10.2
11	NH 22003 Bt	9.3	10.7	10.7	10.2	10.2
12	CICR 25-22 Bt II	9.4	10.4	10.8	12.1	10.7
13	ADB-791Bt	9.1	10.4	10.6	11.0	10.3
14	CICR 23 Bt (ZC Bt-1)	7.2	8.9	8.4	10.2	8.7
15	CCH 25-4 Bt II	10.1	11.9	11.8	12.8	11.7
16	CICR 25-21 Bt II	8.9	9.9	10.6	12.0	10.4
17	PKV 081 Bt (ZC Bt-2)	8.4	8.4	10.0	11.4	9.6
18	CCH 25-2 Bt II	10.5	12.5	11.6	13.3	12.0
	CD @ 5%	0.6	1.3		1.3	
	CV %	4.1	8.0		7.0	

Ginning outturn (%) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	40.2	38.7	43.3	36.8	39.8
2	CPDBt(HD)-2554	36.9	30.0	35.3	36.6	34.7
3	CCH 25-1 Bt II	37.1	31.0	29.6	35.4	33.3
4	Suraksha Bt	35.5	31.9	34.3	34.3	34.0
5	CCH 25-3 Bt II	36.0	28.7	33.1	34.1	33.0
6	Subiksha Bt	36.5	31.8	31.6	35.5	33.9
7	Nano Bt	40.7	31.6	33.9	37.0	35.8
8	CICR Bt 25-24 Bt II	39.1	31.4	33.9	33.8	34.6
9	CICR Bt 142	39.3	29.7	32.0	35.5	34.1
10	NH 22012 Bt	39.8	31.4	33.3	33.7	34.6
11	NH 22003 Bt	34.4	32.5	35.7	34.1	34.2
12	CICR 25-22 Bt II	37.0	31.2	32.0	34.3	33.6
13	ADB-791Bt	37.3	30.3	29.9	33.9	32.9
14	CICR 23 Bt (ZC Bt-1)	38.9	28.6	34.2	33.2	33.7
15	CCH 25-4 Bt II	35.7	28.0	28.3	34.4	31.6
16	CICR 25-21 Bt II	37.8	31.1	32.7	32.2	33.5
17	PKV 081 Bt (ZC Bt-2)	29.9	29.3	35.0	34.5	32.2
18	CCH 25-2 Bt II	34.0	31.5	32.7	37.6	34.0
	CD @ 5%	2.6	2.3		3.8	
	CV %	4.2	4.5		6.9	

Upper Half Mean Length (mm) under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	25.2	25.3	27.3	25.3	25.8
2	CPDBt(HD)-2554	25.5	26.2	27.2	25.4	26.1
3	CCH 25-1 Bt II	30.7	31.5	34.2	33.6	32.5
4	Suraksha Bt	29.1	29.9	33.3	32.4	31.2
5	CCH 25-3 Bt II	30.5	32.0	32.9	32.1	31.9
6	Subiksha Bt	30.1	29.3	32.0	31.9	30.8
7	Nano Bt	28.5	28.4	30.6	30.2	29.4
8	CICR Bt 25-24 Bt II	27.9	27.8	32.3	29.9	29.5
9	CICR Bt 142	26.8	27.4	29.2	28.4	28.0
10	NH 22012 Bt	26.5	26.1	28.6	29.1	27.6
11	NH 22003 Bt	26.6	26.6	29.0	27.9	27.5
12	CICR 25-22 Bt II	26.2	24.7	27.8	26.0	26.2
13	ADB-791Bt	28.1	28.3	28.3	29.3	28.5
14	CICR 23 Bt (ZC Bt-1)	26.6	26.2	29.0	27.3	27.3
15	CCH 25-4 Bt II	33.7	31.7	33.0	35.2	33.4
16	CICR 25-21 Bt II	27.9	27.7	31.4	30.7	29.4
17	PKV 081 Bt (ZC Bt-2)	26.0	26.1	28.0	26.9	26.8
18	CCH 25-2 Bt II	30.2	30.4	31.0	32.4	31.0

Uniformity index under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	80.0	81.0	84.0	83.0	82.0
2	CPDBt(HD)-2554	82.0	81.0	85.0	83.0	82.8
3	CCH 25-1 Bt II	84.0	84.0	87.0	87.0	85.5
4	Suraksha Bt	84.0	83.0	88.0	87.0	85.5
5	CCH 25-3 Bt II	83.0	83.0	85.0	85.0	84.0
6	Subiksha Bt	85.0	85.0	87.0	88.0	86.3
7	Nano Bt	83.0	85.0	87.0	86.0	85.3
8	CICR Bt 25-24 Bt II	82.0	81.0	86.0	82.0	82.8
9	CICR Bt 142	81.0	81.0	85.0	83.0	82.5
10	NH 22012 Bt	82.0	81.0	85.0	84.0	83.0
11	NH 22003 Bt	82.0	81.0	86.0	84.0	83.3
12	CICR 25-22 Bt II	82.0	82.0	85.0	85.0	83.5
13	ADB-791Bt	83.0	83.0	86.0	85.0	84.3
14	CICR 23 Bt (ZC Bt-1)	79.0	80.0	84.0	83.0	81.5
15	CCH 25-4 Bt II	82.0	82.0	84.0	84.0	83.0
16	CICR 25-21 Bt II	83.0	82.0	84.0	84.0	83.3
17	PKV 081 Bt (ZC Bt-2)	82.0	83.0	86.0	85.0	84.0
18	CCH 25-2 Bt II	84.0	84.0	86.0	84.0	84.5



Micronaire under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	4.3	4.4	4.5	5.5	4.7
2	CPDBt(HD)-2554	4.1	3.8	4.3	5.1	4.3
3	CCH 25-1 Bt II	3.6	4.0	4.0	4.0	3.9
4	Suraksha Bt	4.0	3.9	4.3	4.8	4.3
5	CCH 25-3 Bt II	3.7	0.3	3.9	3.6	2.9
6	Subiksha Bt	3.8	4.1	3.9	4.3	4.0
7	Nano Bt	3.2	3.3	3.7	3.8	3.5
8	CICR Bt 25-24 Bt II	3.7	3.7	3.1	3.8	3.6
9	CICR Bt 142	3.8	3.5	3.2	3.6	3.5
10	NH 22012 Bt	4.5	3.9	4.8	4.4	4.4
11	NH 22003 Bt	4.6	4.7	5.1	5.5	5.0
12	CICR 25-22 Bt II	4.2	4.7	4.2	5.4	4.6
13	ADB-791Bt	3.9	4.2	4.5	4.6	4.3
14	CICR 23 Bt (ZC Bt-1)	3.7	4.1	4.2	4.6	4.2
15	CCH 25-4 Bt II	3.9	3.8	4.1	3.8	3.9
16	CICR 25-21 Bt II	3.7	3.5	2.7	3.8	3.4
17	PKV 081 Bt (ZC Bt-2)	3.7	3.7	4.0	4.1	3.9
18	CCH 25-2 Bt II	3.6	3.8	4.1	4.7	4.1

Tenacity under HVI Mode in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	27.1	27.0	29.2	26.6	27.5
2	CPDBt(HD)-2554	27.0	27.1	28.9	26.8	27.5
3	CCH 25-1 Bt II	31.6	31.5	32.7	30.7	31.6
4	Suraksha Bt	30.3	32.2	31.9	31.2	31.4
5	CCH 25-3 Bt II	30.9	32.3	30.8	31.0	31.3
6	Subiksha Bt	31.1	32.3	31.9	31.4	31.7
7	Nano Bt	30.7	30.1	32.8	31.5	31.3
8	CICR Bt 25-24 Bt II	29.1	29.3	29.5	30.2	29.5
9	CICR Bt 142	27.0	28.1	28.5	29.2	28.2
10	NH 22012 Bt	27.5	27.7	27.7	29.2	28.0
11	NH 22003 Bt	28.8	27.4	29.9	27.7	28.5
12	CICR 25-22 Bt II	27.7	25.6	28.5	27.8	27.4
13	ADB-791Bt	30.1	30.5	29.3	31.4	30.3
14	CICR 23 Bt (ZC Bt-1)	28.7	28.1	29.4	28.0	28.6
15	CCH 25-4 Bt II	32.7	31.9	30.7	32.0	31.8
16	CICR 25-21 Bt II	29.1	28.9	28.4	30.6	29.3
17	PKV 081 Bt (ZC Bt-2)	26.2	27.9	29.4	28.8	28.1
18	CCH 25-2 Bt II	31.4	30.7	31.7	31.2	31.3



Seed Cotton Yield at 140 DAS (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	13.16	17.15	11.42	7.67	12.35
2	CPDBt(HD)-2554	16.19	24.26	12.01	8.20	15.17
3	CCH 25-1 Bt II	14.56	17.24	5.62	7.39	11.20
4	Suraksha Bt	11.92	16.34	5.62	14.63	12.13
5	CCH 25-3 Bt II	12.81	20.21	5.35	10.14	12.13
6	Subiksha Bt	11.32	7.97	5.69	6.89	7.97
7	Nano Bt	13.63	15.03	4.44	12.58	11.42
8	CICR Bt 25-24 Bt II	14.02	21.03	6.31	10.82	13.05
9	CICR Bt 142	14.71	15.94	8.94	10.15	12.44
10	NH 22012 Bt	16.30	21.53	2.50	13.23	13.39
11	NH 22003 Bt	15.89	18.89	9.08	10.99	13.71
12	CICR 25-22 Bt II	16.05	19.51	5.80	8.45	12.45
13	ADB-791Bt	13.03	16.00	3.00	5.60	9.41
14	CICR 23 Bt (ZC Bt-1)	11.05	9.76	1.92	8.72	7.86
15	CCH 25-4 Bt II	11.47	15.64	3.81	9.47	10.10
16	CICR 25-21 Bt II	15.20	18.14	5.14	11.65	12.53
17	PKV 081 Bt (ZC Bt-2)	14.85	21.49	5.80	14.92	14.27
18	CCH 25-2 Bt II	14.01	16.44	6.13	11.77	12.09
	CD @ 5%	1.40	3.88	1.43	3.14	
	CV %	6.30	13.46	14.20	19.25	

Seed Cotton Yield at 165 DAS (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean
1	CPDBt(HD)-2555	1.69	2.33	7.14	1.27	3.11
2	CPDBt(HD)-2554	4.13	2.30	7.45	1.17	3.76
3	CCH 25-1 Bt II	3.67	3.55	5.55	1.00	3.44
4	Suraksha Bt	1.81	4.47	6.76	1.24	3.57
5	CCH 25-3 Bt II	1.47	3.37	6.68	1.15	3.17
6	Subiksha Bt	1.87	4.01	6.98	1.37	3.56
7	Nano Bt	2.58	3.21	7.54	1.12	3.61
8	CICR Bt 25-24 Bt II	2.94	2.22	5.78	1.29	3.06
9	CICR Bt 142	4.14	2.75	6.09	1.12	3.53
10	NH 22012 Bt	2.73	3.03	5.01	1.17	2.99
11	NH 22003 Bt	3.55	1.90	6.03	1.16	3.16
12	CICR 25-22 Bt II	3.44	2.09	5.79	1.12	3.11
13	ADB-791Bt	1.81	2.27	4.90	1.01	2.50
14	CICR 23 Bt (ZC Bt-1)	1.68	2.72	7.48	1.53	3.35
15	CCH 25-4 Bt II	1.46	4.01	4.85	1.24	2.89
16	CICR 25-21 Bt II	5.13	2.23	6.10	1.28	3.69
17	PKV 081 Bt (ZC Bt-2)	3.01	3.64	7.09	1.07	3.70
18	CCH 25-2 Bt II	2.54	3.41	5.44	1.05	3.11
	CD @ 5%	0.60	0.72	1.62	0.36	
	CV %	13.70	14.53	15.60	19.08	

Total Seed Cotton Yield (q/ha) in Initial Evaluation Trial of Hirsutum Variety

S. No.	Entries	Mudhole	Adilabad	Dharwad	Perambalur	Mean	Rank	% Inc over best check
1	CPDBt(HD)-2555	14.85	19.48	18.55	8.94	15.46	10	-14.0
2	CPDBt(HD)-2554	20.32	26.56	19.47	9.37	18.93	1	5.3
3	CCH 25-1 Bt II	18.22	20.79	11.17	8.39	14.64	14	-18.5
4	Suraksha Bt	13.73	20.80	12.38	15.87	15.70	8	-12.7
5	CCH 25-3 Bt II	14.27	23.58	12.03	11.29	15.29	11	-14.9
6	Subiksha Bt	13.19	11.99	12.68	8.26	11.53	17	-35.8
7	Nano Bt	16.21	18.24	11.98	13.70	15.03	13	-16.3
8	CICR Bt 25-24 Bt II	16.96	23.25	12.08	12.11	16.10	6	-10.4
9	CICR Bt 142	18.85	18.68	15.03	11.27	15.96	7	-11.2
10	NH 22012 Bt	19.03	24.57	7.52	14.40	16.38	4	-8.8
11	NH 22003 Bt	19.44	20.79	15.11	12.15	16.87	3	-6.1
12	CICR 25-22 Bt II	19.49	21.59	11.59	9.57	15.56	9	-13.4
13	ADB-791Bt	14.84	18.27	7.90	6.61	11.91	16	-33.8
14	CICR 23 Bt (ZC Bt-1)	12.74	12.48	9.40	10.25	11.22	18	-37.6
15	CCH 25-4 Bt II	12.93	19.65	8.66	10.71	12.99	15	-27.7
16	CICR 25-21 Bt II	20.32	20.37	11.24	12.93	16.22	5	-9.8
17	PKV 081 Bt (ZC Bt-2)	17.86	25.13	12.89	15.99	17.97	2	0.0
18	CCH 25-2 Bt II	16.55	19.85	11.57	12.82	15.20	12	-15.4
	CD @ 5%	1.70	4.75	1.85	3.04			
	CV %	6.20	10.57	9.10	16.72			

Evaluation under Protected Condition for Insect pests
Reaction to Insect Pest

**Table: Initial Variety (Compact) trial in South Zone under Protected Conditions –
Aphid**

Name of Entry	Aphid (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	2.54	-	0.73	1.09	1.45	BETL
56132	-	2.22	-	0.77	2.81	1.93	BETL
56133	-	2.97	-	0.77	3.87	2.54	BETL
56134	-	2.45	-	1.13	3.28	2.28	BETL
56135	-	2.20	-	0.87	2.47	1.85	BETL
56136	-	2.40	-	1.20	2.10	1.90	BETL
56137	-	2.75	-	1.30	2.52	2.19	BETL
56138	-	2.18	-	0.93	2.37	1.83	BETL
56139	-	2.07	-	0.83	1.38	1.42	BETL
56140	-	2.26	-	0.90	2.25	1.80	BETL
56141	-	2.26	-	1.07	2.36	1.89	BETL
56142	-	2.03	-	0.80	4.37	2.40	BETL
56143	-	2.04	-	0.83	1.83	1.57	BETL
56144	-	2.11	-	0.73	1.43	1.42	BETL
56145	-	1.98	-	0.73	4.52	2.41	BETL
56146	-	1.96	-	0.57	2.58	1.70	BETL
56147	-	1.39	-	0.57	1.23	1.06	BETL
56148	-	2.04	-	0.77	1.83	1.55	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole



Table: Initial Variety (Compact) trial in South Zone under Protected Conditions –Leafhopper

Name of Entry	Leafhopper (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	1.17	8.67	0.39	1.63	2.96	BETL
56132	-	0.90	11.33	0.24	3.05	3.88	BETL
56133	-	0.96	9.33	0.39	1.53	3.05	BETL
56134	-	1.04	8.67	0.31	1.73	2.94	BETL
56135	-	1.06	11.67	0.26	2.34	3.83	BETL
56136	-	1.26	9.33	0.42	1.73	3.19	BETL
56137	-	1.17	12.00	0.45	1.73	3.84	BETL
56138	-	1.17	6.67	2.1	1.22	2.79	BETL
56139	-	0.91	9.33	0.37	0.71	2.83	BETL
56140	-	1.10	8.33	0.32	2.04	2.95	BETL
56141	-	1.02	6.67	0.4	1.63	2.43	BETL
56142	-	1.30	8.33	0.39	0.92	2.73	BETL
56143	-	0.99	7.33	0.26	1.42	2.50	BETL
56144	-	1.18	9.33	0.25	2.34	3.28	BETL
56145	-	1.09	9.33	0.43	2.95	3.45	BETL
56146	-	0.85	7.33	0.34	1.63	2.54	BETL
56147	-	1.07	9.67	0.5	1.02	3.06	BETL
56148	-	0.86	10.00	0.35	2.04	3.31	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – JIG

Name of Entry	JIG/plant						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-		-	-	-		
56132	-		-	-	-		
56133	-		-	-	-		
56134	-		-	-	-		
56135	-		-	-	-		
56136	-		-	-	-		
56137	-		-	-	-		
56138	-		-	-	-		
56139	-		-	-	-		
56140	-		-	-	-		
56141	-		-	-	-		
56142	-		-	-	-		
56143	-		-	-	-		
56144	-		-	-	-		
56145	-		-	-	-		
56146	-		-	-	-		
56147	-		-	-	-		
56148	-		-	-	-		

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	2.67	0.00	1.40	1.93	1.50	BETL
56132	-	2.72	0.00	1.20	0.76	1.17	BETL
56133	-	2.45	0.00	1.30	1.42	1.29	BETL
56134	-	3.53	0.00	1.37	3.61	2.13	BETL
56135	-	3.19	0.00	0.93	1.53	1.41	BETL
56136	-	4.07	0.00	0.80	1.04	1.48	BETL
56137	-	3.38	0.00	1.60	0.92	1.47	BETL
56138	-	3.23	0.00	0.60	3.08	1.73	BETL
56139	-	2.89	0.00	1.33	0.38	1.15	BETL
56140	-	2.72	0.00	1.33	2.19	1.56	BETL
56141	-	2.45	0.00	0.93	1.88	1.32	BETL
56142	-	3.53	0.00	1.07	2.59	1.80	BETL
56143	-	3.19	0.00	0.97	2.21	1.59	BETL
56144	-	3.83	0.00	0.97	0.18	1.24	BETL
56145	-	3.38	0.00	0.90	1.35	1.41	BETL
56146	-	3.43	0.00	1.03	2.29	1.69	BETL
56147	-	3.95	0.00	1.03	0.57	1.39	BETL
56148	-	2.76	0.00	1.10	0.31	1.04	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	0.24	0.00	0.40	0.48	0.28	BETL
56132	-	0.18	0.33	0.57	0.37	0.36	BETL
56133	-	0.10	0.67	0.37	0.37	0.38	BETL
56134	-	0.15	0.67	0.50	0.41	0.43	BETL
56135	-	0.11	0.33	0.33	0.26	0.26	BETL
56136	-	0.08	0.33	0.13	0.37	0.23	BETL
56137	-	0.15	0.00	0.23	0.33	0.18	BETL
56138	-	0.15	0.00	0.33	0.45	0.23	BETL
56139	-	0.12	0.67	0.23	0.45	0.37	BETL
56140	-	0.18	0.00	0.33	0.71	0.30	BETL
56141	-	0.10	0.67	0.13	0.48	0.35	BETL
56142	-	0.15	0.00	0.13	0.63	0.23	BETL
56143	-	0.16	0.00	0.33	0.41	0.22	BETL
56144	-	0.10	0.33	0.33	0.37	0.28	BETL
56145	-	0.19	0.00	0.53	0.26	0.25	BETL
56146	-	0.13	0.33	0.33	0.48	0.32	BETL
56147	-	0.03	0.00	0.30	0.37	0.18	BETL
56148	-	0.06	0.00	0.27	0.19	0.13	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	0.47	0.00	0.00	-	0.16	
56132	-	0.60	0.00	0.00	-	0.20	
56133	-	0.49	0.00	0.00	-	0.16	
56134	-	0.22	0.00	0.00	-	0.07	
56135	-	0.30	0.00	0.00	-	0.10	
56136	-	0.24	0.00	0.00	-	0.08	
56137	-	0.13	0.00	0.00	-	0.04	
56138	-	0.42	0.00	0.00	-	0.14	
56139	-	0.49	0.00	0.00	-	0.16	
56140	-	0.17	0.00	0.00	-	0.06	
56141	-	0.56	0.00	0.00	-	0.19	
56142	-	0.11	0.00	0.00	-	0.04	
56143	-	0.32	0.00	0.00	-	0.11	
56144	-	0.48	0.00	0.00	-	0.16	
56145	-	0.13	0.00	0.00	-	0.04	
56146	-	0.40	0.00	0.00	-	0.13	
56147	-	0.27	0.00	0.00	-	0.09	
56148	-	0.11	0.00	0.00	-	0.04	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions –*Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	0.00	0.00	0.00	-	0.00	BETL
56132	-	0.00	0.00	0.00	-	0.00	BETL
56133	-	0.00	0.00	0.00	-	0.00	BETL
56134	-	0.00	0.00	0.00	-	0.00	BETL
56135	-	0.00	0.00	0.00	-	0.00	BETL
56136	-	0.00	0.00	0.00	-	0.00	BETL
56137	-	0.00	0.00	0.00	-	0.00	BETL
56138	-	0.00	0.00	0.00	-	0.00	BETL
56139	-	0.00	0.00	0.00	-	0.00	BETL
56140	-	0.00	0.00	0.00	-	0.00	BETL
56141	-	0.00	0.00	0.00	-	0.00	BETL
56142	-	0.00	0.00	0.00	-	0.00	BETL
56143	-	0.00	0.00	0.00	-	0.00	BETL
56144	-	0.00	0.00	0.00	-	0.00	BETL
56145	-	0.00	0.00	0.00	-	0.00	BETL
56146	-	0.00	0.00	0.00	-	0.00	BETL
56147	-	0.00	0.00	0.00	-	0.00	BETL
56148	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	0.00	0.00	0.00	-	0.00	BETL
56132	-	0.00	0.00	0.00	-	0.00	BETL
56133	-	0.00	0.00	0.00	-	0.00	BETL
56134	-	0.00	0.00	0.00	-	0.00	BETL
56135	-	0.00	0.00	0.00	-	0.00	BETL
56136	-	0.00	0.00	0.00	-	0.00	BETL
56137	-	0.00	0.00	0.00	-	0.00	BETL
56138	-	0.00	0.00	0.00	-	0.00	BETL
56139	-	0.00	0.00	0.00	-	0.00	BETL
56140	-	0.00	0.00	0.00	-	0.00	BETL
56141	-	0.00	0.00	0.00	-	0.00	BETL
56142	-	0.00	0.00	0.00	-	0.00	BETL
56143	-	0.00	0.00	0.00	-	0.00	BETL
56144	-	0.00	0.00	0.00	-	0.00	BETL
56145	-	0.00	0.00	0.00	-	0.00	BETL
56146	-	0.00	0.00	0.00	-	0.00	BETL
56147	-	0.00	0.00	0.00	-	0.00	BETL
56148	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	0.00	0.00	0.00	-	0.00	BETL
56132	-	0.00	0.00	0.00	-	0.00	BETL
56133	-	0.00	0.00	0.00	-	0.00	BETL
56134	-	0.00	0.00	0.00	-	0.00	BETL
56135	-	0.00	0.00	0.00	-	0.00	BETL
56136	-	0.00	0.00	0.00	-	0.00	BETL
56137	-	0.00	0.00	0.00	-	0.00	BETL
56138	-	0.00	0.00	0.00	-	0.00	BETL
56139	-	0.00	0.00	0.00	-	0.00	BETL
56140	-	0.00	0.00	0.00	-	0.00	BETL
56141	-	0.00	0.00	0.00	-	0.00	BETL
56142	-	0.00	0.00	0.00	-	0.00	BETL
56143	-	0.00	0.00	0.00	-	0.00	BETL
56144	-	0.00	0.00	0.00	-	0.00	BETL
56145	-	0.00	0.00	0.00	-	0.00	BETL
56146	-	0.00	0.00	0.00	-	0.00	BETL
56147	-	0.00	0.00	0.00	-	0.00	BETL
56148	-	0.00	0.00	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)						Remark
	NA	DH	PE	AD#	MU	Mean	
56131	-	0.50	2.48	0.60	-	1.19	BETL
56132	-	0.33	1.48	0.87	-	0.89	BETL
56133	-	0.50	1.15	0.67	-	0.77	BETL
56134	-	0.83	1.67	0.80	-	1.10	BETL
56135	-	0.33	2.00	0.27	-	0.87	BETL
56136	-	0.83	1.00	0.47	-	0.77	BETL
56137	-	0.50	2.00	0.67	-	1.06	BETL
56138	-	1.00	1.10	0.60	-	0.90	BETL
56139	-	0.83	2.10	0.73	-	1.22	BETL
56140	-	0.83	1.43	0.40	-	0.89	BETL
56141	-	1.17	1.25	0.53	-	0.98	BETL
56142	-	1.83	1.77	1.00	-	1.53	BETL
56143	-	0.00	0.98	0.73	-	0.57	BETL
56144	-	0.83	1.66	0.87	-	1.12	BETL
56145	-	0.67	1.75	0.80	-	1.07	BETL
56146	-	0.50	1.33	0.33	-	0.72	BETL
56147	-	0.67	1.50	0.40	-	0.86	BETL
56148	-	1.83	1.33	0.27	-	1.14	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole, # Based on 5 observations

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	0.00	-	0.00	-	0.00	BETL
56132	-	0.00	-	0.00	-	0.00	BETL
56133	-	0.00	-	0.00	-	0.00	BETL
56134	-	0.00	-	0.00	-	0.00	BETL
56135	-	0.00	-	0.00	-	0.00	BETL
56136	-	0.00	-	0.00	-	0.00	BETL
56137	-	0.00	-	0.00	-	0.00	BETL
56138	-	0.00	-	0.00	-	0.00	BETL
56139	-	0.00	-	0.00	-	0.00	BETL
56140	-	0.00	-	0.00	-	0.00	BETL
56141	-	0.00	-	0.00	-	0.00	BETL
56142	-	0.00	-	0.00	-	0.00	BETL
56143	-	0.00	-	0.00	-	0.00	BETL
56144	-	0.00	-	0.00	-	0.00	BETL
56145	-	0.00	-	0.00	-	0.00	BETL
56146	-	0.00	-	0.00	-	0.00	BETL
56147	-	0.00	-	0.00	-	0.00	BETL
56148	-	0.00	-	0.00	-	0.00	BETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Green Boll Damage (Pink bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	6.67	-	17.33	-	12.00	AETL
56132	-	8.33	-	26.00	-	17.17	AETL
56133	-	8.33	-	31.33	-	19.83	AETL
56134	-	11.67	-	17.33	-	14.50	AETL
56135	-	11.67	-	21.33	-	16.50	AETL
56136	-	5.00	-	17.33	-	11.17	AETL
56137	-	10.00	-	20.00	-	15.00	AETL
56138	-	10.00	-	21.33	-	15.67	AETL
56139	-	11.67	-	18.00	-	14.84	AETL
56140	-	11.67	-	12.67	-	12.17	AETL
56141	-	10.00	-	15.33	-	12.67	AETL
56142	-	16.67	-	16.00	-	16.34	AETL
56143	-	5.00	-	10.00	-	7.50	BETL
56144	-	8.33	-	16.67	-	12.50	AETL
56145	-	8.33	-	22.67	-	15.50	AETL
56146	-	5.00	-	29.67	-	17.34	AETL
56147	-	5.00	-	18.00	-	11.50	AETL
56148	-	15.00	-	9.33	-	12.17	AETL

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	4.54	6.00	10.00	-	6.85	
56132	-	8.49	9.00	14.33	-	10.61	
56133	-	9.24	5.00	15.67	-	9.97	
56134	-	8.48	4.00	11.67	-	8.05	
56135	-	9.56	8.00	13.33	-	10.30	
56136	-	9.27	8.00	10.67	-	9.31	
56137	-	8.77	7.00	10.00	-	8.59	
56138	-	10.55	6.00	11.67	-	9.41	
56139	-	9.41	6.00	11.00	-	8.80	
56140	-	9.35	5.00	8.33	-	7.56	
56141	-	7.76	8.00	10.67	-	8.81	
56142	-	9.01	7.00	10.67	-	8.89	
56143	-	8.80	7.00	9.33	-	8.38	
56144	-	8.99	6.00	10.00	-	8.33	
56145	-	12.81	5.00	13.33	-	10.38	
56146	-	8.16	8.00	13.33	-	9.83	
56147	-	8.66	6.00	11.67	-	8.78	
56148	-	10.96	4.00	17.67	-	10.88	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Locule Damage

Name of Entry	Locule Damage (%)						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	6.92	3.00	3.33	-	4.42	
56132	-	7.25	3.00	6.67	-	5.64	
56133	-	7.17	2.00	6.97	-	5.38	
56134	-	7.67	1.00	5.17	-	4.61	
56135	-	11.42	3.00	8.67	-	7.70	
56136	-	8.08	4.00	6.17	-	6.08	
56137	-	9.58	2.00	2.17	-	4.58	
56138	-	14.67	1.00	4.97	-	6.88	
56139	-	8.58	2.00	3.17	-	4.58	
56140	-	6.58	2.00	2.83	-	3.80	
56141	-	7.50	4.00	5.00	-	5.50	
56142	-	10.17	3.00	4.17	-	5.78	
56143	-	13.67	3.00	3.50	-	6.72	
56144	-	12.92	2.00	3.17	-	6.03	
56145	-	11.08	2.00	4.00	-	5.69	
56146	-	11.92	4.00	5.33	-	7.08	
56147	-	10.42	2.00	3.17	-	5.20	
56148	-	7.08	1.00	7.50	-	5.19	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Protected Conditions – Number of sprays for Insect-Pests

Name of Entry	Number of sprays for Insect- pests						Remark
	NA	DH	PE	AD	MU	Mean	
56131	-	5.00	6.00	4.00	4.00	4.75	
56132	-	5.00	6.00	4.00	4.00	4.75	
56133	-	5.00	6.00	4.00	4.00	4.75	
56134	-	5.00	6.00	4.00	4.00	4.75	
56135	-	5.00	6.00	4.00	4.00	4.75	
56136	-	5.00	6.00	4.00	4.00	4.75	
56137	-	5.00	6.00	4.00	4.00	4.75	
56138	-	5.00	6.00	4.00	4.00	4.75	
56139	-	5.00	6.00	4.00	4.00	4.75	
56140	-	5.00	6.00	4.00	4.00	4.75	
56141	-	5.00	6.00	4.00	4.00	4.75	
56142	-	5.00	6.00	4.00	4.00	4.75	
56143	-	5.00	6.00	4.00	4.00	4.75	
56144	-	5.00	6.00	4.00	4.00	4.75	
56145	-	5.00	6.00	4.00	4.00	4.75	
56146	-	5.00	6.00	4.00	4.00	4.75	
56147	-	5.00	6.00	4.00	4.00	4.75	
56148	-	5.00	6.00	4.00	4.00	4.75	

NA- Nandyal, DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Reaction to Diseases

Table 18(a): Initial Evaluation Trial of Compact Hirsutum Varieties – Rainfed (IET Compact Var RF) under Protected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Protected conditions							
			UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
7	56131	CPDBt(HD)-2555	21.9	R	10.8	R	16.3	R	17.2	R
14	56132	CPDBt(HD)-2554	22.1	R	10.4	R	17.9	R	18.4	R
17	56133	CCH 25-1 Bt II	22.2	R	10.1	R	17.7	R	18.2	R
1	56134	Suraksha Bt	24.1	R	10.1	R	20.1	R	17.2	R
5	56135	CCH 25-3 Bt II	21.6	R	9.2	R	18.6	R	16.9	R
10	56136	Subiksha Bt	21.9	R	9.7	R	18.6	R	18.9	R
13	56137	Nano Bt	21.9	R	9.8	R	18.5	R	19.0	R
18	56138	CICR Bt 25-24 Bt II	21.3	R	8.6	R	13.3	R	17.4	R
12	56139	CICR Bt 142	22.0	R	9.8	R	17.0	R	19.1	R
9	56140	NH 22012 Bt	21.5	R	9.2	R	16.4	R	18.4	R
6	56141	NH 22003 Bt	21.5	R	9.0	R	18.0	R	18.9	R
4	56142	CICR 25-22 Bt II	23.4	R	8.9	R	17.3	R	18.2	R
2	56143	ADB-791Bt	22.0	R	9.0	R	18.0	R	19.2	R
8	56144	CICR 23 Bt (ZC Bt-1)	21.5	R	10.9	R	18.8	R	18.0	R
11	56145	CCH 25-4 Bt II	22.6	R	11.4	R	16.9	R	19.3	R
15	56146	CICR 25-21 Bt II	21.5	R	10.2	R	16.3	R	18.1	R
3	56147	PKV 081 Bt (ZC Bt-2)	22.4	R	9.9	R	16.3	R	18.7	R
16	56148	CCH 25-2 Bt II	22.8	R	10.1	R	17.2	R	17.4	R

Evaluation under Unprotected Condition for Insect pests

Reaction to Insect Pest

**Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions –
Aphid**

Name of Entry	Aphid (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56131	8.73	-	1.45	1.85	4.01	BETL
56132	9.53	-	1.62	4.74	5.30	BETL
56133	9.24	-	1.22	6.58	5.68	BETL
56134	7.44	-	1.55	5.55	4.85	BETL
56135	7.76	-	1.30	4.16	4.40	BETL
56136	6.69	-	2.03	3.58	4.10	BETL
56137	8.16	-	1.94	4.27	4.79	BETL
56138	8.76	-	1.73	4.04	4.84	BETL
56139	7.64	-	0.95	2.31	3.63	BETL
56140	7.24	-	1.29	3.81	4.12	BETL
56141	8.21	-	1.29	4.04	4.51	BETL
56142	7.04	-	1.26	7.39	5.23	BETL
56143	8.20	-	1.34	3.12	4.22	BETL
56144	6.02	-	1.16	2.43	3.20	BETL
56145	6.49	-	0.90	7.74	5.04	BETL
56146	9.40	-	0.70	4.39	4.83	BETL
56147	8.82	-	0.54	2.08	3.81	BETL
56148	6.62	-	0.96	3.12	3.57	BETL
SP7679	-	-	-	-	-	

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

**Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions –
Leafhopper**

Name of Entry	Leafhopper (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56131	3.03	9.33	0.67	2.70	3.93	BETL
56132	2.62	10.67	0.44	5.06	4.70	BETL
56133	2.70	8.67	2.44	2.53	4.08	BETL
56134	1.84	9.00	0.26	2.87	3.49	BETL
56135	4.40	10.33	0.46	3.88	4.77	BETL
56136	3.11	8.67	0.33	2.87	3.74	BETL
56137	3.53	9.67	0.74	2.87	4.20	BETL
56138	2.31	8.00	2.05	2.02	3.60	BETL
56139	2.42	7.67	0.71	1.18	3.00	BETL
56140	1.09	12.67	0.38	3.38	4.38	BETL
56141	2.29	9.00	0.80	2.70	3.70	BETL
56142	2.25	11.00	0.82	1.52	3.90	BETL
56143	2.67	9.00	0.60	2.36	3.66	BETL
56144	3.05	9.00	0.64	3.88	4.14	BETL
56145	3.98	10.33	0.83	4.89	5.01	BETL
56146	3.64	7.67	0.62	2.70	3.66	BETL
56147	2.27	13.67	0.80	1.69	4.61	BETL
56148	1.40	9.00	0.55	3.38	3.58	BETL
SP7679	-	11.53	-	-	11.53	AETL

DH- Dharwad, PE- Perambalur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – JIG

Name of Entry	JIG/plant					Remark
	DH	PE	AD	MU	Mean	
56131	II	-	-	-	II	
56132	I	-	-	-	I	
56133	II	-	-	-	II	
56134	I	-	-	-	I	
56135	II	-	-	-	II	
56136	II	-	-	-	II	
56137	II	-	-	-	II	
56138	I	-	-	-	I	
56139	II	-	-	-	II	
56140	I	-	-	-	I	
56141	II	-	-	-	II	
56142	II	-	-	-	II	
56143	II	-	-	-	II	
56144	II	-	-	-	II	
56145	II	-	-	-	II	
56146	II	-	-	-	II	
56147	I	-	-	-	I	
56148	I	-	-	-	I	
SP7679	-	-	-	-	-	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Thrips

Name of Entry	Thrips (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56131	18.33	2.67	2.86	2.34	6.55	BETL
56132	20.76	2.67	2.87	0.93	6.80	BETL
56133	15.62	2.33	1.39	1.73	5.27	BETL
56134	17.07	2.67	2.67	4.38	6.70	BETL
56135	17.22	3.00	1.04	1.85	5.78	BETL
56136	15.91	2.33	2.55	1.26	5.51	BETL
56137	18.51	3.00	2.62	1.11	6.31	BETL
56138	20.36	1.33	0.98	3.73	6.60	BETL
56139	18.47	3.33	2.15	0.46	6.10	BETL
56140	18.56	1.33	2.02	2.65	6.14	BETL
56141	16.93	3.67	1.55	2.28	6.11	BETL
56142	17.62	1.67	1.72	3.15	6.04	BETL
56143	15.53	4.00	2.03	2.68	6.06	BETL
56144	17.78	2.33	1.84	0.22	5.54	BETL
56145	25.36	2.67	1.88	1.63	7.88	BETL
56146	21.44	3.00	2.06	2.78	7.32	BETL
56147	18.04	3.67	2.02	3.36	6.77	BETL
56148	17.00	1.67	2.01	0.37	5.26	BETL
SP7679	-	2.33	-	-	2.33	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Whitefly

Name of Entry	Whitefly (Average of 3 leaves/plant)					Remark
	DH	PE	AD	MU	Mean	
56131	1.04	2.00	0.69	0.69	1.11	BETL
56132	0.67	1.67	0.18	0.53	0.76	BETL
56133	0.79	1.33	0.50	0.53	0.79	BETL
56134	0.89	1.67	0.51	0.58	0.91	BETL
56135	0.87	1.33	0.40	0.37	0.74	BETL
56136	1.08	1.67	0.15	0.53	0.86	BETL
56137	1.17	2.00	0.48	0.48	1.03	BETL
56138	0.79	2.00	0.34	0.63	0.94	BETL
56139	1.36	1.33	0.64	0.63	0.99	BETL
56140	1.09	1.67	0.38	1.00	1.04	BETL
56141	1.22	1.67	0.17	0.69	0.94	BETL
56142	0.79	1.67	0.12	0.90	0.87	BETL
56143	0.90	1.67	0.15	0.58	0.82	BETL
56144	0.72	1.00	0.13	0.53	0.60	BETL
56145	1.02	2.00	1.08	0.37	1.12	BETL
56146	0.70	1.00	0.22	0.69	0.65	BETL
56147	0.80	2.00	0.20	0.53	0.88	BETL
56148	0.58	2.00	0.22	0.26	0.77	BETL
SP7679	-	1.66	-	-	1.66	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Natural Enemies

Name of Entry	Natural Enemies (No./plant)					Remark
	DH	PE	AD	MU	Mean	
56131	0.85	0.00	0.33	-	0.39	
56132	0.98	0.00	0.13	-	0.37	
56133	1.07	0.00	0.20	-	0.42	
56134	1.71	0.00	0.07	-	0.59	
56135	1.09	0.00	0.00	-	0.36	
56136	1.09	0.00	0.34	-	0.48	
56137	0.78	0.00	0.07	-	0.28	
56138	1.67	0.00	0.07	-	0.58	
56139	1.44	0.00	0.13	-	0.52	
56140	1.16	0.00	0.00	-	0.39	
56141	1.60	0.00	0.07	-	0.56	
56142	1.51	0.00	0.20	-	0.57	
56143	0.93	0.00	0.27	-	0.40	
56144	0.96	0.00	0.00	-	0.32	
56145	1.42	0.00	0.26	-	0.56	
56146	1.30	0.00	0.27	-	0.52	
56147	0.91	0.00	0.13	-	0.35	
56148	0.82	0.00	0.00	-	0.27	
SP7679	-	0.00	-	-	0.00	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – *Helicoverpa armigera*

Name of Entry	<i>Helicoverpa armigera</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56131	0.00	0.00	0.00	-	0.00	BETL
56132	0.00	0.00	0.00	-	0.00	BETL
56133	0.00	0.00	0.00	-	0.00	BETL
56134	0.00	0.00	0.00	-	0.00	BETL
56135	0.00	0.00	0.00	-	0.00	BETL
56136	0.00	0.00	0.00	-	0.00	BETL
56137	0.00	0.00	0.00	-	0.00	BETL
56138	0.00	0.00	0.00	-	0.00	BETL
56139	0.00	0.00	0.00	-	0.00	BETL
56140	0.00	0.00	0.00	-	0.00	BETL
56141	0.00	0.00	0.00	-	0.00	BETL
56142	0.00	0.00	0.00	-	0.00	BETL
56143	0.00	0.00	0.00	-	0.00	BETL
56144	0.00	0.00	0.00	-	0.00	BETL
56145	0.00	0.00	0.00	-	0.00	BETL
56146	0.00	0.00	0.00	-	0.00	BETL
56147	0.00	0.00	0.00	-	0.00	BETL
56148	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	0.00	-	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Spotted/Spiny Bollworms

Name of Entry	Spotted Bollworms (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56131	0.00	0.00	0.00	-	0.00	BETL
56132	0.00	0.00	0.00	-	0.00	BETL
56133	0.00	0.00	0.00	-	0.00	BETL
56134	0.00	0.00	0.00	-	0.00	BETL
56135	0.00	0.00	0.00	-	0.00	BETL
56136	0.00	0.00	0.00	-	0.00	BETL
56137	0.00	0.00	0.00	-	0.00	BETL
56138	0.00	0.00	0.00	-	0.00	BETL
56139	0.00	0.00	0.00	-	0.00	BETL
56140	0.00	0.00	0.00	-	0.00	BETL
56141	0.00	0.00	0.00	-	0.00	BETL
56142	0.00	0.00	0.00	-	0.00	BETL
56143	0.00	0.00	0.00	-	0.00	BETL
56144	0.00	0.00	0.00	-	0.00	BETL
56145	0.00	0.00	0.00	-	0.00	BETL
56146	0.00	0.00	0.00	-	0.00	BETL
56147	0.00	0.00	0.00	-	0.00	BETL
56148	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	0.00	-	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – *Spodoptera litura*

Name of Entry	<i>Spodoptera litura</i> (No. /5 plants)					Remark
	DH	PE	AD	MU	Mean	
56131	0.00	0.00	0.00	-	0.00	BETL
56132	0.00	0.00	0.00	-	0.00	BETL
56133	0.00	0.00	0.00	-	0.00	BETL
56134	0.00	0.00	0.00	-	0.00	BETL
56135	0.00	0.00	0.00	-	0.00	BETL
56136	0.00	0.00	0.00	-	0.00	BETL
56137	0.00	0.00	0.00	-	0.00	BETL
56138	0.00	0.00	0.00	-	0.00	BETL
56139	0.00	0.00	0.00	-	0.00	BETL
56140	0.00	0.00	0.00	-	0.00	BETL
56141	0.00	0.00	0.00	-	0.00	BETL
56142	0.00	0.00	0.00	-	0.00	BETL
56143	0.00	0.00	0.00	-	0.00	BETL
56144	0.00	0.00	0.00	-	0.00	BETL
56145	0.00	0.00	0.00	-	0.00	BETL
56146	0.00	0.00	0.00	-	0.00	BETL
56147	0.00	0.00	0.00	-	0.00	BETL
56148	0.00	0.00	0.00	-	0.00	BETL
SP7679	-	0.00	-	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Pink Bollworm

Name of Entry	Pink Bollworm Larva (No./10 bolls destructive sampling)					Remark
	DH	PE	AD#	MU	Mean	
56131	1.17	2.22	0.60	-	1.33	AETL
56132	2.33	1.55	0.40	-	1.43	AETL
56133	1.33	1.37	1.20	-	1.30	AETL
56134	1.67	1.89	0.40	-	1.32	AETL
56135	2.17	1.10	0.60	-	1.29	AETL
56136	1.67	2.60	0.20	-	1.49	AETL
56137	2.17	1.60	0.20	-	1.32	AETL
56138	2.00	1.27	0.60	-	1.29	AETL
56139	1.50	1.79	0.40	-	1.23	AETL
56140	1.17	2.12	0.80	-	1.36	AETL
56141	1.50	1.12	1.40	-	1.34	AETL
56142	4.17	2.12	1.20	-	2.50	AETL
56143	1.50	1.22	1.20	-	1.31	AETL
56144	1.83	1.62	1.20	-	1.55	AETL
56145	2.17	1.45	0.60	-	1.41	AETL
56146	2.00	1.37	0.40	-	1.26	AETL
56147	1.50	1.78	0.00	-	1.09	AETL
56148	4.00	1.87	0.40	-	2.09	AETL
SP7679	-	1.45	-	-	1.45	AETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole, # Based on 5 observations



Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage due to ABW/SBW/TC

Name of Entry	Green Boll Damage (%) due to ABW/SBW/TC					Remark
	DH	PE	AD	MU	Mean	
56131	0.00	-	0.00	-	0.00	BETL
56132	0.00	-	0.00	-	0.00	BETL
56133	0.00	-	0.00	-	0.00	BETL
56134	0.00	-	0.00	-	0.00	BETL
56135	0.00	-	0.00	-	0.00	BETL
56136	0.00	-	0.00	-	0.00	BETL
56137	0.00	-	0.00	-	0.00	BETL
56138	0.00	-	0.00	-	0.00	BETL
56139	0.00	-	0.00	-	0.00	BETL
56140	0.00	-	0.00	-	0.00	BETL
56141	0.00	-	0.00	-	0.00	BETL
56142	0.00	-	0.00	-	0.00	BETL
56143	0.00	-	0.00	-	0.00	BETL
56144	0.00	-	0.00	-	0.00	BETL
56145	0.00	-	0.00	-	0.00	BETL
56146	0.00	-	0.00	-	0.00	BETL
56147	0.00	-	0.00	-	0.00	BETL
56148	0.00	-	0.00	-	0.00	BETL
SP7679	-	-	-	-	0.00	BETL

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Green Boll Damage (Pink Bollworm)

Name of Entry	Green Boll Damage (%) / 10 bolls destructive sampling					Remark
	DH	PE	AD	MU	Mean	
56131	20.00	-	28.00	-	24.00	AETL
56132	19.17	-	32.00	-	25.59	AETL
56133	13.33	-	28.00	-	20.67	AETL
56134	20.00	-	24.00	-	22.00	AETL
56135	20.83	-	32.00	-	26.42	AETL
56136	13.33	-	28.00	-	20.67	AETL
56137	14.50	-	20.00	-	17.25	AETL
56138	11.67	-	22.00	-	16.84	AETL
56139	15.00	-	30.00	-	22.50	AETL
56140	16.67	-	24.00	-	20.34	AETL
56141	13.33	-	30.00	-	21.67	AETL
56142	25.00	-	26.00	-	25.50	AETL
56143	11.67	-	34.00	-	22.84	AETL
56144	11.67	-	22.00	-	16.84	AETL
56145	16.67	-	30.00	-	23.34	AETL
56146	15.00	-	28.00	-	21.50	AETL
56147	13.33	-	26.00	-	19.67	AETL
56148	25.00	-	28.00	-	26.50	AETL
SP7679	-	-	-	-	-	-

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Open Boll Damage

Name of Entry	Open Boll Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56131	8.11	8.00	15.00	-	10.37	
56132	13.92	12.00	20.00	-	15.31	
56133	14.57	7.00	15.00	-	12.19	
56134	20.14	6.00	12.00	-	12.71	
56135	15.20	13.00	15.00	-	14.40	
56136	13.28	12.00	15.00	-	13.43	
56137	17.31	10.00	10.00	-	12.44	
56138	18.03	9.00	12.00	-	13.01	
56139	14.98	8.00	15.00	-	12.66	
56140	11.84	8.00	15.00	-	11.61	
56141	13.26	10.00	20.00	-	14.42	
56142	12.69	9.00	15.00	-	12.23	
56143	12.78	9.00	20.00	-	13.93	
56144	11.38	8.00	15.00	-	11.46	
56145	21.17	7.00	20.00	-	16.06	
56146	18.46	10.00	15.00	-	14.49	
56147	10.21	9.00	15.00	-	11.40	
56148	14.25	7.00	12.00	-	11.08	
SP7679	-	7.00	-	-	7.00	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole

Table: Initial Variety (Compact) trial in South Zone under Unprotected Conditions – Locule Damage

Name of Entry	Locule Damage (%)					Remark
	DH	PE	AD	MU	Mean	
56131	11.08	4.00	20.50	-	11.86	
56132	15.75	5.00	23.00	-	14.58	
56133	13.67	3.00	20.50	-	12.39	
56134	16.17	2.00	19.50	-	12.56	
56135	21.67	4.00	24.50	-	16.72	
56136	13.58	4.00	17.50	-	11.69	
56137	14.92	3.00	14.00	-	10.64	
56138	25.92	2.00	15.50	-	14.47	
56139	16.08	2.00	16.50	-	11.53	
56140	12.08	3.00	16.00	-	10.36	
56141	16.67	4.00	25.00	-	15.22	
56142	17.00	3.00	24.00	-	14.67	
56143	24.08	4.00	21.50	-	16.53	
56144	22.08	3.00	13.00	-	12.69	
56145	17.88	3.00	17.00	-	12.63	
56146	20.67	4.00	18.00	-	14.22	
56147	18.75	3.00	17.00	-	12.92	
56148	11.92	2.00	19.50	-	11.14	
SP7679	-	3.00	-	-	3.00	

DH- Dharwad, PE- Peramblur, AD- Adilabad, MU- Mudhole



Reaction to Diseases

Table 18(b): Initial Evaluation Trial of Compact Hirsutum Varieties – Rainfed (IET Compact Var RF) Unprotected conditions

Code-I	Code-II	Entries	Average PDI & Disease Reaction (DR): Unprotected conditions							
			UAS Dharwad							
			ALB		BLB		GM		Rust	
			PDI	DR	PDI	DR	PDI	DR	PDI	DR
7	56131	CPDBt(HD)-2555	25.3	MR	10.0	R	13.9	R	20.3	R
14	56132	CPDBt(HD)-2554	25.1	MR	11.8	R	14.9	R	19.8	R
17	56133	CCH 25-1 Bt II	26.1	MR	10.9	R	15.9	R	19.4	R
1	56134	Suraksha Bt	24.5	R	10.4	R	13.8	R	16.3	R
5	56135	CCH 25-3 Bt II	24.5	R	11.7	R	15.6	R	19.3	R
10	56136	Subiksha Bt	26.1	MR	12.4	R	16.2	R	19.3	R
13	56137	Nano Bt	25.6	MR	12.3	R	15.8	R	18.7	R
18	56138	CICR Bt 25-24 Bt II	26.4	MR	11.9	R	17.4	R	17.9	R
12	56139	CICR Bt 142	25.2	MR	11.2	R	16.2	R	19.1	R
9	56140	NH 22012 Bt	25.1	MR	11.8	R	15.7	R	19.1	R
6	56141	NH 22003 Bt	25.9	MR	11.9	R	16.0	R	18.7	R
4	56142	CICR 25-22 Bt II	25.4	MR	11.2	R	17.4	R	17.7	R
2	56143	ADB-791Bt	26.3	MR	11.5	R	14.1	R	19.3	R
8	56144	CICR 23 Bt (ZC Bt-1)	27.0	MR	11.1	R	18.3	R	19.8	R
11	56145	CCH 25-4 Bt II	25.1	MR	11.5	R	16.2	R	16.6	R
15	56146	CICR 25-21 Bt II	26.6	MR	11.4	R	14.1	R	20.7	R
3	56147	PKV 081 Bt (ZC Bt-2)	25.8	MR	13.1	R	15.5	R	21.0	R
16	56148	CCH 25-2 Bt II	26.0	MR	11.9	R	18.1	R	22.1	R



हर कदम, हर डगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

*Agr*search with a human touch