Annual Progress Report

Rabi Maize

2012-13

भाकृअनुप
ICAR

All India Coordinated Research Project on Maize
Directorate of Maize Research
Pusa Campus, New Delhi-110 012, India
www.dmr.res.in

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3	Dr. R. N. Singh	Prof. & Sr. Agronomist	Agronomy	rnsingh.agro@rediffmail.com	+91-9792795906

Decoding of Test Entries

Coded and Decoded Pedigree of Trials

TRIAL NO. 1	:	IVT - LATE
MATURITY	:	LATE
YEAR	:	2012-2013
SEASON	:	RABI
NO. OF ROWS	:	2
ROW LENGTH (METRE)	:	4
NO. OF REPLICATIONS	:	3
NO. OF LOCATIONS	:	19

LOCATIONS: GOSSAIGAON, LUDHIANA, KARNAL, DELHI, PANTNAGAR, KANPUR, BAHRAICH, DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

				REPLICATIONS		
Entry No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**RIII**
1	DKC9120	DMR 101	Monsanto India Ltd.	1019	1060	1101
2	IL 8534	DMR 102	Monsanto India Ltd.	1037	1067	1121
3	II8212	DMR 103	Monsanto India Ltd.	1011	1057	1106
4	TH2	DMR 104	Yaaganti seeds pvt. Ltd.	1035	1072	1102
5	DADA	DMR 105	Yaaganti seeds pvt. Ltd.	1021	1055	1100
6	TH22	DMR 106	Yaaganti seeds pvt. Ltd.	1001	1070	1135
7	PRO-389	DMR 107	Bayer Bioscience Pvt. Ltd.	1015	1054	1123
8	PRO-390	DMR 108	Bayer Bioscience Pvt. Ltd.	1022	1094	1124
9	KMH-2589	DMR 109	Kaveri Seed Company Ltd.	1013	1073	1129
10	Rasi-3022	DMR 110	Rasi Seeds Pvt. Ltd.	1010	1059	1103
11	Rasi-750	DMR 111	Rasi Seeds Pvt. Ltd.	1014	1083	1104
12	Bisco x 6573	DMR 112	BISCO BIO-SCIENCES Pvt.Ltd.	1031	1050	1115
13	Venus	DMR 113	Prabhat Agri BiotechLtd.	1006	1089	1132
14	PMH-2277	DMR 114	Prabhat Agri BiotechLtd	1023	1058	1131
15	IVORY	DMR 115	Pravardhan Seeds Pvt. Ltd.	1012	1082	1133
16	PMH-189	DMR 116	Pravardhan Seeds Pvt. Ltd.	1016	1080	1109
17	Meghan-G	DMR 117	Pravardhan Seeds Pvt. Ltd.	1007	1074	1097
18	GK-3149	DMR 118	Ganga Kaveri Seeds Pvt.Ltd.	1033	1071	1139
19	GK-3150	DMR 119	Ganga Kaveri Seeds Pvt.Ltd.	1020	1091	1116
20	X-1228	DMR 120	Kahchan Ganga Seed Pvt. Ltd.	1045	1062	1113
21	K-25 Gold	DMR 121	Kahchan Ganga Seed Pvt. Ltd.	1008	1085	1118
22	P3533	DMR 122	Pioneer Overseas Corporation	1042	1088	1112
23	X35C526	DMR 123	Pioneer Overseas Corporation	1018	1051	1120
24	X35C529	DMR 124	Pioneer Overseas Corporation	1029	1056	1095
25	X35C535	DMR 125	Pioneer Overseas Corporation	1043	1065	1114
26	X35C537	DMR 126	Pioneer Overseas Corporation	1009	1069	1117
27	X35C538	DMR 127	Pioneer Overseas Corporation	1002	1078	1099

				REPLICATIONS		
Entry No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**RIII**
28	X35C543	DMR 128	Pioneer Overseas Corporation	1004	1090	1111
29	REH2012-1	DMR 129	C.S.A.U. of Ag. & Tech. Kanpur	1039	1086	1141
30	REH2012-2	DMR 130	C.S.A.U. of Ag. & Tech. Kanpur	1028	1081	1098
31	AH 1251	DMR 131	IARI, New Delhi	1024	1063	1130
32	AH 1252	DMR 132	IARI, New Delhi	1027	1077	1134
33	JH 8825	DMR 133	PAU,Ludhiana	1034	1092	1136
34	JH 9031	DMR 134	PAU,Ludhiana	1041	1093	1105
35	JH 8837	DMR135	PAU,Ludhiana	1044	1052	1138
36	JH 9114	DMR 136	PAU,Ludhiana	1038	1061	1119
37	JH 211	DMR 137	PAU,Ludhiana	1003	1048	1127
38	JH 248	DMR 138	PAU,Ludhiana	1040	1053	1125
39	JH 293	DMR 139	PAU,Ludhiana	1017	1075	1137
40	JH 295	DMR 140	PAU,Ludhiana	1005	1079	1110
41	JH 367	DMR 141	PAU,Ludhiana	1026	1084	1126
42	JH 405	DMR 142	PAU,Ludhiana	1047	1064	1108
43	JH 417	DMR 143	PAU,Ludhiana	1025	1049	1128
44	JH 419	DMR 144	PAU,Ludhiana	1036	1068	1096
45	Buland (C)	DMR 145	PAU,Ludhiana	1032	1087	1107
46	Seed Tech 2324 (C)	DMR 146	BISCO BIO-SCIENCES Pvt.Ltd.	1046	1066	1140
47	Bio 9681(C)	DMR 147	Bio seed	1030	1076	1122

TRIAL NO. 2	:	IVT - MEDIUM
MATURITY	:	MEDIUM
YEAR	:	2012-2013
SEASON	:	RABI
NO. OF ROWS	:	2
ROW LENGTH (METRE)	:	4
NO. OF REPLICATIONS	:	3
NO. OF LOCATIONS	:	19

LOCATIONS: GOSSAIGAON, LUDHIANA, KARNAL, DELHI, PANTNAGAR, KANPUR, BAHRAICH, DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

				REPLICATIONS		
Entry No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**RIII**
1	IJ8521	DMR 201	Monsanto India Ltd.	2013	2042	2067
2	IJ8214	DMR 202	Monsanto India Ltd.	2025	2044	2051
3	IL8536	DMR 203	Monsanto India Ltd.	2010	2048	2059
4	IL8537	DMR 204	Monsanto India Ltd.	2015	2038	2074
5	KMHI-6668	DMR 205	Kaveri Seed Company Ltd.	2018	2031	2058
6	KMH-4210	DMR 206	Kaveri Seed Company Ltd.	2001	2045	2073
7	PMH-2246	DMR 207	Prabhat Agri BiotechLtd.	2009	2050	2071
8	K-26	DMR 208	Kahchan Ganga Seed Pvt. Ltd.	2003	2033	2057
9	X-2816	DMR 209	Kahchan Ganga Seed Pvt. Ltd.	2004	2039	2075
10	VEH-12-1	DMR 210	Banaras Hindu University	2019	2046	2070
11	MMH-12-11	DMR 211	Tirhut College of Ag. , Dholi	2023	2047	2066
12	MMH-12-12	DMR 212	Tirhut College of Ag. , Dholi	2020	2043	2062
13	MMH-12-13	DMR 213	Tirhut College of Ag ., Dholi	2006	2027	2061
14	MMH12-14	DMR 214	Tirhut College of Ag. , Dholi	2024	2049	2068
15	REH2012-3	DMR 215	C.S.A.U. of Ag. & Tech. Kanpur	2012	2030	2054
16	REH2012-4	DMR 216	C.S.A.U. of Ag. & Tech. Kanpur	2007	2036	2069
17	AH 1253	DMR 217	IARI, New Delhi	2005	2032	2065
18	AH 1254	DMR 218	IARI, New Delhi	2022	2028	2072
19	AH 1255	DMR 219	IARI, New Delhi	2016	2035	2052
20	HKH420	DMR 220	HAU, Karnal	2002	2040	2053
21	HKH421	DMR 221	HAU, Karnal	2014	2029	2064
22	HKH422	DMR 222	HAU, Karnal	2008	2041	2063
23	BIO 9637 (C)	DMR 223	BIO SEED	2011	2037	2056
24	HM4 (C)	DMR 224	HAU, Karnal	2021	2034	2060
25	HM 8 (C)	DMR 225	HAU, Karnal	2017	2026	2055

TRIAL NO. 3	:	IVT - Early
MATURITY	:	EARLY
YEAR	:	2012-2013
SEASON	:	RABI
NO. OF ROWS	:	2
ROW LENGTH (METRE)	:	4
NO. OF REPLICATIONS	:	3
NO. OF LOCATIONS	:	19

LOCATIONS: GOSSAIGAON, LUDHIANA, KARNAL, DELHI, PANTNAGAR, KANPUR, BAHRAICH, DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

				REPLICATIONS		
Entry No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**RIII**
1	K-25	DMR301	Kahchan Ganga Seed Pvt. Ltd.	3007	3021	3030
2	REH2012-5	DMR302	C.S.A.U. of Ag. & Tech. Kanpur	3001	3014	3028
3	REH2012-6	DMR303	C.S.A.U. of Ag. & Tech. Kanpur	3002	3013	3031
4	AH 1256	DMR304	IARI, New Delhi	3006	3022	3024
5	AH 1257	DMR305	IARI, New Delhi	3004	3012	3023
6	AH 1258	DMR306	IARI, New Delhi	3011	3015	3029
7	AH 1259	DMR307	IARI, New Delhi	3008	3020	3025
8	HKH35	DMR308	HAU, Karnal	3010	3018	3032
9	HKH36	DMR309	HAU, Karnal	3009	3017	3027
10	HKH37	DMR310	HAU, Karnal	3003	3016	3033
11	PRAKASH (C)	DMR311	PAU, Ludhiana	3005	3019	3026

TRIAL NO. 4	:	AVT I - Late
MATURITY	:	LATE
YEAR	:	2012-2013
SEASON	:	RABI
NO. OF ROWS	:	4
ROW LENGTH (METRE)	:	4
NO. OF REPLICATIONS	:	3
NO. OF LOCATIONS	:	19

LOCATIONS: GOSSAIGAON, LUDHIANA, KARNAL, DELHI, PANTNAGAR, KANPUR, BAHRAICH, DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

				REPLICATIONS		
Entry No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**RIII**
1	BP-001	DMR401	Tanindo seed pvt. Ltd.	4007	4035	4040
2	BP-003	DMR402	Tanindo seed pvt. Ltd.	4001	4028	4045
3	BP-007	DMR403	Tanindo seed pt. Ltd.	4013	4034	4053
4	BP-008	DMR404	Tanindo seed pvt. Ltd.	4003	4020	4039
5	HTMH 5105	DMR405	Hytech seed india pvt. Ltd.	4015	4026	4044
6	PRO-385	DMR406	Bayer Bioscience Pvt. Ltd.	4018	4031	4038
7	KMH-7148	DMR407	Kaveri Seed Company Ltd.	4016	4022	4054
8	Bisco X 5141	DMR408	BISCO BIO-SCIENCES Pvt.Ltd.	4010	4030	4043
9	NMH-1247	DMR409	Nuziveedu Seeds Pvt. Ltd.	4009	4027	4052
10	KH-3479	DMR410	Kahchan Ganga Seed Pvt. Ltd.	4006	4023	4046
11	B-54	DMR411	Kahchan Ganga Seed Pvt. Ltd.	4004	4025	4042
12	A 7501	DMR412	Advanta India Ltd.	4008	4033	4047
13	X35B349	DMR413	Pioneer Overseas Corporation	4011	4029	4037
14	Bio-237	DMR414	Bio seed Research India Pvt. Ltd.	4002	4024	4051
15	JH 270	DMR415	PAU Ludhiana	4012	4036	4049
16	Buland (C)	DMR416	PAU Ludhiana	4005	4019	4041
17	Seed Tech 2324 (C)	DMR417	BISCO BIO-SCIENCES Pvt.Ltd.	4017	4021	4050
18	Bio 9681(C)	DMR418	BIO SEED	4014	4032	4048

TRIAL NO. 5 & 6	:	AVT I - Meidum &Early
MATURITY	:	Medium & Early
YEAR	:	2012-2013
SEASON	:	RABI
NO. OF ROWS	:	4
ROW LENGTH (METRE)	:	4
NO. OF REPLICATIONS	:	3
NO. OF LOCATIONS	:	19

LOCATIONS: GOSSAIGAON, LUDHIANA, KARNAL, DELHI, PANTNAGAR, KANPUR, BAHRAICH, DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

				REPLICATIONS		
Entry No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**RIII**
1	VaMH 08014	DMR501	Maize Research Station,TNAU	5002	5017	5044
2	KH-6847	DMR502	Kahchan Ganga Seed Pvt. Ltd.	5005	5024	5037
3	VEH-11-1	DMR503	Banaras Hindu University,Varanasi	5012	5022	5042
4	HKH 323	DMR504	HAU,Karnal	5009	5016	5043
5	HKH 324	DMR505	HAU,Karnal	5015	5030	5033
6	HKH 325	DMR506	HAU,Karnal	5003	5025	5031
7	HKH 326	DMR507	HAU,Karnal	5006	5020	5039
8	HKH 327	DMR508	HAU,Karnal	5014	5029	5035
9	HKH 328	DMR509	HAU,Karnal	5011	5018	5038
10	BIO 9637 (C)	DMR510	BIO SEED	5001	5021	5041
11	HM4 (C)	DMR511	HAU,Karnal	5013	5027	5040
12	HM8 (C)	DMR512	HAU,Karnal	5010	5023	5045
13	HKH 329	DMR513	HAU,Karnal	5007	5026	5032
14	HKH 330	DMR514	HAU,Karnal	5008	5019	5036
15	PRAKASH (C)	DMR515	PAU, LUDHIANA	5004	5028	5034

TRIAL NO. 7&8	:	AVT II - LATE & MEDIUM
MATURITY	:	LATE & MEDIUM
YEAR	:	2012-2013
SEASON	:	RABI
NO. OF ROWS	:	6
ROW LENGTH (METRE)	:	4
NO. OF REPLICATIONS	:	3
NO. OF LOCATIONS	:	19

LOCATIONS: GOSSAIGAON, LUDHIANA, KARNAL, DELHI, PANTNAGAR, KANPUR, BAHRAICH, DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

				REPLICATIONS		
Entry No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**RIII**
1	NK6607	DMR701	Syngenta India Ltd.	7020	7033	7060
2	S 7720	DMR702	Syngenta India Ltd	7005	7024	7057
3	PR0-380	DMR703	Bayer Bioscience Pvt. Ltd.	7019	7037	7052
4	CMH 08-282	DMR704	Tamilnadu Agricultural Univ.	7015	7040	7053
5	CMH 08-287	DMR705	Tamilnadu Agricultural Univ.	7007	7026	7058
6	KMH-25K45(2700)	DMR706	Kaveri Seed Company Ltd.	7012	7034	7056
7	Bisco New 704	DMR707	BISCO BIO-SCIENCES Pvt.Ltd.	7017	7023	7044
8	BiscoX5129	DMR708	BISCO BIO-Sciences Pvt.Ltd.	7006	7041	7055
9	BiscoX9	DMR709	BISCO BIO-Sciences Pvt. Ltd.	7013	7030	7050
10	NMH-713	DMR710	Nuziveedu Seeds Pvt. Ltd.	7004	7027	7062
11	NMH-731	DMR711	Nuziveedu Seeds Pvt. Ltd.	7018	7031	7049
12	NMH-666	DMR712	Nuziveedu Seeds Pvt. Ltd.	7021	7035	7046
13	RJ 2020	DMR713	RJ Biotech	7010	7022	7063
14	Buland (C)	DMR714	PAU, LUDHIANA	7003	7029	7047
15	Seed Tech 2324 (C)	DMR715	BISCO BIO SCIENCES	7011	7039	7048
16	Bio 9681(C)	DMR716	BIO SEED	7002	7032	7051
17	NMH1242	DMR717	Nuziveedu Seeds Pvt. Ltd.	7014	7036	7045
18	Bio-151	DMR718	Bio seed Research India Pvt. Ltd.	7008	7042	7043
19	BIO 9637 (C)	DMR719	BIO SEED	7009	7028	7059
20	HM4 (C)	DMR720	HAU,Karnal	7001	7038	7054
21	HM8 (C)	DMR721	HAU,Karnal	7016	7025	7061

TR. QPM 1 & 2	:	QPM1 &2
MATURITY	:	LATE/MEDIUM/EARLY
YEAR	:	2012-2013
SEASON	:	RABI
NO. OF ROWS	:	4
ROW LENGTH (METRE)	:	4
NO. OF REPLICATIONS	:	3
NO. OF LOCATIONS	:	19

LOCATIONS: GOSSAIGAON, LUDHIANA, KARNAL, DELHI, PANTNAGAR, KANPUR, BAHRAICH, DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

Entry No.	ENTRY NAME	DMR CODE	Institute Name	R I	R II	RIII
1	VEHQ-11-2 (QPM-2)	DMR 801	BHU	8007	8012	8020
2	VEHQ-11-1 (QPM-2)	DMR 802	BHU	8008	8013	8019
3	REHQ 2011-3 (QPM-1)	DMR 803		8003	8014	8021
4	BAUQMH-17(QPM-1)	DMR 804	RAU, BIHAR	8006	8010	8023
5	MHQPM-09-8(QPM-1)	DMR 805		8004	8015	8024
6	HQPM 1 (C)	DMR 806	HAU KARNAL	8005	8011	8018
7	HQPM 5 (C)	DMR 807	HAU KARNAL	8002	8009	8017
8	HQPM 7 (C)	DMR 808	HAU KARNAL	8001	8016	8022

TRIAL NO. N X G : AVT II - N X G - LATE
MATURITY : LATE
YEAR : 2012-2013
SEASON : RABI
NO. OF LOCATIONS : 14
LOCATIONS: LUDHIANA, KARNAL, DELHI, PANTNAGAR, BAHRAICH, DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, ARBHAVI, VAGARAI, BANSWARA

Entry No.	Entry Name	DMR Code	INSTITUTE NAME
1	NK6607	DMR701	Syngenta India Ltd.
2	S 7720	DMR702	Syngenta India Ltd
3	PR0-380	DMR703	Bayer Bioscience Pvt. Ltd.
4	CMH 08-282	DMR704	Tamilnadu Agricultural Univ.
5	CMH 08-287	DMR705	Tamilnadu Agricultural Univ.
6	KMH-25K45(2700)	DMR706	Kaveri Seed Company Ltd.
7	Bisco New 704	DMR707	BISCO BIO-SCIENCES Pvt.Ltd.
8	BiscoX5129	DMR708	BISCO BIO-Sciences Pvt.Ltd.
9	BiscoX9	DMR709	BISCO BIO-Sciences Pvt. Ltd.
10	NMH-713	DMR710	Nuziveedu Seeds Pvt. Ltd.
11	NMH-731	DMR711	Nuziveedu Seeds Pvt. Ltd.
12	NMH-666	DMR712	Nuziveedu Seeds Pvt. Ltd.
13	RJ 2020	DMR713	RJ Biotech
14	Buland (C)	DMR714	PAU, LUDHIANA
15	Seed Tech 2324 (C)	DMR715	BISCO BIO SCIENCES
16	Bio 9681(C)	DMR716	BIO SEED

TRIAL NO. N X G : AVT II - N X G - MEDIUM
MATURITY : MEDIUM
YEAR : 2012-2013
SEASON : RABI
NO. OF LOCATIONS : 14
LOCATIONS: LUDHIANA, KARNAL, DELHI, PANTNAGAR, BAHRAICH, DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, ARBHAVI, VAGARAI, BANSWARA

Entry No.	Entry Name	DMR Code	INSTITUTE NAME
1	NMH1242	DMR850	Nuziveedu Seeds Pvt. Ltd.
2	Bio-151	DMR851	Bio seed Research India Pvt. Ltd.
3	BIO 9637 (C)	DMR852	BIO SEED
4	HM4 (C)	DMR853	HAU,Karnal
5	HM8 (C)	DMR854	HAU,Karnal

TRIAL NO.11 (LATE) : PATHOLOGY. AVT II, AVT I, IVT (LATE)
MATURITY : LATE
YEAR : 2012-2013
SEASON : RABI
NO. OF ROWS : 2
ROW LENGTH (METRE) : 4
NO. OF REPLICATIONS : 2
PATHOLOGY LOCATIONS : 8
LUDHIANA, DHAULAKUAN, DHOLI, HYDERABAD, ARBHAVI, COIMBATORE, MANDYA, KARNAL

Entry No.	Entry Name	DMR CODE	RI	RII
AVTII-LATE				
1	NK6607	DMR 601	6040	6145
2	S 7720	DMR 602	6034	6087
3	PR0-380	DMR 603	6010	6082
4	CMH 08-282	DMR 604	6029	6150
5	CMH 08-287	DMR 605	6026	6107
6	KMH-25K45(2700)	DMR 606	6044	6085
7	Bisco New 704	DMR 607	6002	6093
8	BiscoX5129	DMR 608	6014	6081
9	BiscoX9	DMR 609	6061	6106
10	NMH-713	DMR 610	6030	6148
11	NMH-731	DMR 611	6064	6132
12	NMH-666	DMR 612	6015	6146
13	RJ 2020	DMR 613	6012	6126
AVT I- LATE				
14	BP-001	DMR 614	6006	6090
15	BP-003	DMR 615	6063	6122
16	BP-007	DMR 616	6008	6099
17	BP-008	DMR 617	6020	6142
18	HTMH 5105	DMR 618	6028	6116
19	PRO-385	DMR 619	6066	6096
20	KMH-7148	DMR 620	6023	6143
21	Bisco X 5141	DMR 621	6056	6111
22	NMH-1247	DMR 622	6070	6084
23	KH-3479	DMR 623	6003	6147
24	B-54	DMR 624	6055	6105
25	A 7501	DMR 625	6021	6124
26	X35B349	DMR 626	6073	6135
27	Bio-237	DMR 627	6047	6102
28	JH 270	DMR 628	6071	6109
29	DKC9120	DMR 629	6060	6121
30	IL 8534	DMR 630	6052	6100

Entry No.	Entry Name	DMR CODE	RI	RII
31	II8212	DMR 631	6068	6101
32	TH2	DMR 632	6054	6098
33	DADA	DMR 633	6031	6133
34	TH22	DMR 634	6075	6088
35	PRO-389	DMR 635	6024	6077
36	PRO-390	DMR 636	6009	6079
37	KMH-2589	DMR 637	6067	6131
38	Rasi-3022	DMR 638	6059	6104
39	Rasi-750	DMR 639	6011	6128
40	Bisco x 6573	DMR 640	6048	6078
41	Venus	DMR 641	6018	6094
42	PMH-2277	DMR 642	6038	6080
43	IVORY	DMR 643	6022	6144
44	PMH-189	DMR 644	6033	6123
45	Meghan-G	DMR 645	6050	6136
IVT I-LATE				
46	GK-3149	DMR 646	6045	6095
47	GK-3150	DMR 647	6035	6129
48	X-1228	DMR 648	6074	6110
49	K-25 Gold	DMR 649	6001	6119
50	P3533	DMR 650	6036	6120
51	X35C526	DMR 651	6043	6149
52	X35C529	DMR 652	6025	6117
53	X35C535	DMR 653	6065	6089
54	X35C537	DMR 654	6016	6083
55	X35C538	DMR 655	6005	6114
56	X35C543	DMR 656	6072	6112
57	REH2012-1	DMR 657	6046	6108
58	REH2012-2	DMR 658	6057	6097
59	AH 1251	DMR 659	6032	6130
60	AH 1252	DMR 660	6051	6141
61	JH 8825	DMR 661	6037	6103
62	JH 9031	DMR 662	6007	6115
63	JH 8837	DMR 663	6062	6118
64	JH 9114	DMR 664	6058	6092
65	JH 211	DMR 665	6039	6113
66	JH 248	DMR 666	6049	6140
67	JH 293	DMR 667	6019	6137
68	JH 295	DMR 668	6017	6086
69	JH 367	DMR 669	6004	6125
70	JH 405	DMR 670	6042	6127

Entry No.	Entry Name	DMR CODE	RI	RII
71	JH 417	DMR 671	6069	6134
72	JH 419	DMR 672	6041	6138
73	Buland (C)	DMR 673	6027	6139
74	Seed Tech 2324 (C)	DMR 674	6053	6076
75	Bio 9681(C)	DMR 675	6013	6091

TRIAL NO.11 (MEDIUM & EARLY) : PATHOLOGY. AVTII, AVTI, IVT (MEDIUM & EARLY)

MATURITY : MEDIUM & EARLY

YEAR : 2012-2013

SEASON : RABI

NO. OF ROWS : 2

ROW LENGTH (METRE) : 4

NO. OF REPLICATIONS : 2

PATHOLOGY LOCATIONS : 8

LUDHIANA, DHAULAKUAN, DHOLI, HYDERABAD, ARBHAVI, COIMBATORE, MANDYA, KARNAL

Entry No.	Entry Name	DMR CODE	RI	RII
AVT II- MEDIUM				
1	NMH1242	DMR 901	9012	9092
2	Bio-151	DMR 902	9018	9080
AVT I- MEDIUM				
3	VaMH 08014	DMR 903	9013	9066
4	KH-6847	DMR 904	9035	9099
5	VEH-11-1	DMR 905	9047	9114
6	HKH 323	DMR 906	9005	9076
7	HKH 324	DMR 907	9003	9083
8	HKH 325	DMR 908	9020	9073
9	HKH 326	DMR 909	9004	9079
10	HKH 327	DMR 910	9048	9108
11	HKH 328	DMR 911	9015	9071
IVT-MEDIUM				
12	IJ8521	DMR 912	9057	9096
13	IJ8214	DMR 913	9016	9062
14	IL8536	DMR 914	9044	9111
15	IL8537	DMR 915	9053	9081
16	KMHI-6668	DMR 916	9025	9091
17	KMH-4210	DMR 917	9046	9058
18	PMH-2246	DMR 918	9002	9074
19	k-26	DMR 919	9008	9100
20	X-2816	DMR 920	9023	9077
21	VEH-12-1	DMR 921	9042	9105
22	MMH-12-11	DMR 922	9038	9086
23	MMH-12-12	DMR 923	9027	9094

Entry No.	Entry Name	DMR CODE	RI	RII
24	MMH-12-13	DMR 924	9036	9112
25	MMH12-14	DMR 925	9010	9064
26	REH2012-3	DMR 926	9056	9110
27	REH2012-4	DMR 927	9028	9101
28	AH 1253	DMR 928	9029	9085
29	AH 1254	DMR 929	9017	9093
30	AH 1255	DMR 930	9001	9063
31	HKH420	DMR 931	9014	9106
32	HKH421	DMR 932	9030	9070
33	HKH422	DMR 933	9041	9107
Checks Varieties-Medium				
34	BIO 9637 (C)	DMR 934	9039	9102
35	HM4 (C)	DMR 935	9045	9075
36	HM 8 (C)	DMR 936	9006	9082
		AVT I -EARLY		
37	HKH 229	DMR 937	9034	9084
38	HKH 230	DMR 938	9051	9095
IVT- EARLY				
39	K-25	DMR 939	9055	9098
40	REH2012-5	DMR 940	9032	9061
41	REH2012-6	DMR 941	9022	9069
42	AH 1256	DMR 942	9054	9104
43	AH 1257	DMR 943	9021	9060
44	AH 1258	DMR 944	9019	9097
45	AH 1259	DMR 945	9009	9103
46	HKH35	DMR 946	9040	9078
47	HKH36	DMR 947	9049	9065
48	HKH37	DMR 948	9033	9067
Check Variety- Early				
49	PRAKASH (C)	DMR 949	9024	9059
QPM 1 & 2 Trial				
50	VEHQ-11-2 (QPM-2)	DMR 950	9050	9089
51	VEHQ-11-1 (QPM-2)	DMR 951	9052	9087
52	REHQ 2011-3 (QPM-1)	DMR 952	9037	9072
53	BAUQMH-17(QPM-1)	DMR 953	9031	9109
54	MHQPM-09-8(QPM-1)	DMR 954	9026	9113
Checks Varieties-QPM				
55	HQPM 1 (C)	DMR 955	9007	9068
56	HQPM 5 (C)	DMR 956	9043	9088
57	HQPM 7 (C)	DMR 957	9011	9090

TRIAL No. 11	:	ENTOMOLOGY AVT I&II Year
MATURITY	:	LATE, MADIUM, EARLY
YEAR	:	2012-2013
SEASON	:	RABI
NO. OF ROWS	:	2
ROW LENGTH (METRE)	:	4
NO. OF REPLICATION	:	2
ENTOMOLOGY LOCATIONS	:	2
		HYDERABAD, KOLHAPUR

Entry No.	Entry Name	DMR CODE	RI	RII
AVTII-LATE				
1	NK6607	DMR 1001	9236	9305
2	S 7720	DMR 1002	9201	9280
3	PR0-380	DMR 1003	9229	9284
4	CMH 08-282	DMR 1004	9244	9291
5	CMH 08-287	DMR 1005	9237	9266
6	KMH-25K45(2700)	DMR 1006	9233	9270
7	Bisco New 704	DMR 1007	9203	9271
8	BiscoX5129	DMR 1008	9215	9297
9	BiscoX9	DMR 1009	9246	9269
10	NMH-713	DMR 1010	9225	9277
11	NMH-731	DMR 1011	9205	9262
12	NMH-666	DMR 1012	9235	9274
13	RJ 2020	DMR 1013	9232	9275
AVT I- LATE				
14	BP-001	DMR 1014	9249	9273
15	BP-003	DMR 1015	9222	9290
16	BP-007	DMR 1016	9204	9261
17	BP-008	DMR 1017	9209	9279
18	HTMH 5105	DMR 1018	9245	9306
19	PRO-385	DMR 1019	9220	9294
20	KMH-7148	DMR 1020	9243	9278
21	Bisco X 5141	DMR 1021	9228	9295
22	NMH-1247	DMR 1022	9226	9281
23	KH-3479	DMR 1023	9214	9301
24	B-54	DMR 1024	9208	9256
25	A 7501	DMR 1025	9241	9276
26	X35B349	DMR 1026	9253	9302
27	Bio-237	DMR 1027	9216	9268
28	JH 270	DMR 1028	9227	9304

Entry No.	Entry Name	DMR CODE	RI	RII
Checks Late				
29	Buland (C)	DMR 1029	9213	9296
30	Seed Tech 2324 (C)	DMR 1030	9230	9264
31	Bio 9681(C)	DMR 1031	9210	9298
AVT II- MEDIUM				
32	NMH1242	DMR 1032	9219	9265
33	Bio-151	DMR 1033	9218	9292
AVT I- MEDIUM				
34	VaMH 08014	DMR 1034	9211	9260
35	KH-6847	DMR 1035	9247	9258
36	VEH-11-1	DMR 1036	9252	9303
37	HKH 323	DMR 1037	9238	9299
38	HKH 324	DMR 1038	9239	9267
39	HKH 325	DMR 1039	9242	9257
40	HKH 326	DMR 1040	9250	9288
41	HKH 327	DMR 1041	9223	9254
42	HKH 328	DMR 1042	9217	9285
Checks Varieties-Medium				
43	BIO 9637 (C)	DMR 1043	9224	9286
44	HM4 (C)	DMR 1044	9251	9300
45	HM 8 (C)	DMR 1045	9248	9289
AVT I-Early				
46	HKH 229	DMR 1046	9231	9263
47	HKH 230	DMR 1047	9221	9255
Check-Early				
48	PRAKASH (C)	DMR 1048	9207	9282
QPM-2				
49	VEHQ-11-2	DMR 1049	9234	9287
50	VEHQ-11-1	DMR 1050	9212	9293
Checks-QPM				
51	HQPM 1 (C)	DMR 1051	9202	9283
52	HQPM 5 (C)	DMR 1052	9240	9272
53	HQPM 7 (C)	DMR 1053	9206	9259

BREEDING

BREEDING

The entire India is divided in five major zones – Zone I, Zone II, Zone III, Zone IV and Zone V, for effective evaluation of the maize breeding materials. However during *rabi* season, no AICRP trials are being conducted in zone-I. Given below are the details of zone wise locations where the trials were conducted during *rabi* 2012-13.

Zone(s)	**Location (s)**
Zone II	Ludhiana, Karnal, Delhi, Pantnagar, Kanpur
Zone III	Bahraich, Dholi, Varanasi, Ranchi, Bhubaneshwar
Zone IV	Karimnagar, Kolhapur Mandya, Coimbatore, Arbhavi, Vagarai,
Zone V	Banswara, Godhra

During *Rabi* 2012, in total 122 maize entries were received for testing in different All India Coordinated Trials. All the entries were evaluated in 10 different breeding trials (three each of IVT, AVT-I, AVT-II and one of QPM) at 18 locations across country. Of total 122, genotypes, 76 were evaluated under Initial Varietal Trial (IVT), 26 were under Advance Varietal Trial I (AVT-I), 15 under Advance Varietal Trial-II (AVT-II) and 5 entries were under quality protein maize (QPM). Total of 10 checks belonging to different maturity groups were used in 10 different breeding trials constituted for various maturity groups and types of corns. Of 122 entries evaluated, the 27 test entries were promoted from IVT late to AVT-I late (Trial 1 to Trial 4), 7 from IVT medium to AVT-I medium (Trial 2 to Trial 5), 2 from IVT early to AVT-I early (Trial 3 to Trial 6). In advance varietal trial I, 9 entries were promoted from AVT-I late to AVT-II late (Trial 4 to Trial 7), 3 were from AVT-I medium to AVT-II medium (Trial 5 to Trial 8), 2 entries were promoted from AVT-I early to AVT-II early (Trial 6 to Trial 9) and one entry was promoted from QPM 2 to QPM 3. The details of promoted entries in different trials are given in table 1. The entries were promoted based on the 5% superiority over the best check (in late maturity), 10% (in medium, early, extra early) and 5% in QPM trial.

Zone wise list of promoted entries from Rabi 2012-13 to Rabi 2013-14:

Promoted from Trial 1 to Trial 4 (IVT Late to AVT-I Late)

S. No.	Entry No.	Entry Name	Grain yield (Kg/ha)	Rank	% Superiority	50% Silking (days)	75% Dry husk (days)	Remark
Zone 2								
1	19	GK-3150	11968	1	20	126.5	165.4	Promoted
2	18	GK-3149	11752	2	17.8	126.0	162.8	Promoted
3	11	Rasi-750	11098	3	11.3	126.5	164.7	Promoted
4	26	X35C537	11076	4	11	126.8	165.3	Promoted
5	27	X35C538	10953	5	9.8	125.7	163.5	Promoted
6	13	Venus	10900	6	9.3	124.3	161.7	Promoted
7	35	JH 8837	10886	7	9.1	127.9	165.8	Promoted
8	5	DADA	10852	8	8.8	126.2	165.5	Promoted
9	21	K-25 Gold	10844	9	8.7	128.3	164.4	Promoted
10	20	X-1228	10735	10	7.6	126.4	165.2	Promoted
11	9	KMH-2589	10709	11	7.4	125.5	161.7	Promoted
12	12	Bisco x 6573	10568	12	5.9	126.1	164.5	Promoted
		CHECKS						
	45	**Buland**	**9975**		**-**	**130.0**	**163.8**	**Best Check**
	46	SeedTech 2324	8497		-	128.5	165.0	
	47	Bio 9681	8785		-	127.3	164.8	
		Location Mean	9874			127.7	164.9	
		C.D. (5%)	**2035**			**3.02**	**4.11**	

Zone 3								
S. No.	**Entry No.**	**Entry Name**	**Grain yield (Kg/ha)**	**Rank**	**% Superiority**	**50% Silking (days)**	**75% Dry husk (days)**	**Remark**
1	4	TH2	10693	1	25.5	111.3	146.6	Promoted
2	27	X35C538	10318	2	21.1	109.2	144.9	Promoted
3	24	X35C529	10266	3	20.5	110.7	147.0	Promoted
4	28	X35C543	10213	4	19.9	110.3	146.4	Promoted
5	3	II 8212	10128	5	18.9	113.4	149.5	Promoted
6	16	PMH-189	9922	6	16.5	111.6	145.1	Promoted
7	26	X35C537	9895	7	16.2	111.3	147.3	Promoted
8	15	IVORY	9882	8	16	112.3	148.5	Promoted
9	17	Meghan-G	9713	9	14	109.0	147.8	Promoted
10	6	TH22	9601	10	12.7	112.0	148.3	Promoted
11	1	DKC9120	9595	11	12.6	113.5	150.6	Promoted
12	18	GK-3149	9538	12	12	109.3	146.7	Promoted
13	23	X35C526	9529	13	11.9	110.4	146.9	Promoted
14	12	Bisco x 6573	9469	14	11.2	111.0	146.6	Promoted
15	2	IL 8534	9348	15	9.7	113.7	151.1	Promoted
16	5	DADA	9239	16	8.5	111.0	148.2	Promoted
17	14	PMH-2277	9233	17	8.4	111.3	145.7	Promoted
18	13	Venus	9207	18	8.1	108.8	146.7	Promoted
19	7	PRO-389	9193	19	7.9	114.6	149.6	Promoted
20	22	P3533	9173	20	7.7	111.5	146.3	Promoted
		CHECKS						
	45	Buland	7534	35	-	113.0	146.5	
	46	**SeedTech 2324**	**8518**	**24**	**-**	**112.5**	**146.6**	**Best Check**
	47	Bio 9681	7592	34	-	109.8	144.1	
		Location Mean	8488			111.6	146.8	
		C.D. (5%)	1321			2.15	1.84	
Zone 4								
1	16	PMH-189	10171	1	14.2	68.7	108.2	Promoted
2	28	X35C543	10146	2	14	67.1	106.5	Promoted
3	26	X35C537	10075	3	13.2	67.0	106.1	Promoted
4	4	TH2	9770	4	9.8	68.6	106.3	Promoted
5	23	X35C526	9506	5	6.8	67.8	107.1	Promoted
6	19	GK-3150	9483	6	6.5	67.9	107.7	Promoted
7	27	X35C538	9416	7	5.8	66.7	105.9	Promoted
8	25	X35C535	9398	8	5.6	67.7	107.2	Promoted
9	24	X35C529	9351	9	5	66.9	105.8	Promoted
10	13	Venus	9311	10	4.6	67.7	106.8	Promoted
		CHECKS						
	45	Buland	7128	41	-	70.7	108.3	
	46	SeedTech 2324	7852	31	-	67.9	107.1	
	47	Bio 9681	8902	22	-	66.0	105.3	Best Check
		Location Mean	8443			68.6	107.3	
		C.D. (5%)	1351			1.59	2.14	
Zone 5								
1	2	IL 8534	10992	1	23.2	97.3	130.5	Promoted
2	12	Bisco x 6573	10374	2	16.3	96.7	130.5	Promoted
3	3	II 8212	10284	3	15.3	98.7	131.2	Promoted
4	4	TH2	10097	4	13.2	98.2	130.8	Promoted
5	22	P3533	10071	5	12.9	97.5	131.5	Promoted
6	20	X-1228	10052	6	12.7	97.5	131.8	Promoted
7	21	K-25 Gold	10037	7	12.5	97.3	129.3	Promoted
8	14	PMH-2277	9903	8	11	98.5	132.7	Promoted

S. No.	Entry No.	Entry Name	Grain yield (Kg/ha)	Rank	% Superiority	50% Silking (days)	75% Dry husk (days)	Remark
9	39	JH 293	9857	9	10.5	99.5	134.2	Promoted
10	15	IVORY	9757	10	9.4	97.0	131.2	Promoted
11	7	PRO-389	9701	11	8.8	99.2	134.2	Promoted
12	16	PMH-189	9699	12	8.7	99.5	132.2	Promoted
13	19	GK-3150	9619	13	7.8	97.3	131.2	Promoted
14	27	X35C538	9414	14	5.6	96.3	133.3	Promoted
		CHECKS						
	45	Buland	8812	20	-	99.8	133.7	
	46	**SeedTech 2324**	**8919**	**18**	**-**	**97.7**	**129.7**	**Best Check**
	47	Bio 9681	6662	41	-	95.5	129.0	
		Location Mean	8401			97.8	131.4	

Promoted from Trial 2 to Trial 5 (IVT Medium to AVT-I Medium)

In Zone 2, no entries were promoted as none were found superior over Bio 9637

Zone 3

S. No.	E. No.	Entry Name	Grain yield (Kg/ha)	Rank	% Superiority	50%Silking (days)	75% Dry husk (days)	Remark
1	1	IJ8521	9413	1	21.8	110.9	145.7	Promoted
2	3	IL8536	9004	2	16.5	112.5	146.9	Promoted
		CHECKS						
	23	**BIO9637**	**7730**	**9**	**-**	**111.1**	**145.0**	**Best Check**
	24	HM4	6620	15	-	110.7	143.7	
	25	HM8	6568	18	-	111.9	146.3	
		Location Mean	7159			110.4	144.8	
		C.D. (5%)	**1607**			**4.52**	**1.78**	
Zone 4								
1	7	PMH-2246	10697	1	33.4	65.8	102.4	Promoted
2	3	IL8536	9938	2	23.9	67.7	103.5	Promoted
3	1	IJ8521	9799	3	22.2	66.3	101.9	Promoted
4	4	IL8537	9565	4	19.3	67.7	103.2	Promoted
5	8	K-26	9505	5	18.5	64.4	101.3	Promoted
6	6	KMH-4210	9234	6	15.1	67.4	102.9	Promoted
7	2	IJ8214	9192	7	14.6	65.6	102.6	Promoted
		CHECKS						
	23	**BIO9637**	**8021**	**9**	**-**	**66.1**	**102.1**	**Best Check**
	24	HM4	7239	15	-	64.8	101.1	
	25	HM8	6992	18	-	67.0	102.8	
		Location Mean	7811			66.1	101.8	
		C.D. (5%)	**1209**			**1.68**	**2.10**	
Zone 5								
1	2	IJ8214	10703	1	54.3	91.3	126.8	Promoted
2	1	IJ8521	8554	2	23.4	93.5	127.2	Promoted
3	4	IL8537	7885	3	13.7	91.3	125.0	Promoted
4	7	PMH-2246	7874	4	13.5	91.9	127.7	Promoted
		CHECKS						
	23	BIO9637	5285	17	-	90.3	123.6	
	24	**HM4**	**6935**	**5**	**-**	**86.7**	**122.6**	**Best Check**
		Location Mean	5878			90.6	125.5	
		C.D. (5%)	**1106**			**6.83**	**4.01**	

Promoted from Trial 3 to Trial 6 (IVT-Early to AVT-I Early)

In Zone 2 no entries were promoted as none were found superior over Prakash

Zone 3

S. No.	Entry No.	Entry Name	Grain yield (Kg/ha)	Rank	% Superiority	50%Silking (days)	75% Dry husk (days)	Remark
1	1	K-25	8520	1	17.1	107.6	143.2	Promoted
		CHECKS						
	11	**PRAKASH**	**7277**	**4**	**-**	**105.5**	**140.0**	**Best Check**
		Loc. Mean	7152			106.4	142.1	
		C.D. (5%)	**1677**			**2.22**	**1.70**	
Zone 4								
1	1	K-25	9736	1	36.1	64.0	98.7	Not Promoted
2	9	HKH36	7847	2	9.7	64.2	98.7	Not Promoted
		CHECKS						
	11	**PRAKASH**	**7154**	**6**	**-**	**61.4**	**94.9**	**Best Check**
		Loc. Mean	7326			62.8	96.9	
		C.D. (5%)	**1156**			**2.09**	**2.20**	
Zone 5								
1	1	K-25	8720	1	47.9	83.7	113.2	Promoted
2	9	HKH36	7505	2	27.3	85.5	115.0	Promoted
		CHECKS						
	11	**PRAKASH**	**5897**	**7**	**-**	**81.0**	**110.5**	**Best Check**
		Location Mean	6264			82.6	112.2	
		C.D. (5%)	**1339**			**6.28**	**6.22**	
Promoted from Trial 4 to Trial 7 (AVT-I Late to AVT-II Late) **In Zone 2 no entries were promoted as none were found superior over Seed Tec 2324**								
Zone 3								
1	7	KMH-7148	9224	1	16.1	111.3	151.7	Promoted
2	13	X35B349	9000	2	13.3	112.8	149.5	Promoted
3	14	Bio-237	8953	3	12.7	111.8	149.6	Promoted
4	4	BP-008	8650	4	8.9	113.0	149.5	Promoted
5	9	NMH-1247	8456	5	6.5	112.4	148.3	Promoted
6	8	Bisco X 5141	8401	6	5.8	112.8	148.9	Promoted
		CHECKS						
	16	BULAND	7530	16	-	112.8	149.0	
	17	**SEEDTECH 2324**	**7943**	**10**	**-**	**111.9**	**148.3**	**Best Check**
	18	BIO 9681	7657	14	-	110.7	146.6	
		Loc. Mean	8078			112.7	148.9	
		C.D. (5%)	**30**			**2.46**	**6.19**	
Zone 4								
1	9	NMH-1247	10382	1	11.9	68.2	107.2	Promoted
2	7	KMH-7148	10081	2	8.6	68.3	108.2	Promoted
3	12	A 7501	9940	3	7.1	70.2	109.8	Promoted
4	6	PRO-385	9745	4	5	69.8	108.7	Promoted
		CHECKS						
	16	BULAND	7083	18	-	70.1	107.9	
	17	**SEEDTECH 2324**	**9280**	**7**	**-**	**68.5**	**108.6**	**Best Check**
	18	BIO 9681	8479	16	-	66.4	106.6	
		Loc. Mean	9076			69.5	108.4	
		C.D. (5%)	**30**			**1.56**	**1.78**	
Zone 5								
1	14	Bio-237	12695	1	38.8	98.7	131.3	Promoted
2	13	X35B349	10810	2	18.2	102.7	136.5	Promoted
3	9	NMH-1247	10308	3	12.7	100.0	132.3	Promoted
4	7	KMH-7148	9823	4	7.4	100.5	132.8	Promoted
5	8	Bisco X 5141	9800	5	7.1	103.0	136.2	Promoted
6	15	JH 270	9708	6	6.1	106.8	133.0	Promoted

		CHECKS						
	16	BULAND	8963	12	-	103.0	122.7	
	17	**SEEDTECH 2324**	**9146**	**10**	**-**	**99.2**	**130.5**	**Best Check**
	18	BIO 9681	6960	18	-	98.3	131.8	
		Loc. Mean	9311			101.4	132.5	
		C.D. (5%)	**30**			**7.17**	**10.41**	

Promoted from Trial 5 to Trial 8 (AVT-I Medium to AVT-II Medium)
In Zone 3 and 4 no entries were promoted as none were found superior over Bio 9637

Zone 2

S. No.	Entry No.	Entry Name	Grain yield (Kg/ha)	Rank	% Superiority	50%Silking (days)	75%Dry.husk (days)	Remark
1	6	HKH 325	9347	1	13	123.0	164.3	Promoted
		CHECKS						
	13	BIO9637	7482	15	-	123.9	164.6	
	14	**HM4**	**8268**	**8**	**-**	**117.1**	**163.3**	**Best Check**
		Location Mean	8342			122.4	163.6	
		C.D. (5%)	**1582**			**3.99**	**1.95**	

Zone 5

1	3	VEH-11-1	8816	1	29.1	90.3	121.8	Promoted
2	1	VaMH 08014	7696	2	12.7	88.0	121.3	Promoted
		CHECKS						
	13	BIO9637	6602	8	-	88.7	121.2	
	14	HM4	6303	9	-	87.0	119.2	
	15	**HM8**	**6831**	**4**	**-**	**91.0**	**123.7**	**Best Check**
		Location Mean	6504			88.2	120.9	
		C.D. (5%)	**871**			**2.55**	**1.99**	

Promoted from Trial 6 to Trial 9 (AVT-I Early to AVT-II early)
In Zone 2, 3 and 4 no entries were promoted as none were found superior Prakash

			Zone 5					
S. No.	**Entry No.**	**Entry Name**	**Grain yield (Kg/ha)**	**Rank**	**% Superiority**	**50%Silking (days)**	**75%Dry.husk (days)**	**Remark**
1	10	HKH 329	5763	12	15.3	87.3	119.5	Promoted
2	11	HKH 330	5676	13	13.6	83.2	118.5	Promoted
		CHECKS						
	12	**PRAKASH**	4996	15	**-**	**83.0**	**116.2**	**Best Check**
	13	BIO9637	6602	8		88.7	121.2	
	14	HM4	6303	9		87.0	119.2	
	15	HM8	6831	4		91.0	123.7	
		Loc. Mean	**6504**			88.2	120.9	
		C.D. (5%)	30			**4.83**	**5.15**	

Promoted from Trial QPM 2 to QPM 3
In Zone 2, 4 and 5 no entries were promoted as none were found superior over HQPM 7

Zone 3

S. No.	Entry No.	Entry Name	Grain yield (Kg/ha)	Rank	% superiority	50% silking (days)	75% dry husk (days)	Remark
1	2	VEHQ-11-1 (QPM-2)	8795	1	15.4	111.3	147.8	Promoted
		CHECKS						
	6	HQPM 1	7070	4	-	110.5	148.7	
	7	HQPM 5	6562	6	-	113.3	148.4	
	8	**HQPM 7**	**7622**	**2**	-	**111.3**	**146.6**	**Best Check**
		Location Mean	7004			110.4	146.8	
		C.D. (5%)	739			2.16	2.43	

TABLE No. 1: **Performance of late maturing experimental hybrids at Delhi, Karnal, Ludhiana, Dholi, Pantnagar, Kanpur, Bahraich, Bhubaneshwar, Varanasi, Ranchi, Arbhavi, Karimnagar, Kolhapur, Mandya, Coimbatore, Vagarai, Banswara, Godhra in trial no. TR01 (IVT-L) during rabi 2012-13**

		GRAIN YIELD (kg/ha) AT 15% MOISTURE																						
Sl											ZN 2											ZN 3	
No	PEDIGREE	DELH	R	KARN	R	LUDH	R	PANT	R	KANP	R	MEAN	R	BAHR	R	DHOL	R	BHUB	R	VARA	R	RANC	R	MEAN	R
1	DKC9120	13782	3	7073	36	18133	2	13137	11	7195	41	9135	38	9993	2	6428	9	5443	20	11876	23	11068	26	9595	11
2	IL 8534	13554	7	8146	16	11831	31	12410	17	10548	18	10368	13	8734	7	5960	18	4917	30	13910	5	9833	37	9348	15
3	II 8212	11853	18	6416	42	15889	6	13299	8	11202	14	10306	15	10566	1	5043	36	5631	17	12513	17	11804	14	10128	5
4	TH2	11268	21	8211	13	11906	30	9215	45	13464	6	10297	16	8712	8	4629	44	5201	24	14802	1	14056	2	10693	1
5	DADA	10776	26	8920	6	13277	20	12360	19	11275	13	10852	8	7612	12	5848	20	5147	25	13086	10	11110	23	9239	16
6	TH22	9259	37	8851	7	6327	46	14648	4	7108	42	10202	17	5509	31	5982	17	5137	27	12979	12	14777	1	9601	10
7	PRO-389	8069	43	8658	9	15313	10	13255	10	5932	47	9282	35	6768	20	5616	23	4973	29	11299	26	13731	4	9193	19
8	PRO-390	12697	14	8935	5	10261	38	11487	31	9141	25	9854	24	4850	38	6125	14	5142	26	10379	32	6799	46	6792	40
9	KMH-2589	10613	30	6605	40	10651	37	11813	26	13709	5	10709	11	5816	28	6649	5	4584	34	10423	31	10624	30	7862	31
10	Rasi-3022	10459	31	7956	19	7510	44	11411	32	9086	28	9484	33	7353	14	3199	47	4658	32	12191	20	8339	44	8135	29
11	Rasi-750	11910	17	9735	1	12570	24	11792	28	11766	12	11098	3	5804	29	5314	30	4612	33	11602	24	12011	12	8507	25
12	Bisco x 6573	12970	12	8694	8	10819	35	12166	21	10843	17	10568	12	5620	30	5491	27	6237	5	14322	2	11697	15	9469	14
13	Venus	10742	27	9016	4	13418	18	13312	7	10372	20	10900	6	6576	21	4721	42	6074	8	13933	4	10245	33	9207	18
14	PMH-2277	12972	11	9509	2	14538	12	11805	27	9633	23	10316	14	7054	17	6492	8	5390	21	12964	13	11523	18	9233	17
15	IVORY	10817	25	8454	11	12498	26	13743	5	7463	39	9887	21	6812	19	5719	22	6297	3	12731	15	13687	5	9882	8
16	PMH-189	13556	6	7234	32	16866	4	13466	6	8955	32	9885	22	9375	3	6228	12	5922	11	13064	11	11327	21	9922	6
17	Meghan-G	10358	32	7859	21	12225	27	13023	12	8939	33	9940	20	6862	18	6557	6	5863	12	13829	7	12296	8	9713	9
18	GK-3149	11100	22	8244	12	14958	11	12971	13	14042	2	11752	2	6563	22	4732	41	5475	19	13892	6	12222	10	9538	12
19	GK-3150	11363	20	8117	17	10231	39	12817	15	14970	1	11968	1	7405	13	7398	2	5746	15	11013	27	11334	20	8874	21
20	X-1228	10664	28	6704	38	13668	16	11739	29	13763	3	10735	10	6463	23	4681	43	3498	41	10640	29	10571	31	7793	32
21	K-25 Gold	14371	2	7475	30	17771	3	15273	1	9783	22	10844	9	5987	25	6669	4	5279	22	11956	21	9821	38	8261	27
22	P3533	13012	10	7680	24	14256	15	11975	22	9085	29	9580	32	7245	16	5302	32	6144	6	12216	19	11088	25	9173	20
23	X35C526	12772	13	7138	35	13315	19	12405	18	8779	36	9441	34	8799	6	6188	13	5227	23	11923	22	12166	11	9529	13
24	X35C529	13749	4	7576	27	11798	32	11959	23	7305	40	8947	41	8654	9	5494	26	6368	2	13221	9	12820	7	10266	3
25	X35C535	10953	23	7709	22	13161	22	11378	33	5958	46	8348	46	5480	32	5340	29	5774	14	12542	16	11568	17	8841	23
26	X35C537	13311	8	9341	3	15388	9	15002	2	8884	34	11076	4	8256	11	7071	3	6274	4	13945	3	11104	24	9895	7
27	X35C538	15776	1	8065	18	16352	5	14824	3	9971	21	10953	5	8946	5	8848	1	6559	1	13526	8	12241	9	10318	2
28	X35C543	13715	5	8163	15	18305	1	11931	24	9107	27	9734	27	8595	10	6556	7	6089	7	12842	14	13327	6	10213	4
29	REH2012-1	6025	47	7920	20	7270	45	10594	40	6947	44	8487	44	3825	44	4815	38	4577	35	8625	45	9409	40	6609	44
30	REH2012-2	6103	46	6272	43	4777	47	8171	47	12722	8	9055	40	3372	47	3416	46	4006	38	6969	47	-		4782	47
31	AH 1251	7323	44	7251	31	8202	42	12857	14	9023	31	9710	29	4087	43	4736	40	2944	47	9412	39	9433	39	6469	45
32	AH 1252	12227	15	5497	47	12027	29	10329	41	13097	7	9641	30	4250	42	5930	19	3208	44	9179	40	10654	29	6823	39

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE										ZN 2										ZN 3	
		DELH	R	KARN	R	LUDH	R	PANT	R	KANP	R	MEAN	R	BAHR	R	DHOL	R	BHUB	R	VARA	R	RANC	R	MEAN	R
33	JH 8825	10659	29	6119	45	12538	25	9434	44	13741	4	9765	26	4822	39	6240	11	3719	39	9879	35	11951	13	7593	33
34	JH 9031	6670	45	6886	37	12682	23	10055	43	11950	11	9630	31	3660	45	5176	35	4669	31	7981	46	9398	41	6427	46
35	JH 8837	8250	42	8564	10	14272	14	11919	25	12175	10	10886	7	5116	36	5248	34	3074	46	9843	36	11624	16	7414	37
36	JH 9114	10019	34	7516	28	11666	33	13271	9	8809	35	9865	23	9162	4	6298	10	4030	37	10841	28	11350	19	8846	22
37	JH 211	9415	36	7692	23	11647	34	10988	38	10515	19	9732	28	5985	26	5371	28	3297	43	9682	37	13868	3	8208	28
38	JH 248	10022	33	7630	25	9738	40	11583	30	10902	16	10038	18	4266	41	4088	45	3201	45	10457	30	9106	42	6757	41
39	JH 293	8781	40	7210	34	10705	36	8924	46	6974	43	7703	47	4917	37	5758	21	5488	18	8698	44	10239	34	7335	38
40	JH 295	9076	38	7229	33	13441	17	11345	34	9248	24	9274	36	5178	34	4883	37	5933	10	8822	43	10194	35	7532	36
41	JH 367	12150	16	6572	41	12087	28	11016	37	7813	37	8467	45	3633	46	4807	39	6035	9	8846	42	7956	45	6618	43
42	JH 405	13074	9	6264	44	15579	8	10687	39	12539	9	9830	25	7340	15	5307	31	3419	42	10119	33	11130	22	8002	30
43	JH 417	8898	39	8189	14	9005	41	10214	42	9121	26	9175	37	5279	33	5523	25	3528	40	9601	38	8479	43	6722	42
44	JH 419	11688	19	5593	46	13207	21	12629	16	9040	30	9087	39	5985	27	6104	15	5135	28	12438	18	9944	36	8375	26
	CHECKS																								
45	Buland	10890	24	7489	29	15668	7	11339	35	11096	15	9975	19	4757	40	5273	33	5816	13	9014	41	10549	32	7534	35
46	SeedTech 2324	9978	35	6627	39	14448	13	12226	20	6637	45	8497	43	6129	24	5601	24	5650	16	11501	25	10792	27	8518	24
47	Bio 9681	8353	41	7619	26	8125	43	11138	36	7597	38	8785	42	5141	35	6053	16	4429	36	10047	34	10750	28	7592	34
	Location Mean	**10980**		**7673**		**12560**		**11986**		**9962**		**9874**		**6453**		**5636**		**5017**		**11395**		**11087**		**8488**	
	C.D. (5%)	4518		967		6333		2479		2660		2035		901		2248		443		1529		2411		1321	
	C.V. (%)	**25.37**		7.77		**31.09**		12.75		16.46		**-**		8.61		**24.59**		5.44		8.28		10.79		**-**	
	F (Prob)	0.003		0		0.006		0		0				0		0.047		0		0		0			
	Plot Size	1.5		6		3.6		6		4.8		-		4.8		6		4.8		4.8		5.6		-	
	AGRONOMY DATA																								
	Sowing Date	6-12		18-11		30-11		27-11		25-12		-		4-12		21-11		29-11		26-11		1-12		-	
	Harvest Date	13-06		30-05		3-06		19-06		8-05		-		22-05		13-06		17-04		3-05		20-05		-	
	Irrigation Nos	8		7		12		6		5		-		4		4		10		5		11		-	
	Ferilizer Applied N	180		150		70		120		120		-		150		150		120		150		140		-	
	Ferilizer Applied P	80		60		24		60		60		-		75		70		60		75		60		-	
	Ferilizer Applied K	60		60		12		40		60		-		60		60		60		60		40		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : DELH 25.4 %: LUDH 31.1 %: DHOL 24.6 %

TABLE No. 1: **(cont.)**

Sl No	PEDIGREE	ARBH	R	KARI	R	KOLH	R	MAND	R	COIM	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
1	DKC9120	6785	6	11229	31	12786	4	6536	14	11255	18	5990	27	9097	18	7971	7	8097	36	8034	30	9096	23
2	IL 8534	7116	4	13324	13	9517	31	7427	9	11827	11	6376	19	9264	12	6539	29	15446	1	10992	1	9738	8
3	II 8212	6851	5	18840	1	8831	38	5839	36	7674	43	7100	8	9189	15	7668	8	12900	6	10284	3	9809	6
4	TH2	5807	17	15253	3	12699	5	5406	41	11710	13	7748	2	9770	4	6613	27	13581	3	10097	4	10165	1
5	DADA	6663	9	11175	32	9712	29	6267	26	11103	19	5430	39	8392	28	7081	20	10463	20	8772	21	9160	22
6	TH22	4346	43	12910	16	8734	40	7608	3	13815	1	5967	28	8896	23	8099	5	7821	37	7960	32	9221	20
7	PRO-389	5328	27	11568	29	10905	16	6139	32	12547	5	5796	32	8714	24	9661	3	9740	29	9701	11	9087	24
8	PRO-390	4892	33	12565	20	8648	41	6370	24	12188	9	5884	30	8424	27	4388	46	10503	19	7446	37	8145	33
9	KMH-2589	5521	23	14882	6	9614	30	6580	12	10863	23	7514	3	9163	16	6704	26	7469	40	7086	39	8848	26
10	Rasi-3022	6584	11	11780	27	7734	44	6529	15	9115	32	5482	38	7871	30	7330	15	8143	35	7737	36	8246	29
11	Rasi-750	7359	3	12251	25	10993	14	6466	18	8929	35	6215	22	8702	25	7581	11	10338	21	8959	17	9164	21
12	Bisco x 6573	5952	16	14341	8	11567	11	6416	21	9083	34	6884	11	9041	19	7517	12	13232	4	10374	2	9638	9
13	Venus	6108	14	13242	14	10985	15	7580	4	12163	10	5790	33	9311	10	6986	22	10153	24	8569	24	9502	12
14	PMH-2277	5996	15	11589	28	11146	13	7568	5	11703	14	7157	7	9193	14	5500	42	14306	2	9903	8	9523	11
15	IVORY	5653	19	14794	7	8752	39	6481	17	8674	36	7499	4	8642	26	7299	16	12214	9	9757	10	9370	16
16	PMH-189	6779	7	12820	18	15114	1	7519	6	10790	24	8002	1	10171	1	9756	2	9641	31	9699	12	9984	3
17	Meghan-G	6661	10	13612	10	10742	17	6561	13	11083	20	6550	17	9202	13	7261	17	9661	30	8461	26	9387	15
18	GK-3149	4327	44	12458	23	10564	18	7691	1	12454	6	6131	24	8938	21	5656	39	11348	12	8502	25	9603	10
19	GK-3150	6236	12	12544	22	12073	7	7505	7	12438	7	6103	26	9483	6	8036	6	11202	16	9619	13	9836	5
20	X-1228	5767	18	13425	11	11612	10	6211	29	11340	17	6581	16	9156	17	8988	4	11117	18	10052	6	9228	19
21	K-25 Gold	5601	20	14992	5	10161	25	6168	31	10864	22	6155	23	8990	20	6979	23	13095	5	10037	7	9306	18
22	P3533	6167	13	13049	15	11995	8	7485	8	10442	28	6469	18	9268	11	7422	14	12721	8	10071	5	9412	14
23	X35C526	4628	39	13335	12	11821	9	6450	20	13363	2	7437	5	9506	5	5591	40	11331	13	8461	27	9359	17
24	X35C529	5169	29	15788	2	10539	19	6722	11	12285	8	5601	37	9351	9	5670	37	12746	7	9208	15	9495	13
25	X35C535	7984	1	12829	17	11390	12	7093	10	11463	15	5629	36	9398	8	6593	28	11800	11	9197	16	9013	25
26	X35C537	7604	2	13658	9	14013	3	6401	22	12665	3	6108	25	10075	3	6356	33	11294	14	8825	19	10060	2
27	X35C538	5429	25	12558	21	12548	6	6463	19	12560	4	6939	10	9416	7	7637	9	11192	17	9414	14	9964	4
28	X35C543	5115	30	15122	4	14238	2	7690	2	11723	12	6986	9	10146	2	7149	19	8787	34	7968	31	9791	7
29	REH2012-1	4227	46	11037	34	5608	46	6246	27	7679	42	5888	29	6781	44	5447	43	4258	47	4852	46	6819	46
30	REH2012-2	4667	38	12450	24	5471	47	6497	16	6788	47	6662	13	7089	42	4409	45	4905	46	4657	47	6669	47
31	AH 1251	4559	41	7364	47	10310	22	6384	23	7932	39	2016	47	6428	46	7599	10	6444	44	7022	40	7174	44
32	AH 1252	4806	36	9574	41	9986	26	5973	34	8636	37	5230	44	7368	39	7194	18	7368	41	7281	38	7665	40

Sl No	PEDIGREE	ARBH	R	KARI	R	KOLH	R	MAND	R	COIM	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
33	JH 8825	4261	45	8023	45	8516	43	5691	38	7821	41	5415	42	6621	45	5657	38	6423	45	6040	44	7431	42
34	JH 9031	4873	35	8645	43	6418	45	6042	33	6943	46	5416	41	6389	47	4686	44	7614	39	6150	43	7016	45
35	JH 8837	5583	22	8138	44	8833	37	5306	44	7823	40	5683	35	6894	43	5863	36	7124	42	6493	42	7778	39
36	JH 9114	5361	26	11451	30	10334	21	5393	42	10639	27	6617	14	8299	29	6275	34	11230	15	8753	22	8819	27
37	JH 211	4599	40	9909	38	9216	34	5532	39	10654	25	5823	31	7622	33	5522	41	10089	26	7805	35	8225	31
38	JH 248	5074	31	9595	39	9060	35	6237	28	10648	26	4990	46	7601	35	6450	30	10325	22	8388	28	7968	36
39	JH 293	4448	42	10277	36	8617	42	5452	40	11424	16	5424	40	7607	34	9772	1	9942	27	9857	9	7854	38
40	JH 295	5218	28	9377	42	9483	32	6345	25	9106	33	5319	43	7475	36	6405	31	9928	28	8167	29	7942	37
41	JH 367	5459	24	9592	40	9802	28	6198	30	7615	44	5192	45	7310	40	6748	25	8900	32	7824	34	7425	43
42	JH 405	4946	32	10138	37	9819	27	5834	37	7312	45	6360	20	7402	38	6884	24	8871	33	7878	33	8111	34
43	JH 417	3786	47	11826	26	10301	23	4936	46	9447	30	6722	12	7836	32	3403	47	7652	38	5527	45	7499	41
44	JH 419	5588	21	11050	33	10245	24	3617	47	8364	38	5755	34	7437	37	7027	21	10117	25	8572	23	8168	32
	CHECKS																						
45	Buland	4798	37	7801	46	9482	33	5139	45	9203	31	6345	21	7128	41	7454	13	10171	23	8812	20	8030	35
46	SeedTech 2324	4877	34	10306	35	9040	36	5881	35	10406	29	6602	15	7852	31	5889	35	11949	10	8919	18	8301	28
47	Bio 9681	6704	8	12655	19	10358	20	5374	43	10994	21	7328	6	8902	22	6404	32	6920	43	6662	41	8231	30
	Location Mean	**5580**		**12024**		**10220**		**6324**		**10331**		**6177**		**8443**		**6790**		**10012**		**8401**		**8735**	
	C.D. (5%)	1716		1244		2092		594		830		1631		1351		1480		1897		1688		1525	
	C.V. (%)	18.96		6.38		12.62		5.79		4.95		16.28		-		13.44		11.68		-		-	
	F (Prob)	0		0		0		0		0		0				0		0					
	Plot Size	6		6		6		5.6		4.8		4.8		-		6		4.8		-		-	
	AGRONOMY DATA																						
	Sowing Date	11-12		25-11		22-12		27-11		11-12		27-12		-		5-12		22-11		-		-	
	Harvest Date	20-04		30-03		31-05		25-04		7-04		26-04		-		2-05		25-04		-		-	
	Irrigation Nos	8		8		-		6		10		11		-		6		9		-		-	
	Ferilizer Applied N	150		240		120		150		150		200		-		150		120		-		-	
	Ferilizer Applied P	75		80		60		75		75		75		-		80		50		-		-	
	Ferilizer Applied K	37.5		80		40		40		75		75		-		-		-		-		-	

TABLE No. 1 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Buland																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	RANC	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	DKC9120	26.6	-	15.7	15.9	-	-	110.1	21.9	-	31.7	4.9	27.4	41.4	43.9	34.8	27.2	22.3	-	27.6	6.9	-	-	13.3
2	IL 8534	24.5	8.8	-	9.4	-	3.9	83.6	13	-	54.3	-	24.1	48.3	70.8	0.4	44.5	28.5	0.5	30	-	51.9	24.7	21.3
3	II 8212	8.8	-	1.4	17.3	1	3.3	122.1	-	-	38.8	11.9	34.4	42.8	141.5	-	13.6	-	11.9	28.9	2.9	26.8	16.7	22.2
4	TH2	3.5	9.6	-	-	21.3	3.2	83.1	-	-	64.2	33.2	41.9	21	95.5	33.9	5.2	27.2	22.1	37.1	-	33.5	14.6	26.6
5	DADA	-	19.1	-	9	1.6	8.8	60	10.9	-	45.2	5.3	22.6	38.9	43.3	2.4	21.9	20.6	-	17.7	-	2.9	-	14.1
6	TH22	-	18.2	-	29.2	-	2.3	15.8	13.4	-	44	40.1	27.4	-	65.5	-	48	50.1	-	24.8	8.7	-	-	14.8
7	PRO-389	-	15.6	-	16.9	-	-	42.3	6.5	-	25.3	30.2	22	11.1	48.3	15	19.5	36.3	-	22.3	29.6	-	10.1	13.2
8	PRO-390	16.6	19.3	-	1.3	-	-	1.9	16.2	-	15.1	-	-	2	61.1	-	24	32.4	-	18.2	-	3.3	-	1.4
9	KMH-2589	-	-	-	4.2	23.6	7.4	22.3	26.1	-	15.6	0.7	4.4	15.1	90.8	1.4	28	18	18.4	28.5	-	-	-	10.2
10	Rasi-3022	-	6.2	-	0.6	-	-	54.6	-	-	35.2	-	8	37.2	51	-	27	-	-	10.4	-	-	-	2.7
11	Rasi-750	9.4	30	-	4	6	11.3	22	0.8	-	28.7	13.9	12.9	53.4	57.1	15.9	25.8	-	-	22.1	1.7	1.6	1.7	14.1
12	Bisco x 6573	19.1	16.1	-	7.3	-	5.9	18.1	4.1	7.2	58.9	10.9	25.7	24.1	83.9	22	24.8	-	8.5	26.8	0.8	30.1	17.7	20
13	Venus	-	20.4	-	17.4	-	9.3	38.2	-	4.4	54.6	-	22.2	27.3	69.8	15.9	47.5	32.2	-	30.6	-	-	-	18.3
14	PMH-2277	19.1	27	-	4.1	-	3.4	48.3	23.1	-	43.8	9.2	22.5	25	48.6	17.5	47.3	27.2	12.8	29	-	40.7	12.4	18.6
15	IVORY	-	12.9	-	21.2	-	-	43.2	8.5	8.3	41.2	29.7	31.2	17.8	89.6	-	26.1	-	18.2	21.2	-	20.1	10.7	16.7
16	PMH-189	24.5	-	7.6	18.8	-	-	97.1	18.1	1.8	44.9	7.4	31.7	41.3	64.3	59.4	46.3	17.2	26.1	42.7	30.9	-	10.1	24.3
17	Meghan-G	-	4.9	-	14.9	-	-	44.3	24.4	0.8	53.4	16.6	28.9	38.8	74.5	13.3	27.7	20.4	3.2	29.1	-	-	-	16.9
18	GK-3149	1.9	10.1	-	14.4	26.6	17.8	38	-	-	54.1	15.9	26.6	-	59.7	11.4	49.7	35.3	-	25.4	-	11.6	-	19.6
19	GK-3150	4.3	8.4	-	13	34.9	20	55.7	40.3	-	22.2	7.4	17.8	30	60.8	27.3	46	35.2	-	33	7.8	10.1	9.2	22.5
20	X-1228	-	-	-	3.5	24	7.6	35.9	-	-	18	0.2	3.4	20.2	72.1	22.5	20.9	23.2	3.7	28.5	20.6	9.3	14.1	14.9
21	K-25 Gold	32	-	13.4	34.7	-	8.7	25.9	26.5	-	32.6	-	9.6	16.7	92.2	7.2	20	18	-	26.1	-	28.8	13.9	15.9
22	P3533	19.5	2.6	-	5.6	-	-	52.3	0.5	5.6	35.5	5.1	21.8	28.5	67.3	26.5	45.6	13.5	2	30	-	25.1	14.3	17.2
23	X35C526	17.3	-	-	9.4	-	-	85	17.4	-	32.3	15.3	26.5	-	70.9	24.7	25.5	45.2	17.2	33.4	-	11.4	-	16.6
24	X35C529	26.3	1.2	-	5.5	-	-	81.9	4.2	9.5	46.7	21.5	36.3	7.7	102.4	11.2	30.8	33.5	-	31.2	-	25.3	4.5	18.2
25	X35C535	0.6	2.9	-	0.3	-	-	15.2	1.3	-	39.1	9.7	17.3	66.4	64.5	20.1	38	24.6	-	31.8	-	16	4.4	12.2
26	X35C537	22.2	24.7	-	32.3	-	11	73.5	34.1	7.9	54.7	5.3	31.3	58.5	75.1	47.8	24.6	37.6	-	41.3	-	11	0.1	25.3
27	X35C538	44.9	7.7	4.4	30.7	-	9.8	88.1	67.8	12.8	50.1	16	37	13.2	61	32.3	25.8	36.5	9.4	32.1	2.5	10	6.8	24.1
28	X35C543	25.9	9	16.8	5.2	-	-	80.7	24.3	4.7	42.5	26.3	35.6	6.6	93.9	50.2	49.6	27.4	10.1	42.3	-	-	-	21.9

TABLE No. 1 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Buland																						
		ZN 2						ZN 3											ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	RANC	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
29	REH2012-1	-	5.7	-	-	-	-	-	-	-	-	-	-	-	41.5	-	21.5	-	-	-	-	-	-	-
30	REH2012-2	-	-	-	-	14.7	-	-	-	-	-	-	-	-	59.6	-	26.4	-	5	-	-	-	-	-
31	AH 1251	-	-	-	13.4	-	-	-	-	-	4.4	-	-	-	-	8.7	24.2	-	-	-	2	-	-	-
32	AH 1252	12.3	-	-	-	18	-	-	12.5	-	1.8	1	-	0.2	22.7	5.3	16.2	-	-	3.4	-	-	-	-
33	JH 8825	-	-	-	-	23.8	-	1.4	18.3	-	9.6	13.3	0.8	-	2.8	-	10.7	-	-	-	-	-	-	-
34	JH 9031	-	-	-	-	7.7	-	-	-	-	-	-	-	1.6	10.8	-	17.6	-	-	-	-	-	-	-
35	JH 8837	-	14.4	-	5.1	9.7	9.1	7.6	-	-	9.2	10.2	-	16.4	4.3	-	3.2	-	-	-	-	-	-	-
36	JH 9114	-	0.4	-	17	-	-	92.6	19.4	-	20.3	7.6	17.4	11.7	46.8	9	4.9	15.6	4.3	16.4	-	10.4	-	9.8
37	JH 211	-	2.7	-	-	-	-	25.8	1.9	-	7.4	31.5	8.9	-	27	-	7.6	15.8	-	6.9	-	-	-	2.4
38	JH 248	-	1.9	-	2.2	-	0.6	-	-	-	16	-	-	5.8	23	-	21.4	15.7	-	6.6	-	1.5	-	-
39	JH 293	-	-	-	-	-	-	3.4	9.2	-	-	-	-	-	31.8	-	6.1	24.1	-	6.7	31.1	-	11.9	-
40	JH 295	-	-	-	0.1	-	-	8.8	-	2	-	-	-	8.8	20.2	0	23.5	-	-	4.9	-	-	-	-
41	JH 367	11.6	-	-	-	-	-	-	-	3.8	-	-	-	13.8	23	3.4	20.6	-	-	2.5	-	-	-	-
42	JH 405	20.1	-	-	-	13	-	54.3	0.7	-	12.3	5.5	6.2	3.1	30	3.6	13.5	-	0.2	3.8	-	-	-	1
43	JH 417	-	9.3	-	-	-	-	11	4.7	-	6.5	-	-	-	51.6	8.6	-	2.7	5.9	9.9	-	-	-	-
44	JH 419	7.3	-	-	11.4	-	-	25.8	15.8	-	38	-	11.2	16.5	41.7	8	-	-	-	4.3	-	-	-	1.7
	CHECKS																							
45	Buland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
46	SeedTech 2324	-	-	-	7.8	-	-	28.8	6.2	-	27.6	2.3	13.1	1.7	32.1	-	14.4	13.1	4.1	10.2	-	17.5	1.2	3.4
47	Bio 9681	-	1.7	-	-	-	-	8.1	14.8	-	11.5	1.9	0.8	39.7	62.2	9.2	4.6	19.5	15.5	24.9	-	-	-	2.5

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : DELH 25.4 %: LUDH 31.1 %: DHOL 24.6 %

TABLE No. 1 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE SeedTech 2324																							
		ZN 2						ZN 3												ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	RANC	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	DKC9120	38.1	6.7	25.5	7.5	8.4	7.5	63	14.8	-	3.3	2.6	12.6	39.1	9	41.4	11.2	8.2	-	15.9	35.3	-	-	9.6
2	IL 8534	35.8	22.9	-	1.5	58.9	22	42.5	6.4	-	20.9	-	9.7	45.9	29.3	5.3	26.3	13.7	-	18	11	29.3	23.2	17.3
3	II 8212	18.8	-	10	8.8	68.8	21.3	72.4	-	-	8.8	9.4	18.9	40.5	82.8	-	-	-	7.5	17	30.2	8	15.3	18.2
4	TH2	12.9	23.9	-	-	102.9	21.2	42.1	-	-	28.7	30.2	25.5	19.1	48	40.5	-	12.5	17.3	24.4	12.3	13.7	13.2	22.5
5	DADA	8	34.6	-	1.1	69.9	27.7	24.2	4.4	-	13.8	2.9	8.5	36.6	8.4	7.4	6.6	6.7	-	6.9	20.2	-	-	10.4
6	TH22	-	33.6	-	19.8	7.1	20.1	-	6.8	-	12.9	36.9	12.7	-	25.3	-	29.4	32.8	-	13.3	37.5	-	-	11.1
7	PRO-389	-	30.7	6	8.4	-	9.2	10.4	0.3	-	-	27.2	7.9	9.2	12.2	20.6	4.4	20.6	-	11	64	-	8.8	9.5
8	PRO-390	27.2	34.8	-	-	37.7	16	-	9.4	-	-	-	-	0.3	21.9	-	8.3	17.1	-	7.3	-	-	-	-
9	KMH-2589	6.4	-	-	-	106.6	26	-	18.7	-	-	-	-	13.2	44.4	6.4	11.9	4.4	13.8	16.7	13.8	-	-	6.6
10	Rasi-3022	4.8	20.1	-	-	36.9	11.6	20	-	-	6	-	-	35	14.3	-	11	-	-	0.2	24.5	-	-	-
11	Rasi-750	19.4	46.9	-	-	77.3	30.6	-	-	-	0.9	11.3	-	50.9	18.9	21.6	10	-	-	10.8	28.7	-	0.5	10.4
12	Bisco x 6573	30	31.2	-	-	63.4	24.4	-	-	10.4	24.5	8.4	11.2	22	39.2	27.9	9.1	-	4.3	15.1	27.6	10.7	16.3	16.1
13	Venus	7.7	36.1	-	8.9	56.3	28.3	7.3	-	7.5	21.1	-	8.1	25.2	28.5	21.5	28.9	16.9	-	18.6	18.6	-	-	14.5
14	PMH-2277	30	43.5	0.6	-	45.1	21.4	15.1	15.9	-	12.7	6.8	8.4	23	12.4	23.3	28.7	12.5	8.4	17.1	-	19.7	11	14.7
15	IVORY	8.4	27.6	-	12.4	12.4	16.4	11.1	2.1	11.4	10.7	26.8	16	15.9	43.5	-	10.2	-	13.6	10.1	23.9	2.2	9.4	12.9
16	PMH-189	35.9	9.2	16.7	10.1	34.9	16.3	53	11.2	4.8	13.6	5	16.5	39	24.4	67.2	27.9	3.7	21.2	29.5	65.7	-	8.7	20.3
17	Meghan-G	3.8	18.6	-	6.5	34.7	17	12	17.1	3.8	20.2	13.9	14	36.6	32.1	18.8	11.6	6.5	-	17.2	23.3	-	-	13.1
18	GK-3149	11.2	24.4	3.5	6.1	111.6	38.3	7.1	-	-	20.8	13.2	12	-	20.9	16.9	30.8	19.7	-	13.8	-	-	-	15.7
19	GK-3150	13.9	22.5	-	4.8	125.6	40.9	20.8	32.1	1.7	-	5	4.2	27.9	21.7	33.5	27.6	19.5	-	20.8	36.5	-	7.8	18.5
20	X-1228	6.9	1.2	-	-	107.4	26.3	5.5	-	-	-	-	-	18.2	30.3	28.4	5.6	9	-	16.6	52.6	-	12.7	11.2
21	K-25 Gold	44	12.8	23	24.9	47.4	27.6	-	19.1	-	4	-	-	14.8	45.5	12.4	4.9	4.4	-	14.5	18.5	9.6	12.5	12.1
22	P3533	30.4	15.9	-	-	36.9	12.8	18.2	-	8.7	6.2	2.7	7.7	26.4	26.6	32.7	27.3	0.3	-	18	26	6.5	12.9	13.4
23	X35C526	28	7.7	-	1.5	32.3	11.1	43.6	10.5	-	3.7	12.7	11.9	-	29.4	30.8	9.7	28.4	12.6	21.1	-	-	-	12.8
24	X35C529	37.8	14.3	-	-	10.1	5.3	41.2	-	12.7	15	18.8	20.5	6	53.2	16.6	14.3	18.1	-	19.1	-	6.7	3.2	14.4
25	X35C535	9.8	16.3	-	-	-	-	-	-	2.2	9	7.2	3.8	63.7	24.5	26	20.6	10.2	-	19.7	11.9	-	3.1	8.6
26	X35C537	33.4	41	6.5	22.7	33.9	30.4	34.7	26.2	11	21.2	2.9	16.2	55.9	32.5	55	8.9	21.7	-	28.3	7.9	-	-	21.2
27	X35C538	58.1	21.7	13.2	21.2	50.2	28.9	46	58	16.1	17.6	13.4	21.1	11.3	21.8	38.8	9.9	20.7	5.1	19.9	29.7	-	5.6	20
28	X35C543	37.4	23.2	26.7	-	37.2	14.6	40.2	17	7.8	11.7	23.5	19.9	4.9	46.7	57.5	30.8	12.7	5.8	29.2	21.4	-	-	18

TABLE No. 1 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE SeedTech 2324																							
							ZN 2						ZN 3							ZN 4				ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	RANC	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
29	REH2012-1	-	19.5	-	-	4.7	-	-	-	-	-	-	-	-	7.1	-	6.2	-	-	-	-	-	-	-
30	REH2012-2	-	-	-	-	91.7	6.6	-	-	-	-	-	-	-	20.8	-	10.5	-	0.9	-	-	-	-	-
31	AH 1251	-	9.4	-	5.2	36	14.3	-	-	-	-	-	-	-	-	14	8.6	-	-	-	29	-	-	-
32	AH 1252	22.5	-	-	-	97.3	13.5	-	5.9	-	-	-	-	-	-	10.5	1.6	-	-	-	22.2	-	-	-
33	JH 8825	6.8	-	-	-	107	14.9	-	11.4	-	-	10.7	-	-	-	-	-	-	-	-	-	-	-	-
34	JH 9031	-	3.9	-	-	80	13.3	-	-	-	-	-	-	-	-	-	2.7	-	-	-	-	-	-	-
35	JH 8837	-	29.2	-	-	83.4	28.1	-	-	-	-	7.7	-	14.5	-	-	-	-	-	-	-	-	-	-
36	JH 9114	0.4	13.4	-	8.5	32.7	16.1	49.5	12.5	-	-	5.2	3.8	9.9	11.1	14.3	-	2.2	0.2	5.7	6.6	-	-	6.2
37	JH 211	-	16.1	-	-	58.4	14.5	-	-	-	-	28.5	-	-	-	1.9	-	2.4	-	-	-	-	-	-
38	JH 248	0.4	15.1	-	-	64.3	18.1	-	-	-	-	-	-	4	-	0.2	6.1	2.3	-	-	9.5	-	-	-
39	JH 293	-	8.8	-	-	5.1	-	-	2.8	-	-	-	-	-	-	-	-	9.8	-	-	65.9	-	10.5	-
40	JH 295	-	9.1	-	-	39.3	9.1	-	-	5	-	-	-	7	-	4.9	7.9	-	-	-	8.8	-	-	-
41	JH 367	21.8	-	-	-	17.7	-	-	-	6.8	-	-	-	11.9	-	8.4	5.4	-	-	-	14.6	-	-	-
42	JH 405	31	-	7.8	-	88.9	15.7	19.8	-	-	-	3.1	-	1.4	-	8.6	-	-	-	-	16.9	-	-	-
43	JH 417	-	23.6	-	-	37.4	8	-	-	-	-	-	-	-	14.7	13.9	-	-	1.8	-	-	-	-	-
44	JH 419	17.1	-	-	3.3	36.2	7	-	9	-	8.1	-	-	14.6	7.2	13.3	-	-	-	-	19.3	-	-	-
	CHECKS																							
45	Buland	9.1	13	8.4	-	67.2	17.4	-	-	2.9	-	-	-	-	-	4.9	-	-	-	-	26.6	-	-	-
46	SeedTech 2324	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	Bio 9681	-	15	-	-	14.5	3.4	-	8.1	-	-	-	-	37.5	22.8	14.6	-	5.7	11	13.4	8.7	-	-	-

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : DELH 25.4 %: LUDH 31.1 %: DHOL 24.6 %

TABLE No. 1 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Bio 9681																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	RANC	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	DKC9120	65	-	123.2	18	-	4	94.4	6.2	22.9	18.2	3	26.4	1.2	-	23.4	21.6	2.4	-	2.2	24.5	17	20.6	10.5
2	IL 8534	62.3	6.9	45.6	11.4	38.8	18	69.9	-	11	38.4	-	23.1	6.1	5.3	-	38.2	7.6	-	4.1	2.1	123.2	65	18.3
3	II 8212	41.9	-	95.6	19.4	47.5	17.3	105.5	-	27.1	24.5	9.8	33.4	2.2	48.9	-	8.6	-	-	3.2	19.7	86.4	54.4	19.2
4	TH2	34.9	7.8	46.5	-	77.2	17.2	69.5	-	17.4	47.3	30.8	40.9	-	20.5	22.6	0.6	6.5	5.7	9.8	3.3	96.2	51.6	23.5
5	DADA	29	17.1	63.4	11	48.4	23.5	48.1	-	16.2	30.3	3.4	21.7	-	-	-	16.6	1	-	-	10.6	51.2	31.7	11.3
6	TH22	10.8	16.2	-	31.5	-	16.1	7.2	-	16	29.2	37.5	26.5	-	2	-	41.6	25.7	-	-	26.5	13	19.5	12
7	PRO-389	-	13.6	88.5	19	-	5.7	31.7	-	12.3	12.5	27.7	21.1	-	-	5.3	14.2	14.1	-	-	50.9	40.7	45.6	10.4
8	PRO-390	52	17.3	26.3	3.1	20.3	12.2	-	1.2	16.1	3.3	-	-	-	-	-	18.5	10.9	-	-	-	51.8	11.8	-
9	KMH-2589	27.1	-	31.1	6.1	80.5	21.9	13.1	9.8	3.5	3.7	-	3.6	-	17.6	-	22.4	-	2.5	2.9	4.7	7.9	6.4	7.5
10	Rasi-3022	25.2	4.4	-	2.4	19.6	8	43	-	5.2	21.3	-	7.2	-	-	-	21.5	-	-	-	14.5	17.7	16.1	0.2
11	Rasi-750	42.6	27.8	54.7	5.9	54.9	26.3	12.9	-	4.1	15.5	11.7	12.1	9.8	-	6.1	20.3	-	-	-	18.4	49.4	34.5	11.3
12	Bisco x 6573	55.3	14.1	33.2	9.2	42.7	20.3	9.3	-	40.8	42.6	8.8	24.7	-	13.3	11.7	19.4	-	-	1.6	17.4	91.2	55.7	17.1
13	Venus	28.6	18.3	65.1	19.5	36.5	24.1	27.9	-	37.1	38.7	-	21.3	-	4.6	6.1	41.1	10.6	-	4.6	9.1	46.7	28.6	15.5
14	PMH-2277	55.3	24.8	78.9	6	26.8	17.4	37.2	7.3	21.7	29	7.2	21.6	-	-	7.6	40.8	6.4	-	3.3	-	106.7	48.6	15.7
15	IVORY	29.5	11	53.8	23.4	-	12.5	32.5	-	42.2	26.7	27.3	30.2	-	16.9	-	20.6	-	2.3	-	14	76.5	46.4	13.8
16	PMH-189	62.3	-	107.6	20.9	17.9	12.5	82.4	2.9	33.7	30	5.4	30.7	1.1	1.3	45.9	39.9	-	9.2	14.2	52.4	39.3	45.6	21.3
17	Meghan-G	24	3.1	50.5	16.9	17.7	13.2	33.5	8.3	32.4	37.6	14.4	27.9	-	7.6	3.7	22.1	0.8	-	3.4	13.4	39.6	27	14
18	GK-3149	32.9	8.2	84.1	16.5	84.8	33.8	27.7	-	23.6	38.3	13.7	25.6	-	-	2	43.1	13.3	-	0.4	-	64	27.6	16.7
19	GK-3150	36	6.5	25.9	15.1	97	36.2	44.1	22.2	29.7	9.6	5.4	16.9	-	-	16.6	39.7	13.1	-	6.5	25.5	61.9	44.4	19.5
20	X-1228	27.7	-	68.2	5.4	81.2	22.2	25.7	-	-	5.9	-	2.7	-	6.1	12.1	15.6	3.1	-	2.8	40.4	60.6	50.9	12.1
21	K-25 Gold	72	-	118.7	37.1	28.8	23.4	16.5	10.2	19.2	19	-	8.8	-	18.5	-	14.8	-	-	1	9	89.2	50.7	13.1
22	P3533	55.8	0.8	75.5	7.5	19.6	9.1	40.9	-	38.7	21.6	3.1	20.8	-	3.1	15.8	39.3	-	-	4.1	15.9	83.8	51.2	14.4
23	X35C526	52.9	-	63.9	11.4	15.6	7.5	71.2	2.2	18	18.7	13.2	25.5	-	5.4	14.1	20	21.5	1.5	6.8	-	63.7	27	13.7
24	X35C529	64.6	-	45.2	7.4	-	1.8	68.3	-	43.8	31.6	19.3	35.2	-	24.8	1.7	25.1	11.7	-	5	-	84.2	38.2	15.4
25	X35C535	31.1	1.2	62	2.2	-	-	6.6	-	30.4	24.8	7.6	16.5	19.1	1.4	10	32	4.3	-	5.6	3	70.5	38	9.5
26	X35C537	59.4	22.6	89.4	34.7	16.9	26.1	60.6	16.8	41.7	38.8	3.3	30.3	13.4	7.9	35.3	19.1	15.2	-	13.2	-	63.2	32.5	22.2
27	X35C538	88.9	5.9	101.3	33.1	31.2	24.7	74	46.2	48.1	34.6	13.9	35.9	-	-	21.1	20.3	14.2	-	5.8	19.3	61.7	41.3	21.1
28	X35C543	64.2	7.1	125.3	7.1	19.9	10.8	67.2	8.3	37.5	27.8	24	34.5	-	19.5	37.5	43.1	6.6	-	14	11.6	27	19.6	19

TABLE No. 1 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Bio 9681																							
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	RANC	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
29	REH2012-1	-	3.9	-	-	-	-	-	-	3.3	-	-	-	-	-	-	16.2	-	-	-	-	-	-	-
30	REH2012-2	-	-	-	-	67.5	3.1	-	-	-	-	-	-	-	-	-	20.9	-	-	-	-	-	-	-
31	AH 1251	-	-	0.9	15.4	18.8	10.5	-	-	-	-	-	-	-	-	-	18.8	-	-	-	18.7	-	5.4	-
32	AH 1252	46.4	-	48	-	72.4	9.7	-	-	-	-	-	-	-	-	-	11.1	-	-	-	12.3	6.5	9.3	-
33	JH 8825	27.6	-	54.3	-	80.9	11.2	-	3.1	-	-	11.2	0	-	-	-	5.9	-	-	-	-	-	-	-
34	JH 9031	-	-	56.1	-	57.3	9.6	-	-	5.4	-	-	-	-	-	-	12.4	-	-	-	-	10	-	-
35	JH 8837	-	12.4	75.6	7	60.3	23.9	-	-	-	-	8.1	-	-	-	-	-	-	-	-	-	2.9	-	-
36	JH 9114	19.9	-	43.6	19.1	16	12.3	78.2	4.1	-	7.9	5.6	16.5	-	-	-	0.4	-	-	-	-	62.3	31.4	7.1
37	JH 211	12.7	1	43.3	-	38.4	10.8	16.4	-	-	-	29	8.1	-	-	-	2.9	-	-	-	-	45.8	17.2	-
38	JH 248	20	0.1	19.8	4	43.5	14.3	-	-	-	4.1	-	-	-	-	-	16.1	-	-	-	0.7	49.2	25.9	-
39	JH 293	5.1	-	31.8	-	-	-	-	-	23.9	-	-	-	-	-	-	1.5	3.9	-	-	52.6	43.7	48	-
40	JH 295	8.7	-	65.4	1.9	21.7	5.6	0.7	-	34	-	-	-	-	-	-	18.1	-	-	-	0	43.5	22.6	-
41	JH 367	45.5	-	48.8	-	2.8	-	-	-	36.3	-	-	-	-	-	-	15.3	-	-	-	5.4	28.6	17.4	-
42	JH 405	56.5	-	91.7	-	65.1	11.9	42.8	-	-	0.7	3.5	5.4	-	-	-	8.6	-	-	-	7.5	28.2	18.2	-
43	JH 417	6.5	7.5	10.8	-	20.1	4.4	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	10.6	-	-
44	JH 419	39.9	-	62.5	13.4	19	3.4	16.4	0.8	15.9	23.8	-	10.3	-	-	-	-	-	-	-	9.7	46.2	28.7	-
	CHECKS																							
45	Buland	30.4	-	92.8	1.8	46.1	13.5	-	-	31.3	-	-	-	-	-	-	-	-	-	-	16.4	47	32.3	-
46	SeedTech 2324	19.5	-	77.8	9.8	-	-	19.2	-	27.6	14.5	0.4	12.2	-	-	-	9.4	-	-	-	-	72.7	33.9	0.9
47	Bio 9681	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : DELH 25.4 %: LUDH 31.1 %: DHOL 24.6 %

Table No. 1 (Continued)

		STAND AT HARVEST ('000/ha)																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	DKC9120	80.0	58.3	88.9	62.2	73.6	68.5	70.1	53.3	66.7	80.6	70.5	68.2	56.7	60.6	60.0	56.0	64.6	54.2	58.7	48.3	79.9	64.1	64.4
2	IL 8534	73.3	58.3	66.7	65.0	78.5	68.8	61.1	51.7	68.1	78.5	68.8	65.6	59.4	49.4	57.8	59.5	66.0	56.9	58.2	49.4	76.4	62.9	63.4
3	II 8212	77.8	58.3	79.6	66.7	75.0	69.4	72.9	46.1	66.0	83.3	68.8	67.4	57.8	59.4	57.8	57.1	64.6	52.1	58.1	49.4	76.4	62.9	64.1
4	TH2	80.0	58.3	66.7	66.7	72.9	69.5	66.0	47.2	67.4	84.0	70.5	67.0	52.8	58.3	62.8	58.9	66.0	50.7	58.2	44.4	75.7	60.1	63.7
5	DADA	88.9	59.4	77.8	63.3	76.4	72.0	59.7	43.3	66.7	78.5	67.0	63.0	48.9	48.9	57.2	59.5	66.7	51.4	55.4	46.7	63.2	54.9	61.5
6	TH22	64.4	61.7	26.9	64.4	77.1	66.9	59.7	50.0	66.7	83.3	68.8	65.7	51.7	60.6	55.0	61.9	66.7	49.3	57.5	50.0	56.3	53.1	61.6
7	PRO-389	82.2	60.0	87.0	58.9	77.1	69.5	66.7	56.1	68.8	78.5	67.9	67.6	48.9	54.4	59.4	57.7	66.7	54.2	56.9	48.3	71.5	59.9	63.4
8	PRO-390	80.0	60.0	64.8	65.6	75.7	70.3	51.4	50.0	66.7	83.3	67.0	63.7	53.3	48.3	61.7	59.5	66.0	54.9	57.3	48.9	74.3	61.6	62.7
9	KMH-2589	71.1	57.2	59.3	65.6	75.7	67.4	55.6	53.3	66.0	79.2	71.4	65.1	55.0	57.2	60.0	60.7	66.7	54.2	59.0	46.1	71.5	58.8	62.7
10	Rasi-3022	62.2	57.8	34.3	63.3	72.9	64.1	61.1	32.2	66.7	77.1	56.3	58.7	53.9	42.2	43.3	58.3	64.6	46.5	51.5	42.8	54.9	48.8	56.2
11	Rasi-750	80.0	61.7	65.7	64.4	74.3	70.1	59.7	37.8	66.0	74.3	68.8	61.3	61.1	45.0	58.3	58.9	65.3	54.2	57.1	52.2	71.5	61.9	62.0
12	Bisco x 6573	80.0	58.9	60.2	66.7	75.0	70.1	61.8	56.7	66.0	81.3	70.5	67.2	53.3	52.2	63.9	58.3	66.7	56.3	58.4	46.1	81.3	63.7	64.4
13	Venus	77.8	59.4	84.3	66.7	77.1	70.2	55.6	48.3	67.4	81.3	65.2	63.5	54.4	52.8	58.9	61.9	66.7	54.9	58.3	48.3	71.5	59.9	62.8
14	PMH-2277	77.8	57.2	77.8	65.6	76.4	69.2	59.0	51.1	66.0	80.6	69.6	65.3	51.7	52.8	58.9	62.5	66.0	55.6	57.9	45.6	77.8	61.7	63.2
15	IVORY	82.2	60.0	76.9	66.7	71.5	70.1	65.3	50.6	68.8	80.6	67.0	66.4	51.7	55.0	62.8	61.3	66.0	55.6	58.7	48.3	81.9	65.1	64.4
16	PMH-189	84.4	60.6	87.0	65.6	75.7	71.6	67.4	49.4	66.7	79.9	69.6	66.6	65.0	39.4	64.4	60.1	65.3	56.3	58.4	46.7	76.4	61.5	64.3
17	Meghan-G	77.8	61.7	66.7	65.0	77.1	70.4	62.5	48.3	68.1	81.3	69.6	66.0	56.7	51.1	63.9	58.9	66.7	56.3	58.9	42.8	68.8	55.8	63.3
18	GK-3149	75.6	59.4	83.3	66.7	75.7	69.3	59.7	46.1	66.7	81.9	66.1	64.1	57.8	52.8	63.3	60.1	66.0	50.7	58.4	46.7	73.6	60.1	62.9
19	GK-3150	80.0	58.3	61.1	66.7	75.0	70.0	54.2	51.1	66.0	77.1	67.0	63.1	61.7	49.4	61.7	61.3	66.0	52.8	58.8	46.1	68.1	57.1	62.5
20	X-1228	75.6	58.9	78.7	61.1	77.1	68.2	56.3	42.2	66.0	77.1	67.0	61.7	50.6	43.9	56.7	59.5	66.7	53.5	55.1	48.3	69.4	58.9	60.6
21	K-25 Gold	75.6	57.8	84.3	66.7	72.9	68.2	54.2	48.3	68.1	77.1	67.0	62.9	61.7	54.4	59.4	65.5	66.7	50.0	59.6	50.0	74.3	62.2	62.9
22	P3533	80.0	61.7	86.1	66.7	75.0	70.8	64.6	51.7	68.8	79.2	68.8	66.6	59.4	48.9	61.7	58.9	66.0	51.4	57.7	47.8	79.9	63.8	64.1
23	X35C526	80.0	60.0	81.5	66.7	77.1	70.9	59.7	47.8	67.4	80.6	61.6	63.4	55.0	56.1	57.8	58.9	66.0	60.4	59.0	48.3	68.1	58.2	63.0
24	X35C529	80.0	59.4	60.2	65.6	75.0	70.0	64.6	59.4	68.1	76.4	60.7	65.8	54.4	52.8	60.6	59.5	66.0	50.0	57.2	46.7	74.3	60.5	63.1
25	X35C535	80.0	59.4	75.9	66.7	77.8	71.0	58.3	44.4	68.8	81.3	68.8	64.3	60.0	55.0	58.9	60.1	65.3	46.5	57.6	48.3	80.6	64.4	63.5
26	X35C537	80.0	58.9	74.1	65.6	77.8	70.6	63.2	55.0	64.6	80.6	66.1	65.9	63.3	46.7	61.7	60.7	66.0	58.3	59.4	43.9	66.7	55.3	63.5
27	X35C538	77.8	57.8	87.0	66.7	75.0	69.3	70.1	53.3	59.7	77.8	70.5	66.3	66.7	48.3	61.1	60.1	66.7	57.6	60.1	51.7	65.3	58.5	63.9
28	X35C543	80.0	60.0	88.0	66.1	75.7	70.5	66.7	56.7	68.8	81.3	70.5	68.8	60.6	50.6	65.6	63.1	65.3	58.3	60.6	51.7	66.0	58.8	65.1
29	REH2012-1	42.2	60.0	39.8	57.2	75.0	58.6	55.6	36.1	66.0	69.4	55.4	56.5	48.3	37.8	46.7	60.7	65.3	52.1	51.8	48.3	37.5	42.9	53.7

Table No. 1 (Continued)

		STAND AT HARVEST ('000/ha)																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
30	REH2012-2	37.8	58.3	24.1	51.7	75.7	55.9	45.1	33.3	66.7	70.1	42.9	51.6	47.8	47.8	35.0	57.1	66.7	52.1	51.1	42.8	39.6	41.2	51.2
31	AH 1251	71.1	60.6	40.7	53.3	77.1	65.5	44.4	35.0	62.5	75.0	64.3	56.2	45.0	37.2	46.1	58.9	66.0	27.1	46.7	48.3	52.8	50.6	54.4
32	AH 1252	82.2	58.3	85.2	66.7	75.7	70.7	52.1	45.0	67.4	79.9	66.1	62.1	51.1	58.9	62.2	56.0	65.3	51.4	57.5	47.2	68.1	57.6	62.0
33	JH 8825	62.2	61.1	79.6	61.1	77.1	65.4	57.6	42.2	67.4	81.3	67.0	63.1	56.7	53.3	59.4	57.7	65.3	50.0	57.1	47.2	63.2	55.2	60.6
34	JH 9031	73.3	56.7	87.0	61.1	75.0	66.5	51.4	46.1	66.0	83.3	71.4	63.6	50.0	50.0	62.2	55.4	65.3	52.8	55.9	46.1	62.5	54.3	60.5
35	JH 8837	75.6	58.9	77.8	64.4	77.8	69.2	58.3	52.8	66.0	75.7	71.4	64.8	48.9	40.0	58.9	58.3	66.0	56.3	54.7	46.7	72.2	59.4	61.7
36	JH 9114	82.2	57.2	71.3	66.7	77.8	71.0	66.0	53.3	63.2	82.6	67.0	66.4	55.0	51.7	63.9	57.1	66.0	56.3	58.3	50.6	70.1	60.3	63.9
37	JH 211	75.6	58.3	84.3	66.7	75.0	68.9	56.3	50.6	66.7	80.6	68.8	64.6	39.4	46.7	62.8	57.1	66.0	54.2	54.4	47.2	78.5	62.8	61.8
38	JH 248	80.0	58.3	63.9	65.6	75.7	69.9	57.6	44.4	67.4	84.0	66.1	63.9	48.9	57.8	58.3	55.4	66.7	52.1	56.5	50.6	81.9	66.2	63.0
39	JH 293	75.6	58.9	63.0	61.1	75.0	67.6	54.2	57.8	66.0	82.6	67.0	65.5	48.3	53.3	57.8	59.5	66.0	47.9	55.5	51.1	64.6	57.8	61.6
40	JH 295	77.8	57.8	86.1	65.6	75.7	69.2	56.9	50.0	67.4	77.1	71.4	64.6	52.2	57.2	62.8	60.7	66.0	54.9	59.0	49.4	75.0	62.2	63.4
41	JH 367	80.0	59.4	75.9	66.7	77.1	70.8	52.8	44.4	66.0	81.9	67.0	62.4	56.1	48.9	63.9	57.1	65.3	52.1	57.2	50.0	70.1	60.1	62.3
42	JH 405	77.8	58.9	87.0	66.7	75.7	69.8	60.4	43.3	66.0	79.9	68.8	63.7	57.8	51.7	57.8	58.3	68.1	55.6	58.2	45.6	74.3	59.9	62.7
43	JH 417	71.1	58.9	56.5	66.7	69.4	66.5	56.3	53.9	68.8	82.6	69.6	66.2	45.0	57.8	62.8	55.4	66.0	50.7	56.3	47.8	73.6	60.7	62.1
44	JH 419	82.2	57.8	82.4	66.7	71.5	69.5	61.8	61.1	72.2	84.0	70.5	69.9	55.0	58.3	61.7	53.6	65.3	51.4	57.5	43.3	77.8	60.6	64.4
	CHECKS																							
45	Buland	64.4	59.4	89.8	66.7	78.5	67.3	54.9	57.2	68.8	81.3	69.6	66.3	50.0	52.2	62.2	64.3	65.3	50.7	57.5	40.6	68.1	54.3	62.0
46	SeedTech 2324	75.6	60.0	88.0	65.6	69.4	67.6	59.0	55.0	68.1	83.3	67.9	66.7	53.3	45.0	60.0	60.7	66.0	56.9	57.0	48.3	79.9	64.1	63.2
47	Bio 9681	68.9	59.4	41.7	65.6	72.9	66.7	61.8	43.3	66.7	80.6	67.0	63.9	54.4	55.0	61.1	57.7	66.0	52.8	57.8	43.3	55.6	49.4	60.7
	Loc. Mean	**75.3**	**59.1**	**71.4**	**64.5**	**75.4**	**68.6**	**59.4**	**48.7**	**66.8**	**79.8**	**67.0**	**64.3**	**54.2**	**51.2**	**59.1**	**59.2**	**65.9**	**52.8**	**57.1**	**47.4**	**69.8**	**58.6**	**62.1**
	C.D. (5%)	12.77	2.77	30.67	3.93	4.47	6.75	4.94	13.62	6.15	5.79	9.81	5.03	15.73	3.89	7.15	6.00	1.77	8.85	4.82	3.76	8.94	13.80	3.03
	C.V. (%)	10.46	2.89	26.50	3.75	3.66	7.03	5.13	17.26	5.68	4.47	7.27	6.27	17.91	4.68	7.45	6.25	1.65	10.34	7.42	4.89	7.90	11.70	7.24
	F (Prob)	0.00	0.03	0.00	0.00	0.01	0.03	0.00	0.00	0.88	0.00	0.01	0.00	0.53	0.00	0.00	0.20	0.27	0.00	0.00	0.00	0.00	0.26	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : LUDHIANA 26.5%

Table No. 1 (Continued)

		MOISTURE % AT HARVEST																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	DKC9120	12.0	30.1	25.1	25.0	14.0	21.2	27.1	21.6	18.9	32.6	21.3	24.3	25.3	11.9	11.5	16.8	23.6	17.9	17.8	16.6	21.6	19.1	20.7
2	IL 8534	25.2	30.8	26.9	24.1	13.7	24.1	27.3	21.4	18.5	31.3	21.4	24.0	24.8	12.1	8.5	16.3	22.0	18.1	16.9	18.3	22.8	20.5	21.3
3	II 8212	23.3	29.9	26.3	26.1	15.0	24.1	26.9	20.2	20.9	33.8	22.9	24.9	23.2	14.2	9.9	17.7	24.6	17.4	17.8	18.0	18.0	18.0	21.5
4	TH2	26.1	27.1	27.3	26.5	16.7	24.7	25.6	23.4	18.5	27.6	22.2	23.4	25.7	11.3	7.7	16.6	25.1	16.3	17.1	18.9	23.0	20.9	21.4
5	DADA	23.5	25.6	27.1	22.2	13.7	22.4	25.5	18.6	18.3	27.2	21.8	22.3	24.2	13.0	8.5	17.2	24.3	18.5	17.6	17.5	19.5	18.5	20.3
6	TH22	26.3	28.2	28.1	22.6	12.0	23.4	26.9	21.6	21.2	31.3	19.2	24.0	20.1	14.3	9.1	16.8	22.7	18.1	16.8	17.5	19.5	18.5	20.8
7	PRO-389	23.2	25.1	27.5	25.4	14.7	23.2	27.2	19.5	19.1	31.3	17.7	23.0	23.7	13.9	8.0	17.3	23.7	18.4	17.5	17.7	21.3	19.5	20.8
8	PRO-390	26.4	29.4	28.2	25.7	13.0	24.5	26.9	19.5	18.6	33.6	21.8	24.1	27.3	15.3	10.5	17.3	24.7	19.0	19.0	16.7	25.3	21.0	22.1
9	KMH-2589	23.9	27.3	27.8	22.2	14.0	23.0	25.4	19.4	19.9	32.0	23.7	24.1	21.5	11.8	9.6	17.4	22.4	18.8	16.9	16.9	19.0	18.0	20.7
10	Rasi-3022	22.4	30.7	27.6	24.4	14.7	23.9	24.0	20.2	18.7	30.0	18.8	22.3	25.6	15.2	10.9	16.6	24.4	20.4	18.8	17.1	28.7	22.9	21.7
11	Rasi-750	27.8	27.5	26.2	23.0	15.7	24.0	24.4	20.5	18.9	30.4	23.2	23.5	23.2	11.8	9.3	18.2	25.3	20.0	18.0	17.3	22.1	19.7	21.4
12	Bisco x 6573	26.0	27.2	27.2	22.9	17.7	24.2	27.0	18.6	18.9	29.7	22.8	23.4	22.9	14.8	10.0	17.6	26.5	20.5	18.7	18.7	17.4	18.0	21.4
13	Venus	23.3	29.9	27.8	21.3	16.7	23.8	26.2	20.6	19.9	26.6	20.1	22.7	21.7	12.0	9.4	17.3	23.8	17.4	16.9	17.4	20.3	18.9	20.6
14	PMH-2277	16.9	29.2	26.7	20.2	14.0	21.4	24.9	17.6	18.3	29.4	23.7	22.8	26.8	14.6	11.0	15.9	22.0	17.0	17.9	17.1	18.4	17.7	20.2
15	IVORY	27.3	29.1	27.9	28.2	15.7	25.6	27.2	22.0	18.8	31.6	18.8	23.7	22.3	11.0	8.4	17.7	24.6	16.8	16.8	17.1	27.2	22.2	21.7
16	PMH-189	22.2	29.1	22.0	21.1	13.3	21.5	24.2	17.7	18.9	28.7	24.4	22.8	22.3	10.9	7.5	17.5	22.3	19.4	16.6	19.3	22.2	20.7	20.1
17	Meghan-G	23.2	26.0	25.8	20.9	17.0	22.6	26.4	22.0	19.0	29.4	19.3	23.2	21.3	12.8	9.2	17.9	25.5	18.4	17.5	18.5	18.7	18.6	20.6
18	GK-3149	22.9	27.9	26.3	21.4	16.3	22.9	25.5	19.3	18.6	29.5	21.8	22.9	23.3	11.7	12.1	16.9	23.5	16.6	17.3	17.3	22.6	19.9	20.7
19	GK-3150	21.7	28.3	27.6	22.8	15.7	23.2	24.9	17.7	18.4	32.4	20.3	22.7	26.6	15.4	10.4	18.2	22.9	19.0	18.7	18.7	25.8	22.2	21.5
20	X-1228	23.1	27.7	28.2	20.4	12.7	22.4	25.7	20.1	18.5	32.6	18.9	23.1	24.8	9.3	9.0	17.5	21.5	18.1	16.7	17.4	23.6	20.5	20.5
21	K-25 Gold	21.0	27.9	25.4	21.3	15.7	22.2	27.3	18.3	18.3	26.4	19.9	22.0	23.7	11.5	9.9	17.3	23.9	19.6	17.6	17.1	20.5	18.8	20.3
22	P3533	21.3	27.8	28.0	19.5	12.3	21.8	25.0	20.3	18.4	31.5	21.8	23.4	26.0	11.4	10.4	17.0	24.9	17.2	17.8	18.3	22.0	20.2	20.7
23	X35C526	22.5	26.7	28.4	20.7	14.3	22.5	24.2	18.0	18.5	31.5	18.4	22.1	25.4	12.6	11.1	17.0	21.8	20.1	18.0	17.1	22.7	19.9	20.6
24	X35C529	21.7	25.8	26.7	25.1	17.0	23.2	26.5	17.6	18.5	28.8	21.2	22.5	22.5	14.4	10.4	16.3	22.6	18.3	17.4	17.5	20.4	18.9	20.6
25	X35C535	21.2	27.8	26.9	21.9	14.3	22.4	24.2	17.9	18.1	30.2	19.3	21.9	25.0	13.1	7.7	17.1	23.2	17.1	17.2	17.3	20.5	18.9	20.1
26	X35C537	21.0	25.0	25.0	21.2	17.7	22.0	25.1	17.8	18.0	30.0	21.7	22.5	23.4	14.3	10.4	17.8	23.6	18.0	17.9	18.5	25.3	21.9	20.7
27	X35C538	25.6	29.7	27.1	23.4	14.7	24.1	27.2	19.5	18.8	28.9	22.6	23.4	22.3	13.4	10.3	17.1	27.0	18.6	18.1	18.1	15.8	17.0	21.1
28	X35C543	24.2	24.4	25.4	22.1	15.7	22.3	26.1	17.1	19.5	29.4	21.8	22.8	27.0	11.5	10.8	16.0	21.9	17.4	17.4	18.0	29.6	23.8	21.0

Table No. 1 (Continued)

		MOISTURE % AT HARVEST																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
29	REH2012-1	22.3	24.0	27.1	21.5	13.3	21.6	23.1	18.0	18.9	28.1	18.3	21.3	23.4	15.4	8.5	17.2	25.3	18.4	18.0	17.3	19.1	18.2	19.9
30	REH2012-2	24.5	25.7	24.8	23.6	16.3	23.0	22.9	19.0	18.3	28.3	23.7	22.4	24.5	15.7	9.8	16.7	23.4	18.4	18.0	16.7	16.2	16.4	20.4
31	AH 1251	21.0	28.0	26.6	19.8	15.3	22.1	26.0	16.3	17.6	28.1	18.8	21.3	19.7	14.0	8.0	16.8	20.2	17.7	16.0	18.0	17.9	17.9	19.4
32	AH 1252	8.6	25.2	25.9	18.6	14.0	18.5	24.1	17.0	18.2	26.0	19.8	21.0	19.4	9.5	10.0	15.6	20.6	17.9	15.5	18.3	22.3	20.3	18.4
33	JH 8825	21.1	25.7	27.3	23.4	12.3	21.9	24.1	17.4	18.2	28.1	23.2	22.2	22.8	12.7	6.4	17.0	24.4	16.6	16.6	17.2	26.2	21.7	20.2
34	JH 9031	26.8	26.1	26.6	22.9	13.7	23.2	23.8	19.0	18.0	28.9	20.8	22.1	25.7	11.9	9.3	17.0	24.8	18.9	17.9	17.4	25.2	21.3	20.9
35	JH 8837	24.1	27.6	26.9	19.4	15.0	22.6	27.0	18.2	18.5	30.7	20.7	23.0	21.5	12.3	11.6	18.2	24.1	16.8	17.4	17.4	21.6	19.5	20.6
36	JH 9114	22.4	27.4	25.9	24.5	16.7	23.4	25.5	18.1	18.2	30.6	22.7	23.0	26.3	10.9	9.0	17.2	24.3	15.3	17.2	17.2	19.6	18.4	20.6
37	JH 211	25.0	25.7	28.0	23.6	13.7	23.2	25.2	19.7	21.2	30.1	21.2	23.5	26.4	15.0	10.9	15.7	23.7	20.6	18.7	17.1	27.2	22.2	21.6
38	JH 248	19.1	25.1	25.7	22.8	12.0	20.9	24.7	16.9	18.5	31.3	19.9	22.2	23.2	14.1	9.5	16.5	23.0	17.9	17.4	18.5	17.9	18.2	19.8
39	JH 293	25.4	28.8	27.3	22.5	14.7	23.7	25.1	19.3	18.3	28.4	23.7	23.0	27.9	10.2	10.4	16.0	26.0	17.2	17.9	18.7	23.1	20.9	21.3
40	JH 295	23.1	29.0	24.8	21.8	13.0	22.3	24.8	19.2	20.9	30.4	19.2	22.9	20.6	15.0	15.4	16.0	24.4	20.8	18.7	18.4	25.5	21.9	21.2
41	JH 367	23.2	27.4	26.9	24.9	14.0	23.3	25.8	17.2	18.8	31.8	21.3	23.0	24.0	16.1	9.3	17.1	27.3	19.4	18.8	18.5	23.7	21.1	21.5
42	JH 405	18.0	29.2	27.2	24.4	14.7	22.7	25.1	18.4	18.5	29.3	24.1	23.1	27.9	16.2	10.4	17.1	23.8	19.3	19.1	17.3	24.4	20.8	21.4
43	JH 417	22.1	26.0	24.7	21.3	12.3	21.3	24.2	17.0	18.2	27.5	22.8	21.9	18.9	14.6	9.8	17.4	23.1	18.4	17.0	17.0	16.3	16.6	19.5
44	JH 419	19.8	28.8	26.0	19.3	13.7	21.5	24.9	16.8	18.3	27.6	23.2	22.1	20.2	14.0	11.4	15.6	22.8	18.6	17.1	16.3	21.3	18.8	19.9
	CHECKS																							
45	Buland	28.2	26.3	26.0	23.5	15.0	23.8	24.1	17.5	18.2	25.7	20.3	21.1	21.4	13.4	10.1	15.8	21.3	18.6	16.8	16.8	21.6	19.2	20.2
46	SeedTech 2324	24.1	25.8	28.5	22.6	16.7	23.5	35.3	21.9	18.8	31.1	24.8	26.4	23.4	11.9	9.3	17.6	26.0	19.1	17.9	17.8	26.7	22.2	22.3
47	Bio 9681	23.7	24.8	27.8	17.4	13.7	21.5	24.9	16.9	18.1	25.8	21.3	21.4	21.0	9.6	9.2	17.1	22.3	18.7	16.3	17.9	17.8	17.8	19.3
	Loc. Mean	**22.7**	**27.4**	**26.7**	**22.5**	**14.6**	**22.8**	**25.6**	**18.9**	**18.8**	**29.7**	**21.3**	**22.9**	**23.6**	**13.0**	**9.8**	**17.0**	**23.7**	**18.3**	**17.6**	**17.6**	**21.8**	**19.7**	**20.7**
	C.D. (5%)	4.90	0.79	1.95	3.30	1.15	2.59	2.53	1.83	-	0.40	3.62	1.94	4.10	1.52	2.44	0.00	0.75	2.07	1.73	0.92	4.44	4.92	1.19
	C.V. (%)	13.31	1.79	4.52	9.04	4.86	9.11	6.08	5.95	-	0.84	8.47	6.79	10.72	7.23	15.43	0.00	1.95	6.98	8.67	3.21	12.53	12.40	8.79
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.47	0.00

Table No. 1 (Continued)

GRAIN SHELLING %

S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	DKC9120	86.0	77.6	85.5	81.3	77.0	81.5	79.2	84.0	77.5	77.3	83.8	80.4	83.6	78.4	84.7	83.1	80.8	81.2	82.0	73.2	89.2	81.2	81.3
2	IL 8534	87.0	80.1	83.0	83.2	73.3	81.3	80.0	84.0	79.4	82.0	83.8	81.8	82.6	79.4	86.9	82.3	80.7	78.1	81.6	70.8	84.8	77.8	81.2
3	II 8212	87.0	77.6	85.0	81.1	73.7	80.9	80.2	84.0	78.5	81.8	86.6	82.2	84.3	80.2	69.8	81.7	79.9	79.8	79.3	69.7	83.8	76.7	80.2
4	TH2	88.0	77.3	85.0	83.2	74.3	81.6	75.4	84.0	79.7	76.3	86.3	80.3	83.1	79.1	87.2	79.8	76.2	84.0	81.6	74.7	87.7	81.2	81.2
5	DADA	88.0	79.5	83.0	82.3	72.7	81.1	81.2	84.0	79.5	81.5	86.7	82.6	85.6	79.6	86.6	82.5	79.9	81.0	82.5	74.2	76.9	75.5	81.4
6	TH22	86.0	79.1	80.5	90.0	74.3	82.0	76.2	80.0	79.0	75.8	86.8	79.6	81.5	79.5	85.3	80.6	79.8	79.8	81.1	72.6	82.6	77.6	80.5
7	PRO-389	84.0	79.9	82.5	85.1	74.7	81.2	73.3	84.0	80.9	76.5	83.6	79.7	80.2	76.0	85.8	79.7	76.5	73.3	78.6	75.3	82.1	78.7	79.6
8	PRO-390	87.0	80.1	80.5	81.6	75.7	81.0	76.6	82.5	78.1	77.8	85.4	80.1	83.8	79.0	83.6	82.7	79.5	79.5	81.3	74.0	83.8	78.9	80.6
9	KMH-2589	88.0	79.1	82.5	83.0	72.7	81.0	79.6	86.0	79.6	75.3	85.5	81.2	83.4	78.4	86.0	79.0	77.5	82.9	81.2	68.8	77.8	73.3	80.3
10	Rasi-3022	89.0	79.9	85.0	79.7	75.0	81.7	80.9	83.5	80.6	81.3	84.2	82.1	83.7	77.8	86.0	81.6	78.8	73.9	80.3	72.6	83.3	78.0	80.9
11	Rasi-750	87.0	81.8	81.0	80.8	72.7	80.7	75.8	82.0	79.1	77.0	84.9	79.8	84.2	77.6	85.0	83.0	78.3	78.1	81.0	69.3	84.2	76.7	80.1
12	Bisco x 6573	89.0	78.5	81.5	80.4	75.3	80.9	74.6	84.5	77.8	81.8	87.4	81.2	83.8	77.6	88.0	83.6	74.8	76.4	80.7	77.7	83.4	80.5	80.9
13	Venus	88.0	81.4	83.5	80.8	74.3	81.6	84.0	86.5	78.0	81.3	86.6	83.3	85.3	80.6	85.8	81.3	79.9	78.5	81.9	74.7	70.2	72.4	81.1
14	PMH-2277	88.0	82.1	82.5	81.1	75.3	81.8	78.3	83.5	78.4	78.3	87.1	81.1	83.1	78.5	86.0	82.9	79.2	83.2	82.1	70.9	83.8	77.3	81.2
15	IVORY	84.0	75.9	81.5	83.7	72.7	79.5	75.8	85.0	79.1	73.5	86.3	79.9	83.7	77.3	86.9	83.3	77.1	74.0	80.4	77.3	83.1	80.2	80.0
16	PMH-189	89.0	79.8	83.0	84.3	73.0	81.8	78.9	87.5	78.4	79.3	86.3	82.1	84.9	79.1	85.9	82.9	77.3	81.0	81.8	73.6	81.1	77.4	81.4
17	Meghan-G	87.0	77.6	82.0	84.0	71.3	80.4	83.1	88.0	79.1	81.5	85.8	83.5	84.1	78.8	87.9	82.1	81.2	81.0	82.5	75.3	82.2	78.7	81.8
18	GK-3149	89.0	78.9	81.0	84.3	72.3	81.1	78.7	84.0	78.4	84.5	87.0	82.5	84.6	78.9	89.0	80.1	79.1	79.3	81.8	70.7	85.1	77.9	81.4
19	GK-3150	85.0	81.0	82.5	84.9	74.7	81.6	81.5	85.0	79.8	82.0	86.9	83.0	85.0	81.2	87.5	82.4	82.4	81.0	83.2	72.1	84.0	78.0	82.2
20	X-1228	86.0	75.9	84.0	80.3	75.0	80.2	78.9	80.0	78.4	79.8	84.3	80.3	80.5	78.0	85.9	82.7	79.3	82.0	81.4	75.9	86.6	81.2	80.7
21	K-25 Gold	88.0	78.5	83.5	82.5	74.7	81.4	77.0	86.0	80.7	78.0	87.2	81.8	83.8	80.5	87.8	81.3	80.2	76.6	81.7	72.2	87.7	79.9	81.4
22	P3533	83.0	79.2	82.5	81.3	73.7	79.9	78.9	84.0	78.1	76.0	84.9	80.4	80.5	78.7	85.0	81.5	74.3	76.0	79.3	74.7	86.2	80.4	79.9
23	X35C526	84.0	79.0	82.0	79.6	73.3	79.6	80.3	85.0	78.5	75.5	86.0	81.0	80.3	81.7	79.2	81.0	80.9	76.5	79.9	67.4	76.4	71.9	79.2
24	X35C529	87.0	79.8	81.5	81.4	75.3	81.0	80.0	85.0	79.7	82.0	86.5	82.6	82.4	81.9	87.8	82.5	79.4	75.0	81.5	71.5	85.0	78.2	81.3
25	X35C535	83.0	79.9	82.0	82.6	75.3	80.6	76.9	85.0	79.9	78.3	84.7	81.0	82.6	75.7	82.2	82.0	72.6	75.1	78.3	69.6	81.5	75.5	79.4
26	X35C537	87.0	79.1	84.5	83.3	74.7	81.7	79.9	83.0	78.7	81.8	85.9	81.9	84.8	80.1	87.9	80.0	81.1	79.0	82.1	74.9	84.8	79.8	81.7
27	X35C538	90.0	78.7	83.5	82.2	73.3	81.5	77.5	85.5	79.1	80.5	80.2	80.5	83.5	78.3	84.3	83.7	78.6	76.9	80.9	73.0	83.4	78.2	80.7
28	X35C543	87.0	79.9	82.5	80.9	73.0	80.7	80.9	87.0	77.8	81.5	85.5	82.5	82.7	81.0	86.2	80.7	78.0	82.2	81.8	76.8	85.4	81.1	81.6
29	REH2012-1	80.0	81.1	82.0	78.7	74.3	79.2	80.1	81.5	79.4	76.5	81.2	79.7	78.5	78.1	81.6	83.5	80.6	76.3	79.8	71.6	80.5	76.1	79.2
30	REH2012-2	81.0	80.7	83.0	81.7	73.0	79.9	79.8	81.0	81.1	77.3	84.1	80.6	82.2	77.6	86.8	81.9	79.8	80.5	81.5	70.4	86.4	78.4	80.4
31	AH 1251	85.0	79.0	82.5	87.2	73.7	81.5	82.5	85.5	78.1	82.5	86.3	83.0	81.9	83.4	86.1	79.4	81.3	85.4	82.9	75.4	84.3	79.8	82.2

Table No. 1 (Continued)

S.No.	PEDIGREE	GRAIN SHELLING % DELH	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
32	AH 1252	86.0	80.8	81.0	80.8	74.0	80.5	80.6	84.0	78.7	82.5	86.0	82.4	83.4	84.1	86.2	81.5	82.3	76.0	82.2	73.2	86.5	79.8	81.5
33	JH 8825	86.0	79.6	85.0	84.1	74.7	81.9	76.9	85.0	79.5	81.3	85.1	81.5	81.2	79.0	88.9	79.6	77.9	80.5	81.2	76.0	81.9	78.9	81.2
34	JH 9031	81.0	79.7	83.5	80.0	73.3	79.5	76.4	85.0	78.3	70.8	82.2	78.5	81.6	74.0	84.9	82.5	72.0	75.3	78.4	74.3	82.0	78.2	78.7
35	JH 8837	82.0	79.6	82.5	80.8	73.7	79.7	77.2	86.0	79.6	80.3	84.7	81.6	81.1	79.6	85.0	82.7	78.4	80.0	81.1	77.5	86.9	82.2	81.0
36	JH 9114	81.0	81.0	82.0	82.6	74.3	80.2	77.2	84.0	80.4	73.3	79.0	78.8	77.3	73.8	82.1	79.5	73.2	80.5	77.7	72.0	80.8	76.4	78.5
37	JH 211	86.0	80.8	82.5	83.0	72.7	81.0	79.7	84.5	78.8	77.8	86.3	81.4	80.5	76.4	88.3	82.2	77.4	77.0	80.3	71.1	83.6	77.3	80.5
38	JH 248	82.0	77.3	81.0	82.1	74.3	79.3	62.9	86.5	78.8	77.3	82.0	77.5	81.8	77.6	83.3	79.6	74.7	74.5	78.6	70.4	79.6	75.0	78.1
39	JH 293	85.0	78.5	84.5	76.6	74.7	79.8	73.1	81.5	80.6	73.5	79.9	77.7	78.7	71.9	85.1	81.3	71.6	75.8	77.4	75.0	81.7	78.4	78.3
40	JH 295	86.0	79.4	82.5	82.0	75.7	81.1	73.4	84.0	77.8	77.3	82.3	78.9	81.8	76.9	85.0	81.1	75.5	76.0	79.4	73.4	82.0	77.7	79.5
41	JH 367	86.0	81.0	82.0	80.1	72.7	80.3	76.9	79.5	79.1	78.3	82.2	79.2	82.1	76.6	81.1	81.5	77.4	78.8	79.6	75.0	83.1	79.0	79.6
42	JH 405	86.0	77.2	83.5	80.2	74.3	80.2	82.2	86.5	77.8	81.5	84.0	82.4	82.0	79.1	85.0	80.4	78.2	80.2	80.8	73.0	81.6	77.3	80.7
43	JH 417	86.0	79.9	82.0	81.3	73.7	80.6	76.7	87.0	78.8	75.8	84.8	80.6	80.3	78.1	86.1	80.5	75.6	75.0	79.3	68.1	83.5	75.8	79.6
44	JH 419	84.0	77.4	81.5	85.5	73.7	80.4	82.0	85.5	78.5	81.8	83.9	82.3	80.0	79.4	87.6	86.2	76.6	76.7	81.1	73.2	88.0	80.6	81.2
	CHECKS																							
45	Buland	86.0	79.6	81.5	78.1	74.3	79.9	72.4	82.5	78.4	72.8	78.7	76.9	79.2	75.1	89.8	80.7	73.3	78.2	79.4	72.8	83.2	78.0	78.7
46	SeedTech 2324	85.0	80.0	82.0	81.8	75.0	80.8	81.8	81.0	79.6	76.8	85.3	80.9	84.0	77.1	86.1	79.0	75.8	77.9	80.0	74.2	87.9	81.0	80.6
47	Bio 9681	84.0	79.0	81.5	80.9	74.3	79.9	79.1	82.5	78.8	79.3	82.7	80.5	85.4	80.4	89.1	81.2	77.9	79.3	82.2	75.0	85.2	80.1	80.9
	Loc. Mean	**85.7**	**79.3**	**82.6**	**82.0**	**74.0**	**80.7**	**78.2**	**84.2**	**79.0**	**78.6**	**84.6**	**80.9**	**82.4**	**78.5**	**85.5**	**81.6**	**77.9**	**78.5**	**80.7**	**73.1**	**83.3**	**78.2**	**80.5**
	C.D. (5%)	-	0.65	1.66	3.35	1.45	2.25	3.97	3.90	-	1.35	2.99	2.81	2.48	1.59	3.68	-	0.84	4.60	2.56	3.08	8.50	5.46	1.46
	C.V. (%)	-	0.50	1.24	2.52	1.21	2.23	3.13	2.86	-	1.06	1.75	2.78	1.86	1.25	2.65	-	0.66	3.61	2.79	2.60	6.30	3.47	2.77
	F (Prob)	-	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.12	0.00

Table No. 1 (Continued)

		DAYS TO 50% POLLEN SHED																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	DKC9120	125.0	148.7	127.7	134.0	95.3	126.1	130.3	127.3	70.3	112.0	114.0	110.8	78.0	65.7	72.0	72.3	62.7	58.3	68.2	96.3	96.3	96.3	99.2
2	IL 8534	127.3	150.0	127.3	132.7	96.3	126.7	130.0	129.3	72.0	111.0	112.5	111.0	75.0	64.0	74.0	71.3	60.7	56.3	66.9	93.0	93.7	93.3	98.7
3	II 8212	126.3	142.7	127.0	134.7	101.0	126.3	130.3	128.0	71.7	112.0	109.5	110.3	76.3	64.0	73.3	72.0	61.3	56.7	67.3	95.0	94.0	94.5	98.7
4	TH2	126.0	149.3	128.7	131.3	104.7	128.0	129.0	127.3	70.3	108.7	105.5	108.2	77.3	62.0	72.0	66.3	60.3	55.0	65.5	94.7	92.7	93.7	97.8
5	DADA	123.7	139.0	125.3	131.0	97.3	123.3	124.7	128.0	71.0	106.7	110.5	108.2	76.0	65.7	72.7	69.0	60.0	54.7	66.3	96.0	92.3	94.2	96.9
6	TH22	126.0	138.3	130.3	132.7	93.7	124.2	129.7	126.7	71.7	109.3	108.0	109.1	77.0	63.3	72.3	67.3	59.7	55.7	65.9	96.3	95.7	96.0	97.4
7	PRO-389	129.0	143.3	127.3	134.7	96.0	126.1	131.0	126.7	74.0	112.0	114.5	111.6	79.7	66.7	73.7	72.7	63.0	58.3	69.0	96.0	97.7	96.8	99.8
8	PRO-390	130.7	149.0	129.7	135.0	97.3	128.3	129.7	125.3	72.7	110.3	110.5	109.7	77.7	64.7	73.0	73.0	60.0	57.0	67.6	96.3	97.0	96.7	99.4
9	KMH-2589	127.7	141.7	126.3	128.3	86.7	122.1	126.7	129.0	71.3	107.0	104.0	107.6	76.0	64.0	71.3	73.3	57.7	57.0	66.6	94.3	94.0	94.2	96.5
10	Rasi-3022	129.0	143.0	126.7	135.0	91.0	124.9	130.3	129.0	72.0	110.7	108.5	110.1	79.3	68.0	72.0	72.7	63.3	58.3	68.9	95.7	95.3	95.5	98.9
11	Rasi-750	128.7	138.3	126.0	131.0	94.7	123.7	128.0	127.7	70.3	109.3	106.5	108.4	76.0	63.7	71.7	68.7	59.7	57.7	66.2	96.3	93.3	94.8	97.1
12	Bisco x 6573	124.3	140.0	125.0	130.0	96.3	123.1	126.0	126.0	70.3	108.3	105.5	107.2	73.7	61.7	73.0	67.3	64.0	53.7	65.6	95.0	93.3	94.2	96.3
13	Venus	124.0	137.7	123.7	126.3	95.7	121.5	123.0	127.7	71.0	105.3	104.0	106.2	76.0	63.0	71.0	68.3	57.7	57.3	65.6	96.3	92.3	94.3	95.6
14	PMH-2277	126.0	141.7	128.3	132.7	98.3	125.4	127.7	128.0	71.0	109.0	108.5	108.8	77.3	63.3	72.7	67.3	60.0	55.0	65.9	97.7	93.0	95.3	97.6
15	IVORY	130.0	141.0	126.3	132.7	96.0	125.2	130.3	128.0	71.3	108.7	106.0	108.9	77.0	62.3	72.3	69.0	59.0	55.0	65.8	93.0	94.7	93.8	97.4
16	PMH-189	127.7	143.0	125.7	134.7	96.3	125.5	128.3	128.0	71.3	111.3	107.0	109.2	76.3	64.3	72.3	69.0	62.0	53.7	66.3	95.3	95.7	95.5	97.9
17	Meghan-G	123.7	137.7	125.0	127.3	89.3	120.6	123.3	128.7	70.7	105.7	104.0	106.5	76.0	62.0	71.3	69.3	57.7	56.0	65.4	93.0	93.3	93.2	95.2
18	GK-3149	123.7	141.0	126.3	130.0	94.7	123.1	124.7	125.7	71.3	106.3	105.0	106.6	78.7	61.3	72.7	69.7	61.3	55.3	66.5	96.3	92.7	94.5	96.5
19	GK-3150	124.3	141.0	127.7	129.3	95.0	123.5	124.0	126.0	69.7	108.0	105.5	106.6	76.3	63.0	72.0	69.7	59.3	54.7	65.8	96.0	91.3	93.7	96.3
20	X-1228	124.7	140.3	126.3	130.7	96.0	123.6	128.3	129.0	70.0	109.0	109.5	109.2	76.0	62.7	72.7	69.0	61.0	54.3	65.9	96.0	92.0	94.0	97.1
21	K-25 Gold	128.3	141.7	125.0	132.0	99.7	125.3	128.7	128.3	70.7	108.7	105.5	108.4	76.0	64.0	71.0	70.0	59.7	56.3	66.2	93.0	91.0	92.0	97.2
22	P3533	127.3	144.0	126.0	132.3	99.7	125.9	128.3	126.0	70.7	110.0	108.0	108.6	78.0	63.3	73.0	69.3	59.7	54.7	66.3	95.7	92.0	93.8	97.7
23	X35C526	125.7	144.7	127.7	132.7	103.3	126.8	128.0	124.7	71.3	109.7	105.5	107.8	77.7	63.3	70.3	69.3	58.3	54.7	65.6	97.0	92.3	94.7	97.6
24	X35C529	125.0	145.0	125.0	134.3	93.0	124.5	127.7	128.7	70.0	107.0	108.0	108.3	76.3	61.0	69.7	68.7	58.0	55.0	64.8	95.3	92.0	93.7	96.6
25	X35C535	124.7	144.7	127.7	131.0	95.0	124.6	129.3	127.0	71.0	109.0	109.0	109.1	76.0	62.3	72.3	68.3	59.7	54.3	65.5	95.7	92.3	94.0	97.2
26	X35C537	123.3	141.3	126.3	135.0	95.0	124.2	127.3	128.7	69.7	109.3	109.0	108.8	76.7	61.3	69.3	71.7	58.3	54.7	65.3	96.3	89.3	92.8	96.8
27	X35C538	126.0	138.0	124.7	129.7	95.3	122.7	124.3	126.7	69.3	106.7	105.0	106.4	74.7	59.7	70.7	69.0	58.3	53.7	64.3	96.7	88.7	92.7	95.4
28	X35C543	127.7	141.7	125.0	130.3	96.3	124.2	127.0	127.3	70.0	109.0	107.0	108.1	76.3	61.7	70.0	68.7	58.7	55.7	65.2	94.7	92.0	93.3	96.6
29	REH2012-1	129.7	145.0	127.3	130.3	98.3	126.1	124.3	128.0	72.0	108.7	109.0	108.4	77.0	62.3	72.0	67.0	56.0	56.0	65.1	95.7	88.3	92.0	97.1

Table No. 1 (Continued)

		DAYS TO 50% POLLEN SHED																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
30	REH2012-2	127.3	135.0	123.3	128.7	100.0	122.9	125.0	128.7	69.7	105.7	-	107.3	72.3	64.7	71.7	66.0	56.0	55.3	64.3	96.0	89.3	92.7	95.0
31	AH 1251	122.7	137.7	126.3	129.7	98.7	123.0	124.3	126.7	68.0	104.7	104.0	105.5	73.7	60.0	70.7	65.7	57.7	53.3	63.5	97.3	87.0	92.2	94.9
32	AH 1252	123.7	138.0	122.3	125.7	99.3	121.8	121.3	127.7	67.3	103.0	103.5	104.6	74.7	60.7	72.0	63.3	55.7	54.7	63.5	95.3	83.7	89.5	94.0
33	JH 8825	131.0	144.3	127.7	134.7	96.7	126.9	128.3	124.7	73.0	110.0	112.5	109.7	77.7	66.0	73.0	70.3	61.7	57.7	67.7	94.7	95.7	95.2	98.9
34	JH 9031	129.3	149.0	129.3	136.0	93.0	127.3	130.7	129.0	72.0	109.3	110.0	110.2	78.0	66.7	72.0	68.7	58.0	57.7	66.8	94.3	92.7	93.5	98.6
35	JH 8837	124.3	142.7	126.3	131.0	99.3	124.7	128.0	127.3	70.0	109.7	109.0	108.8	75.0	63.3	72.3	68.0	56.0	54.0	64.8	96.3	93.7	95.0	97.0
36	JH 9114	128.3	150.0	129.3	134.0	99.7	128.3	129.0	128.7	73.3	111.0	113.0	111.0	78.3	67.0	74.0	71.0	62.0	56.7	68.2	96.3	94.7	95.5	99.8
37	JH 211	126.7	139.0	127.0	131.7	95.7	124.0	129.0	129.0	72.3	110.3	108.5	109.8	76.7	66.0	73.0	69.7	59.3	57.7	67.1	93.7	93.0	93.3	97.7
38	JH 248	127.3	144.3	125.3	135.3	94.7	125.4	129.0	127.7	73.7	109.7	112.5	110.5	75.7	66.0	73.7	68.0	60.0	55.0	66.4	96.3	93.3	94.8	98.2
39	JH 293	130.3	143.7	128.3	133.3	98.0	126.7	132.3	126.3	72.3	113.7	111.5	111.2	80.0	65.3	73.0	74.0	62.0	58.7	68.8	94.7	97.3	96.0	99.7
40	JH 295	127.7	141.7	125.7	133.7	98.7	125.5	128.0	128.0	72.0	112.0	110.0	110.0	76.7	65.0	72.0	68.3	60.7	58.7	66.9	96.0	94.0	95.0	98.3
41	JH 367	130.0	139.3	124.7	132.3	101.3	125.5	130.7	128.0	73.0	109.0	110.5	110.2	76.7	67.3	73.3	69.3	62.3	56.7	67.6	96.0	94.3	95.2	98.6
42	JH 405	125.3	144.7	126.3	134.3	97.7	125.7	129.3	127.3	73.0	110.3	110.5	110.1	77.7	66.3	73.3	69.3	63.7	56.0	67.7	95.0	95.3	95.2	98.6
43	JH 417	126.0	136.0	127.7	129.7	97.7	123.4	124.0	128.3	70.3	108.3	106.0	107.4	75.0	64.0	71.7	67.3	61.7	54.7	65.7	97.7	92.7	95.2	96.6
44	JH 419	123.3	137.7	126.3	129.0	100.0	123.3	124.3	129.3	68.0	103.0	105.0	105.9	73.3	61.0	70.0	66.3	57.7	54.0	63.7	94.3	88.7	91.5	95.1
	CHECKS																							
45	Buland	131.7	148.3	125.7	133.7	95.7	127.0	130.3	125.3	73.7	110.3	111.5	110.2	78.7	65.3	73.3	72.0	62.3	56.7	68.1	97.3	96.0	96.7	99.3
46	SeedTech 2324	126.3	143.7	126.0	132.3	98.3	125.3	129.0	129.7	70.3	109.3	108.5	109.4	76.7	61.7	73.3	68.0	59.7	55.7	65.8	95.7	91.7	93.7	97.5
47	Bio 9681	125.3	140.0	128.0	129.0	99.0	124.3	125.3	128.0	69.3	107.0	104.5	106.8	72.3	61.0	70.3	66.3	56.0	54.0	63.3	94.0	89.0	91.5	95.5
	Loc. Mean	**126.6**	**142.3**	**126.5**	**131.8**	**96.8**	**124.8**	**127.6**	**127.6**	**71.1**	**108.8**	**108.2**	**108.7**	**76.5**	**63.7**	**72.1**	**69.2**	**59.8**	**55.8**	**66.2**	**95.5**	**92.8**	**94.1**	**97.4**
	C.D. (5%)	3.63	0.93	4.30	3.30	1.70	3.05	1.19	2.87	1.62	3.13	2.96	2.04	3.13	1.85	1.92	3.02	1.02	3.08	1.49	1.35	3.72	4.35	1.24
	C.V. (%)	1.77	0.40	2.09	1.54	1.09	1.96	0.57	1.38	1.40	1.78	1.34	1.51	2.52	1.79	1.64	2.70	1.05	3.40	1.98	0.87	2.47	2.30	1.95
	F (Prob)	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00

Table No. 1 (Continued)

		DAYS TO 50% SILKING																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	DKC9120	127.0	151.0	130.3	137.7	98.7	128.9	132.3	130.0	73.0	115.3	117.0	113.5	78.3	68.0	73.0	75.3	65.3	60.7	70.1	100.0	100.0	100.0	101.8
2	IL 8534	128.3	152.7	130.0	135.7	99.3	129.2	132.0	131.3	74.7	114.0	116.5	113.7	78.0	66.0	75.0	73.7	63.0	60.0	69.3	97.0	97.7	97.3	101.4
3	II 8212	127.7	145.3	129.7	138.3	105.7	129.3	132.3	131.0	73.7	116.0	114.0	113.4	78.0	66.0	74.0	74.3	63.3	58.7	69.1	99.3	98.0	98.7	101.4
4	TH2	129.7	151.7	131.7	135.0	108.7	131.3	131.0	129.7	73.3	112.3	110.0	111.3	81.3	64.0	73.0	72.3	62.7	58.0	68.6	98.3	98.0	98.2	101.1
5	DADA	126.0	141.7	127.7	134.0	101.7	126.2	126.7	130.3	73.7	110.0	114.5	111.0	76.7	67.7	73.7	72.0	62.0	58.7	68.4	99.0	95.3	97.2	99.5
6	TH22	129.7	141.3	132.7	135.7	97.7	127.4	131.7	129.0	73.7	114.0	111.5	112.0	81.3	66.3	73.3	71.0	62.3	59.7	69.0	99.7	98.0	98.8	100.5
7	PRO-389	132.0	145.3	129.7	138.3	100.0	129.1	133.0	129.0	77.3	116.7	117.0	114.6	84.3	69.7	74.7	75.3	65.3	61.7	71.8	99.3	99.0	99.2	102.6
8	PRO-390	132.7	151.7	133.0	138.0	101.3	131.3	131.7	127.7	75.0	114.7	115.5	112.9	80.3	66.7	74.0	75.7	62.3	59.3	69.7	100.0	101.0	100.5	102.3
9	KMH-2589	130.7	144.0	129.7	131.7	91.3	125.5	128.7	132.0	73.3	111.7	107.0	110.5	78.3	66.0	72.3	75.3	59.7	60.0	68.6	98.3	97.0	97.7	99.3
10	Rasi-3022	130.7	145.0	129.3	138.3	95.0	127.7	132.3	131.7	74.3	115.0	112.0	113.1	80.7	70.0	73.0	75.3	65.7	61.3	71.0	99.3	98.7	99.0	101.5
11	Rasi-750	130.7	141.0	128.3	134.3	98.3	126.5	130.0	130.0	73.0	112.7	110.0	111.1	78.3	65.0	72.7	73.3	62.0	60.7	68.7	99.7	95.3	97.5	99.7
12	Bisco x 6573	127.0	142.0	127.3	134.0	100.0	126.1	128.0	128.7	73.3	112.3	112.5	111.0	78.3	64.0	74.0	71.7	66.3	58.0	68.7	98.7	94.7	96.7	99.5
13	Venus	125.3	141.0	126.3	129.7	99.0	124.3	124.0	130.0	73.3	108.7	108.0	108.8	77.3	65.3	72.0	71.7	60.7	59.3	67.7	100.3	96.0	98.2	98.2
14	PMH-2277	126.7	143.3	130.7	136.0	103.0	127.9	129.7	130.3	73.0	111.7	112.0	111.3	79.7	65.3	74.0	70.7	62.3	58.0	68.3	100.7	96.3	98.5	100.2
15	IVORY	131.7	143.7	128.7	135.7	99.7	127.9	132.3	130.7	73.7	114.0	111.0	112.3	81.0	65.0	73.3	74.3	62.0	59.3	69.2	96.3	97.7	97.0	100.6
16	PMH-189	129.3	145.7	128.0	138.3	100.3	128.3	130.3	130.7	73.3	113.7	110.0	111.6	77.0	66.3	73.3	72.7	64.0	59.0	68.7	98.7	100.3	99.5	100.6
17	Meghan-G	126.7	140.0	128.0	130.7	92.7	123.6	125.3	131.0	73.0	109.3	106.5	109.0	76.0	64.7	72.3	73.0	60.7	58.7	67.6	96.7	97.0	96.8	97.9
18	GK-3149	125.7	143.7	129.0	133.7	98.0	126.0	126.7	128.0	73.3	109.3	109.0	109.3	82.0	63.7	73.7	74.7	63.7	58.7	69.4	100.3	95.3	97.8	99.4
19	GK-3150	126.3	143.7	130.0	133.0	99.7	126.5	126.0	128.7	72.7	111.0	109.5	109.6	77.0	65.0	73.0	72.7	61.7	58.0	67.9	99.3	95.3	97.3	99.0
20	X-1228	127.0	142.7	128.7	133.7	100.0	126.4	130.3	132.0	73.3	113.3	114.0	112.6	75.7	64.0	73.7	71.7	63.3	57.7	67.7	99.0	96.0	97.5	99.8
21	K-25 Gold	130.0	144.3	128.0	135.7	103.3	128.3	130.7	130.7	73.3	114.0	109.5	111.6	78.7	65.7	72.0	73.3	61.7	59.3	68.4	96.3	98.3	97.3	100.3
22	P3533	130.7	146.3	129.0	135.7	102.7	128.9	130.3	129.0	72.3	113.3	112.5	111.5	80.3	65.0	74.0	72.3	61.7	58.0	68.6	99.3	95.7	97.5	100.5
23	X35C526	127.0	147.0	130.7	135.3	107.3	129.5	130.0	127.3	73.3	112.3	109.0	110.4	80.0	65.7	71.3	71.3	60.3	58.3	67.8	100.7	94.7	97.7	100.1
24	X35C529	126.3	147.7	127.7	138.0	96.3	127.2	129.7	131.0	72.3	109.3	111.0	110.7	78.0	62.7	70.7	71.7	60.0	58.7	66.9	99.0	96.0	97.5	99.2
25	X35C535	126.3	147.0	130.0	135.0	99.0	127.5	131.3	129.7	73.0	111.7	112.5	111.6	77.0	64.3	73.3	71.0	62.0	58.3	67.7	99.0	96.0	97.5	99.8
26	X35C537	124.7	144.0	129.3	137.0	99.0	126.8	129.3	131.3	72.0	111.7	112.0	111.3	77.0	63.3	70.3	74.3	60.3	56.7	67.0	99.7	99.0	99.3	99.5
27	X35C538	128.0	140.7	127.3	133.0	99.3	125.7	126.3	129.3	71.7	110.3	108.5	109.2	76.3	62.0	71.7	72.3	60.7	57.3	66.7	100.0	92.7	96.3	98.2
28	X35C543	129.0	144.3	127.3	133.7	100.7	127.0	127.7	130.0	72.3	111.7	110.0	110.3	76.7	63.7	71.0	71.3	62.0	57.7	67.1	98.3	95.3	96.8	99.0
29	REH2012-1	132.3	147.3	130.3	133.7	102.3	129.2	126.3	131.0	74.3	113.0	112.5	111.4	79.0	64.3	73.0	70.7	58.0	58.7	67.3	99.3	93.3	96.3	100.0

Table No. 1 (Continued)

		DAYS TO 50% SILKING																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
30	REH2012-2	129.3	137.7	126.0	131.7	103.7	125.7	127.0	131.3	72.0	110.3	-	110.2	76.3	66.7	72.7	69.7	58.0	59.0	67.1	100.3	90.7	95.5	97.8
31	AH 1251	123.3	140.3	129.0	133.3	102.0	125.6	126.3	129.7	70.0	109.3	108.0	108.7	77.0	62.0	71.0	68.0	59.3	57.0	65.7	102.0	96.3	99.2	98.0
32	AH 1252	125.0	140.7	124.7	131.7	103.0	125.0	123.3	130.0	70.3	108.0	107.5	107.8	78.7	62.3	71.0	69.7	57.7	56.7	66.0	99.0	88.3	93.7	97.1
33	JH 8825	132.0	149.7	130.0	138.3	101.3	130.3	130.3	127.0	75.3	113.3	117.0	112.6	81.7	69.3	74.0	73.3	63.7	62.0	70.7	98.7	99.3	99.0	102.0
34	JH 9031	133.0	151.3	132.3	140.3	97.0	130.8	132.7	131.3	74.0	114.3	114.5	113.4	82.3	69.3	73.0	73.0	60.0	60.7	69.7	98.7	95.0	96.8	101.8
35	JH 8837	128.0	145.0	128.7	135.3	102.3	127.9	130.0	130.0	74.3	115.0	114.5	112.8	81.7	65.3	73.3	73.3	58.0	58.7	68.4	99.7	98.7	99.2	100.7
36	JH 9114	130.0	152.3	132.3	137.0	103.0	130.9	131.0	131.3	76.3	115.3	116.0	114.0	80.0	70.3	75.0	73.3	64.0	59.7	70.4	100.0	98.7	99.3	102.5
37	JH 211	128.3	142.3	129.3	135.3	99.7	127.0	131.0	131.3	75.7	115.0	113.5	113.3	81.3	68.7	74.0	72.7	61.7	60.7	69.8	97.0	98.7	97.8	100.9
38	JH 248	130.0	146.7	128.3	139.0	98.3	128.5	131.0	130.0	76.7	111.7	117.0	113.3	78.0	69.7	74.7	72.0	62.7	59.0	69.3	100.0	95.3	97.7	101.1
39	JH 293	132.7	146.7	131.3	136.7	101.7	129.8	134.3	129.0	76.3	119.0	117.5	115.2	86.3	67.7	74.0	76.0	64.0	61.3	71.6	98.3	100.7	99.5	103.0
40	JH 295	129.3	144.7	128.0	137.0	102.0	128.2	130.0	130.7	75.0	117.7	113.5	113.4	80.0	67.7	73.0	74.0	63.3	61.7	69.9	100.0	97.7	98.8	101.4
41	JH 367	132.0	142.0	127.3	135.3	103.7	128.1	132.7	130.3	75.3	113.3	114.0	113.1	80.3	70.0	74.3	74.3	65.3	59.7	70.7	99.3	95.7	97.5	101.4
42	JH 405	128.0	147.3	128.7	138.0	102.0	128.8	131.3	130.3	77.7	114.3	115.5	113.8	81.0	69.0	74.3	72.3	66.0	59.7	70.4	98.7	97.3	98.0	101.8
43	JH 417	127.7	138.3	129.7	133.0	101.0	125.9	126.0	131.3	72.7	111.7	113.0	110.9	76.3	66.0	72.7	71.7	63.7	57.7	68.0	101.0	94.0	97.5	99.3
44	JH 419	126.0	140.0	129.0	132.7	103.3	126.2	126.3	131.7	70.0	107.7	107.5	108.6	77.7	63.0	71.0	71.7	59.7	58.3	66.9	98.0	94.0	96.0	98.2
	CHECKS																							
45	Buland	134.7	150.7	128.3	137.0	99.3	130.0	132.3	127.7	75.7	115.7	113.5	113.0	82.0	68.7	74.3	75.0	64.3	60.0	70.7	100.7	99.0	99.8	102.2
46	SeedTech 2324	129.0	146.7	128.7	135.7	102.3	128.5	131.0	132.0	72.3	112.0	115.0	112.5	78.0	63.0	74.3	71.3	61.7	59.3	67.9	99.7	95.7	97.7	100.4
47	Bio 9681	127.7	143.0	130.7	132.3	102.7	127.3	127.3	130.3	71.0	110.7	109.5	109.8	76.0	62.7	71.3	70.7	58.0	57.3	66.0	98.3	92.7	95.5	98.5
	Loc. Mean	**128.7**	**144.9**	**129.2**	**135.3**	**100.6**	**127.7**	**129.6**	**130.1**	**73.6**	**112.7**	**112.2**	**111.6**	**79.1**	**65.9**	**73.0**	**72.7**	**62.0**	**59.1**	**68.6**	**99.2**	**96.5**	**97.8**	**100.2**
	C.D. (5%)	3.70	1.62	4.35	4.00	1.74	3.02	1.40	2.93	1.76	3.30	3.64	2.15	4.26	2.15	1.60	3.17	0.87	2.83	1.59	1.15	4.43	4.23	1.28
	C.V. (%)	1.77	0.69	2.08	1.82	1.06	1.90	0.67	1.39	1.48	1.81	1.59	1.54	3.32	2.01	1.35	2.69	0.87	2.95	2.03	0.72	2.83	2.15	1.95
	F (Prob)	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.78	0.00

Table No. 1 (Continued)

		DAYS TO 75% DRY HUSK																					
						ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	DKC9120	175.0	182.3	166.3	135.3	164.8	158.7	167.0	116.3	152.7	158.5	150.6	113.7	103.0	107.0	109.7	104.0	111.7	108.2	132.7	134.3	133.5	137.0
2	IL 8534	173.7	185.0	166.7	135.0	165.1	159.3	167.7	118.7	153.0	157.0	151.1	114.7	101.0	109.0	107.7	103.0	112.3	107.9	131.7	129.3	130.5	136.7
3	II 8212	179.7	177.0	166.7	143.7	166.8	157.7	163.3	119.0	152.7	155.0	149.5	117.3	101.0	107.3	110.7	103.3	114.0	108.9	131.0	131.3	131.2	137.1
4	TH2	173.3	186.7	167.7	144.7	168.1	152.7	162.0	114.3	150.7	153.5	146.6	115.3	99.0	107.7	100.7	102.3	113.0	106.3	131.7	130.0	130.8	135.6
5	DADA	179.7	177.3	167.3	137.7	165.5	155.7	164.0	116.7	149.0	155.5	148.2	113.7	102.7	108.0	107.7	102.0	112.7	107.8	132.3	130.7	131.5	136.0
6	TH22	178.7	174.0	167.3	134.0	163.5	156.3	162.0	116.3	152.3	154.5	148.3	115.3	101.3	107.7	112.3	102.0	112.7	108.6	133.3	134.0	133.7	136.1
7	PRO-389	175.0	179.3	166.3	136.7	164.3	157.7	163.0	119.0	151.3	157.0	149.6	118.0	104.7	107.3	112.0	106.0	112.0	110.0	132.0	136.3	134.2	137.3
8	PRO-390	174.0	181.0	168.3	136.3	164.9	157.3	162.3	114.3	150.3	153.0	147.5	115.0	101.7	108.7	110.7	102.0	112.3	108.4	133.3	124.3	128.8	135.6
9	KMH-2589	173.0	177.7	167.0	129.0	161.7	154.0	161.0	115.0	148.3	154.0	146.5	116.3	101.0	106.0	109.0	99.3	113.0	107.4	133.0	131.7	132.3	134.6
10	Rasi-3022	181.3	176.0	165.3	134.3	164.3	157.3	162.0	116.0	150.7	154.0	148.0	118.0	105.0	105.7	109.0	105.7	113.7	109.5	132.3	133.7	133.0	136.5
11	Rasi-750	179.7	176.7	167.0	135.3	164.7	154.7	159.7	113.0	147.3	154.0	145.7	115.3	100.0	107.0	104.3	102.0	112.7	106.9	131.0	131.0	131.0	134.7
12	Bisco x 6573	175.3	178.3	166.7	137.7	164.5	152.7	160.7	114.3	150.7	154.5	146.6	117.0	99.0	108.7	105.3	106.3	113.7	108.3	132.0	129.0	130.5	135.4
13	Venus	175.0	175.3	166.0	130.3	161.7	154.7	161.0	118.0	146.3	153.5	146.7	115.7	100.3	107.7	105.0	100.0	112.3	106.8	132.7	130.3	131.5	134.4
14	PMH-2277	174.7	177.3	167.7	136.0	163.9	155.3	159.7	112.0	148.0	153.5	145.7	115.7	100.3	108.7	105.7	102.3	113.7	107.7	134.7	130.7	132.7	135.0
15	IVORY	176.3	177.3	166.0	136.7	164.1	155.3	160.7	118.7	151.0	157.0	148.5	115.7	100.0	107.3	105.7	102.0	112.3	107.2	130.0	132.3	131.2	135.5
16	PMH-189	172.7	180.3	164.3	127.0	161.1	154.7	158.7	113.0	147.0	152.0	145.1	115.3	101.3	108.3	107.0	104.7	112.3	108.2	132.3	132.0	132.2	134.3
17	Meghan-G	175.7	174.0	166.3	130.7	161.7	157.3	161.0	117.0	150.0	153.5	147.8	116.3	99.7	106.7	103.0	100.0	113.7	106.6	130.3	130.7	130.5	134.5
18	GK-3149	174.7	176.0	164.7	136.0	162.8	156.7	162.0	115.3	147.7	152.0	146.7	113.3	98.7	108.3	106.7	104.0	113.0	107.3	133.0	129.0	131.0	134.8
19	GK-3150	175.7	181.3	167.0	137.7	165.4	154.0	161.0	113.3	148.3	153.5	146.0	114.7	100.0	108.3	109.0	102.0	112.3	107.7	132.7	129.7	131.2	135.3
20	X-1228	174.3	177.0	165.0	144.3	165.2	154.7	161.7	113.7	149.0	157.0	147.2	113.7	99.0	106.7	107.3	103.0	114.0	107.3	134.7	129.0	131.8	135.5
21	K-25 Gold	173.7	174.7	163.3	146.0	164.4	155.3	159.7	114.3	148.0	153.0	146.1	116.3	100.7	106.0	105.3	102.0	114.3	107.4	129.0	129.7	129.3	134.8
22	P3533	174.0	179.0	164.7	139.7	164.3	154.7	160.3	115.0	147.7	154.0	146.3	115.3	100.0	108.3	106.0	102.0	111.7	107.2	133.0	130.0	131.5	135.0
23	X35C526	175.7	180.3	168.7	143.7	167.1	154.3	163.0	113.7	149.7	154.0	146.9	116.3	100.7	105.7	106.3	100.0	113.7	107.1	132.3	130.3	131.3	135.8
24	X35C529	176.3	177.7	166.0	142.7	165.7	155.0	161.3	118.7	144.7	155.5	147.0	113.7	97.7	105.3	104.3	100.0	113.7	105.8	130.7	127.7	129.2	134.8
25	X35C535	178.7	182.3	166.3	138.3	166.4	156.7	161.3	116.7	150.0	155.5	148.0	115.3	99.3	107.0	106.3	102.0	113.3	107.2	131.3	128.7	130.0	135.8
26	X35C537	179.3	177.0	166.0	138.7	165.3	157.3	162.0	116.0	146.0	155.0	147.3	115.3	98.3	104.7	105.7	100.0	112.7	106.1	130.7	127.7	129.2	134.8
27	X35C538	176.3	174.0	165.0	138.7	163.5	154.3	158.7	112.7	146.7	152.0	144.9	116.0	97.0	106.3	102.7	100.7	112.7	105.9	132.0	134.7	133.3	134.1
28	X35C543	177.7	176.7	164.3	141.7	165.1	154.3	160.0	116.7	147.3	153.5	146.4	114.7	98.7	105.7	105.3	102.0	112.7	106.5	132.0	130.3	131.2	134.9
29	REH2012-1	175.3	183.0	166.0	145.0	167.3	154.7	160.3	114.0	149.0	152.0	146.0	113.7	99.3	107.3	106.7	98.0	112.3	106.2	132.3	127.7	130.0	135.1

Table No. 1 (Continued)

S.No.	PEDIGREE	DAYS TO 75% DRY HUSK																					
		DELH	KARN	LUDH	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
30	REH2012-2	175.7	174.0	164.7	141.7	164.0	155.7	159.3	112.7	146.7	-	143.6	113.7	101.7	107.0	103.0	98.0	113.7	106.2	133.0	128.7	130.8	133.1
31	AH 1251	176.3	179.7	167.0	140.0	165.8	152.7	159.7	109.7	146.3	152.0	144.1	114.7	97.0	105.3	103.7	100.0	113.0	105.6	135.0	127.7	131.3	134.1
32	AH 1252	175.3	181.0	165.7	142.0	166.0	151.3	158.3	109.7	142.0	152.0	142.7	117.3	97.3	106.0	100.3	97.0	113.3	105.2	132.3	124.3	128.3	133.3
33	JH 8825	172.3	178.3	167.0	141.7	164.8	153.0	163.3	115.7	148.7	154.0	146.9	117.7	104.3	108.3	102.3	103.7	114.0	108.4	131.7	133.0	132.3	135.8
34	JH 9031	177.3	184.0	166.7	142.7	167.7	154.3	160.7	116.0	150.3	151.5	146.6	112.0	104.3	107.0	103.3	100.0	114.3	106.8	132.0	130.7	131.3	135.7
35	JH 8837	175.0	179.3	164.3	144.7	165.8	155.3	160.7	114.0	149.7	156.5	147.2	112.3	100.3	107.3	106.0	98.0	113.7	106.3	133.7	132.0	132.8	135.5
36	JH 9114	174.7	185.7	167.7	145.3	168.3	157.3	161.7	115.3	151.0	155.0	148.1	118.0	105.3	107.7	108.7	104.0	112.7	109.4	133.0	130.3	131.7	137.3
37	JH 211	174.3	172.7	167.3	140.0	163.6	156.7	161.7	115.7	150.7	155.5	148.0	112.7	103.7	108.3	111.0	102.0	112.7	108.4	130.0	132.3	131.2	135.7
38	JH 248	179.0	183.3	166.3	142.3	167.8	156.0	161.3	114.7	150.3	154.0	147.3	115.7	104.7	108.3	109.0	102.0	114.0	108.9	132.0	129.3	130.7	136.6
39	JH 293	177.3	180.3	166.7	141.0	166.3	158.7	164.0	116.3	153.3	157.0	149.9	113.3	102.7	108.3	108.3	104.0	114.0	108.4	134.3	134.0	134.2	137.3
40	JH 295	176.3	177.7	164.3	137.0	163.8	156.7	160.3	114.7	151.7	154.5	147.6	111.7	102.7	108.0	107.0	104.0	112.7	107.7	133.0	132.0	132.5	135.5
41	JH 367	171.3	179.7	165.7	139.0	163.9	156.3	161.7	116.0	150.3	155.5	148.0	114.3	105.0	108.7	104.7	105.0	111.7	108.2	133.0	132.3	132.7	135.9
42	JH 405	176.3	181.7	165.0	140.3	165.8	155.7	159.3	114.3	149.7	152.0	146.2	111.0	104.0	108.3	104.3	105.7	111.7	107.5	132.7	133.0	132.8	135.6
43	JH 417	173.7	179.3	164.7	141.0	164.7	149.0	157.3	110.7	145.7	152.5	143.0	113.7	101.0	106.7	100.0	104.0	112.7	106.3	134.7	130.3	132.5	133.9
44	JH 419	178.7	177.3	166.0	136.3	164.6	149.3	157.0	109.0	139.3	151.0	141.1	114.3	98.0	104.7	99.0	100.0	112.0	104.7	133.0	126.7	129.8	132.5
	CHECKS																						
45	Buland	176.0	181.3	164.7	133.3	163.8	155.0	161.0	114.3	148.3	154.0	146.5	117.0	103.7	108.7	103.3	104.0	113.0	108.3	132.3	135.0	133.7	135.6
46	SeedTech 2324	177.7	180.0	166.0	136.3	165.0	156.7	160.7	113.7	147.7	154.5	146.6	113.3	98.0	109.0	106.7	102.0	113.7	107.1	132.3	127.0	129.7	135.0
47	Bio 9681	174.0	177.3	167.3	140.3	164.8	152.0	159.3	110.0	146.0	153.0	144.1	116.3	97.7	106.3	100.7	98.0	113.0	105.3	131.7	126.3	129.0	133.5
	Loc. Mean	**175.9**	**178.9**	**166.1**	**138.7**	**164.9**	**155.2**	**161.2**	**114.8**	**148.8**	**154.2**	**146.8**	**115.0**	**100.9**	**107.3**	**105.9**	**102.0**	**113.0**	**107.3**	**132.3**	**130.4**	**131.4**	**135.3**
	C.D. (5%)	6.02	1.90	2.92	3.19	4.11	1.49	2.87	2.87	4.55	2.80	1.84	4.80	2.15	2.01	4.98	0.71	2.13	2.14	1.96	6.58	4.20	1.56
	C.V. (%)	2.11	0.66	1.08	1.42	1.78	0.59	1.10	1.54	1.88	0.89	1.01	2.57	1.31	1.16	2.90	0.43	1.16	1.75	0.91	3.11	1.59	1.71
	F (Prob)	0.38	0.00	0.12	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00	0.51	0.00	0.00	0.16	0.53	0.00

Table No. 1 (Continued)

		PLANT HEIGHT(cm)																							
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	DKC9120	240	172	233	228	180	211	209	190	221	230	214	213	201	232	217	183	216	181	205	242	209	242	211
2	IL 8534	230	177	203	227	180	203	177	183	206	225	210	200	191	233	220	201	174	167	198	273	226	273	204
3	Il 8212	224	163	228	224	191	206	206	176	216	200	199	199	190	240	213	191	200	173	201	223	212	223	203
4	TH2	225	143	202	221	173	193	174	159	183	203	172	178	175	228	210	151	170	177	185	190	184	190	186
5	DADA	203	177	207	211	178	195	198	171	191	188	171	184	184	238	218	176	212	190	203	211	192	211	195
6	TH22	237	200	213	230	181	212	197	165	187	210	203	192	185	231	208	195	207	174	200	247	174	247	204
7	PRO-389	218	182	205	227	179	202	192	173	180	183	190	184	180	234	213	185	179	177	194	280	184	280	199
8	PRO-390	236	172	187	233	191	204	184	179	183	213	93	170	163	221	202	181	196	194	193	273	194	273	194
9	KMH-2589	214	143	190	214	199	192	179	173	189	183	173	179	171	209	215	166	200	184	191	251	190	251	191
10	Rasi-3022	208	162	173	215	176	187	190	165	192	183	167	179	189	206	210	177	173	183	190	269	185	269	190
11	Rasi-750	211	155	192	214	170	188	180	167	190	180	172	178	179	197	180	168	179	177	180	156	172	156	180
12	Bisco x 6573	220	162	213	225	173	198	181	178	199	203	170	186	174	242	212	179	189	186	197	240	195	240	197
13	Venus	208	175	205	219	172	196	184	172	199	193	185	187	182	222	210	182	218	191	201	227	187	227	197
14	PMH-2277	210	170	203	223	195	200	199	171	197	193	175	187	165	219	215	192	201	185	196	266	191	266	199
15	IVORY	201	145	192	224	198	192	172	163	208	175	152	174	165	215	207	171	185	180	187	247	184	247	188
16	PMH-189	217	167	228	230	199	208	194	179	202	190	199	193	187	223	218	177	175	180	193	240	197	240	200
17	Meghan-G	215	155	205	219	198	199	181	170	206	180	167	181	175	238	215	170	214	174	198	269	184	269	197
18	GK-3149	217	162	215	231	186	202	176	160	186	208	183	182	177	241	228	173	156	182	193	205	184	205	193
19	GK-3150	223	175	208	230	175	202	193	169	204	195	183	189	199	228	215	183	208	199	205	195	195	195	199
20	X-1228	208	157	203	213	186	193	180	162	169	173	170	171	179	210	195	170	175	172	184	216	177	216	185
21	K-25 Gold	224	183	220	235	195	211	205	192	213	193	184	197	195	229	213	187	209	178	202	271	207	271	207
22	P3533	243	175	228	253	186	217	208	169	195	203	197	194	186	233	213	200	205	152	198	291	203	291	208
23	X35C526	246	175	223	246	200	218	203	190	208	218	185	201	184	218	227	196	209	200	206	218	194	218	209
24	X35C529	239	175	212	248	168	208	195	194	212	215	195	202	160	230	212	198	209	187	199	292	190	292	208
25	X35C535	238	177	240	243	175	215	204	178	193	205	190	194	191	231	222	201	203	188	206	297	196	297	210
26	X35C537	249	187	220	251	181	218	206	201	215	218	196	207	205	229	230	194	208	196	210	222	206	222	212
27	X35C538	229	202	205	243	195	215	215	171	203	183	212	197	194	209	220	182	207	189	200	262	182	262	207
28	X35C543	249	202	248	250	189	228	237	201	224	205	217	217	208	259	217	203	205	193	214	263	207	263	222
29	REH2012-1	222	167	205	215	185	199	208	167	195	198	188	191	172	215	225	199	180	183	196	235	176	235	198
30	REH2012-2	190	135	182	217	196	184	171	156	198	185	168	176	150	214	210	170	179	189	185	195	182	195	183

Table No. 1 (Continued)

		PLANT HEIGHT(cm)																							
							ZN 2						ZN 3								ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
31	AH 1251	198	158	198	202	186	189	183	155	157	150	143	157	156	195	190	162	192	161	176	270	157	270	180
32	AH 1252	202	148	223	213	197	197	189	163	164	168	168	170	147	201	208	158	198	178	182	261	174	261	187
33	JH 8825	231	162	207	246	202	209	201	164	186	210	180	188	176	229	225	192	170	190	197	269	186	269	202
34	JH 9031	213	163	207	220	195	200	183	167	190	178	167	177	173	195	205	157	210	172	185	192	177	192	187
35	JH 8837	201	150	222	228	179	196	205	150	168	168	170	172	185	213	208	170	165	175	186	230	171	230	187
36	JH 9114	205	168	197	223	203	199	198	163	185	205	185	187	181	213	215	188	168	170	189	232	181	232	194
37	JH 211	218	192	190	223	197	204	203	168	190	195	193	190	184	213	215	186	205	175	196	250	173	250	200
38	JH 248	198	155	210	211	180	191	187	143	151	170	156	161	164	208	195	159	186	169	180	199	168	199	179
39	JH 293	213	162	195	239	196	201	184	154	196	178	192	181	170	234	213	180	188	178	194	185	183	185	192
40	JH 295	196	183	222	230	201	207	202	174	199	183	193	190	180	211	207	175	202	189	194	210	178	210	197
41	JH 367	216	162	198	219	202	199	197	165	157	178	165	172	153	214	207	183	197	187	190	259	357	259	192
42	JH 405	230	167	222	239	207	213	188	186	186	193	165	184	173	221	205	195	199	183	196	276	194	276	202
43	JH 417	200	168	185	228	207	198	183	161	186	178	158	173	154	215	188	170	176	174	180	190	171	190	184
44	JH 419	217	148	195	215	195	194	191	163	188	188	166	179	163	212	210	166	169	176	183	223	176	223	187
	CHECKS																								
45	Buland	238	172	238	246	179	215	197	183	225	198	202	201	174	248	223	182	178	201	201	184	203	184	204
46	SeedTech 2324	217	157	200	217	203	199	179	159	183	175	161	171	169	206	212	174	158	178	183	274	169	274	189
47	Bio 9681	207	148	215	243	189	200	204	178	196	215	194	198	170	208	208	163	193	184	188	252	183	252	198
	Loc. Mean	**219**	**167**	**209**	**228**	**189**	**202**	**193**	**171**	**193**	**193**	**179**	**186**	**177**	**222**	**212**	**180**	**191**	**181**	**194**	**239**	**191**	**239**	**197**
	C.D. (5%)	21.80	3.68	39.78	19.44	3.25	14.66	23.23	17.72	14.23	-	44.21	14.75	14.78	15.71	24.15	21.24	6.77	27.95	12.50	29.95	76.33	29.95	9.22
	C.V. (%)	6.14	1.36	11.75	5.26	1.06	5.81	7.42	6.39	4.55	-	12.24	6.36	5.15	4.37	7.04	7.28	2.18	9.51	5.67	7.74	24.69	7.74	6.97
	F (Prob)	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	-	0.01	0.00	0.00	0.00	0.10	0.00	0.00	0.50	0.00	0.00	0.37	0.00	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : GODHRA 24.7%

Table No. 1 (Continued)

		EAR HEIGHT(cm)																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	DKC9120	126	73	117	86	64	85	90	83	94	113	86	93	99	94	112	74	109	83	95	112	87	100	93
2	IL 8534	116	77	123	99	70	92	90	79	85	103	93	90	95	95	113	83	85	78	92	129	98	114	94
3	Il 8212	187	58	107	86	63	78	88	74	89	90	84	85	82	101	100	74	90	80	88	115	78	97	86
4	TH2	124	58	110	85	60	78	72	66	72	88	79	75	83	99	110	62	88	85	88	95	76	86	82
5	DADA	119	90	98	83	62	83	91	78	82	80	69	80	90	114	115	73	110	98	100	103	76	89	89
6	TH22	130	138	103	101	62	101	91	78	91	100	105	93	92	113	105	83	107	81	97	114	69	92	96
7	PRO-389	129	103	113	94	65	94	96	90	89	100	94	94	94	109	113	80	105	91	99	112	83	98	96
8	PRO-390	136	90	93	93	67	86	96	80	82	88	73	84	76	103	107	77	100	96	93	110	81	96	89
9	KMH-2589	117	63	98	90	64	79	75	86	87	83	85	83	91	88	112	64	111	91	93	118	84	101	88
10	Rasi-3022	124	82	110	88	62	86	89	90	97	90	86	90	101	106	113	86	98	92	99	122	87	105	94
11	Rasi-750	126	80	95	88	61	81	89	87	89	85	93	89	95	97	127	68	103	96	98	115	72	94	91
12	Bisco x 6573	116	75	108	88	63	84	89	83	82	83	77	83	79	110	113	75	99	88	94	123	79	101	89
13	Venus	112	73	98	85	59	79	77	77	82	88	77	80	97	99	115	70	116	85	97	117	77	97	88
14	PMH-2277	128	93	113	95	55	89	84	86	96	103	82	90	81	110	107	80	110	88	96	116	89	103	93
15	IVORY	104	73	98	85	63	80	68	61	85	73	72	72	79	101	103	64	99	83	88	119	70	95	82
16	PMH-189	124	85	133	99	61	95	99	96	97	90	103	97	97	108	139	75	105	84	101	118	92	105	99
17	Meghan-G	190	80	105	85	59	82	63	80	86	78	67	75	89	110	113	67	114	96	98	119	73	96	87
18	GK-3149	121	75	118	94	59	87	66	82	82	90	79	80	104	114	130	64	97	96	101	99	71	85	89
19	GK-3150	119	83	105	93	54	84	93	79	90	95	77	87	99	105	108	72	125	94	100	101	81	91	91
20	X-1228	118	82	112	95	58	87	90	86	74	80	82	82	88	99	110	74	90	83	91	112	75	93	88
21	K-25 Gold	119	82	125	104	65	94	95	95	95	90	91	93	109	108	103	77	112	89	100	109	96	103	97
22	P3533	138	103	130	108	61	101	93	83	84	113	139	102	93	118	122	94	109	88	104	119	90	105	103
23	X35C526	129	90	125	101	59	94	87	98	93	103	93	94	101	94	115	90	108	100	101	109	87	98	97
24	X35C529	124	77	145	102	54	94	82	93	89	90	81	87	72	104	122	79	106	100	97	114	76	95	93
25	X35C535	131	90	123	102	58	93	94	85	83	100	87	90	89	106	123	86	105	86	99	130	81	105	96
26	X35C537	135	82	115	108	62	92	90	102	79	103	88	92	95	100	110	75	106	93	96	110	82	96	94
27	X35C538	135	100	115	101	57	93	97	83	87	80	99	89	103	105	120	94	103	92	103	119	78	99	96
28	X35C543	128	117	137	105	61	105	110	94	96	88	104	98	101	110	117	95	109	90	104	119	84	102	102

Table No. 1 (Continued)

		EAR HEIGHT(cm)																						
							ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
29	REH2012-1	135	83	120	96	54	89	91	89	95	103	99	95	97	115	122	92	108	93	104	119	85	102	98
30	REH2012-2	109	63	92	99	63	79	83	81	94	83	81	84	76	107	115	71	94	95	93	90	83	87	86
31	AH 1251	109	80	108	85	62	84	75	79	72	63	65	71	78	96	102	68	91	89	87	117	62	89	82
32	AH 1252	116	73	113	89	59	84	93	87	79	85	89	87	73	103	140	58	102	87	94	103	75	89	89
33	JH 8825	132	83	120	109	68	95	100	87	98	113	92	98	89	118	125	82	97	96	101	108	84	96	98
34	JH 9031	116	95	128	98	63	96	96	84	98	95	83	91	91	99	113	69	112	92	96	99	83	91	94
35	JH 8837	112	85	125	94	66	93	97	71	76	83	79	81	95	107	115	75	82	85	93	108	73	91	89
36	JH 9114	122	77	100	90	69	84	96	80	86	110	92	93	89	108	113	81	88	86	94	111	82	97	92
37	JH 211	123	100	102	102	69	93	99	88	95	88	98	93	105	108	130	91	110	85	105	119	82	101	98
38	JH 248	116	82	122	89	58	88	87	70	75	85	81	80	91	110	95	76	96	79	91	110	73	92	87
39	JH 293	123	82	110	112	68	93	95	83	100	93	104	95	101	127	118	86	119	95	108	108	89	99	99
40	JH 295	123	102	142	97	73	104	110	90	97	90	99	97	97	112	122	80	107	96	102	98	86	92	100
41	JH 367	124	88	115	94	84	95	95	85	74	90	96	88	76	105	112	76	113	98	97	116	77	97	94
42	JH 405	140	92	143	108	87	107	87	107	99	105	89	97	94	109	120	95	114	97	105	113	96	105	103
43	JH 417	114	88	97	96	84	91	86	84	70	75	74	78	84	115	112	74	99	87	95	92	69	81	87
44	JH 419	124	73	97	100	84	88	88	79	80	93	81	84	81	106	110	68	88	86	90	111	79	95	88
	CHECKS																							
45	Buland	141	83	142	113	87	106	97	100	135	90	101	105	95	138	125	84	114	97	109	94	107	100	106
46	SeedTech 2324	139	88	103	101	69	90	93	87	95	95	86	91	91	106	128	86	101	86	100	115	82	98	95
47	Bio 9681	112	67	108	103	58	84	91	88	81	100	86	89	84	106	110	65	88	86	90	107	81	94	89
	Loc. Mean	**126**	**84**	**114**	**96**	**65**	**90**	**89**	**84**	**88**	**91**	**88**	**88**	**90**	**107**	**115**	**77**	**103**	**90**	**97**	**111**	**81**	**96**	**93**
	C.D. (5%)	48.02	4.38	31.13	12.68	3.08	14.17	12.09	17.35	11.54	0.00	24.32	10.24	9.89	14.83	26.13	15.99	4.53	17.46	8.69	6.94	15.44	17.36	5.76
	C.V. (%)	23.45	3.21	16.83	8.13	2.94	11.30	8.34	12.66	8.09	0.00	13.79	9.31	6.74	8.57	13.96	12.76	2.71	11.99	7.87	3.84	11.71	8.95	9.24
	F (Prob)	0.70	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.47	0.00	0.00	0.73	0.00	0.00	0.00	0.42	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : DELHI 23.4%

TABLE No. 2: **Performance of medium maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Kanpur, Bahraich, Dholi, Bhubaneshwar, Varanasi, Ranchi, Arbhavi, Karimnagar, Kolhapur, Mandya, Coimbatore, Vagarai, Banswara, Godhra in trial no. TR02 (IVT-M) during rabi 2012-13.**

		GRAIN YIELD (kg/ha) AT 15% MOISTURE																					
SI										ZN 2												ZN 3	
No	PEDIGREE	KARN	R	LUDH	R	PANT	R	KANP	R	MEAN	R	BAHR	R	DHOL	R	BHUB	R	VARA	R	RANC	R	MEAN	R
1	IJ8521	6188	13	8037	11	18810	1	6722	17	10573	2	8674	2	6685	3	7341	1	11112	1	13254	3	9413	1
2	IJ8214	5354	17	14396	1	15740	4	8439	4	9844	6	7985	4	5592	10	4176	25	9151	7	12028	6	7786	8
3	IL8536	6511	10	11383	4	18727	2	5743	22	10327	3	9240	1	6902	1	6256	6	9140	8	13481	1	9004	2
4	IL8537	6276	12	12252	2	14672	7	7291	10	9413	10	8068	3	5446	13	5657	11	9610	5	13012	4	8358	3
5	KMHI-6668	7474	4	6870	14	13139	12	7397	9	9337	12	6242	11	5886	6	5754	9	10872	2	12935	5	8338	4
6	KMH-4210	6459	11	11603	3	12314	15	5641	23	8138	19	7162	5	6693	2	5531	13	9456	6	11898	8	8148	6
7	PMH-2246	8717	2	9855	6	14914	6	6835	15	10156	5	6367	9	6315	5	6768	4	9790	3	12008	7	8250	5
8	K-26	7189	6	7503	13	17957	3	5523	24	10223	4	5707	13	5514	12	6794	3	9768	4	11767	9	7910	7
9	X-2816	5673	15	7777	12	12676	14	6022	20	8124	20	4693	23	5521	11	7132	2	8172	11	11093	11	7322	10
10	VEH-12-1	5854	14	4351	25	10921	21	10437	3	9071	13	5551	16	4987	17	4504	22	7338	15	10557	14	6588	16
11	MMH-12-11	4970	22	5218	23	13212	9	10579	2	9587	8	5183	18	4574	20	4212	24	5381	23	9551	17	5780	24
12	MMH-12-12	4684	24	5783	20	9597	24	6883	14	7055	24	7073	6	5350	14	5162	15	7201	18	-		6196	21
13	MMH-12-13	1357	25	5555	21	8878	25	7054	12	5763	25	4673	24	3082	25	4897	21	5397	22	-		4512	25
14	MMH12-14	8458	3	6342	15	11700	17	8048	7	9402	11	5066	19	4970	19	5124	18	8017	13	10579	13	6751	13
15	REH2012-3	4946	23	5829	19	11068	20	6930	13	7648	21	5239	17	4389	22	5162	16	8099	12	8304	22	6239	20
16	REH2012-4	5280	18	4775	24	10431	22	6822	16	7511	22	5558	15	5041	16	5135	17	7912	14	7994	23	6328	19
17	AH 1253	5176	20	6087	17	11378	19	8124	6	8226	17	6344	10	4979	18	5070	19	4699	25	8579	20	5934	22
18	AH 1254	5355	16	9359	8	9829	23	7281	11	7488	23	6521	8	5068	15	4405	23	5125	24	8532	21	5930	23
19	AH 1255	6567	9	6313	16	13155	10	4850	25	8191	18	6203	12	4350	23	6072	7	8234	10	9557	16	6883	12
20	HKH420	9167	1	8125	10	13135	13	6016	21	9439	9	5018	20	5798	7	6315	5	6407	21	9364	19	6581	17
21	HKH421	5112	21	9785	7	13578	8	6486	18	8392	16	5650	14	5740	9	5386	14	7262	17	10826	12	6973	11

SI No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE																					
		ZN 2																		ZN 3			
		KARN	R	LUDH	R	PANT	R	KANP	R	MEAN	R	BAHR	R	DHOL	R	BHUB	R	VARA	R	RANC	R	MEAN	R
22	HKH422	6937	8	10051	5	13148	11	11691	1	10592	1	6693	7	4426	21	5981	8	6734	20	9392	18	6645	14
	CHECKS																						
23	BIO9637	5252	19	8840	9	15695	5	8160	5	9702	7	4980	21	5741	8	5683	10	8868	9	13376	2	7730	9
24	HM4	7213	5	5968	18	12311	16	6143	19	8555	15	4735	22	6337	4	4967	20	7313	16	9748	15	6620	15
25	HM8	7015	7	5499	22	11583	18	7910	8	8836	14	4663	25	3862	24	5648	12	7199	19	11466	10	6568	18
	Location Mean	**6127**		**7902**		**13143**		**7321**		**8864**		**6132**		**5330**		**5565**		**7930**		**10839**		**7159**	
	C.D. (5%)	835		5040		2103		804		1248		1133		1714		579		1596		3012		1607	
	C.V. (%)	8.3		**38.83**		9.74		6.69		**-**		11.25		19.58		6.33		12.25		13.36		**-**	
	F (Prob)	0		0.009		0		0				0		0.006		0		0		0.006			
	Plot Size	6		3.6		6		4.8		-		4.8		6		4.8		4.8		5.6		-	
	AGRONOMY DATA																						
	Sowing Date	18-11		30-11		27-11		25-12		-		4-12		29-11		30-11		28-11		1-12		-	
	Harvest Date	25-05		3-06		6-03		8-05		-		15-05		13-06		8-04		3-04		20-05		-	
	Irrigation Nos	7		12		6		4		-		4		4		10		5		11		-	
	Ferilizer Applied N	150		70		120		120		-		150		150		120		150		140		-	
	Ferilizer Applied P	60		24		60		60		-		75		70		60		75		60		-	
	Ferilizer Applied K	60		12		40		60		-		60		60		60		60		40		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 38.8 %

TABLE No. 2: **(Cont..)**

Sl No	PEDIGREE	ARBH	R	KARI	R	KOLH	R	MAND	R	COIM	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
1	IJ8521	5525	7	13458	2	13680	3	7733	3	11618	7	6777	5	9799	3	4833	2	12276	2	8554	2	9668	1
2	IJ8214	5587	5	12057	6	12696	6	6716	14	11730	4	6369	9	9192	7	4235	4	17172	1	10703	1	9064	4
3	IL8536	8019	1	11502	7	12972	5	6867	13	13648	1	6619	7	9938	2	3411	17	8766	10	6088	11	9238	3
4	IL8537	5161	8	12304	5	13846	2	7354	8	11663	6	7065	3	9565	4	4530	3	11240	4	7885	3	8950	5
5	KMHI-6668	1635	25	11175	8	10907	9	5907	22	12258	3	5959	16	7973	10	3987	6	9141	8	6564	7	8167	8
6	KMH-4210	4264	13	14556	1	11174	8	6410	17	11709	5	7288	2	9234	6	3941	7	7717	15	5829	12	8263	7
7	PMH-2246	6283	2	12754	3	15615	1	8884	1	12619	2	8027	1	10697	1	4927	1	10821	5	7874	4	9478	2
8	K-26	5709	4	12648	4	13079	4	7146	12	11417	9	7030	4	9505	5	3817	8	7587	16	5702	14	8666	6
9	X-2816	5551	6	10650	10	11211	7	7326	9	11486	8	6077	13	8717	8	3164	18	8414	12	5789	13	7804	10
10	VEH-12-1	3874	15	8818	18	6526	22	6422	16	10985	12	5516	21	7024	17	2992	21	7962	14	5477	16	7078	18
11	MMH-12-11	3576	16	8504	22	7519	20	6435	15	6728	24	2506	24	5878	23	3734	11	7366	17	5550	15	6502	21
12	MMH-12-12	3120	20	6787	24	3723	24	6199	19	8251	19	5962	15	5674	24	3789	9	2002	24	2896	24	5719	24
13	MMH-12-13	2740	23	6683	25	3494	25	-		10277	13	1061	25	4851	25	3160	19	1993	25	2577	25	4625	25
14	MMH12-14	4850	9	9237	15	8269	18	6007	21	7005	23	6035	14	6900	19	3446	16	6919	18	5183	19	7108	17
15	REH2012-3	3392	19	8566	21	6209	23	7486	6	9344	16	5814	19	6802	20	3712	12	6825	19	5269	18	6593	20
16	REH2012-4	4825	10	8686	20	6684	21	6354	18	7976	21	5870	18	6732	21	2618	22	5411	22	4015	22	6412	22
17	AH 1253	3517	17	7948	23	8668	16	5844	23	5689	25	5896	17	6260	22	2294	25	5640	21	3967	23	6240	23
18	AH 1254	5904	3	8687	19	9106	14	5435	24	7284	22	6666	6	7180	16	3656	13	8982	9	6319	9	6740	19
19	AH 1255	4434	12	9310	14	10805	10	7312	10	8287	18	6103	12	7708	13	3783	10	9305	7	6544	8	7395	12
20	HKH420	3509	18	9894	12	9967	11	7588	4	10996	11	5671	20	7937	11	3149	20	5039	23	4094	21	7315	13
21	HKH421	2275	24	9032	17	9181	13	7357	7	10039	14	6285	10	7361	14	3472	14	6280	20	4876	20	7122	16

Sl No	PEDIGREE	ARBH	R	KARI	R	KOLH	R	MAND	R	COIM	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
22	HKH422	2975	21	10338	11	8432	17	7543	5	11142	10	6119	11	7758	12	3466	15	8735	11	6101	10	7735	11
	CHECKS																						
23	BIO9637	4648	11	10967	9	9813	12	8118	2	9190	17	5388	22	8021	9	2408	24	8163	13	5285	17	7903	9
24	HM4	4057	14	9510	13	9039	15	6008	20	8207	20	6613	8	7239	15	2529	23	11341	3	6935	5	7255	14
25	HM8	2963	22	9120	16	7963	19	7175	11	9737	15	4991	23	6992	18	4017	5	9722	6	6870	6	7190	15
	Location Mean	**4336**		**10128**		**9623**		**6901**		**9971**		**5908**		**7811**		**3563**		**8193**		**5878**		**7563**	
	C.D. (5%)	1211		864		1950		676		844		1711		1209		1118		1094		1106		1328	
	C.V. (%)	17		5.19		12.34		5.95		5.15		17.63		-		19.1		6.45		-		-	
	F (Prob)	0		0		0		0		0		0				0		0					
	Plot Size	6		6		6		5.6		4.8		4.8		-		6		4.8		-		-	
	AGRONOMY DATA																						
	Sowing Date	11-12		25-11		23-12		27-11		7-12		27-12		-		6-12		22-11		-		-	
	Harvest Date	20-04		26-03		6-03		25-04		4-04		23-04		-		3-05		24-04		-		-	
	Irrigation Nos	8		8		-		6		9		10		-		6		9		-		-	
	Ferilizer Applied N	150		200		120		150		150		200		-		150		120		-		-	
	Ferilizer Applied P	75		60		60		75		75		75		-		80		50		-		-	
	Ferilizer Applied K	37.5		60		40		40		75		75		-		-		-		-		-	

TABLE No.2 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE BIO9637																					
						ZN 2						ZN 3							ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	RANC	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	IJ8521	17.8	-	19.8	-	9	74.2	16.4	29.2	25.3	-	21.8	18.9	22.7	39.4	-	26.4	25.8	22.2	100.7	50.4	61.9	22.3
2	IJ8214	2	62.9	0.3	3.4	1.5	60.3	-	-	3.2	-	0.7	20.2	9.9	29.4	-	27.6	18.2	14.6	75.9	110.4	102.5	14.7
3	IL8536	24	28.8	19.3	-	6.4	85.5	20.2	10.1	3.1	0.8	16.5	72.5	4.9	32.2	-	48.5	22.8	23.9	41.7	7.4	15.2	16.9
4	IL8537	19.5	38.6	-	-	-	62	-	-	8.4	-	8.1	11	12.2	41.1	-	26.9	31.1	19.3	88.1	37.7	49.2	13.2
5	KMHI-6668	42.3	-	-	-	-	25.3	2.5	1.3	22.6	-	7.9	-	1.9	11.1	-	33.4	10.6	-	65.6	12	24.2	3.3
6	KMH-4210	23	31.3	-	-	-	43.8	16.6	-	6.6	-	5.4	-	32.7	13.9	-	27.4	35.3	15.1	63.7	-	10.3	4.6
7	PMH-2246	66	11.5	-	-	4.7	27.8	10	19.1	10.4	-	6.7	35.2	16.3	59.1	9.4	37.3	49	33.4	104.6	32.6	49	19.9
8	K-26	36.9	-	14.4	-	5.4	14.6	-	19.6	10.1	-	2.3	22.8	15.3	33.3	-	24.2	30.5	18.5	58.5	-	7.9	9.7
9	X-2816	8	-	-	-	-	-	-	25.5	-	-	-	19.4	-	14.2	-	25	12.8	8.7	31.4	3.1	9.5	-
10	VEH-12-1	11.5	-	-	27.9	-	11.5	-	-	-	-	-	-	-	-	-	19.5	2.4	-	24.3	-	3.6	-
11	MMH-12-11	-	-	-	29.6	-	4.1	-	-	-	-	-	-	-	-	-	-	-	-	55.1	-	5	-
12	MMH-12-12	-	-	-	-	-	42	-	-	-	-	-	-	-	-	-	-	10.6	-	57.4	-	-	-
13	MMH-12-13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11.8	-	-	31.2	-	-	-
14	MMH12-14	61	-	-	-	-	1.7	-	-	-	-	-	4.4	-	-	-	-	12	-	43.1	-	-	-
15	REH2012-3	-	-	-	-	-	5.2	-	-	-	-	-	-	-	-	-	1.7	7.9	-	54.2	-	-	-
16	REH2012-4	0.5	-	-	-	-	11.6	-	-	-	-	-	3.8	-	-	-	-	8.9	-	8.7	-	-	-
17	AH 1253	-	-	-	-	-	27.4	-	-	-	-	-	-	-	-	-	-	9.4	-	-	-	-	-
18	AH 1254	2	5.9	-	-	-	30.9	-	-	-	-	-	27	-	-	-	-	23.7	-	51.8	10	19.6	-
19	AH 1255	25.1	-	-	-	-	24.6	-	6.9	-	-	-	-	-	10.1	-	-	13.3	-	57.1	14	23.8	-
20	HKH420	74.5	-	-	-	-	0.8	1	11.1	-	-	-	-	-	1.6	-	19.6	5.2	-	30.8	-	-	-
21	HKH421	-	10.7	-	-	-	13.4	-	-	-	-	-	-	-	-	-	9.2	16.6	-	44.2	-	-	-
22	HKH422	32.1	13.7	-	43.3	9.2	34.4	-	5.3	-	-	-	-	-	-	-	21.2	13.6	-	44	7	15.4	-
	CHECKS																						
23	BIO9637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
24	HM4	37.3	-	-	-	-	-	10.4	-	-	-	-	-	-	-	-	-	22.7	-	5	38.9	31.2	-
25	HM8	33.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	-	-	66.8	19.1	30	-

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 38.8 %

TABLE No. 2 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HM4																					
						ZN 2						ZN 3							ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	RANC	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	IJ8521	-	34.7	52.8	9.4	23.6	83.2	5.5	47.8	51.9	36	42.2	36.2	41.5	51.3	28.7	41.6	2.5	35.4	91.1	8.2	23.4	33.3
2	IJ8214	-	141.2	27.9	37.4	15.1	68.6	-	-	25.1	23.4	17.6	37.7	26.8	40.5	11.8	42.9	-	27	67.5	51.4	54.3	24.9
3	IL8536	-	90.7	52.1	-	20.7	95.1	8.9	25.9	25	38.3	36	97.7	20.9	43.5	14.3	66.3	0.1	37.3	34.9	-	-	27.3
4	IL8537	-	105.3	19.2	18.7	10	70.4	-	13.9	31.4	33.5	26.3	27.2	29.4	53.2	22.4	42.1	6.8	32.1	79.1	-	13.7	23.4
5	KMHI-6668	3.6	15.1	6.7	20.4	9.1	31.8	-	15.8	48.7	32.7	25.9	-	17.5	20.7	-	49.4	-	10.1	57.7	-	-	12.6
6	KMH-4210	-	94.4	0	-	-	51.2	5.6	11.3	29.3	22.1	23.1	5.1	53.1	23.6	6.7	42.7	10.2	27.6	55.8	-	-	13.9
7	PMH-2246	20.9	65.1	21.1	11.3	18.7	34.5	-	36.2	33.9	23.2	24.6	54.9	34.1	72.7	47.9	53.8	21.4	47.8	94.8	-	13.5	30.6
8	K-26	-	25.7	45.9	-	19.5	20.5	-	36.8	33.6	20.7	19.5	40.7	33	44.7	18.9	39.1	6.3	31.3	50.9	-	-	19.5
9	X-2816	-	30.3	3	-	-	-	-	43.6	11.7	13.8	10.6	36.8	12	24	21.9	39.9	-	20.4	25.1	-	-	7.6
10	VEH-12-1	-	-	-	69.9	6	17.2	-	-	0.3	8.3	-	-	-	-	6.9	33.8	-	-	18.3	-	-	-
11	MMH-12-11	-	-	7.3	72.2	12.1	9.4	-	-	-	-	-	-	-	-	7.1	-	-	-	47.7	-	-	-
12	MMH-12-12	-	-	-	12	-	49.4	-	3.9	-	-	-	-	-	-	3.2	0.5	-	-	49.9	-	-	-
13	MMH-12-13	-	-	-	14.8	-	-	-	-	-	-	-	-	-	-	-	25.2	-	-	25	-	-	-
14	MMH12-14	17.3	6.3	-	31	9.9	7	-	3.1	9.6	8.5	2	19.5	-	-	-	-	-	-	36.3	-	-	-
15	REH2012-3	-	-	-	12.8	-	10.6	-	3.9	10.8	-	-	-	-	-	24.6	13.9	-	-	46.8	-	-	-
16	REH2012-4	-	-	-	11.1	-	17.4	-	3.4	8.2	-	-	18.9	-	-	5.7	-	-	-	3.5	-	-	-
17	AH 1253	-	2	-	32.2	-	34	-	2.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	AH 1254	-	56.8	-	18.5	-	37.7	-	-	-	-	-	45.5	-	0.7	-	-	0.8	-	44.6	-	-	-
19	AH 1255	-	5.8	6.9	-	-	31	-	22.2	12.6	-	4	9.3	-	19.5	21.7	1	-	6.5	49.6	-	-	1.9
20	HKH420	27.1	36.1	6.7	-	10.3	6	-	27.1	-	-	-	-	4	10.3	26.3	34	-	9.6	24.5	-	-	0.8
21	HKH421	-	64	10.3	5.6	-	19.3	-	8.4	-	11.1	5.3	-	-	1.6	22.4	22.3	-	1.7	37.3	-	-	-
22	HKH422	-	68.4	6.8	90.3	23.8	41.3	-	20.4	-	-	0.4	-	8.7	-	25.5	35.8	-	7.2	37.1	-	-	6.6
	CHECKS																						
23	BIO9637	-	48.1	27.5	32.8	13.4	5.2	-	14.4	21.3	37.2	16.8	14.6	15.3	8.6	35.1	12	-	10.8	-	-	-	8.9
24	HM4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25	HM8	-	-	-	28.8	3.3	-	-	13.7	-	17.6	-	-	-	-	19.4	18.6	-	-	58.9	-	-	-

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 38.8 %

TABLE No. 2 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HM8																					
						ZN 2						ZN 3							ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	RANC	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	IJ8521	-	46.1	62.4	-	19.7	86	73.1	30	54.4	15.6	43.3	86.5	47.6	71.8	7.8	19.3	35.8	40.1	20.3	26.3	24.5	34.5
2	IJ8214	-	161.8	35.9	6.7	11.4	71.2	44.8	-	27.1	4.9	18.6	88.5	32.2	59.4	-	20.5	27.6	31.5	5.4	76.6	55.8	26.1
3	IL8536	-	107	61.7	-	16.9	98.1	78.7	10.8	27	17.6	37.1	170.6	26.1	62.9	-	40.2	32.6	42.1	-	-	-	28.5
4	IL8537	-	122.8	26.7	-	6.5	73	41	0.2	33.5	13.5	27.3	74.2	34.9	73.9	2.5	19.8	41.5	36.8	12.8	15.6	14.8	24.5
5	KMHI-6668	6.6	24.9	13.4	-	5.7	33.9	52.4	1.9	51	12.8	27	-	22.5	37	-	25.9	19.4	14	-	-	-	13.6
6	KMH-4210	-	111	6.3	-	-	53.6	73.3	-	31.4	3.8	24.1	43.9	59.6	40.3	-	20.3	46	32.1	-	-	-	14.9
7	PMH-2246	24.3	79.2	28.8	-	14.9	36.5	63.5	19.8	36	4.7	25.6	112	39.8	96.1	23.8	29.6	60.8	53	22.6	11.3	14.6	31.8
8	K-26	2.5	36.4	55	-	15.7	22.4	42.8	20.3	35.7	2.6	20.4	92.7	38.7	64.2	-	17.3	40.9	36	-	-	-	20.5
9	X-2816	-	41.4	9.4	-	-	0.6	43	26.3	13.5	-	11.5	87.4	16.8	40.8	2.1	18	21.8	24.7	-	-	-	8.5
10	VEH-12-1	-	-	-	31.9	2.7	19	29.1	-	1.9	-	0.3	30.8	-	-	-	12.8	10.5	0.5	-	-	-	-
11	MMH-12-11	-	-	14.1	33.7	8.5	11.1	18.5	-	-	-	-	20.7	-	-	-	-	-	-	-	-	-	-
12	MMH-12-12	-	5.2	-	-	-	51.7	38.5	-	0	-	-	5.3	-	-	-	-	19.4	-	-	-	-	-
13	MMH-12-13	-	1	-	-	-	0.2	-	-	-	-	-	-	-	-	-	5.6	-	-	-	-	-	-
14	MMH12-14	20.6	15.3	1	1.7	6.4	8.6	28.7	-	11.4	-	2.8	63.7	1.3	3.8	-	-	20.9	-	-	-	-	-
15	REH2012-3	-	6	-	-	-	12.4	13.6	-	12.5	-	-	14.5	-	-	4.3	-	16.5	-	-	-	-	-
16	REH2012-4	-	-	-	-	-	19.2	30.5	-	9.9	-	-	62.8	-	-	-	-	17.6	-	-	-	-	-
17	AH 1253	-	10.7	-	2.7	-	36	28.9	-	-	-	-	18.7	-	8.9	-	-	18.1	-	-	-	-	-
18	AH 1254	-	70.2	-	-	-	39.8	31.2	-	-	-	-	99.3	-	14.4	-	-	33.6	2.7	-	-	-	-
19	AH 1255	-	14.8	13.6	-	-	33	12.6	7.5	14.4	-	4.8	49.6	2.1	35.7	1.9	-	22.3	10.3	-	-	-	2.9
20	HKH420	30.7	47.7	13.4	-	6.8	7.6	50.1	11.8	-	-	0.2	18.4	8.5	25.2	5.8	12.9	13.6	13.5	-	-	-	1.7
21	HKH421	-	77.9	17.2	-	-	21.1	48.6	-	0.9	-	6.2	-	-	15.3	2.5	3.1	25.9	5.3	-	-	-	-
22	HKH422	-	82.8	13.5	47.8	19.9	43.5	14.6	5.9	-	-	1.2	0.4	13.4	5.9	5.1	14.4	22.6	11	-	-	-	7.6
	CHECKS																						
23	BIO9637	-	60.7	35.5	3.2	9.8	6.8	48.7	0.6	23.2	16.7	17.7	56.9	20.2	23.2	13.1	-	8	14.7	-	-	-	9.9
24	HM4	2.8	8.5	6.3	-	-	1.5	64.1	-	1.6	-	0.8	36.9	4.3	13.5	-	-	32.5	3.5	-	16.6	0.9	0.9
25	HM8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 38.8 %

Table No.2 (Cont..)

S.No.	PEDIGREE	MOISTURE % AT HARVEST																					
						ZN 2						ZN 3						ZN 4			ZN 5	OV'L	
		KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	IJ8521	29.3	27.5	22.0	14.0	23.2	25.9	21.2	19.7	32.8	19.2	23.8	16.5	9.9	9.9	17.0	23.7	17.8	15.8	17.5	17.8	17.6	20.1
2	IJ8214	28.5	25.1	24.1	15.0	23.2	24.5	18.7	19.0	32.8	22.8	23.5	22.0	6.9	10.2	17.4	23.5	17.5	16.2	17.4	21.5	19.4	20.4
3	IL8536	26.3	28.8	24.3	14.0	23.3	26.2	20.3	18.4	33.0	15.9	22.7	25.4	11.3	12.1	17.0	23.4	16.8	17.7	17.1	27.5	22.3	21.0
4	IL8537	29.1	27.4	24.9	14.0	23.8	25.0	19.0	20.7	34.7	21.8	24.2	22.3	7.5	11.4	16.6	26.7	15.4	16.6	17.4	20.5	18.9	20.8
5	KMHI-6668	28.1	28.1	22.1	12.0	22.6	25.1	19.1	17.6	32.7	24.4	23.8	16.4	12.6	10.4	17.7	24.0	15.4	16.1	16.3	19.3	17.8	20.1
6	KMH-4210	29.7	25.7	22.4	14.3	23.0	24.7	19.3	17.6	36.8	21.2	23.9	21.1	8.6	11.6	16.9	22.8	16.0	16.2	17.0	16.5	16.8	20.1
7	PMH-2246	25.6	25.2	21.7	15.0	21.9	24.1	17.7	18.1	30.9	22.2	22.6	19.9	12.7	10.7	17.3	22.8	18.0	16.9	17.8	19.9	18.9	20.0
8	K-26	28.1	27.0	16.9	13.7	21.4	24.8	17.5	19.3	29.0	19.7	22.0	11.5	8.4	11.6	17.4	19.9	14.6	13.9	16.9	15.8	16.4	18.3
9	X-2816	29.3	17.8	27.9	13.0	22.0	25.7	23.6	19.7	30.9	22.9	24.5	23.8	9.0	12.1	16.0	22.6	15.8	16.6	16.2	27.9	22.0	20.8
10	VEH-12-1	25.9	28.7	20.5	15.0	22.5	24.1	16.8	18.7	32.9	23.8	23.2	19.0	12.3	11.7	16.2	21.1	18.0	16.4	16.8	17.9	17.4	19.9
11	MMH-12-11	23.5	24.8	19.6	14.3	20.5	22.9	19.2	19.7	26.1	22.3	22.0	14.8	6.4	10.1	17.7	19.3	11.6	13.3	16.6	12.2	14.4	17.7
12	MMH-12-12	25.3	27.9	20.8	14.7	22.2	22.2	17.5	18.7	28.9	22.7	22.0	24.2	7.2	10.9	17.0	23.9	16.3	16.6	17.2	18.1	17.6	19.6
13	MMH-12-13	25.6	27.9	23.1	14.3	22.7	24.7	17.9	20.5	27.9	21.9	22.6	18.2	10.4	11.7	-	22.0	16.4	15.7	17.1	24.7	20.9	20.2
14	MMH12-14	30.3	28.9	23.6	14.3	24.2	25.2	18.6	20.9	32.1	22.3	23.8	25.4	8.1	10.3	17.6	23.4	15.5	16.7	16.4	20.0	18.2	20.7
15	REH2012-3	28.4	26.3	24.8	15.0	23.6	23.2	18.6	19.7	32.1	20.3	22.8	18.0	10.8	12.8	17.0	26.0	18.0	17.1	17.3	18.4	17.8	20.4
16	REH2012-4	27.3	28.8	22.7	14.0	23.2	23.0	18.0	18.2	28.4	22.7	22.0	15.4	7.2	11.7	16.9	23.6	18.7	15.5	18.2	16.9	17.5	19.5
17	AH 1253	24.4	24.9	17.5	14.0	20.2	23.1	17.7	18.7	27.4	23.7	22.1	18.5	5.6	11.4	17.0	19.7	14.8	14.5	16.2	14.5	15.3	18.2
18	AH 1254	23.1	26.5	16.4	13.7	19.9	23.0	18.1	19.4	28.5	18.4	21.5	19.6	10.2	10.7	17.2	19.7	15.1	15.4	16.9	17.3	17.1	18.4
19	AH 1255	23.4	28.5	18.7	14.3	21.2	23.2	18.5	19.0	30.5	20.8	22.4	19.4	11.9	11.2	18.0	21.7	16.9	16.5	19.2	15.6	17.4	19.4
20	HKH420	26.1	28.1	22.7	15.0	23.0	23.0	18.1	19.7	33.5	23.7	23.6	24.9	8.9	11.7	17.2	23.0	15.1	16.8	17.2	17.9	17.5	20.3
21	HKH421	32.5	27.7	23.4	15.0	24.6	25.2	17.7	20.5	33.8	20.8	23.6	21.8	11.1	11.6	17.2	24.0	16.5	17.0	17.3	16.2	16.7	20.7
22	HKH422	28.9	28.6	23.6	14.0	23.8	22.6	21.8	18.1	32.9	23.8	23.8	27.6	11.3	12.7	18.8	22.0	17.5	18.3	18.7	20.0	19.4	21.3
	CHECKS																						
23	BIO9637	25.6	26.5	23.7	14.0	22.4	24.9	18.8	19.4	32.1	21.8	23.4	21.3	13.7	12.5	17.2	27.5	19.5	18.6	17.3	18.7	18.0	20.8
24	HM4	28.5	28.7	19.2	12.0	22.1	23.2	18.2	19.8	27.5	19.2	21.6	18.0	11.4	10.3	15.8	20.2	16.4	15.3	16.9	15.5	16.2	18.9
25	HM8	24.0	29.1	20.8	14.3	22.0	22.5	18.6	17.7	32.7	23.9	23.1	23.1	9.1	11.4	17.8	21.4	17.4	16.7	16.9	17.6	17.2	19.9
	Loc. Mean	**27.0**	**27.0**	**21.9**	**14.1**	**22.5**	**24.1**	**18.8**	**19.2**	**31.2**	**21.7**	**23.0**	**20.3**	**9.7**	**11.3**	**16.5**	**22.7**	**16.4**	**16.2**	**17.2**	**18.7**	**17.9**	**19.9**
	C.D. (5%)	1.25	4.56	3.00	0.57	3.04	0.69	1.32	0.00	0.75	3.71	2.17	5.46	1.41	0.86	0.00	0.78	1.94	2.25	0.51	0.00	5.54	1.33
	C.V. (%)	2.81	10.31	8.36	2.45	9.58	1.76	4.27	0.00	1.47	8.30	7.52	16.40	8.85	4.67	0.00	2.09	7.18	12.10	1.81	0.00	14.95	9.89
	F (Prob)	0.00	0.01	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.01	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.56	0.00

Table No.2 (Cont..)

GRAIN SHELLING %

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	IJ8521	80.1	82.5	81.0	73.0	79.1	77.4	86.0	80.5	75.8	85.5	81.0	81.5	83.8	85.8	79.2	75.5	79.5	80.9	72.4	82.9	77.7	80.1
2	IJ8214	78.1	82.0	86.7	73.7	80.1	80.9	82.5	81.0	77.2	88.6	82.0	85.6	84.1	90.7	81.7	84.6	83.8	85.1	72.6	87.5	80.0	82.4
3	IL8536	78.6	81.5	79.6	74.3	78.5	83.3	86.5	80.2	75.3	84.4	81.9	87.5	75.9	82.8	79.3	75.7	77.9	79.8	71.6	76.5	74.0	79.5
4	IL8537	81.1	82.0	81.8	74.7	79.9	77.4	85.0	80.1	75.7	84.0	80.4	82.8	79.8	85.1	79.2	76.1	74.9	79.6	69.4	83.6	76.5	79.6
5	KMHI-6668	80.1	83.5	84.4	73.0	80.3	76.7	85.5	77.7	81.7	84.3	81.2	73.0	81.0	85.9	80.7	79.9	80.4	80.1	72.3	84.8	78.6	80.3
6	KMH-4210	78.4	83.5	82.6	74.7	79.8	77.1	87.0	79.0	77.6	84.5	81.0	80.9	82.9	84.1	81.0	79.3	81.8	81.7	70.5	85.7	78.1	80.6
7	PMH-2246	82.0	83.0	84.4	74.0	80.8	74.4	87.0	77.8	79.5	86.0	80.9	83.2	82.6	86.8	81.6	80.8	81.8	82.8	72.8	86.8	79.8	81.4
8	K-26	77.3	83.5	86.9	76.0	80.9	77.4	89.0	80.5	77.6	86.6	82.2	83.6	85.8	88.1	79.2	79.9	84.9	83.6	70.8	86.5	78.7	82.0
9	X-2816	80.8	83.0	81.7	73.7	79.8	71.6	82.5	77.1	76.5	81.5	77.8	83.8	79.1	84.9	81.4	75.9	71.4	79.4	69.6	78.7	74.1	78.4
10	VEH-12-1	78.5	83.5	82.3	73.3	79.4	77.9	81.0	81.7	76.0	84.4	80.2	78.8	80.5	82.2	79.3	78.5	73.5	78.8	69.3	83.3	76.3	79.0
11	MMH-12-11	79.9	85.0	85.4	72.3	80.6	76.9	80.0	78.3	78.8	82.4	79.3	82.3	82.3	85.7	81.5	77.2	79.5	81.4	70.0	79.6	74.8	79.8
12	MMH-12-12	77.1	83.0	84.4	73.7	79.5	79.5	88.5	78.5	81.0	82.9	82.1	82.8	83.5	85.0	80.8	80.5	82.9	82.6	72.8	83.1	78.0	81.2
13	MMH-12-13	77.4	84.0	82.3	74.7	79.6	76.0	87.0	80.2	79.0	43.5	73.1	82.6	82.3	82.1	-	80.3	76.9	80.8	70.9	86.4	78.7	77.8
14	MMH12-14	82.5	82.0	79.3	74.7	79.6	73.3	80.5	80.9	78.9	81.8	79.1	83.5	79.4	82.9	80.7	79.9	76.8	80.5	70.2	80.2	75.2	79.3
15	REH2012-3	77.5	82.0	87.3	75.0	80.4	75.3	81.5	77.9	77.6	85.3	79.5	60.0	79.5	86.8	80.0	77.7	82.0	77.7	70.9	87.5	79.2	79.0
16	REH2012-4	77.9	83.5	84.2	74.7	80.1	75.6	83.0	78.4	77.7	82.8	79.5	83.8	84.5	86.2	79.7	80.7	77.5	82.1	70.8	85.7	78.3	80.4
17	AH 1253	79.3	85.0	79.8	73.7	79.4	77.1	79.5	81.2	77.6	84.2	79.9	77.5	82.9	86.5	79.8	85.0	84.2	82.6	69.2	84.1	76.6	80.4
18	AH 1254	81.0	83.0	85.6	77.0	81.6	77.4	81.5	80.6	78.9	85.4	80.8	86.0	83.8	88.9	75.6	81.5	79.3	82.5	72.1	84.4	78.3	81.3
19	AH 1255	82.1	85.5	85.4	75.3	82.1	78.4	83.5	81.2	77.6	88.3	81.8	82.9	84.5	86.8	78.6	79.8	83.0	82.6	70.1	86.5	78.3	81.7
20	HKH420	80.9	84.5	78.7	75.3	79.9	73.2	84.0	78.9	78.1	82.9	79.4	84.6	78.4	85.8	79.8	78.3	77.5	80.7	72.2	82.1	77.1	79.7
21	HKH421	81.1	82.5	85.0	74.7	80.8	75.2	89.5	80.5	77.2	87.9	82.1	78.5	80.1	84.9	79.8	78.5	76.8	79.7	70.2	78.4	74.3	80.0
22	HKH422	77.0	81.5	80.9	73.3	78.2	77.3	85.0	79.1	75.8	83.8	80.2	79.7	79.3	85.1	80.4	76.8	79.6	80.1	71.6	90.0	80.8	79.8
	CHECKS																						
23	BIO9637	79.1	82.5	85.0	73.0	79.9	71.7	82.0	79.9	77.6	84.7	79.2	82.2	79.7	84.7	81.4	76.4	78.3	80.4	70.9	83.6	77.3	79.6
24	HM4	80.0	84.5	79.1	74.3	79.5	72.6	85.5	79.8	75.8	64.9	75.7	81.4	80.1	86.2	77.2	77.7	79.9	80.4	71.8	83.6	77.7	78.5
25	HM8	81.2	83.5	84.5	76.3	81.4	72.1	82.5	80.0	76.5	82.8	78.8	81.9	77.5	85.2	83.1	78.3	72.2	79.7	71.8	83.0	77.4	79.6
	Loc. Mean	**79.5**	**83.2**	**83.1**	**74.3**	**80.0**	**76.2**	**84.2**	**79.6**	**77.6**	**82.2**	**80.0**	**81.2**	**81.3**	**85.6**	**80.0**	**79.0**	**79.0**	**81.0**	**71.1**	**83.8**	**77.4**	**80.1**
	C.D. (5%)	1.05	1.74	4.16	1.32	2.44	1.46	4.06	-	0.67	26.40	5.71	8.72	1.21	0.81	-	0.89	4.21	3.38	1.54	-	4.57	2.18
	C.V. (%)	0.81	1.27	3.05	1.09	2.16	1.16	2.94	-	0.52	15.57	5.69	6.54	0.91	0.58	-	0.69	3.25	3.65	1.32	-	2.86	4.03
	F (Prob)	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.48	0.41	0.00	0.00	0.00	-	0.00	0.00	0.01	0.00	0.00	0.22	0.00

Table No.2 (Cont..)

		STAND AT HARVEST ('000/ha)																					
						ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	IJ8521	58.9	57.4	66.1	73.6	66.2	56.9	58.9	68.1	79.9	67.0	66.1	56.7	62.8	63.9	61.9	66.0	54.2	60.9	44.4	70.8	57.6	63.1
2	IJ8214	58.3	74.1	66.7	72.9	66.0	68.8	53.9	66.7	78.5	67.9	67.1	52.2	52.2	60.0	55.4	66.0	52.8	56.4	48.3	103.1	75.7	64.0
3	IL8536	60.0	62.0	66.7	74.3	67.0	71.5	56.7	63.2	79.2	68.8	67.9	54.4	57.8	60.6	57.7	65.3	54.9	58.4	46.1	87.5	66.8	64.0
4	IL8537	60.0	76.9	66.1	77.1	67.7	64.6	51.7	64.6	78.5	69.6	65.8	61.1	53.3	58.3	56.5	66.7	51.4	57.9	47.8	84.4	66.1	63.2
5	KMHI-6668	61.7	36.1	63.3	68.8	64.6	64.6	60.6	64.6	81.3	71.4	68.5	35.6	51.7	57.8	56.0	66.0	54.9	53.6	50.0	72.9	61.5	61.3
6	KMH-4210	60.0	75.0	63.3	70.8	64.7	68.1	57.2	66.0	80.6	70.5	68.5	61.7	57.2	58.3	56.5	66.7	52.1	58.8	43.9	38.5	41.2	60.7
7	PMH-2246	60.6	60.2	66.7	74.3	67.2	69.4	58.9	66.7	82.6	71.4	69.8	61.1	58.3	62.8	58.9	66.0	52.8	60.0	44.4	71.9	58.2	64.2
8	K-26	61.1	39.8	66.1	70.1	65.8	59.7	57.2	65.3	80.6	65.2	65.6	51.7	48.9	56.1	57.1	66.0	50.7	55.1	47.8	27.1	37.4	58.2
9	X-2816	60.0	54.6	61.7	77.1	66.3	65.3	56.1	66.7	79.9	70.5	67.7	57.8	59.4	62.8	54.2	66.0	60.4	60.1	44.4	50.0	47.2	62.0
10	VEH-12-1	61.7	36.1	65.0	71.5	66.1	59.7	55.6	62.5	76.4	71.4	65.1	48.3	52.8	52.2	56.5	66.0	54.9	55.1	46.7	68.8	57.7	60.6
11	MMH-12-11	59.4	39.8	60.0	72.9	64.1	58.3	58.3	62.5	74.3	66.1	63.9	41.1	50.0	48.9	57.1	65.3	36.8	49.9	47.8	46.9	47.3	56.6
12	MMH-12-12	57.2	39.8	58.9	72.9	63.0	58.3	58.3	63.2	73.6	17.0	54.1	37.2	36.1	25.6	60.1	66.7	54.9	46.8	47.8	10.4	29.1	49.9
13	MMH-12-13	11.1	43.5	58.9	75.0	48.3	53.5	27.8	64.6	43.1	15.2	40.8	41.7	28.9	12.8	-	66.7	7.6	31.5	43.3	9.4	26.4	37.3
14	MMH12-14	62.2	47.2	51.1	75.0	62.8	59.7	48.9	64.6	77.1	57.1	61.5	51.1	52.2	42.8	57.1	66.7	45.8	52.6	48.9	28.1	38.5	55.5
15	REH2012-3	57.8	42.6	49.4	74.3	60.5	63.2	44.4	65.3	67.4	49.1	57.9	42.2	42.2	31.1	58.9	66.0	54.2	49.1	48.9	45.8	47.4	53.8
16	REH2012-4	58.9	36.1	61.1	77.1	65.7	52.1	52.8	64.6	53.1	62.5	57.0	43.9	46.7	37.2	56.5	66.0	50.0	50.0	44.4	41.7	43.1	54.3
17	AH 1253	58.9	54.6	65.6	68.8	64.4	58.3	58.3	65.3	81.9	70.5	66.9	52.8	53.3	61.1	56.5	66.7	54.9	57.5	46.1	67.7	56.9	61.7
18	AH 1254	56.1	52.8	62.8	70.8	63.2	56.3	60.6	63.2	81.3	68.8	66.0	58.9	62.8	64.4	58.9	66.7	49.3	60.2	47.8	78.1	63.0	62.9
19	AH 1255	61.1	40.7	63.3	74.3	66.3	61.1	40.0	65.3	73.6	63.4	60.7	52.2	51.1	51.7	58.9	66.0	46.5	54.4	47.2	50.0	48.6	57.9
20	HKH420	61.7	59.3	66.7	70.1	66.2	61.1	57.8	68.8	78.5	68.8	67.0	52.8	46.7	57.2	56.5	65.3	52.1	55.1	44.4	54.2	49.3	60.2
21	HKH421	58.9	66.7	66.1	77.1	67.4	54.9	55.0	63.9	77.8	71.4	64.6	41.1	55.6	53.3	60.1	66.7	51.4	54.7	46.7	72.9	59.8	60.8
22	HKH422	60.0	62.0	63.3	71.5	65.0	61.1	44.4	63.2	75.7	69.6	62.8	38.9	54.4	60.0	57.1	66.0	45.8	53.7	42.8	55.2	49.0	58.1
	CHECKS																						
23	BIO9637	58.9	63.9	66.7	72.9	66.2	64.6	57.2	66.7	75.7	67.9	66.4	45.0	55.0	53.9	60.1	65.3	50.7	55.0	50.0	65.6	57.8	61.0
24	HM4	60.0	45.4	64.4	72.9	65.8	70.1	56.1	62.5	77.8	70.5	67.4	55.6	57.8	57.2	56.0	66.0	50.0	57.1	47.8	71.9	59.8	62.3
25	HM8	59.4	50.0	63.3	75.0	65.9	53.5	46.1	66.7	83.3	68.8	63.7	41.1	53.9	55.6	58.9	65.3	52.1	54.5	49.4	67.7	58.6	60.0
	Loc. Mean	**57.8**	**52.7**	**62.9**	**73.3**	**64.6**	**61.4**	**53.3**	**65.0**	**75.7**	**63.2**	**63.7**	**49.4**	**52.0**	**52.2**	**55.4**	**66.1**	**49.6**	**54.3**	**46.7**	**57.6**	**52.2**	**58.9**
	C.D. (5%)	2.87	22.35	4.69	3.81	10.42	4.43	9.96	5.09	14.89	7.68	9.18	15.31	4.24	9.53	4.27	1.65	8.44	7.27	4.83	7.92	33.31	5.51
	C.V. (%)	3.02	25.85	4.54	3.16	9.82	4.39	11.38	4.77	11.99	5.89	11.47	18.86	4.96	11.11	4.70	1.53	10.36	11.70	6.30	6.66	30.94	13.44
	F (Prob)	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.55	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.77	0.00	0.00	0.09	0.00	0.42	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : LUDHIANA 25.9%: Mean!ZN 5 30.9%

Table No.2 (Cont..)

S.No.	PEDIGREE	DAYS TO 50% POLLEN SHED																					
						ZN 2						ZN 3						ZN 4			ZN 5	OV'L	
		KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	IJ8521	144.0	125.7	129.0	97.7	124.1	127.7	122.3	67.3	112.0	111.5	108.2	74.7	62.7	71.0	66.7	56.0	56.0	64.5	86.0	94.0	90.0	94.4
2	IJ8214	143.3	125.7	129.7	94.3	123.3	129.3	123.0	67.0	113.0	113.5	109.2	76.0	61.3	70.3	67.0	55.0	54.0	63.9	83.3	93.0	88.2	94.0
3	IL8536	144.3	129.7	128.7	95.0	124.4	129.7	122.3	68.0	114.0	115.5	109.9	77.0	62.7	71.7	69.3	57.0	56.7	65.7	84.3	95.5	89.9	95.4
4	IL8537	144.3	129.3	130.3	98.3	125.6	130.3	122.3	69.3	113.7	113.0	109.7	77.0	63.7	71.3	69.0	56.0	55.7	65.4	82.7	92.5	87.6	95.2
5	KMHI-6668	147.3	130.3	128.7	95.0	125.3	128.3	122.0	70.0	112.0	112.0	108.9	77.0	63.3	72.0	68.0	54.7	55.7	65.1	86.3	92.0	89.2	95.0
6	KMH-4210	148.0	126.7	127.7	95.0	124.3	126.7	124.0	68.0	113.3	112.5	108.9	73.3	64.0	71.7	69.0	55.3	55.3	64.8	82.7	96.5	89.6	94.7
7	PMH-2246	137.7	126.7	124.7	96.3	121.3	123.7	122.7	67.0	107.3	109.0	105.9	73.7	62.0	69.7	64.7	55.0	55.0	63.3	85.7	91.0	88.3	92.5
8	K-26	136.3	128.0	126.3	93.7	121.1	127.7	122.0	67.3	109.3	112.0	107.7	74.0	62.0	68.7	64.3	53.0	53.0	62.5	83.0	87.0	85.0	92.2
9	X-2816	145.3	129.3	131.7	92.7	124.8	127.3	121.3	67.0	113.0	112.5	108.2	77.0	63.3	71.3	69.0	54.7	55.3	65.1	85.0	87.0	86.0	94.3
10	VEH-12-1	137.7	126.0	127.7	91.3	120.7	126.7	122.7	67.3	111.0	110.0	107.5	76.0	63.3	72.3	65.7	56.0	57.0	65.1	85.7	87.5	86.6	93.2
11	MMH-12-11	134.7	125.0	123.3	94.3	119.3	119.7	123.3	65.7	105.3	105.0	103.8	68.3	56.0	68.0	59.7	53.0	53.7	59.8	83.3	87.5	85.4	89.8
12	MMH-12-12	138.0	127.0	126.0	97.7	122.2	122.0	122.7	66.7	107.0	109.0	105.5	73.7	60.7	70.7	63.3	55.0	54.7	63.0	84.0	86.5	85.3	92.0
13	MMH-12-13	136.3	126.7	128.3	99.7	122.8	118.7	122.0	67.3	108.3	109.5	105.2	75.0	60.0	70.0	-	56.0	56.3	63.5	83.3	88.0	85.7	94.1
14	MMH12-14	144.3	126.3	129.3	97.7	124.4	127.7	126.0	72.7	113.0	115.0	110.9	77.0	63.0	71.3	67.3	57.0	57.3	65.5	86.3	91.5	88.9	95.5
15	REH2012-3	146.0	126.7	128.7	87.7	122.3	129.3	124.0	68.7	113.0	114.5	109.9	75.7	63.0	72.0	65.3	55.7	55.3	64.5	85.7	90.5	88.1	94.2
16	REH2012-4	144.0	127.0	126.0	86.0	120.8	122.3	124.3	67.3	110.3	109.5	106.8	74.0	62.7	71.0	63.7	53.7	54.3	63.2	85.7	89.0	87.3	92.4
17	AH 1253	135.3	124.0	120.0	85.3	116.2	118.7	123.0	62.3	104.3	104.5	102.6	71.3	55.3	68.3	58.3	48.7	49.7	58.6	83.7	83.0	83.3	88.0
18	AH 1254	135.0	125.3	122.7	91.3	118.6	119.0	121.0	64.7	104.0	104.5	102.6	68.3	56.3	68.0	60.3	49.0	51.7	58.9	83.7	80.0	81.8	88.5
19	AH 1255	141.7	127.3	125.0	98.3	123.1	124.3	123.3	68.0	110.0	109.5	107.0	74.0	62.7	71.0	64.0	52.0	53.7	62.9	85.0	85.5	85.3	92.7
20	HKH420	139.3	128.0	128.7	97.0	123.3	126.0	125.3	68.7	114.7	114.5	109.8	76.0	60.0	69.3	67.3	54.0	54.7	63.6	84.0	94.5	89.3	94.2
21	HKH421	149.7	128.3	134.0	98.0	127.5	130.7	124.7	73.0	117.0	117.0	112.5	78.0	66.7	74.0	71.3	56.0	57.7	67.3	86.7	97.0	91.8	97.6
22	HKH422	148.0	129.3	131.7	96.0	126.3	130.3	125.0	70.0	116.3	117.0	111.7	78.3	66.3	72.3	68.7	58.0	55.3	66.5	85.0	96.5	90.8	96.7
	CHECKS																						
23	BIO9637	143.3	127.3	127.0	95.3	123.3	127.7	120.3	67.3	113.0	112.5	108.2	76.7	62.3	71.0	65.7	55.7	55.0	64.4	83.3	90.0	86.7	93.7
24	HM4	139.7	126.7	126.0	92.7	121.3	127.7	123.7	67.7	109.3	110.5	107.8	74.7	61.3	70.3	64.7	51.0	54.0	62.7	83.0	84.5	83.8	92.2
25	HM8	141.0	126.7	131.0	96.0	123.7	128.0	122.3	69.0	114.0	113.5	109.4	77.7	61.7	72.0	66.0	55.7	55.7	64.8	82.0	92.0	87.0	94.4
	Loc. Mean	**141.8**	**127.2**	**127.7**	**94.5**	**122.8**	**126.0**	**123.0**	**67.9**	**111.1**	**111.5**	**107.9**	**75.0**	**61.9**	**70.8**	**65.8**	**54.5**	**54.9**	**63.8**	**84.4**	**90.1**	**87.2**	**93.5**
	C.D. (5%)	1.10	4.73	4.05	1.76	3.77	1.22	4.32	1.45	1.65	3.18	2.27	4.26	1.52	1.49	2.33	0.61	3.67	1.43	1.19	5.10	6.37	1.64
	C.V. (%)	0.47	2.27	1.93	1.13	2.18	0.59	2.14	1.30	0.90	1.38	1.67	3.46	1.50	1.28	2.25	0.68	4.07	1.97	0.86	2.74	3.54	2.60
	F (Prob)	0.00	0.61	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.28	0.00

Table No. 2 (Cont..)

		DAYS TO 50% SILKING																					
						ZN 2						ZN 3						ZN 4			ZN 5	OV'L	
S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	IJ8521	146.3	128.0	131.7	102.7	127.2	129.7	124.7	69.3	115.3	115.5	110.9	75.3	64.3	72.0	69.7	58.0	58.7	66.3	89.0	98.0	93.5	97.0
2	IJ8214	146.0	128.7	132.7	98.3	126.4	131.3	125.7	69.0	116.7	116.5	111.8	76.3	62.7	71.3	69.3	57.0	56.7	65.6	86.7	96.0	91.3	96.5
3	IL8536	147.3	132.0	131.7	98.3	127.3	131.7	124.3	70.3	117.7	118.5	112.5	77.7	64.7	72.7	72.3	59.0	59.7	67.7	87.3	99.0	93.2	97.9
4	IL8537	147.3	132.3	133.7	101.7	128.8	132.3	125.0	71.7	117.7	116.0	112.5	79.7	66.0	72.3	72.7	58.0	57.7	67.7	85.7	97.0	91.3	98.0
5	KMHI-6668	150.0	133.0	132.7	98.7	128.6	130.3	124.0	72.0	116.0	115.0	111.5	82.7	65.3	73.0	71.3	56.7	58.3	67.9	89.7	96.5	93.1	98.0
6	KMH-4210	150.3	129.0	130.7	99.3	127.3	128.7	126.3	70.0	118.3	115.5	111.8	75.7	66.3	72.7	73.3	57.3	59.3	67.4	86.3	100.5	93.4	97.6
7	PMH-2246	140.0	129.0	127.3	101.3	124.4	124.7	125.0	69.0	112.3	113.0	108.8	77.3	64.0	70.7	68.0	57.0	57.7	65.8	89.3	94.5	91.9	95.3
8	K-26	139.0	127.0	129.0	97.7	123.2	129.7	124.3	69.7	114.7	115.0	110.7	76.0	63.0	69.7	66.7	55.0	56.3	64.4	86.3	89.5	87.9	94.6
9	X-2816	148.0	132.3	134.7	96.7	127.9	129.3	123.7	68.7	117.3	116.0	111.0	78.7	65.0	72.3	72.0	56.7	58.7	67.2	88.0	90.5	89.3	97.0
10	VEH-12-1	140.0	128.3	130.7	95.3	123.6	128.7	125.0	69.7	117.3	115.0	111.1	78.0	65.0	73.3	69.3	58.0	60.7	67.4	89.0	93.0	91.0	96.3
11	MMH-12-11	137.3	127.3	126.0	99.3	122.5	121.7	125.7	67.3	108.0	108.0	106.1	71.3	58.0	69.0	60.7	55.0	56.0	61.7	87.0	91.0	89.0	92.3
12	MMH-12-12	140.3	128.3	129.3	103.0	125.3	124.0	125.7	68.7	112.0	113.5	108.8	78.0	63.0	71.7	65.7	57.0	57.3	65.4	87.3	89.5	88.4	95.0
13	MMH-12-13	138.3	129.0	131.3	105.7	126.1	120.7	124.3	69.3	78.0	112.5	101.0	76.0	62.0	71.0	-	58.0	60.3	65.5	86.3	92.5	89.4	94.7
14	MMH12-14	147.0	129.7	132.7	103.3	128.2	129.7	128.0	74.3	117.0	118.0	113.4	79.7	64.3	72.3	70.7	59.0	61.0	67.8	89.7	89.5	89.6	98.0
15	REH2012-3	148.7	128.7	131.7	92.3	125.3	131.3	125.3	71.0	117.7	117.0	112.5	78.0	65.0	73.0	70.7	57.7	58.7	67.2	88.7	98.5	93.6	97.3
16	REH2012-4	146.7	130.0	128.7	91.0	124.1	124.3	126.7	69.3	114.7	112.5	109.5	77.3	63.7	72.0	67.3	55.7	57.3	65.6	89.3	91.0	90.2	95.1
17	AH 1253	138.0	127.7	123.0	91.0	119.9	120.7	125.3	64.3	109.0	107.5	105.4	74.0	58.0	69.3	62.3	50.7	53.0	61.2	87.0	87.0	87.0	91.0
18	AH 1254	137.0	128.0	126.3	96.0	121.8	121.0	123.3	66.3	109.7	107.5	105.6	76.0	59.3	69.0	62.0	51.0	55.7	62.2	87.0	83.0	85.0	91.7
19	AH 1255	143.7	129.7	128.0	101.7	125.8	126.3	126.3	70.0	114.7	114.0	110.3	76.7	64.3	72.0	68.0	54.0	57.3	65.4	88.0	89.5	88.8	95.5
20	HKH420	141.7	130.0	131.7	101.0	126.1	128.0	128.0	70.7	119.0	117.0	112.5	77.7	62.0	70.3	71.3	56.0	57.7	65.8	87.0	98.0	92.5	96.9
21	HKH421	152.0	131.3	137.0	103.3	130.9	132.7	126.7	75.0	120.0	121.5	115.2	80.7	70.7	75.0	74.7	58.0	60.7	69.9	89.7	99.0	94.3	100.5
22	HKH422	150.7	132.0	134.7	100.7	129.5	132.3	127.7	71.7	119.0	120.0	114.1	82.0	68.0	73.3	71.7	60.0	58.7	68.9	88.7	98.5	93.6	99.4
	CHECKS																						
23	BIO9637	146.3	130.0	130.3	99.7	126.6	129.7	122.3	69.3	117.7	116.5	111.1	77.3	63.7	72.0	69.3	57.7	56.7	66.1	86.7	94.0	90.3	96.4
24	HM4	142.0	129.0	128.7	96.7	124.1	129.7	126.0	69.7	114.0	114.0	110.7	77.0	63.0	71.3	67.0	53.0	57.7	64.8	86.3	87.0	86.7	94.8
25	HM8	144.0	129.3	134.0	100.7	127.0	130.0	124.3	71.0	118.3	116.0	111.9	80.7	63.3	73.0	69.3	57.7	58.0	67.0	85.0	96.0	90.5	97.1
	Loc. Mean	**144.3**	**129.6**	**130.7**	**99.0**	**125.9**	**127.9**	**125.3**	**69.9**	**114.1**	**114.9**	**110.4**	**77.6**	**63.8**	**71.8**	**69.0**	**56.5**	**58.0**	**66.1**	**87.6**	**93.5**	**90.6**	**96.2**
	C.D. (5%)	1.23	4.47	4.03	1.65	3.88	1.22	4.05	1.73	19.02	3.19	4.52	4.29	1.51	1.49	3.24	0.61	3.39	1.68	1.10	3.90	6.83	2.08
	C.V. (%)	0.52	2.10	1.88	1.02	2.19	0.58	1.97	1.51	10.16	1.35	3.26	3.36	1.44	1.26	2.98	0.66	3.56	2.22	0.77	2.02	3.65	3.20
	F (Prob)	0.00	0.32	0.00	0.00	0.00	0.00	0.49	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.38	0.00

Table No.2 (Cont..)

		DAYS TO 75% DRY HUSK																				
					ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	IJ8521	180.3	165.7	141.3	162.4	156.3	156.0	108.7	150.3	157.0	145.7	111.5	94.3	103.3	101.7	97.3	103.3	101.9	123.3	131.0	127.2	130.1
2	IJ8214	180.7	169.3	144.3	164.8	157.3	158.3	107.0	150.7	157.0	146.1	114.0	92.7	103.0	107.3	96.0	102.3	102.6	123.0	130.5	126.8	130.8
3	IL8536	180.7	167.7	149.0	165.8	156.7	156.3	112.0	150.7	159.0	146.9	114.5	94.7	104.7	106.3	98.0	103.0	103.5	121.0	127.5	124.3	131.4
4	IL8537	180.7	169.0	141.7	163.8	156.7	157.7	112.7	151.7	155.0	146.7	109.0	96.0	106.0	105.3	96.7	106.3	103.2	121.0	129.0	125.0	130.9
5	KMHI-6668	180.7	169.7	142.0	164.1	155.0	158.3	114.0	151.7	157.0	147.2	108.5	95.3	104.7	106.3	95.7	102.3	102.1	118.0	129.0	123.5	130.5
6	KMH-4210	176.7	166.0	145.7	162.8	154.7	157.0	108.0	150.7	156.5	145.4	111.5	96.3	104.0	105.0	97.3	103.0	102.9	121.0	136.0	128.5	130.6
7	PMH-2246	178.0	165.3	148.0	163.8	152.3	153.0	106.0	148.3	154.5	142.8	114.5	94.0	102.7	104.3	95.7	103.0	102.4	125.3	130.0	127.7	129.7
8	K-26	175.3	166.3	149.0	163.6	153.7	153.7	107.3	148.0	157.0	143.9	113.0	93.0	101.3	104.3	94.3	101.7	101.3	122.0	127.5	124.8	129.2
9	X-2816	180.7	167.3	146.3	164.8	156.0	157.7	112.7	151.3	159.5	147.4	112.5	95.0	104.3	106.0	96.0	102.7	102.8	122.0	129.0	125.5	131.2
10	VEH-12-1	175.3	166.0	150.7	164.0	152.3	154.7	104.0	148.3	158.0	143.5	110.0	95.0	104.7	101.0	98.0	102.7	101.9	121.0	129.0	125.0	129.4
11	MMH-12-11	174.7	164.3	150.7	163.2	147.7	152.7	105.0	143.7	154.0	140.6	112.0	88.0	100.7	100.3	94.7	103.0	99.8	121.0	127.0	124.0	127.5
12	MMH-12-12	175.7	166.0	134.7	158.8	150.7	152.7	109.0	148.0	154.5	143.0	106.5	93.0	103.3	103.3	96.7	102.3	100.9	121.7	129.0	125.3	127.9
13	MMH-12-13	179.0	166.7	140.3	162.0	154.0	154.7	108.7	149.3	156.5	144.6	110.0	92.0	102.7	-	98.0	103.7	101.3	122.7	129.5	126.1	131.2
14	MMH12-14	179.3	168.0	134.7	160.7	154.0	156.3	112.0	149.7	159.0	146.2	111.5	94.3	104.3	104.7	98.0	103.0	102.6	123.7	131.5	127.6	130.3
15	REH2012-3	179.3	169.3	142.0	163.6	156.0	156.7	114.0	150.3	159.0	147.2	115.0	95.0	104.3	104.0	96.7	104.0	103.2	121.0	132.5	126.8	131.2
16	REH2012-4	178.7	165.0	145.7	163.1	154.0	153.7	109.7	149.7	158.5	145.1	111.0	93.7	103.7	99.3	95.3	104.0	101.2	124.0	129.0	126.5	129.7
17	AH 1253	173.0	165.7	148.0	162.2	150.0	152.0	104.0	144.0	153.0	140.6	106.5	88.0	101.3	96.7	90.7	102.0	97.5	122.7	125.5	124.1	126.4
18	AH 1254	175.3	165.7	141.3	160.8	146.7	152.3	105.3	144.3	154.5	140.6	113.0	89.3	101.0	100.7	90.0	103.7	99.6	121.3	127.0	124.2	127.0
19	AH 1255	179.0	167.0	144.3	163.4	153.3	155.0	107.7	150.0	157.0	144.6	112.5	94.3	103.7	103.0	93.0	102.7	101.5	122.7	126.0	124.3	129.4
20	HKH420	180.3	167.7	149.0	165.7	154.7	156.3	108.0	150.7	155.5	145.0	111.0	92.0	102.3	105.7	95.0	103.0	101.5	122.0	132.5	127.3	130.4
21	HKH421	178.7	167.3	148.0	164.7	157.0	158.0	112.3	152.0	156.5	147.2	109.0	100.7	106.7	101.3	97.3	101.0	102.7	124.0	129.5	126.8	131.2
22	HKH422	180.0	167.3	147.0	164.8	154.0	158.0	107.7	151.3	155.0	145.2	110.5	98.0	104.7	106.3	100.0	103.7	103.9	124.0	133.5	128.8	131.3
	CHECKS																					
23	BIO9637	173.0	166.0	145.7	161.6	153.7	155.0	110.7	151.0	154.5	145.0	112.0	93.7	104.0	104.3	96.7	101.7	102.1	120.7	126.5	123.6	129.3
24	HM4	175.0	164.7	142.0	160.6	153.3	154.0	107.7	148.0	155.5	143.7	112.0	93.0	103.0	104.0	92.0	102.3	101.1	120.7	124.5	122.6	128.2
25	HM8	178.7	166.7	145.7	163.7	157.0	156.3	110.3	150.0	158.0	146.3	112.5	93.3	105.0	104.3	97.3	104.0	102.8	118.7	126.5	122.6	130.3
	Loc. Mean	**177.9**	**166.8**	**144.7**	**163.1**	**153.9**	**155.5**	**109.0**	**149.3**	**156.5**	**144.8**	**111.4**	**93.8**	**103.6**	**103.6**	**95.9**	**103.0**	**101.8**	**121.9**	**129.1**	**125.5**	**129.8**
	C.D. (5%)	1.30	3.67	1.82	5.00	2.65	1.57	2.00	2.50	2.64	1.78	3.80	1.51	1.92	4.23	0.91	2.99	2.10	2.25	5.45	4.01	1.73
	C.V. (%)	0.44	1.34	0.77	1.87	1.05	0.61	1.12	1.02	0.82	0.98	2.08	0.98	1.13	2.59	0.58	1.77	1.80	1.13	2.04	1.55	1.92
	F (Prob)	0.00	0.21	0.00	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.04	0.11	0.00

Table No.2 (Cont..)

		PLANT HEIGHT(cm)																					
						ZN 2						ZN 3						ZN 4			ZN 5	OV'L	
S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	RANC	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	IJ8521	170.0	193.3	244.0	183.0	197.6	191.7	172.0	199.7	182.5	173.2	183.8	154.0	214.7	210.0	202.7	180.1	156.1	186.3	240.6	136.5	188.5	188.5
2	IJ8214	165.0	198.3	229.7	183.7	194.2	176.3	180.3	220.1	182.5	171.5	186.2	167.0	220.0	215.0	209.7	194.3	182.1	198.0	196.8	213.5	205.1	194.5
3	IL8536	165.0	175.0	239.3	181.7	190.3	196.7	181.0	209.5	172.5	191.8	190.3	183.0	205.3	196.7	204.7	183.7	155.5	188.1	185.5	164.5	175.0	187.7
4	IL8537	183.3	193.3	234.3	165.3	194.1	204.3	174.3	219.5	205.0	194.8	199.6	183.0	240.0	195.0	211.7	186.3	183.5	199.9	183.8	168.5	176.2	195.7
5	KMHI-6668	173.3	156.7	234.3	165.7	182.5	187.7	171.3	178.4	182.5	178.6	179.7	143.5	224.3	203.3	208.3	180.4	176.2	189.4	195.2	164.0	179.6	183.8
6	KMH-4210	205.0	175.0	230.3	183.7	198.5	208.7	182.3	224.8	180.0	206.3	200.4	167.0	223.3	178.3	183.3	190.2	179.5	187.0	183.5	141.0	162.2	190.7
7	PMH-2246	155.0	175.0	222.3	180.7	183.3	184.3	166.3	200.9	152.5	160.8	173.0	166.0	220.3	218.3	203.3	192.8	170.5	195.2	233.4	165.0	199.2	186.3
8	K-26	186.7	168.3	241.0	166.7	190.7	176.3	170.0	221.6	167.5	162.9	179.7	177.0	219.7	206.7	196.3	164.7	164.7	188.2	199.2	176.5	187.8	186.2
9	X-2816	158.3	150.0	193.7	176.0	169.5	183.7	151.0	194.7	140.0	172.8	168.4	175.0	190.0	190.0	208.7	153.4	163.9	180.2	192.4	166.5	179.4	174.1
10	VEH-12-1	183.3	140.0	221.7	174.3	179.8	173.3	153.3	173.7	157.5	154.2	162.4	152.5	202.0	190.0	201.0	176.0	176.3	183.0	222.4	166.5	194.5	177.5
11	MMH-12-11	145.0	113.3	200.7	181.3	160.1	162.0	142.0	166.8	135.0	145.7	150.3	130.5	168.0	173.3	196.0	143.9	140.4	158.7	205.4	176.0	190.7	160.3
12	MMH-12-12	145.0	136.7	214.3	165.3	165.3	157.0	160.0	189.3	142.5	146.0	159.0	159.0	208.3	190.0	198.0	182.6	163.8	183.6	207.4	158.5	183.0	172.0
13	MMH-12-13	148.3	161.7	201.7	171.3	170.8	157.3	148.7	178.9	157.5	147.1	157.9	157.5	188.7	190.0	-	148.9	133.3	163.7	255.4	147.0	201.2	168.3
14	MMH12-14	156.7	148.0	249.7	173.7	182.0	158.0	149.7	185.7	150.0	172.5	163.2	155.5	216.0	181.7	211.0	184.6	164.9	185.6	192.2	180.0	186.1	178.2
15	REH2012-3	155.0	198.3	238.0	187.0	194.6	181.7	168.0	214.3	182.5	166.5	182.6	168.5	211.0	210.0	210.0	185.6	174.3	193.2	231.6	169.5	200.6	191.3
16	REH2012-4	163.3	180.0	245.0	197.3	196.4	175.3	167.7	203.9	160.0	176.3	176.6	161.0	235.0	201.7	199.0	178.9	174.9	191.7	235.2	171.5	203.4	189.8
17	AH 1253	136.7	158.3	184.0	174.3	163.3	150.3	128.7	163.6	117.5	163.9	144.8	154.0	168.3	170.0	161.0	129.5	134.2	152.8	185.3	108.5	146.9	152.2
18	AH 1254	143.3	148.3	175.0	185.7	163.1	147.0	139.3	138.7	130.0	147.6	140.5	154.0	177.0	176.7	161.0	181.6	138.4	164.8	207.2	149.5	178.4	158.8
19	AH 1255	181.7	185.0	219.7	189.7	194.0	180.0	167.7	209.5	157.5	182.9	179.5	156.0	208.7	198.3	182.7	168.0	159.4	178.8	196.3	159.0	177.6	182.5
20	HKH420	146.7	171.7	215.0	200.0	183.3	179.0	153.3	205.3	147.5	167.6	170.6	169.5	191.0	183.3	203.0	175.9	169.5	182.1	220.4	129.5	174.9	178.1
21	HKH421	126.7	151.7	231.0	173.7	170.8	162.3	142.7	190.5	155.0	169.2	163.9	147.5	213.7	171.7	177.3	143.1	153.8	167.8	208.9	194.5	201.7	171.4
22	HKH422	168.3	181.7	243.3	182.7	194.0	190.3	169.3	213.0	165.0	165.5	180.6	156.5	218.7	201.7	211.3	177.4	169.9	189.3	188.5	173.0	180.8	186.8
	CHECKS																						
23	BIO9637	170.0	190.0	260.3	192.7	203.3	196.0	200.3	216.7	195.0	206.3	202.9	197.5	225.0	208.3	224.3	189.5	180.0	204.1	162.1	156.5	159.3	198.3
24	HM4	146.7	151.7	210.7	194.0	175.8	167.0	152.7	161.5	120.0	153.8	151.0	141.5	192.7	171.7	162.3	151.1	161.4	163.5	177.2	168.0	172.6	163.8
25	HM8	145.0	146.7	196.0	195.7	170.8	162.0	151.0	168.6	150.0	152.4	156.8	147.5	185.0	181.7	194.7	170.5	159.2	173.1	215.6	164.0	189.8	169.7
	Loc. Mean	**160.9**	**165.9**	**223.0**	**181.0**	**182.7**	**176.3**	**161.7**	**194.0**	**159.5**	**169.2**	**172.1**	**161.0**	**206.7**	**192.5**	**196.7**	**172.5**	**163.4**	**181.9**	**204.9**	**162.7**	**183.8**	**179.5**
	C.D. (5%)	6.34	50.52	36.15	5.46	21.58	28.68	19.29	16.05	-	37.18	12.45	15.01	12.43	33.00	20.96	5.75	23.40	12.24	17.73	9.80	46.45	9.57
	C.V. (%)	2.40	18.55	9.87	1.84	8.38	9.91	7.27	5.04	-	10.65	5.76	5.68	3.66	10.44	6.76	2.03	8.72	5.89	5.27	2.92	12.24	7.91
	F (Prob)	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	-	0.07	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.66	0.00

Table No.2 (Cont..)

EAR HEIGHT(cm)

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	IJ8521	65.0	90.0	113.7	77.3	71.2	81.0	77.3	76.2	67.5	62.6	72.9	74.0	92.7	105.0	82.3	77.7	73.3	84.2	112.1	67.0	89.5	79.4
2	IJ8214	83.3	95.0	89.7	78.7	81.0	76.3	88.3	102.1	77.5	74.0	83.7	67.5	93.3	115.0	80.7	83.9	78.2	86.4	102.6	98.0	100.3	86.6
3	IL8536	70.0	95.0	104.3	71.0	70.5	91.0	90.0	94.2	80.0	88.5	88.7	90.0	102.0	108.3	87.7	97.5	73.7	93.2	90.5	55.0	72.8	86.0
4	IL8537	85.0	88.3	96.3	78.0	81.5	87.0	74.0	80.9	67.5	77.5	77.4	81.0	96.0	120.0	99.0	94.1	81.0	95.2	101.7	78.5	90.1	86.8
5	KMHI-6668	75.0	70.0	93.7	66.7	70.8	88.0	77.3	69.5	72.5	82.5	78.0	61.0	95.0	105.0	87.0	82.6	67.3	83.0	94.9	62.5	78.7	79.1
6	KMH-4210	105.0	86.7	126.7	65.7	85.3	98.3	85.7	102.9	70.0	90.7	89.5	86.0	103.7	123.3	77.7	96.7	82.8	95.0	92.2	49.0	70.6	88.6
7	PMH-2246	63.3	76.7	82.3	63.7	63.5	87.0	79.7	90.3	65.0	64.8	77.4	77.0	87.0	108.3	84.7	96.1	75.7	88.1	114.4	78.5	96.4	82.4
8	K-26	101.7	88.3	109.3	69.0	85.3	75.7	95.0	94.5	72.5	73.6	82.3	90.5	101.0	108.3	84.7	93.1	70.1	91.3	82.9	70.0	76.5	85.5
9	X-2816	81.7	80.0	78.0	64.3	73.0	84.0	71.0	83.4	70.0	78.7	77.4	82.5	86.0	96.7	91.7	82.5	69.8	84.9	105.6	75.5	90.6	81.6
10	VEH-12-1	83.3	70.0	84.0	71.3	77.3	76.7	79.0	72.6	65.0	60.4	70.7	75.5	93.3	105.0	84.0	91.8	80.1	88.3	107.4	73.5	90.5	81.3
11	MMH-12-11	58.3	61.7	85.0	68.0	63.2	72.7	75.0	65.1	62.5	57.7	66.6	69.0	93.7	106.7	80.0	85.9	69.1	84.1	103.9	71.5	87.7	75.9
12	MMH-12-12	63.3	63.3	91.3	63.0	63.2	72.7	82.3	82.5	60.0	56.6	70.8	76.5	97.0	110.0	84.7	88.9	78.9	89.3	98.7	68.5	83.6	78.9
13	MMH-12-13	63.3	88.3	78.7	62.3	62.8	65.0	84.7	88.5	77.5	68.8	76.9	86.5	108.3	118.3	-	95.3	77.3	97.2	112.9	64.0	88.4	83.8
14	MMH12-14	65.0	68.0	92.3	62.3	63.7	62.7	75.7	93.1	82.5	75.6	77.9	70.5	109.7	113.3	93.3	84.7	83.8	92.6	100.4	72.5	86.4	83.0
15	REH2012-3	61.7	101.7	133.3	75.3	68.5	94.7	96.3	112.4	87.5	76.9	93.6	87.0	102.0	121.7	90.7	98.0	83.4	97.1	109.3	62.5	85.9	90.6
16	REH2012-4	70.0	91.7	110.7	83.0	76.5	73.3	84.0	98.8	92.5	77.4	85.2	85.0	121.0	125.0	89.3	92.5	83.8	99.4	105.7	63.5	84.6	89.7
17	AH 1253	73.3	73.3	80.0	70.0	71.7	55.7	66.0	65.7	50.0	64.8	60.4	71.0	88.7	90.0	59.0	73.9	66.0	74.8	100.2	34.5	67.4	68.6
18	AH 1254	63.3	63.3	69.7	70.0	66.7	68.0	68.3	58.1	60.0	57.6	62.4	76.0	87.0	90.0	74.7	76.1	62.3	77.7	107.8	75.5	91.6	73.0
19	AH 1255	96.7	96.7	101.0	58.7	77.7	95.3	86.0	97.4	72.5	87.0	87.6	73.0	111.0	118.3	83.3	95.5	82.1	93.9	104.8	63.5	84.2	88.3
20	HKH420	78.3	101.7	99.0	86.7	82.5	91.7	82.3	101.2	72.5	90.2	87.6	85.5	96.7	115.0	84.7	99.2	86.5	94.6	72.1	50.5	61.3	86.2
21	HKH421	65.0	78.3	98.7	69.0	67.0	87.7	81.7	78.9	87.5	81.9	83.5	70.5	110.3	108.3	82.3	81.1	83.0	89.3	108.0	75.0	91.5	84.7
22	HKH422	83.3	106.7	107.3	58.3	70.8	95.3	93.7	93.5	87.5	90.0	92.0	82.5	110.3	121.7	102.0	103.9	87.3	101.3	95.0	56.0	75.5	90.7
	CHECKS																						
23	BIO9637	70.0	103.3	117.3	86.7	78.3	88.3	108.7	99.4	90.0	101.6	97.6	107.5	101.7	115.0	107.0	97.8	96.0	104.2	85.0	66.5	75.8	94.7
24	HM4	66.7	80.0	94.7	69.0	67.8	92.7	73.3	66.3	60.0	70.8	72.6	75.0	99.3	105.0	66.3	90.1	77.1	85.5	84.4	82.5	83.5	78.6
25	HM8	80.0	81.7	84.7	58.3	69.2	69.7	84.3	72.6	85.0	73.1	76.9	68.5	97.0	120.0	97.7	96.2	82.8	93.7	107.7	63.5	85.6	83.8
	Loc. Mean	**74.9**	**84.0**	**96.9**	**69.9**	**72.4**	**81.2**	**82.4**	**85.6**	**73.4**	**75.3**	**79.6**	**78.8**	**99.3**	**110.9**	**85.6**	**90.2**	**78.1**	**90.6**	**100.0**	**67.1**	**83.6**	**83.5**
	C.D. (5%)	6.57	33.11	34.37	3.48	23.35	19.62	15.33	13.15	-	15.74	10.02	7.99	8.38	22.19	15.24	4.37	10.25	7.25	20.54	6.37	20.52	6.59
	C.V. (%)	5.35	24.01	21.61	3.04	15.64	14.71	11.33	9.36	-	10.12	10.03	6.18	5.14	12.18	11.30	2.95	8.00	7.00	12.51	4.60	11.90	10.99
	F (Prob)	0.00	0.20	0.06	0.00	0.70	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.01	0.00	0.09	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : LUDHIANA 24.0%: PANTNAGAR 21.6%

TABLE No. 3: **Performance of early maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Kanpur, Bahraich, Dholi, Bhubaneshwar, Varanasi, Ranchi, Arbhavi, Karimnagar, Kolhapur, Mandya, Coimbatore, Vagarai, Banswara, Godhra in trial no. TR03 (IVT-E) during rabi 2012-13**

		GRAIN YIELD (kg/ha) AT 15% MOISTURE																				
Sl									ZN 2												ZN 3	
No	PEDIGREE	KARN	R	LUDH	R	PANT	R	KANP	R	MEAN	R	BAHR	R	DHOL	R	BHUB	R	VARA	R	RANC	R	MEAN	R
1	K-25	5241	10	7471	1	15064	1	6164	8	8485	3	7042	5	4932	2	6556	3	9324	2	14746	1	8520	1
2	REH2012-5	7260	6	4885	10	11869	5	7205	4	7805	8	4819	11	4670	4	6250	4	7849	6	11853	5	7088	6
3	REH2012-6	7151	7	5478	9	10521	11	6512	5	7416	10	6605	6	4623	6	5547	8	8158	3	9411	9	6869	7
4	AH 1256	8277	3	6236	3	11473	8	8063	3	8512	2	4864	10	3966	11	5250	9	9377	1	9562	7	6604	10
5	AH 1257	6565	8	5803	8	12029	4	5683	11	7520	9	8748	1	4335	8	5645	7	7433	8	9858	6	7204	5
6	AH 1258	6284	9	6105	5	13631	3	5995	9	8004	7	7736	4	4160	9	5763	5	7608	7	6983	11	6450	11
7	AH 1259	3636	11	4766	11	11811	6	8158	2	7093	11	7911	3	4029	10	5091	11	7347	9	8782	10	6632	9
8	HKH35	8143	4	6172	4	11632	7	8329	1	8569	1	6207	7	4630	5	6756	1	6895	11	9436	8	6785	8
9	HKH36	7539	5	5816	7	14257	2	5852	10	8366	4	8115	2	4907	3	6671	2	7014	10	12446	3	7831	2
10	HKH37	9840	1	6045	6	11258	9	6234	7	8344	5	5887	8	4532	7	5742	6	7958	5	12954	2	7415	3
	CHECKS																						
11	PRAKASH	9476	2	6395	2	10636	10	6251	6	8190	6	5870	9	5123	1	5166	10	8120	4	12103	4	7277	4
	Location Mean	**7219**		**5925**		**12198**		**6768**		**8028**		**6710**		**4537**		**5858**		**7917**		**10739**		**7152**	
	C.D. (5%)	788		1980		2114		1125		1502		1700		1228		580		919		3959		1677	
	C.V. (%)	6.38		19.55		10.14		9.73		-		14.83		15.84		5.79		6.79		16.3		-	
	F (Prob)	0		0.302		0.002		0				0.002		0.567		0		0		0.026			
	Plot Size	6		3.6		6		4.8		-		4.8		6		4.8		4.8		5.6		-	
	AGRONOMY DATA																						
	Sowing Date	18-11		20-02		27-11		26-12		-		3-12		29-11		30-11		28-11		22-11		-	
	Harvest Date	24-05		10-06		6-04		8-05		-		14-05		11-06		9-04		30-04		155-05		-	
	Irrigation Nos	7		10		6		4		-		4		4		10		5		11		-	
	Ferilizer Applied N	150		70		120		120		-		150		150		120		150		120		-	
	Ferilizer Applied P	60		24		60		60		-		75		70		60		75		60		-	
	Ferilizer Applied K	60		12		40		60		-		60		60		60		60		40		-	

TABLE No. 3: (Cont.)

Sl No	PEDIGREE	ARBH	R	KARI	R	KOLH	R	MAND	R	COIM	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
1	K-25	7763	1	13539	1	12417	1	5691	2	12311	1	6697	1	9736	1	6662	1	10778	1	8720	1	8965	1
2	REH2012-5	6535	2	8177	9	7872	11	4938	8	9411	5	4301	8	6872	8	4754	10	5140	11	4947	11	6929	8
3	REH2012-6	4331	9	7206	11	8000	10	5159	5	9380	7	3916	11	6332	11	5282	4	5941	10	5611	9	6660	11
4	AH 1256	4038	11	8358	8	9217	7	4938	9	7385	11	4209	10	6358	10	4925	7	6365	8	5645	8	6853	9
5	AH 1257	5544	8	9387	5	9920	4	4799	10	9400	6	6631	2	7614	3	4961	6	7282	6	6122	6	7296	4
6	AH 1258	5555	7	9636	2	9772	5	5989	1	9574	4	4693	7	7536	4	4903	8	6037	9	5470	10	7084	7
7	AH 1259	4191	10	9610	3	11037	2	5169	4	7890	10	4283	9	7030	7	5152	5	7563	5	6357	4	6849	10
8	HKH35	5652	4	9521	4	8693	8	5094	7	9944	3	5049	4	7325	5	5719	3	7040	7	6379	3	7348	3
9	HKH36	5863	3	9322	6	10500	3	5415	3	10745	2	5239	3	7847	2	5782	2	9229	2	7505	2	7924	2
10	HKH37	5572	6	7741	10	8659	9	4706	11	9148	9	4849	6	6779	9	4852	9	7646	3	6249	5	7272	6
	CHECKS																						
11	PRAKASH	5626	5	8557	7	9255	6	5154	6	9297	8	5032	5	7154	6	4177	11	7617	4	5897	7	7286	5
	Location Mean	**5516**		**9187**		**9577**		**5187**		**9499**		**4991**		**7326**		**5197**		**7331**		**6264**		**7315**	
	C.D. (5%)	1278		838		1495		577		1086		1660		1156		1421		1256		1339		1412	
	C.V. (%)	13.56		5.34		9.13		6.51		6.69		19.46		-		15.99		10.03		-		-	
	F (Prob)	0		0		0		0.004		0		0.022				0.092		0					
	Plot Size	6		6		6		5.6		4.8		4.8		-		6		4.8		-		-	
	AGRONOMY DATA																						
	Sowing Date	11-12		25-11		23-12		27-11		7-12		27-12		-		6-12		22-11		-		-	
	Harvest Date	18-04		30-03		6-03		26-04		2-04		22-04		-		29-04		9-04		-		-	
	Irrigation Nos	8		8		-		6		9		10		-		6		8		-		-	
	Ferilizer Applied N	150		200		100		150		150		200		-		150		120		-		-	
	Ferilizer Applied P	75		60		50		75		75		75		-		80		50		-		-	
	Ferilizer Applied K	37.5		60		30		40		75		75		-		-		-		-		-	

TABLE No.3 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE PRAKASH																						
		KARN	LUDH	PANT	KANP	ZN 2 MEAN	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 MEAN	BANS	GODH	ZN 5 MEAN	OV'L MEAN
1	K-25	-	16.8	41.6	-	3.6	20	-	26.9	14.8	21.8	17.1	38	58.2	34.2	10.4	32.4	33.1	36.1	59.5	41.5	47.9	23
2	REH2012-5	-	-	11.6	15.3	-	-	-	21	-	-	-	16.2	-	-	-	1.2	-	-	13.8	-	-	-
3	REH2012-6	-	-	-	4.2	-	12.5	-	7.4	0.5	-	-	-	-	-	0.1	0.9	-	-	26.5	-	-	-
4	AH 1256	-	-	7.9	29	3.9	-	-	1.6	15.5	-	-	-	-	-	-	-	-	-	17.9	-	-	-
5	AH 1257	-	-	13.1	-	-	49	-	9.3	-	-	-	-	9.7	7.2	-	1.1	31.8	6.4	18.8	-	3.8	0.1
6	AH 1258	-	-	28.2	-	-	31.8	-	11.5	-	-	-	-	12.6	5.6	16.2	3	-	5.4	17.4	-	-	-
7	AH 1259	-	-	11	30.5	-	34.8	-	-	-	-	-	-	12.3	19.3	0.3	-	-	-	23.3	-	7.8	-
8	HKH35	-	-	9.4	33.2	4.6	5.7	-	30.8	-	-	-	0.5	11.3	-	-	7	0.3	2.4	36.9	-	8.2	0.9
9	HKH36	-	-	34	-	2.2	38.2	-	29.1	-	2.8	7.6	4.2	8.9	13.5	5.1	15.6	4.1	9.7	38.4	21.2	27.3	8.8
10	HKH37	3.8	-	5.8	-	1.9	0.3	-	11.1	-	7	1.9	-	-	-	-	-	-	-	16.2	0.4	6	-
	CHECKS																						
11	PRAKASH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No.3 (Cont..)

MOISTURE % AT HARVEST

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	K-25	25.8	24.5	16.0	13.7	20.0	21.0	16.9	18.6	29.0	18.3	20.7	16.5	15.2	11.8	13.9	20.8	18.0	16.0	16.0	20.4	18.2	18.6
2	REH2012-5	24.4	28.0	20.3	15.0	21.9	20.0	18.2	18.2	29.3	21.8	21.5	25.4	13.7	11.6	13.8	21.7	18.6	17.5	16.2	23.2	19.7	20.0
3	REH2012-6	23.7	24.8	22.9	15.0	21.6	19.1	16.4	18.3	29.7	24.1	21.5	17.2	13.8	11.4	14.3	22.8	15.5	15.8	16.2	23.6	19.9	19.3
4	AH 1256	23.7	26.5	16.6	14.3	20.3	19.6	15.9	17.0	29.7	19.3	20.3	21.1	11.7	11.8	14.0	20.2	14.7	15.6	16.6	20.2	18.4	18.4
5	AH 1257	25.1	21.8	17.2	14.0	19.5	20.1	16.3	18.0	29.3	25.1	21.7	17.5	11.9	10.7	13.1	18.9	13.4	14.2	16.0	19.6	17.8	18.1
6	AH 1258	26.6	24.1	15.1	12.7	19.6	21.1	18.6	18.6	29.6	22.3	22.0	23.0	14.6	11.6	14.9	20.8	18.0	17.1	16.4	20.9	18.6	19.3
7	AH 1259	23.0	27.3	18.2	13.3	20.4	19.2	15.5	17.5	26.8	23.2	20.4	22.4	12.9	11.0	15.0	20.4	13.0	15.8	15.7	18.0	16.8	18.4
8	HKH35	26.1	24.7	23.4	14.0	22.0	20.6	16.4	18.3	32.2	24.2	22.3	18.2	15.2	12.0	15.9	23.4	17.5	17.0	15.5	23.3	19.4	20.0
9	HKH36	25.0	26.5	18.3	14.7	21.1	19.7	16.9	18.3	29.5	22.4	21.4	18.5	12.6	11.5	13.8	21.7	16.8	15.8	15.8	16.2	16.0	18.7
10	HKH37	20.4	21.5	17.5	15.0	18.6	19.2	15.7	17.1	26.8	20.2	19.8	17.2	12.3	11.9	14.3	18.8	14.1	14.7	15.7	14.1	14.9	17.1
	CHECKS																						
11	PRAKASH	21.4	24.0	16.5	14.7	19.1	20.7	15.6	18.0	28.9	22.9	21.2	16.8	13.1	10.6	14.5	20.8	14.0	15.0	16.2	16.2	16.2	17.9
	Loc. Mean	**24.1**	**24.8**	**18.3**	**14.2**	**20.4**	**20.0**	**16.6**	**18.0**	**29.1**	**22.2**	**21.2**	**19.4**	**13.3**	**11.4**	**14.3**	**20.9**	**15.8**	**15.9**	**16.0**	**19.6**	**17.8**	**18.7**
	C.D. (5%)	0.59	2.29	2.43	1.20	2.73	0.67	0.69	-	0.65	1.87	1.50	4.74	1.67	0.38	0.08	0.88	2.18	1.76	0.82	3.89	4.93	1.06
	C.V. (%)	1.43	5.41	7.77	4.96	9.29	1.96	2.46	-	1.32	3.79	5.53	14.35	7.36	1.93	0.32	2.47	8.12	9.58	3.01	11.66	12.43	8.40
	F (Prob)	0.00	0.00	0.00	0.01	0.19	0.00	0.00	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.30	0.00	0.44	0.00

GRAIN SHELLING %

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	K-25	79.3	82.5	83.1	74.7	79.9	76.9	84.0	79.5	74.8	86.8	80.4	83.2	82.2	87.0	82.8	80.8	80.4	82.7	72.6	78.7	75.7	80.5
2	REH2012-5	79.4	82.0	84.4	75.7	80.4	66.0	78.0	78.6	80.8	84.9	77.6	84.1	79.0	84.4	81.0	78.6	78.8	81.0	70.0	74.1	72.1	78.8
3	REH2012-6	77.2	81.5	79.6	72.7	77.7	77.8	81.5	78.4	76.8	84.3	79.8	85.2	78.9	85.8	80.3	78.6	78.2	81.2	70.2	77.3	73.8	79.1
4	AH 1256	79.6	81.0	80.6	74.3	78.9	78.1	77.5	78.2	79.3	83.6	79.3	79.8	81.7	86.0	79.6	82.6	82.4	82.0	71.5	81.4	76.4	79.8
5	AH 1257	79.9	83.5	79.7	73.7	79.2	81.5	81.5	77.3	82.5	84.9	81.5	80.5	82.1	87.0	81.3	80.4	85.5	82.8	71.3	80.9	76.1	80.8
6	AH 1258	80.8	82.0	84.6	73.7	80.3	75.6	79.0	79.5	77.8	85.6	79.5	83.0	78.2	86.4	80.4	83.0	80.0	81.8	71.9	81.1	76.5	80.1
7	AH 1259	77.0	83.5	85.0	74.3	80.0	79.8	80.0	79.5	75.8	87.1	80.4	81.0	82.0	88.1	82.7	81.8	79.7	82.5	70.7	78.5	74.6	80.4
8	HKH35	77.3	82.0	81.4	75.0	78.9	74.4	83.0	79.7	75.0	85.1	79.4	80.9	74.3	83.7	81.6	72.1	74.4	77.8	70.5	73.7	72.1	77.9
9	HKH36	78.9	82.5	82.0	74.3	79.4	80.0	83.0	80.6	76.0	82.5	80.4	82.7	76.9	83.9	82.3	77.3	76.4	79.9	71.4	77.3	74.3	79.3
10	HKH37	81.1	82.0	75.9	78.0	79.3	76.3	79.0	78.5	76.5	86.8	79.4	83.1	80.3	86.2	79.2	73.1	81.4	80.5	68.0	74.6	71.3	78.8
	CHECKS																						
11	PRAKASH	80.9	83.0	81.2	76.0	80.3	78.0	83.5	79.5	82.3	83.2	81.3	83.5	81.0	86.4	81.2	78.8	83.2	82.3	71.0	83.6	77.3	80.9
	Loc. Mean	**79.2**	**82.3**	**81.6**	**74.8**	**79.5**	**76.8**	**80.9**	**79.0**	**77.9**	**85.0**	**79.9**	**82.4**	**79.7**	**85.9**	**81.1**	**78.8**	**80.0**	**81.3**	**70.8**	**78.3**	**74.6**	**79.7**
	C.D. (5%)	0.93	1.88	6.57	2.03	2.58	1.48	3.82	-	1.13	3.67	3.37	3.25	1.93	1.19	-	0.80	4.60	2.41	1.83	2.83	4.34	1.48
	C.V. (%)	0.69	1.34	4.72	1.59	2.25	1.13	2.77	-	0.85	1.94	3.30	2.32	1.42	0.81	-	0.60	3.37	2.55	1.51	2.12	2.61	2.75
	F (Prob)	0.00	0.21	0.23	0.00	0.65	0.00	0.01	0.00	0.00	0.20	0.61	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.11	0.00

Table No.3 (Cont..)

STAND AT HARVEST ('000/ha)

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	K-25	57.8	81.5	61.7	72.2	68.3	70.1	53.3	65.3	78.5	70.5	67.6	55.0	52.2	51.7	56.0	66.0	58.3	56.5	47.2	66.0	56.6	62.5
2	REH2012-5	58.3	75.9	62.2	76.4	68.2	62.5	51.7	61.8	77.1	69.6	64.5	51.1	36.7	47.2	58.3	66.0	45.1	50.7	46.7	47.9	47.3	58.5
3	REH2012-6	58.9	79.6	58.9	73.6	67.8	60.4	48.3	62.5	72.2	67.0	62.1	35.0	35.0	52.8	57.1	66.7	47.9	49.1	47.2	50.0	48.6	57.2
4	AH 1256	58.3	79.6	65.0	70.1	68.3	62.5	54.4	68.8	79.9	68.8	66.9	46.1	45.6	49.4	60.1	66.0	52.1	53.2	47.2	50.7	49.0	60.3
5	AH 1257	58.9	75.0	64.4	71.5	67.5	56.3	51.7	67.4	81.9	71.4	65.7	57.8	33.3	52.8	57.1	66.0	49.3	52.7	50.0	60.4	55.2	60.3
6	AH 1258	59.4	83.3	63.9	72.2	69.7	54.9	49.4	66.7	78.5	68.8	63.6	51.1	48.9	60.6	58.9	66.7	51.4	56.3	47.8	52.1	49.9	60.9
7	AH 1259	56.7	82.4	65.6	72.2	69.2	57.6	52.8	68.1	81.9	71.4	66.4	51.1	47.2	66.1	58.9	66.0	55.6	57.5	50.0	63.2	56.6	62.8
8	HKH35	61.1	86.1	56.1	72.9	69.1	59.7	50.0	66.7	81.3	69.6	65.5	58.9	52.8	60.0	56.5	66.7	60.4	59.2	47.8	69.4	58.6	63.3
9	HKH36	58.3	83.3	63.3	71.5	69.1	64.6	47.8	68.8	82.6	71.4	67.0	55.6	48.9	56.1	60.7	65.3	52.1	56.4	44.4	66.7	55.6	62.4
10	HKH37	61.7	88.0	64.4	74.3	72.1	63.2	53.9	68.1	81.3	71.4	67.6	51.1	46.7	57.8	56.5	65.3	50.7	54.7	49.4	66.7	58.1	63.0
	CHECKS																						
11	PRAKASH	57.8	86.1	65.6	72.9	70.6	65.3	55.0	66.0	79.9	71.4	67.5	56.1	47.2	58.3	61.9	66.7	52.1	57.1	49.4	50.0	49.7	62.5
	Loc. Mean	**58.8**	**81.9**	**62.8**	**72.7**	**69.1**	**61.6**	**51.7**	**66.4**	**79.5**	**70.1**	**65.8**	**51.7**	**44.9**	**55.7**	**58.4**	**66.1**	**52.3**	**54.9**	**47.9**	**58.5**	**53.2**	**61.2**
	C.D. (5%)	3.47	7.11	5.76	5.76	4.04	4.74	7.87	5.44	5.17	2.21	3.27	15.01	4.13	10.01	5.59	1.71	10.38	4.85	4.85	9.38	13.32	2.53
	C.V. (%)	3.47	5.10	5.38	4.65	4.05	4.52	8.95	4.81	3.81	1.42	3.89	17.04	5.40	10.55	5.62	1.52	11.66	7.63	5.94	9.42	11.24	6.10
	F (Prob)	0.20	0.02	0.05	0.71	0.52	0.00	0.58	0.17	0.02	0.01	0.02	0.14	0.00	0.03	0.45	0.63	0.18	0.00	0.44	0.00	0.49	0.00

DAYS TO 50% POLLEN SHED

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	K-25	140.7	69.0	128.3	74.3	103.1	119.3	117.7	66.3	108.3	112.0	104.7	72.0	62.3	71.0	66.3	53.0	45.3	61.7	78.0	83.3	80.7	86.3
2	REH2012-5	138.0	71.7	127.0	77.7	103.6	120.7	116.3	66.3	108.7	110.0	104.4	75.0	62.0	69.7	64.0	51.7	45.7	61.3	77.3	84.3	80.8	86.2
3	REH2012-6	138.7	68.7	127.0	79.0	103.3	124.3	118.0	65.0	109.0	111.0	105.5	72.3	59.7	70.0	64.7	52.3	48.7	61.3	75.3	81.7	78.5	86.2
4	AH 1256	139.0	68.0	122.3	83.7	103.3	116.3	117.7	62.3	104.0	110.5	102.2	71.7	59.3	68.3	61.0	50.3	45.7	59.4	78.3	78.0	78.2	84.5
5	AH 1257	137.0	68.7	123.3	81.7	102.7	117.7	120.0	62.3	105.7	109.0	102.9	70.3	59.3	68.0	60.3	49.0	45.7	58.8	77.7	79.0	78.3	84.4
6	AH 1258	145.3	70.0	122.7	83.3	105.3	119.3	117.7	62.7	102.7	108.0	102.1	70.3	58.7	68.7	61.7	49.3	47.3	59.3	75.0	78.3	76.7	84.8
7	AH 1259	138.0	70.0	125.0	78.3	102.8	115.7	117.3	62.3	103.7	108.0	101.4	71.0	61.0	69.0	62.3	53.0	47.3	60.6	78.7	79.3	79.0	84.7
8	HKH35	142.7	70.7	130.3	76.0	104.9	120.7	119.3	66.0	110.3	107.0	104.7	72.0	61.0	71.3	66.7	54.0	48.0	62.2	75.3	85.3	80.3	86.9
9	HKH36	140.7	70.7	129.3	74.7	103.8	119.3	118.0	65.3	109.7	107.5	104.0	72.7	59.3	70.3	65.3	55.0	47.7	61.7	77.0	87.0	82.0	86.4
10	HKH37	138.0	67.7	123.3	76.7	101.4	119.7	118.0	64.3	106.0	107.0	103.0	71.0	59.7	68.3	61.7	50.3	55.3	61.1	76.0	79.0	77.5	84.8
	CHECKS																						
11	PRAKASH	138.0	69.0	124.7	75.3	101.8	120.7	116.3	60.0	105.3	110.0	102.5	69.3	58.7	68.7	61.0	49.3	50.7	59.6	79.0	77.0	78.0	84.3
	Loc. Mean	**139.6**	**69.5**	**125.8**	**78.2**	**103.3**	**119.4**	**117.8**	**63.9**	**106.7**	**109.1**	**103.4**	**71.6**	**60.1**	**69.4**	**63.2**	**51.6**	**47.9**	**60.6**	**77.1**	**81.1**	**79.1**	**85.4**
	C.D. (5%)	1.71	3.74	2.88	1.56	3.85	1.80	4.10	1.94	1.51	4.04	2.24	5.69	1.69	1.70	1.48	0.74	1.69	2.02	1.74	2.27	6.35	1.40
	C.V. (%)	0.72	3.16	1.35	1.17	2.58	0.89	2.04	1.79	0.83	1.66	1.70	4.66	1.65	1.44	1.38	0.84	2.07	2.88	1.32	1.64	3.61	2.42
	F (Prob)	0.00	0.51	0.00	0.00	0.65	0.00	0.79	0.00	0.00	0.19	0.01	0.79	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.74	0.00

Table No.3 (Cont..)

DAYS TO 50% SILKING

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	K-25	143.3	71.0	131.3	78.0	105.9	121.3	120.0	68.3	112.3	116.0	107.6	73.3	63.7	72.0	70.0	55.0	50.0	64.0	81.3	86.0	83.7	89.0
2	REH2012-5	140.7	74.0	130.0	81.7	106.6	122.7	118.7	68.3	112.7	114.0	107.3	76.0	63.7	70.7	68.0	53.7	48.3	63.4	80.7	88.0	84.3	88.9
3	REH2012-6	141.0	71.0	130.0	84.0	106.5	126.3	120.7	67.0	113.0	115.0	108.4	74.7	61.7	71.0	69.0	54.3	51.3	63.7	78.7	85.7	82.2	89.1
4	AH 1256	141.3	70.7	125.0	87.7	106.2	118.3	120.0	64.0	108.0	114.5	105.0	75.0	61.0	69.3	62.7	52.3	47.7	61.3	81.0	81.7	81.3	87.1
5	AH 1257	140.0	71.0	126.3	86.7	106.0	119.7	122.3	64.0	109.7	113.5	105.8	74.3	61.3	69.0	63.3	51.0	50.3	61.6	81.0	82.7	81.8	87.4
6	AH 1258	147.7	72.3	125.7	87.3	108.3	121.3	120.7	65.0	108.0	112.0	105.4	73.0	60.3	69.7	64.0	51.3	52.0	61.7	78.3	82.3	80.3	87.7
7	AH 1259	140.3	72.7	128.0	83.0	106.0	117.7	119.3	64.7	109.3	111.5	104.5	74.0	63.0	70.0	65.0	55.0	49.7	62.8	81.7	84.3	83.0	87.6
8	HKH35	145.3	73.3	133.3	80.3	108.1	122.7	122.3	68.0	115.3	111.5	108.0	74.7	63.0	72.3	69.7	56.0	53.3	64.8	78.7	89.7	84.2	90.0
9	HKH36	143.7	73.3	132.3	79.0	107.1	121.7	120.7	67.3	113.0	111.0	106.7	75.0	60.7	71.3	68.3	57.0	52.7	64.2	80.3	90.7	85.5	89.3
10	HKH37	140.7	70.3	126.3	83.0	105.1	121.7	120.0	65.7	109.0	112.0	105.7	70.3	61.0	69.3	64.0	52.3	57.0	62.3	79.7	83.7	81.7	87.4
	CHECKS																						
11	PRAKASH	140.3	71.3	127.3	78.7	104.4	122.7	119.0	62.0	109.0	115.0	105.5	71.3	60.3	69.7	62.7	51.3	53.0	61.4	82.0	80.0	81.0	86.8
	Loc. Mean	**142.2**	**71.9**	**128.7**	**82.7**	**106.4**	**121.5**	**120.3**	**65.8**	**110.8**	**113.3**	**106.4**	**73.8**	**61.8**	**70.4**	**66.1**	**53.6**	**51.4**	**62.8**	**80.3**	**85.0**	**82.6**	**88.2**
	C.D. (5%)	1.65	3.59	2.76	1.49	4.00	1.74	4.25	2.03	1.91	5.36	2.22	4.89	1.67	1.70	2.38	0.74	2.44	2.09	1.76	3.21	6.28	1.40
	C.V. (%)	0.68	2.93	1.26	1.05	2.60	0.84	2.08	1.81	1.01	2.12	1.63	3.89	1.58	1.42	2.12	0.81	2.78	2.87	1.28	2.22	3.41	2.34
	F (Prob)	0.00	0.42	0.00	0.00	0.73	0.00	0.73	0.00	0.00	0.47	0.01	0.45	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.74	0.00

DAYS TO 75% DRY HUSK

S.No.	PEDIGREE	KARN	LUDH	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	K-25	181.0	97.0	144.7	140.9	151.7	154.3	101.0	144.3	164.5	143.2	110.0	88.7	101.7	103.0	94.7	94.3	98.7	110.3	116.0	113.2	122.3
2	REH2012-5	176.0	97.3	155.0	142.8	150.0	154.7	104.7	147.3	163.0	143.9	113.0	88.7	100.3	99.3	92.7	94.7	98.1	109.7	118.0	113.8	122.8
3	REH2012-6	178.3	96.0	148.3	140.9	154.0	153.3	103.3	147.3	164.0	144.4	108.7	86.7	101.0	99.3	92.7	94.3	97.1	108.7	115.7	112.2	122.0
4	AH 1256	177.7	97.3	149.7	141.6	148.0	152.0	99.7	142.3	163.0	141.0	107.7	86.0	100.0	94.7	91.7	91.3	95.2	110.7	111.7	111.2	120.2
5	AH 1257	175.7	96.3	154.3	142.1	147.3	152.3	101.0	142.7	163.5	141.4	105.3	86.3	99.3	94.7	88.0	94.7	94.7	109.0	112.7	110.8	120.2
6	AH 1258	181.0	97.0	159.3	145.8	148.3	153.0	100.7	141.7	159.5	140.6	107.3	85.3	100.7	99.3	90.0	97.3	96.7	109.3	112.3	110.8	121.4
7	AH 1259	176.3	97.0	156.0	143.1	146.7	152.3	100.0	144.3	162.5	141.2	109.3	88.0	99.7	99.0	94.3	94.7	97.5	110.0	114.3	112.2	121.5
8	HKH35	181.0	98.0	151.0	143.3	154.3	155.3	102.7	148.3	161.5	144.4	109.7	88.0	102.0	103.0	96.0	97.0	99.3	108.0	119.7	113.8	123.5
9	HKH36	177.0	95.7	152.7	141.8	150.3	154.7	100.7	146.0	162.0	142.7	109.3	85.7	101.7	103.0	97.0	95.3	98.7	109.3	120.7	115.0	122.6
10	HKH37	174.0	96.0	147.7	139.2	148.7	150.7	99.0	142.3	161.0	140.3	103.3	86.0	99.7	95.7	90.3	97.3	95.4	107.7	113.7	110.7	119.6
	CHECKS																					
11	PRAKASH	176.3	97.7	143.7	139.2	147.0	150.7	99.3	142.7	160.5	140.0	103.7	85.3	99.3	95.0	88.7	97.7	94.9	111.0	110.0	110.5	119.3
	Loc. Mean	**177.7**	**96.8**	**151.1**	**141.9**	**149.7**	**153.0**	**101.1**	**144.5**	**162.3**	**142.1**	**107.9**	**86.8**	**100.5**	**98.7**	**92.4**	**95.3**	**96.9**	**109.4**	**115.0**	**112.2**	**121.4**
	C.D. (5%)	2.01	2.61	2.79	5.30	0.78	1.58	2.35	2.89	3.19	1.70	7.57	1.67	2.78	5.14	1.17	1.23	2.20	1.63	3.21	6.22	1.48
	C.V. (%)	0.66	1.58	1.09	2.20	0.31	0.61	1.36	1.18	0.88	0.94	4.12	1.13	1.63	3.06	0.74	0.76	1.95	0.88	1.64	2.49	1.74
	F (Prob)	0.00	0.70	0.00	0.40	0.00	0.00	0.00	0.00	0.10	0.00	0.31	0.00	0.42	0.01	0.00	0.00	0.00	0.01	0.00	0.77	0.00

Table No.3 (Cont..)

PLANT HEIGHT(cm)

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	K-25	170	171	223	177	185	164	157	191	168	182	172	158	211	210	195	172	158	184	192	167	180	180
2	REH2012-5	145	163	209	187	176	162	149	186	198	171	173	170	208	198	209	192	164	190	190	168	179	181
3	REH2012-6	135	165	211	182	173	168	163	168	193	179	174	153	205	208	205	187	153	185	199	173	186	179
4	AH 1256	145	170	189	188	173	151	131	163	100	172	143	142	200	197	177	137	148	167	201	141	171	162
5	AH 1257	150	180	208	188	181	148	134	169	208	170	166	150	161	183	191	181	156	171	195	164	180	173
6	AH 1258	125	159	204	182	167	151	131	148	133	161	145	163	174	182	190	190	147	174	203	137	170	163
7	AH 1259	137	187	196	187	177	149	144	168	135	161	151	156	188	185	172	173	160	172	182	143	163	166
8	HKH35	138	157	205	188	172	144	136	175	123	156	147	144	189	205	195	202	155	182	199	143	171	168
9	HKH36	160	175	213	194	186	177	160	204	158	155	171	158	201	202	205	200	151	186	181	169	175	180
10	HKH37	153	173	194	188	177	151	150	179	195	177	170	150	185	177	201	181	144	173	184	155	170	173
	CHECKS																						
11	PRAKASH	138	178	199	186	175	168	145	181	185	162	168	161	193	202	190	159	151	176	194	157	175	174
	Loc. Mean	**145**	**171**	**205**	**186**	**177**	**158**	**146**	**176**	**163**	**168**	**162**	**155**	**192**	**195**	**194**	**179**	**153**	**178**	**193**	**156**	**174**	**173**
	C.D. (5%)	5.70	16.12	24.54	3.08	12.80	22.23	13.27	12.13	0.00	23.60	20.89	17.24	8.83	23.07	18.91	7.56	18.77	12.87	10.93	10.75	27.06	8.58
	C.V. (%)	2.31	5.54	7.04	0.97	5.02	8.28	5.36	4.05	0.00	6.31	10.10	6.54	2.70	6.93	5.73	2.47	7.18	6.23	3.33	4.04	6.96	7.34
	F (Prob)	0.00	0.02	0.27	0.00	0.16	0.08	0.00	0.00	0.00	0.25	0.01	0.09	0.00	0.06	0.01	0.00	0.57	0.01	0.00	0.00	0.81	0.00

EAR HEIGHT(cm)

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	RANC	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	K-25	82	80	101	91	88	72	78	83	78	92	80	79	102	120	68	91	91	92	101	76	89	87
2	REH2012-5	68	78	89	96	83	77	75	87	93	86	83	82	108	103	69	112	91	94	100	84	92	88
3	REH2012-6	63	75	91	82	78	78	90	73	65	87	78	73	100	120	76	112	81	94	105	83	94	86
4	AH 1256	83	68	86	89	82	69	62	72	73	91	73	66	92	112	64	72	88	82	111	72	91	81
5	AH 1257	73	78	88	94	83	61	60	72	75	80	70	74	82	100	75	110	87	88	97	74	86	81
6	AH 1258	48	78	83	79	72	70	61	61	63	74	66	78	81	98	71	95	77	83	109	58	83	76
7	AH 1259	50	65	83	87	71	71	68	78	48	78	69	77	102	108	58	95	94	89	91	68	79	78
8	HKH35	73	75	86	88	80	71	66	85	78	76	75	68	107	135	78	115	85	98	112	77	94	87
9	HKH36	65	75	102	80	80	84	87	109	83	74	87	74	113	132	100	122	97	106	99	81	90	93
10	HKH37	70	72	85	87	78	66	77	82	78	88	78	74	95	112	71	101	82	89	94	73	83	83
	CHECKS																						
11	PRAKASH	65	83	89	97	84	81	77	83	78	85	81	81	114	117	72	97	94	95	100	77	89	88
	Loc. Mean	**67**	**75**	**89**	**88**	**80**	**73**	**73**	**80**	**73**	**83**	**76**	**75**	**99**	**114**	**73**	**102**	**88**	**92**	**102**	**75**	**88**	**84**
	C.D. (5%)	8.21	10.10	7.85	2.60	9.62	22.21	8.92	9.13	-	15.34	10.15	14.05	11.22	17.52	13.40	4.92	13.53	9.93	9.66	16.43	16.49	5.40
	C.V. (%)	7.15	7.87	5.16	1.73	8.32	17.90	7.20	6.67	-	8.34	10.39	11.02	6.62	9.00	10.80	2.83	9.04	9.32	5.57	12.90	8.38	9.47
	F (Prob)	0.00	0.05	0.00	0.00	0.04	0.63	0.00	0.00	-	0.17	0.00	0.40	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.12	0.57	0.00

TABLE No. 4: **Performance of late maturing experimental hybrids at Delhi, Karnal, Ludhiana, Pantnagar, Kanpur, Bahraich, Dholi, Bhubaneshwar, Varanasi, Arbhavi, Karimnagar, Kolhapur, Mandya, Coimbatore, Vagarai, Banswara, Godhra in trial no. TR04 (AVT1-Late) during rabi 2012-13.**

	GRAIN YIELD (kg/ha) AT 15% MOISTURE																					
Sl											ZN 2										ZN 3	
No	PEDIGREE	DELH	R	KARN	R	LUDH	R	PANT	R	KANP	R	MEAN	R	BAHR	R	DHOL	R	BHUB	R	VARA	R	MEAN	R
1	BP-001	10168	15	7770	10	6345	18	6069	17	6532	13	6790	16	6660	18	9296	1	5216	12	8019	17	7298	17
2	BP-003	11230	9	8479	5	11079	13	7763	13	5215	15	7152	14	8269	14	9164	3	4873	15	8808	13	7778	13
3	BP-007	10415	13	6990	15	9647	17	5836	18	3933	18	5586	18	8847	13	8232	11	6089	4	8539	14	7927	11
4	BP-008	10779	11	6378	17	11429	11	8639	11	6493	14	7170	13	11087	2	8585	7	6090	3	8839	11	8650	4
5	HTMH 5105	10698	12	7805	9	13257	4	6948	16	9186	5	7980	11	9460	9	7575	17	5286	11	8234	16	7639	15
6	PRO-385	11170	10	8547	4	14414	2	7255	15	7941	9	7914	12	10171	6	8090	12	5046	13	8847	10	8038	9
7	KMH-7148	11858	5	8766	3	14743	1	11301	2	8475	8	9514	2	13218	1	7719	15	5312	10	10647	2	9224	1
8	Bisco X 5141	11552	8	6378	16	12805	6	7710	14	4212	17	6100	17	8861	12	9098	4	5486	8	10157	3	8401	6
9	NMH-1247	11827	6	9368	1	12776	7	11849	1	7524	12	9580	1	10087	8	8734	6	3906	18	11097	1	8456	5
10	KH-3479	9825	16	7765	11	10533	16	8611	12	7872	10	8083	10	9258	10	7779	14	5561	7	8815	12	7853	12
11	B-54	12309	3	9163	2	10815	15	10367	3	8639	7	9390	3	8953	11	8312	10	5741	5	9319	7	8081	8
12	A 7501	11725	7	7486	13	12437	9	8894	7	9594	2	8658	6	10171	7	8494	8	4700	16	9392	6	8189	7
13	X35B349	12407	2	8010	8	14207	3	8855	8	7573	11	8146	9	10771	3	8319	9	6880	1	10031	4	9000	2
14	Bio-237	13793	1	7374	14	12468	8	8795	10	4342	16	6837	15	10514	5	9033	5	6544	2	9719	5	8953	3
15	JH 270	12099	4	6299	18	11271	12	9843	5	9093	6	8411	8	7332	17	6919	18	5740	6	7136	18	6782	18
	CHECKS																						
16	BULAND	10326	14	8176	6	12904	5	8913	6	10190	1	9093	5	7674	16	9219	2	4971	14	8254	15	7530	16
17	SEEDTECH 2324	9330	17	8106	7	11666	10	10085	4	9327	3	9172	4	10746	4	7714	16	4135	17	9175	9	7943	10
18	BIO 9681	9139	18	7527	12	10940	14	8809	9	9188	4	8508	7	7989	15	7960	13	5360	9	9319	8	7657	14
	Location Mean	**11147**		**7799**		**11874**		**8697**		**7518**		**8005**		**9448**		**8347**		**5385**		**9131**		**8078**	
	Mean Stand	30		30		30		30		30		30		30		30		30		30		30	
	C.D. (5%)	4164		527		4092		1579		516		874		1293		1972		220		918		1101	
	C.V. (%)	**22.48**		4.06		**20.74**		10.93		4.13		**-**		8.24		14.22		2.46		6.05		**-**	
	F (Prob)	0.79		0		0.044		0		0				0		0.501		0		0			
	Plot Size	3		12		7.2		12		9.6		-		9.6		12		9.6		9.6		-	
	AGRONOMY DATA																						
	Sowing Date	6-12		18-11		30-11		6-12		26-12		-		4-12		19-11		30-11		27-11		-	
	Harvest Date	14-06		30-05		3-06		19-06		10-05		-		21-05		11-06		20-04		4-05		-	
	Irrigation Nos	8		8		12		6		4		-		4		-		10		5		-	
	Ferilizer Applied N	180		150		70		120		120		-		150		150		120		150		-	
	Ferilizer Applied P	80		60		24		60		60		-		75		70		60		75		-	
	Ferilizer Applied K	60		60		12		40		60		-		60		60		60		60		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : DELH 22.5 %: LUDH 20.7 %

TABLE No. 4: **(Cont..)**

Sl No	PEDIGREE	ARBH	R	KARI	R	KOLH	R	MAND	R	COIM	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
1	BP-001	6771	11	8561	17	9762	15	6064	16	11287	12	6973	15	8236	17	7309	9	8476	17	7893	17	7651	18
2	BP-003	8563	4	9622	9	9700	16	5985	18	11501	11	7220	13	8765	12	7658	8	8601	16	8129	16	8095	14
3	BP-007	6088	14	9940	6	9833	14	8477	2	11975	8	7661	11	8996	11	6128	16	11584	9	8856	14	8010	16
4	BP-008	9510	1	9707	8	10185	12	5986	17	10753	16	8114	10	9043	10	7698	7	10103	15	8901	13	8545	11
5	HTMH 5105	5413	16	9573	10	12314	5	6426	11	11677	10	6994	14	8733	14	5288	18	12876	3	9082	11	8337	12
6	PRO-385	9093	2	9725	7	11510	8	7455	5	13050	5	7635	12	9745	4	6525	15	11867	7	9196	8	8850	7
7	KMH-7148	7049	8	10341	4	11113	9	9051	1	13830	2	9104	2	10081	2	7099	10	12547	4	9823	4	9705	1
8	Bisco X 5141	6880	10	9356	12	13041	3	6323	12	13019	6	8785	3	9567	5	7749	5	11851	8	9800	5	8594	9
9	NMH-1247	8220	5	10524	1	14144	1	6631	8	14412	1	8361	6	10382	1	6986	11	13629	2	10308	3	9698	2
10	KH-3479	5661	15	9541	11	11843	7	6614	9	13503	3	8197	9	9226	8	6793	13	10701	11	8747	15	8568	10
11	B-54	6403	13	10379	2	12506	4	6490	10	10565	17	6105	17	8741	13	6893	12	11426	10	9159	9	8751	8
12	A 7501	8769	3	9168	15	14040	2	7345	6	11083	15	9237	1	9940	3	8463	3	10368	12	9416	7	9147	4
13	X35B349	7569	6	10145	5	10863	10	6097	14	13327	4	8377	5	9396	6	9177	2	12444	5	10810	2	9229	3
14	Bio-237	5045	18	10354	3	11995	6	7749	4	11208	13	8742	4	9182	9	7771	4	17620	1	12695	1	9120	5
15	JH 270	6979	9	8856	16	8861	17	6088	15	11812	9	8348	7	8491	15	9241	1	10175	14	9708	6	8181	13
	CHECKS																						
16	BULAND	5083	17	7890	18	7923	18	6261	13	8930	18	6412	16	7083	18	7732	6	10194	13	8963	12	7855	17
17	SEEDTECH 2324	7347	7	9348	13	10715	11	7284	7	12673	7	8312	8	9280	7	6011	17	12282	6	9146	10	8884	6
18	BIO 9681	6507	12	9274	14	10049	13	8046	3	11143	14	5855	18	8479	16	6685	14	7236	18	6960	18	8063	15
	Location Mean	**7053**		**9572**		**11133**		**6910**		**11986**		**7802**		**9076**		**7289**		**11332**		**9311**		**8627**	
	Mean Stand	30		30		30		30		30		30		30		30		30		30		30	
	C.D. (5%)	1760		1312		997		537		911		1954		1245		1413		1062		1238		1131	
	C.V. (%)	15.02		8.25		5.39		4.68		4.57		15.07		-		11.67		5.64		-		-	
	F (Prob)	0		0.018		0		0		0		0.02				0		0					
	Plot Size	12		12		12		11.2		9.6		9.6		-		12		9.6		-		-	
	AGRONOMY DATA																						
	Sowing Date	11-12		25-11		22-12		27-11		7-12		20-12		-		29-11		22-11		-		-	
	Harvest Date	19-04		26-03		1-06		26-04		4-04		22-04		-		7-05		25-04		-		-	
	Irrigation Nos	8		8		-		6		10		11		-		6		9		-		-	
	Ferilizer Applied N	150		240		120		150		150		200		-		150		120		-		-	
	Ferilizer Applied P	75		80		60		75		75		75		-		80		50		-		-	
	Ferilizer Applied K	37.5		80		40		40		75		75		-		-		-		-		-	

TABLE No.4 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE BULAND																					
		ZN 2									ZN 3								ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	BP-001	-	-	-	-	-	-	-	0.8	4.9	-	-	33.2	8.5	23.2	-	26.4	8.7	16.3	-	-	-	-
2	BP-003	8.8	3.7	-	-	-	-	7.7	-	-	6.7	3.3	68.5	21.9	22.4	-	28.8	12.6	23.7	-	-	-	3.1
3	BP-007	0.9	-	-	-	-	-	15.3	-	22.5	3.5	5.3	19.8	26	24.1	35.4	34.1	19.5	27	-	13.6	-	2
4	BP-008	4.4	-	-	-	-	-	44.5	-	22.5	7.1	14.9	87.1	23	28.6	-	20.4	26.5	27.7	-	-	-	8.8
5	HTMH 5105	3.6	-	2.7	-	-	-	23.3	-	6.3	-	1.4	6.5	21.3	55.4	2.6	30.8	9.1	23.3	-	26.3	1.3	6.1
6	PRO-385	8.2	4.5	11.7	-	-	-	32.5	-	1.5	7.2	6.8	78.9	23.2	45.3	19.1	46.1	19.1	37.6	-	16.4	2.6	12.7
7	KMH-7148	14.8	7.2	14.2	26.8	-	4.6	72.2	-	6.9	29	22.5	38.7	31.1	40.3	44.6	54.9	42	42.3	-	23.1	9.6	23.6
8	Bisco X 5141	11.9	-	-	-	-	-	15.5	-	10.4	23	11.6	35.3	18.6	64.6	1	45.8	37	35.1	0.2	16.3	9.3	9.4
9	NMH-1247	14.5	14.6	-	32.9	-	5.4	31.4	-	-	34.4	12.3	61.7	33.4	78.5	5.9	61.4	30.4	46.6	-	33.7	15	23.5
10	KH-3479	-	-	-	-	-	-	20.6	-	11.9	6.8	4.3	11.4	20.9	49.5	5.6	51.2	27.8	30.3	-	5	-	9.1
11	B-54	19.2	12.1	-	16.3	-	3.3	16.7	-	15.5	12.9	7.3	26	31.5	57.8	3.6	18.3	-	23.4	-	12.1	2.2	11.4
12	A 7501	13.5	-	-	-	-	-	32.5	-	-	13.8	8.8	72.5	16.2	77.2	17.3	24.1	44.1	40.3	9.5	1.7	5.1	16.4
13	X35B349	20.2	-	10.1	-	-	-	40.3	-	38.4	21.5	19.5	48.9	28.6	37.1	-	49.2	30.6	32.7	18.7	22.1	20.6	17.5
14	Bio-237	33.6	-	-	-	-	-	37	-	31.6	17.7	18.9	-	31.2	51.4	23.8	25.5	36.3	29.6	0.5	72.8	41.6	16.1
15	JH 270	17.2	-	-	10.4	-	-	-	-	15.5	-	-	37.3	12.2	11.8	-	32.3	30.2	19.9	19.5	-	8.3	4.2
	CHECKS																						
16	BULAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	SEEDTECH 2324	-	-	-	13.1	-	0.9	40	-	-	11.2	5.5	44.5	18.5	35.2	16.3	41.9	29.6	31	-	20.5	2	13.1
18	BIO 9681	-	-	-	-	-	-	4.1	-	7.8	12.9	1.7	28	17.5	26.8	28.5	24.8	-	19.7	-	-	-	2.7

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : DELH 22.5 %: LUDH 20.7 %

TABLE No.4 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE SEEDTECH 2324																						
		ZN 2									ZN 3								ZN 4			ZN 5	OV'L	
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN	
1	BP-001	9	-	-	-	-	-	-	20.5	26.1	-	-	-	-	-	-	-	-	-	21.6	-	-	-	
2	BP-003	20.4	4.6	-	-	-	-	-	18.8	17.8	-	-	16.5	2.9	-	-	-	-	-	27.4	-	-	-	
3	BP-007	11.6	-	-	-	-	-	-	6.7	47.3	-	-	-	6.3	-	16.4	-	-	-	1.9	-	-	-	
4	BP-008	15.5	-	-	-	-	-	3.2	11.3	47.3	-	8.9	29.4	3.8	-	-	-	-	-	28.1	-	-	-	
5	HTMH 5105	14.7	-	13.6	-	-	-	-	-	27.8	-	-	-	2.4	14.9	-	-	-	-	-	4.8	-	-	
6	PRO-385	19.7	5.4	23.6	-	-	-	-	4.9	22.1	-	1.2	23.8	4	7.4	2.4	3	-	5	8.6	-	0.5	-	
7	KMH-7148	27.1	8.1	26.4	12.1	-	3.7	23	0.1	28.5	16	16.1	-	10.6	3.7	24.3	9.1	9.5	8.6	18.1	2.2	7.4	9.2	
8	Bisco X 5141	23.8	-	9.8	-	-	-	-	17.9	32.7	10.7	5.8	-	0.1	21.7	-	2.7	5.7	3.1	28.9	-	7.1	-	
9	NMH-1247	26.8	15.6	9.5	17.5	-	4.4	-	13.2	-	20.9	6.5	11.9	12.6	32	-	13.7	0.6	11.9	16.2	11	12.7	9.2	
10	KH-3479	5.3	-	-	-	-	-	-	0.8	34.5	-	-	-	2.1	10.5	-	6.6	-	-	13	-	-	-	
11	B-54	31.9	13	-	2.8	-	2.4	-	7.7	38.8	1.6	1.7	-	11	16.7	-	-	-	-	14.7	-	0.1	-	
12	A 7501	25.7	-	6.6	-	2.9	-	-	10.1	13.7	2.4	3.1	19.4	-	31	0.8	-	11.1	7.1	40.8	-	2.9	3	
13	X35B349	33	-	21.8	-	-	-	0.2	7.8	66.4	9.3	13.3	3	8.5	1.4	-	5.2	0.8	1.3	52.7	1.3	18.2	3.9	
14	Bio-237	47.8	-	6.9	-	-	-	-	17.1	58.3	5.9	12.7	-	10.8	11.9	6.4	-	5.2	-	29.3	43.5	38.8	2.7	
15	JH 270	29.7	-	-	-	-	-	-	-	38.8	-	-	-	-	-	-	-	0.4	-	53.7	-	6.1	-	
	CHECKS																							
16	BULAND	10.7	0.9	10.6	-	9.3	-	-	19.5	20.2	-	-	-	-	-	-	-	-	-	28.6	-	-	-	
17	SEEDTECH 2324	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
18	BIO 9681	-	-	-	-	-	-	-	3.2	29.6	1.6	-	-	-	-	10.5	-	-	-	11.2	-	-	-	

TABLE No. 4 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE BIO 9681																						
		ZN 2									ZN 3								ZN 4				ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	BP-001	11.3	3.2	-	-	-	-	-	16.8	-	-	-	4.1	-	-	-	1.3	19.1	-	9.3	17.1	13.4	-
2	BP-003	22.9	12.7	1.3	-	-	-	3.5	15.1	-	-	1.6	31.6	3.7	-	-	3.2	23.3	3.4	14.5	18.9	16.8	0.4
3	BP-007	14	-	-	-	-	-	10.7	3.4	13.6	-	3.5	-	7.2	-	5.3	7.5	30.8	6.1	-	60.1	27.2	-
4	BP-008	17.9	-	4.5	-	-	-	38.8	7.8	13.6	-	13	46.1	4.7	1.4	-	-	38.6	6.6	15.1	39.6	27.9	6
5	HTMH 5105	17.1	3.7	21.2	-	-	-	18.4	-	-	-	-	-	3.2	22.5	-	4.8	19.4	3	-	78	30.5	3.4
6	PRO-385	22.2	13.6	31.8	-	-	-	27.3	1.6	-	-	5	39.7	4.9	14.5	-	17.1	30.4	14.9	-	64	32.1	9.8
7	KMH-7148	29.7	16.5	34.8	28.3	-	11.8	65.5	-	-	14.2	20.5	8.3	11.5	10.6	12.5	24.1	55.5	18.9	6.2	73.4	41.1	20.4
8	Bisco X 5141	26.4	-	17.1	-	-	-	10.9	14.3	2.4	9	9.7	5.7	0.9	29.8	-	16.8	50.1	12.8	15.9	63.8	40.8	6.6
9	NMH-1247	29.4	24.5	16.8	34.5	-	12.6	26.3	9.7	-	19.1	10.4	26.3	13.5	40.8	-	29.3	42.8	22.4	4.5	88.4	48.1	20.3
10	KH-3479	7.5	3.2	-	-	-	-	15.9	-	3.7	-	2.6	-	2.9	17.9	-	21.2	40	8.8	1.6	47.9	25.7	6.3
11	B-54	34.7	21.7	-	17.7	-	10.4	12.1	4.4	7.1	0	5.5	-	11.9	24.5	-	-	4.3	3.1	3.1	57.9	31.6	8.5
12	A 7501	28.3	-	13.7	1	4.4	1.8	27.3	6.7	-	0.8	6.9	34.8	-	39.7	-	-	57.8	17.2	26.6	43.3	35.3	13.4
13	X35B349	35.8	6.4	29.9	0.5	-	-	34.8	4.5	28.4	7.6	17.5	16.3	9.4	8.1	-	19.6	43.1	10.8	37.3	72	55.3	14.5
14	Bio-237	50.9	-	14	-	-	-	31.6	13.5	22.1	4.3	16.9	-	11.6	19.4	-	0.6	49.3	8.3	16.2	143.5	82.4	13.1
15	JH 270	32.4	-	3	11.7	-	-	-	-	7.1	-	-	7.3	-	-	-	6	42.6	0.1	38.2	40.6	39.5	1.5
	CHECKS																						
16	BULAND	13	8.6	18	1.2	10.9	6.9	-	15.8	-	-	-	-	-	-	-	-	9.5	-	15.7	40.9	28.8	-
17	SEEDTECH 2324	2.1	7.7	6.6	14.5	1.5	7.8	34.5	-	-	-	3.7	12.9	0.8	6.6	-	13.7	42	9.4	-	69.7	31.4	10.2
18	BIO 9681	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No. 4 (Cont..)

		MOISTURE % AT HARVEST																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	BP-001	28.4	27.8	25.0	23.0	14.0	23.6	23.9	21.5	17.8	30.3	23.4	31.8	18.7	10.0	15.9	26.2	15.8	19.7	18.1	20.0	19.1	21.6
2	BP-003	27.7	29.0	26.9	26.0	14.3	24.8	23.3	15.4	18.7	33.1	22.6	25.4	18.7	8.8	16.4	24.5	17.3	18.5	17.4	19.9	18.7	21.3
3	BP-007	29.4	29.1	25.7	24.4	15.0	24.7	26.3	23.1	19.5	34.2	25.8	27.5	16.6	10.0	16.8	25.2	17.5	18.9	16.9	21.6	19.2	22.3
4	BP-008	19.9	27.2	23.4	22.0	15.0	21.5	24.1	23.4	20.1	32.4	25.0	29.3	14.6	10.1	18.1	27.0	16.6	19.3	17.9	19.5	18.7	21.2
5	HTMH 5105	25.0	29.9	27.8	29.5	14.3	25.3	26.5	21.1	20.8	33.8	25.5	28.7	16.7	9.2	15.8	27.5	16.5	19.0	18.3	23.5	20.9	22.6
6	PRO-385	23.8	28.2	26.4	26.3	15.0	23.9	25.3	22.5	18.5	32.6	24.7	31.9	18.7	15.4	15.7	26.3	17.6	20.9	17.5	18.4	17.9	22.3
7	KMH-7148	23.6	30.0	27.2	28.9	15.0	24.9	27.0	23.7	20.2	33.2	26.0	28.9	16.1	10.0	16.0	26.2	15.7	18.8	18.3	23.2	20.8	22.5
8	Bisco X 5141	25.8	29.7	24.7	22.3	14.0	23.3	24.6	20.9	18.3	33.4	24.3	28.8	15.0	13.0	16.8	25.2	16.3	19.2	17.7	17.1	17.4	21.4
9	NMH-1247	22.9	28.2	25.5	19.0	14.0	21.9	25.5	19.3	18.7	30.4	23.5	24.7	14.3	9.0	16.4	24.0	18.8	17.9	18.0	17.2	17.6	20.3
10	KH-3479	31.8	27.4	26.5	23.3	12.0	24.2	25.2	19.7	19.1	34.4	24.6	27.0	18.0	10.8	17.0	26.6	14.7	19.0	17.5	19.3	18.4	21.8
11	B-54	21.4	26.9	22.8	17.4	14.3	20.5	25.2	19.6	18.7	26.9	22.6	24.3	16.4	10.2	17.3	19.9	17.8	17.6	17.5	17.3	17.4	19.6
12	A 7501	26.8	27.7	24.6	23.3	14.0	23.3	25.9	20.9	20.7	34.0	25.4	25.3	19.4	9.1	16.7	26.6	18.0	19.2	16.9	19.2	18.0	21.7
13	X35B349	23.6	28.0	24.4	23.6	15.0	22.9	26.2	22.9	19.0	30.8	24.7	29.4	17.9	10.8	17.2	26.2	17.1	19.8	17.7	18.0	17.8	21.6
14	Bio-237	24.9	28.7	26.6	22.4	15.0	23.5	26.0	20.1	19.4	33.4	24.7	23.6	18.6	10.1	15.7	24.3	18.1	18.4	18.0	16.5	17.2	21.2
15	JH 270	24.3	27.1	26.4	22.8	14.0	22.9	25.1	17.7	20.8	32.4	24.0	28.8	17.9	13.0	16.7	24.9	18.5	20.0	17.7	19.4	18.5	21.6
	CHECKS																						
16	BULAND	16.9	29.4	24.5	23.7	14.0	21.7	23.9	23.2	20.2	28.4	23.9	28.9	14.5	12.9	17.3	21.8	15.8	18.5	18.8	20.7	19.8	20.9
17	SEEDTECH 2324	19.2	29.7	26.4	27.3	12.0	22.9	26.2	23.7	19.2	33.6	25.7	26.2	16.7	8.7	16.4	27.0	17.6	18.7	17.4	21.9	19.6	21.7
18	BIO 9681	28.9	27.0	27.8	23.7	14.3	24.3	26.9	18.1	19.4	28.6	23.2	22.7	15.6	8.0	16.1	23.8	19.0	17.5	16.9	19.8	18.4	21.0
	Loc. Mean	**24.7**	**28.4**	**25.7**	**23.8**	**14.2**	**23.3**	**25.4**	**20.9**	**19.4**	**32.0**	**24.4**	**27.4**	**16.9**	**10.5**	**16.6**	**25.2**	**17.1**	**18.9**	**17.7**	**19.6**	**18.6**	**21.5**
	C.D. (5%)	4.80	1.00	3.15	4.36	0.69	2.78	0.93	2.84	0.00	0.50	2.32	3.78	2.73	0.44	0.00	0.73	2.24	1.97	0.75	3.30	2.99	1.24
	C.V. (%)	11.73	2.12	7.38	11.03	2.95	9.45	2.21	8.19	0.00	0.95	6.70	8.32	9.75	2.54	0.00	1.74	7.89	9.08	2.57	10.17	7.62	8.58
	F (Prob)	0.00	0.00	0.08	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.02	0.14	0.00	0.00	0.37	0.00

Table No.4 (Cont..)

S.No.	PEDIGREE	GRAIN SHELLING %																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	BP-001	86.0	77.1	84.0	78.4	74.7	80.0	75.9	82.5	80.9	76.5	78.9	83.5	72.7	83.7	78.9	73.4	72.5	77.4	73.0	81.4	77.2	78.5
2	BP-003	85.0	80.0	83.0	79.8	75.7	80.7	77.9	82.5	78.9	77.5	79.2	83.0	73.4	85.9	79.5	75.1	77.0	79.0	76.3	83.6	79.9	79.6
3	BP-007	85.0	80.1	84.5	78.5	76.7	80.9	79.8	82.0	80.5	79.8	80.5	83.4	75.6	85.5	82.2	77.9	78.5	80.5	73.7	83.8	78.7	80.4
4	BP-008	81.0	78.7	82.5	81.9	76.3	80.1	82.4	80.5	79.4	77.8	80.0	83.9	74.9	83.2	80.6	76.2	75.5	79.0	75.3	84.2	79.7	79.7
5	HTMH 5105	82.0	77.2	83.0	77.7	75.0	79.0	75.8	80.5	77.8	78.0	78.0	79.8	76.8	86.1	83.2	73.8	79.7	79.9	74.3	74.9	74.6	78.5
6	PRO-385	85.0	79.0	82.5	84.0	75.0	81.1	76.1	83.0	80.2	76.3	78.9	83.1	74.8	84.8	80.7	75.2	79.0	79.6	72.7	83.6	78.1	79.7
7	KMH-7148	85.0	78.3	82.0	80.7	75.3	80.2	83.2	78.5	79.1	81.8	80.6	83.4	76.0	85.0	83.4	79.8	77.9	80.9	69.1	84.3	76.7	80.1
8	Bisco X 5141	83.0	77.8	83.0	77.3	77.3	79.7	76.0	86.5	79.8	76.8	79.8	83.0	74.7	84.6	81.3	76.7	76.5	79.5	74.9	79.9	77.4	79.4
9	NMH-1247	84.0	80.0	83.5	81.5	75.7	80.9	77.1	80.0	78.4	80.8	79.1	83.6	76.9	86.1	81.2	79.1	82.0	81.5	73.8	85.5	79.6	80.5
10	KH-3479	83.0	78.8	83.0	78.4	75.0	79.6	77.4	77.5	79.0	77.5	77.9	82.0	75.1	85.7	79.3	77.6	77.4	79.5	78.6	83.7	81.1	79.3
11	B-54	87.0	78.1	82.5	87.4	74.3	81.9	75.6	75.5	80.4	78.8	77.6	83.2	76.3	86.6	82.4	77.6	76.5	80.4	71.9	86.5	79.2	80.0
12	A 7501	86.0	78.2	83.5	86.7	78.0	82.5	82.0	86.0	80.6	80.0	82.2	82.4	76.9	87.8	81.5	82.4	82.5	82.2	77.2	85.8	81.5	82.2
13	X35B349	84.0	77.1	82.0	84.1	76.0	80.6	79.2	81.5	80.9	76.8	79.6	81.6	76.3	85.1	81.2	80.5	79.3	80.7	73.9	83.5	78.7	80.2
14	Bio-237	86.0	76.9	83.0	81.7	74.0	80.3	79.9	79.0	79.5	78.0	79.1	84.3	77.0	90.8	82.3	79.5	84.2	83.0	77.7	87.9	82.8	81.3
15	JH 270	86.0	78.6	84.0	78.7	73.3	80.1	74.6	78.5	78.5	76.3	77.0	82.4	74.2	82.3	82.5	75.4	80.5	79.5	73.8	79.1	76.5	78.7
	CHECKS																						
16	BULAND	83.0	77.9	81.5	75.8	74.0	78.4	69.1	82.5	78.2	76.0	76.5	83.5	73.0	82.9	81.6	74.3	80.3	79.3	73.8	85.6	79.7	78.4
17	SEEDTECH 2324	83.0	77.6	84.5	81.2	74.3	80.1	78.1	83.5	80.3	78.3	80.0	83.3	77.0	85.0	82.4	79.9	79.0	81.1	72.5	84.6	78.5	80.3
18	BIO 9681	81.0	78.8	82.0	79.3	75.7	79.3	79.2	80.5	79.8	78.5	79.5	83.8	76.0	85.8	80.8	77.6	76.2	80.0	72.0	85.6	78.8	79.5
	Loc. Mean	**84.2**	**78.3**	**83.0**	**80.7**	**75.4**	**80.3**	**77.7**	**81.1**	**79.6**	**78.1**	**79.1**	**82.9**	**75.4**	**85.4**	**81.4**	**77.3**	**78.6**	**80.2**	**74.1**	**83.5**	**78.8**	**79.8**
	C.D. (5%)	-	0.89	1.98	3.06	2.84	2.18	1.41	6.35	-	1.02	3.14	3.79	2.33	0.85	0.00	0.80	3.45	1.81	1.88	5.97	5.58	1.31
	C.V. (%)	-	0.68	1.44	2.28	2.27	2.16	1.10	4.72	-	0.78	2.79	2.76	1.86	0.60	0.00	0.63	2.65	1.97	1.53	4.31	3.35	2.43
	F (Prob)	-	0.00	0.12	0.00	0.15	0.10	0.00	0.12	0.00	0.00	0.10	0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.42	0.00

Table No.4 (Cont..)

		STAND AT HARVEST ('000/ha)																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	BP-001	68.9	62.5	37.0	62.8	67.7	65.5	59.4	54.4	69.1	76.4	64.8	59.4	50.6	57.8	59.2	66.0	55.6	58.1	47.8	74.0	60.9	62.0
2	BP-003	75.6	62.2	81.5	63.6	65.6	66.8	62.5	62.8	67.7	79.9	68.2	65.8	56.4	60.6	58.3	66.3	61.1	61.4	51.9	73.6	62.8	64.6
3	BP-007	67.8	61.7	62.5	52.2	67.4	62.3	59.0	61.9	67.7	82.3	67.7	57.5	49.4	57.2	59.2	66.0	60.8	58.4	47.8	80.6	64.2	62.4
4	BP-008	74.4	62.5	67.1	63.3	69.4	67.4	66.0	58.9	66.7	78.5	67.5	70.0	43.6	55.3	62.2	66.3	55.6	58.8	54.2	66.0	60.1	63.3
5	HTMH 5105	80.0	62.8	84.7	64.4	70.5	69.4	66.3	56.7	69.4	78.1	67.6	68.3	52.2	58.9	58.3	66.0	56.3	60.0	48.1	78.8	63.4	64.7
6	PRO-385	77.8	61.1	88.0	66.7	69.1	68.7	61.5	61.7	68.8	77.1	67.2	64.4	54.7	56.7	59.5	66.0	59.7	60.2	64.4	76.0	70.2	65.3
7	KMH-7148	78.9	61.1	86.6	59.7	66.3	66.5	67.4	64.4	68.4	75.7	69.0	63.1	52.2	53.9	58.0	66.0	53.8	57.8	49.2	67.0	58.1	62.8
8	Bisco X 5141	76.7	61.1	85.2	66.7	66.7	67.8	62.8	61.9	68.4	79.5	68.2	61.9	46.9	61.4	58.0	66.0	59.7	59.0	52.5	65.6	59.1	63.5
9	NMH-1247	80.0	60.3	81.5	66.7	69.8	69.2	67.4	65.8	69.4	76.7	69.8	64.7	54.7	59.7	58.3	66.3	59.4	60.5	47.8	60.8	54.3	64.2
10	KH-3479	72.2	62.5	63.4	60.8	70.5	66.5	64.9	50.8	68.8	77.1	65.4	58.9	51.4	61.1	59.2	66.0	56.6	58.9	51.7	75.7	63.7	63.0
11	B-54	75.6	60.6	81.0	64.7	68.8	67.4	62.2	59.2	68.8	79.9	67.5	60.8	50.3	57.8	56.3	66.3	57.6	58.2	54.2	71.9	63.0	63.4
12	A 7501	76.7	61.1	84.7	66.7	66.0	67.6	64.6	52.8	69.8	81.6	67.2	66.9	55.8	63.1	59.2	66.0	59.0	61.7	49.2	69.1	59.1	64.2
13	X35B349	78.9	61.7	86.6	66.7	68.8	69.0	66.3	56.9	69.4	78.8	67.9	67.2	56.9	59.4	59.5	66.0	57.6	61.1	53.3	70.1	61.7	64.9
14	Bio-237	77.8	61.9	74.1	61.9	69.1	67.7	67.4	64.7	68.8	79.9	70.2	55.8	51.9	58.6	56.8	66.0	59.4	58.1	50.0	70.1	60.1	63.8
15	JH 270	75.6	62.2	75.9	64.7	70.8	68.3	59.7	60.8	69.1	80.6	67.6	66.9	51.7	59.7	60.1	66.3	59.0	60.6	53.3	67.4	60.3	64.3
	CHECKS																						
16	BULAND	74.4	62.8	86.1	62.5	66.7	66.6	60.1	61.4	67.7	80.9	67.5	65.6	52.8	59.4	63.7	66.0	58.7	61.0	49.7	73.3	61.5	64.1
17	SEEDTECH 2324	78.9	61.7	80.1	61.7	69.4	67.9	67.4	64.2	68.1	75.3	68.7	58.9	50.8	58.6	59.8	66.0	54.9	58.2	46.4	74.3	60.3	63.5
18	BIO 9681	72.2	60.8	81.5	64.2	67.0	66.1	60.4	57.8	67.7	82.3	67.0	53.6	47.2	51.4	60.1	65.6	55.6	55.6	49.7	66.0	57.8	61.4
	Loc. Mean	**75.7**	**61.7**	**77.1**	**63.3**	**68.3**	**67.3**	**63.6**	**59.8**	**68.5**	**78.9**	**67.7**	**62.8**	**51.7**	**58.4**	**59.2**	**66.0**	**57.8**	**59.3**	**51.2**	**71.1**	**61.1**	**63.6**
	C.D. (5%)	10.35	2.14	26.82	4.71	2.20	3.41	3.36	8.50	2.52	5.78	4.22	10.43	6.23	5.12	2.66	0.99	6.38	2.98	7.75	6.54	9.68	2.10
	C.V. (%)	8.24	2.09	20.97	4.48	1.94	3.57	3.19	8.56	2.21	4.42	4.39	10.02	7.27	5.29	2.71	0.90	6.65	4.37	9.13	5.54	7.50	4.74
	F (Prob)	0.51	0.40	0.06	0.00	0.00	0.04	0.00	0.03	0.61	0.33	0.73	0.11	0.01	0.01	0.00	0.99	0.53	0.01	0.02	0.00	0.45	0.02

Locations Rejected due to High C.V.(i.e.> 20%) : LUDHIANA 21.0%

Table No.4 (Cont..)

S.No.	PEDIGREE	DAYS TO 50% POLLEN SHED																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	BP-001	132.3	146.3	127.7	133.3	96.3	127.2	129.3	124.3	71.3	117.3	110.6	82.3	65.3	72.0	67.7	60.3	57.3	67.5	102.7	94.7	98.7	98.9
2	BP-003	134.0	141.3	129.3	133.3	95.7	126.7	133.3	125.3	74.3	116.7	112.4	78.7	66.7	70.0	72.3	60.7	56.7	67.5	100.0	96.7	98.3	99.1
3	BP-007	132.3	147.0	127.3	131.0	87.3	125.0	130.7	126.3	73.3	117.0	111.8	75.3	65.3	72.0	70.3	60.0	60.0	67.2	99.7	96.0	97.8	98.3
4	BP-008	129.7	145.7	128.3	129.7	96.0	125.9	129.0	124.3	71.3	116.7	110.3	78.3	67.0	70.0	72.0	61.7	57.7	67.8	101.7	96.0	98.8	98.5
5	HTMH 5105	128.3	148.7	127.3	133.0	95.3	126.5	130.0	125.7	73.0	117.7	111.6	79.3	67.3	75.0	69.3	64.7	55.0	68.4	100.7	96.0	98.3	99.2
6	PRO-385	126.0	142.3	124.0	125.0	97.7	123.0	126.0	128.3	71.0	112.0	109.3	77.7	65.3	74.3	67.7	62.3	54.3	66.9	100.3	95.7	98.0	97.1
7	KMH-7148	123.3	146.0	125.3	129.3	103.3	125.5	124.7	125.7	73.0	111.3	108.7	76.3	65.3	69.7	68.0	60.3	55.3	65.8	103.0	91.3	97.2	97.1
8	Bisco X 5141	129.7	146.3	125.7	126.3	100.0	125.6	130.3	125.0	71.3	113.3	110.0	80.7	65.7	72.7	68.7	60.7	57.3	67.6	102.0	96.3	99.2	98.4
9	NMH-1247	127.3	135.7	127.3	126.3	94.7	122.3	128.3	124.3	74.0	113.3	110.0	77.0	65.3	71.3	69.0	58.0	56.3	66.2	100.7	93.0	96.8	96.6
10	KH-3479	127.0	146.7	126.3	133.3	96.0	125.9	127.7	126.3	71.0	114.0	109.8	81.7	65.0	72.3	67.0	60.7	55.3	67.0	103.0	90.0	96.5	97.8
11	B-54	126.3	144.3	126.7	127.3	96.3	124.2	125.3	123.7	70.3	111.3	107.7	78.7	66.0	71.0	67.7	58.0	54.0	65.9	99.0	91.3	95.2	96.3
12	A 7501	130.0	146.0	125.7	125.7	90.3	123.5	127.3	127.3	72.0	113.3	110.0	78.0	66.7	73.3	67.7	61.0	57.7	67.4	101.3	97.3	99.3	97.7
13	X35B349	130.7	144.0	127.0	125.7	93.7	124.2	128.7	124.7	72.0	115.7	110.3	80.7	65.7	73.0	69.7	59.0	57.0	67.5	101.0	97.0	99.0	97.9
14	Bio-237	128.0	136.0	127.0	128.7	96.0	123.1	128.7	124.0	71.3	113.3	109.3	77.0	65.7	71.0	67.7	62.7	57.0	66.8	101.3	88.7	95.0	96.7
15	JH 270	132.7	147.3	129.7	136.0	97.3	128.6	130.7	123.7	74.3	118.7	111.8	82.7	67.3	74.3	74.0	63.7	60.0	70.3	101.3	96.7	99.0	100.6
	CHECKS																						
16	BULAND	129.7	146.0	127.3	130.3	86.7	124.0	130.7	122.7	71.0	117.0	110.3	80.0	67.0	70.0	71.3	60.0	57.0	67.6	101.7	97.3	99.5	98.0
17	SEEDTECH 2324	124.0	144.7	125.7	133.0	91.0	123.7	126.7	125.0	72.3	113.3	109.3	77.3	65.0	70.7	66.7	61.7	54.3	65.9	102.0	90.0	96.0	96.7
18	BIO 9681	126.0	144.7	124.3	127.0	94.7	123.3	125.0	128.0	69.0	111.0	108.3	75.7	64.3	70.3	64.0	57.0	52.7	64.0	102.3	88.0	95.2	95.5
	Loc. Mean	**128.7**	**144.4**	**126.8**	**129.7**	**94.9**	**124.9**	**128.5**	**125.3**	**72.0**	**114.6**	**110.1**	**78.7**	**65.9**	**71.8**	**68.9**	**60.7**	**56.4**	**67.1**	**101.3**	**94.0**	**97.7**	**97.8**
	C.D. (5%)	5.32	1.55	4.59	4.69	5.16	3.88	1.92	3.18	1.52	1.67	2.54	4.80	1.48	1.35	2.32	1.08	2.67	1.75	0.87	5.03	5.59	1.47
	C.V. (%)	2.49	0.65	2.18	2.18	3.28	2.46	0.90	1.53	1.28	0.88	1.63	3.67	1.35	1.13	2.03	1.07	2.85	2.28	0.52	3.23	2.71	2.22
	F (Prob)	0.01	0.00	0.58	0.00	0.00	0.11	0.00	0.05	0.00	0.00	0.03	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.00

Table No.4 (Cont..)

		DAYS TO 50% SILKING																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	BP-001	133.7	148.7	130.3	136.3	100.0	129.8	131.3	126.3	73.7	120.3	112.9	84.0	67.7	73.0	70.7	62.3	59.7	69.6	105.7	98.0	101.8	101.3
2	BP-003	135.3	144.0	132.7	136.7	99.0	129.5	135.3	127.3	76.3	120.3	114.8	81.7	70.7	71.0	74.7	63.0	59.3	70.1	103.0	100.7	101.8	101.8
3	BP-007	134.0	149.3	130.0	134.3	91.0	127.7	132.7	128.7	76.0	120.7	114.5	78.7	68.0	73.0	73.3	62.0	60.3	69.2	102.7	100.7	101.7	100.9
4	BP-008	133.7	148.0	131.3	133.0	99.3	129.1	131.0	126.3	74.0	120.7	113.0	83.0	70.3	71.0	75.0	64.0	60.0	70.6	104.7	100.0	102.3	101.5
5	HTMH 5105	130.3	151.7	130.7	136.3	98.7	129.5	132.0	127.7	76.0	118.0	113.4	83.7	71.0	76.0	73.7	67.0	59.7	71.8	103.7	101.3	102.5	102.2
6	PRO-385	128.3	144.7	126.7	128.7	102.7	126.2	128.0	130.3	74.0	117.3	112.4	81.7	68.0	75.0	71.7	64.3	58.3	69.8	103.3	99.7	101.5	100.2
7	KMH-7148	125.0	148.3	129.0	132.3	107.0	128.3	126.7	127.7	76.0	115.0	111.3	80.3	68.0	70.7	71.0	62.3	57.7	68.3	106.0	95.0	100.5	99.9
8	Bisco X 5141	132.3	149.0	128.3	129.7	104.3	128.7	132.3	127.0	74.7	117.3	112.8	84.0	68.3	73.3	72.3	62.7	60.0	70.1	105.0	101.0	103.0	101.3
9	NMH-1247	129.0	138.0	130.0	129.0	99.0	125.0	130.3	126.3	76.3	116.7	112.4	78.0	68.0	72.3	71.7	60.7	58.7	68.2	103.7	96.3	100.0	99.1
10	KH-3479	129.0	149.3	128.7	136.7	99.7	128.7	133.0	128.7	74.3	118.3	113.6	79.3	67.0	73.3	70.3	63.0	58.0	68.5	106.0	94.0	100.0	100.5
11	B-54	129.0	147.0	129.3	131.0	100.3	127.3	127.3	125.7	73.0	116.3	110.6	80.0	68.3	72.0	70.7	60.3	56.7	68.0	102.0	95.3	98.7	99.1
12	A 7501	133.7	148.3	128.3	129.7	94.7	126.9	129.3	129.3	74.3	118.3	112.8	81.0	70.3	74.3	71.0	63.0	61.7	70.2	104.3	101.3	102.8	100.8
13	X35B349	133.0	146.3	129.7	129.3	97.7	127.2	130.7	127.0	74.3	119.3	112.8	83.7	68.7	73.3	72.7	61.3	59.7	69.9	104.0	101.3	102.7	100.7
14	Bio-237	129.7	138.7	129.7	132.0	100.0	126.0	130.7	126.0	73.7	117.0	111.8	78.7	67.7	72.0	71.0	66.0	60.0	69.2	104.3	93.0	98.7	99.4
15	JH 270	134.7	150.3	132.7	139.0	101.3	131.6	132.7	125.7	77.0	121.7	114.3	85.0	70.7	75.3	77.0	65.7	62.0	72.6	104.3	109.3	106.8	103.8
	CHECKS																						
16	BULAND	130.7	148.7	130.3	133.3	91.3	126.9	132.7	124.7	73.7	120.0	112.8	83.0	70.3	71.0	73.7	62.3	60.0	70.1	104.7	101.3	103.0	100.7
17	SEEDTECH 2324	125.7	147.0	130.0	136.3	95.0	126.8	128.7	127.0	75.0	117.0	111.9	79.3	68.0	71.7	70.0	63.7	58.3	68.5	105.0	93.3	99.2	99.5
18	BIO 9681	127.3	147.0	127.0	130.0	98.3	125.9	127.0	130.0	71.3	114.3	110.7	79.7	67.0	71.3	67.0	59.0	54.7	66.4	105.3	91.3	98.3	98.1
	Loc. Mean	**130.8**	**146.9**	**129.7**	**133.0**	**98.9**	**127.8**	**130.6**	**127.3**	**74.6**	**118.3**	**112.7**	**81.4**	**68.8**	**72.8**	**72.1**	**62.9**	**59.1**	**69.5**	**104.3**	**98.5**	**101.4**	**100.6**
	C.D. (5%)	5.26	1.34	4.20	4.75	5.03	3.91	2.68	3.21	1.72	2.57	2.46	5.65	2.08	1.13	2.28	1.12	1.89	1.56	0.87	7.76	7.17	1.50
	C.V. (%)	2.43	0.55	1.95	2.15	3.07	2.42	1.24	1.52	1.39	1.31	1.53	4.19	1.82	0.94	1.90	1.07	1.93	1.96	0.50	4.75	3.35	2.20
	F (Prob)	0.00	0.00	0.30	0.00	0.00	0.13	0.00	0.05	0.00	0.00	0.04	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.71	0.00

Table No.4 (Cont..)

S.No.	PEDIGREE	DAYS TO 75% DRY HUSK				ZN 2				ZN 3								ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	BP-001	178.7	181.0	167.3	143.7	167.7	159.3	173.7	83.0	152.7	142.2	121.7	102.7	105.7	106.0	102.7	113.0	108.6	134.7	131.7	133.2	134.8
2	BP-003	180.3	180.3	167.0	144.7	168.1	161.3	172.0	119.3	153.0	151.4	121.3	105.7	104.0	110.0	102.3	113.3	109.4	134.7	136.0	135.3	137.8
3	BP-007	175.7	187.3	166.3	137.7	166.8	157.3	172.7	116.7	152.7	149.8	116.3	103.0	105.7	108.3	102.0	113.7	108.2	132.7	135.3	134.0	136.5
4	BP-008	175.7	181.7	166.3	134.0	164.4	156.0	172.3	117.0	152.7	149.5	119.0	105.3	104.3	106.3	103.3	112.7	108.5	136.0	130.7	133.3	135.8
5	HTMH 5105	176.7	187.3	165.0	136.7	166.4	159.3	173.7	117.3	155.3	151.4	117.7	106.0	109.3	106.3	107.0	112.3	109.8	131.0	131.7	131.3	137.0
6	PRO-385	174.7	175.7	164.0	136.3	162.7	155.7	169.3	116.0	152.3	148.3	117.7	103.0	108.3	106.0	104.0	113.0	108.7	134.3	131.3	132.8	135.1
7	KMH-7148	177.7	183.7	166.7	129.0	164.3	159.3	173.0	121.3	153.0	151.7	117.0	103.0	103.7	110.3	102.3	112.7	108.2	136.0	129.7	132.8	136.1
8	Bisco X 5141	180.0	188.0	165.0	134.3	166.8	155.7	171.7	116.0	152.3	148.9	120.7	103.3	106.3	105.7	102.7	112.0	108.4	135.3	137.0	136.2	136.6
9	NMH-1247	180.3	180.7	165.0	135.3	165.3	155.3	168.0	118.0	151.7	148.3	116.3	103.0	105.7	105.7	100.0	112.7	107.2	134.7	130.0	132.3	135.1
10	KH-3479	180.7	181.0	165.3	137.7	166.2	157.3	171.7	116.0	152.0	149.3	119.0	102.0	106.3	106.7	102.3	112.3	108.1	132.0	127.0	129.5	135.6
11	B-54	179.3	180.3	163.7	141.3	166.2	152.3	170.7	114.7	150.7	147.1	117.3	103.3	105.7	104.3	100.3	113.3	107.4	133.0	129.3	131.2	135.0
12	A 7501	175.3	181.3	166.0	144.3	166.8	157.3	173.0	117.3	153.3	150.3	119.7	105.3	108.3	108.0	103.0	114.3	109.8	134.3	139.0	136.7	137.5
13	X35B349	174.3	178.7	164.0	149.0	166.5	157.7	171.7	116.0	152.7	149.5	121.7	103.7	106.7	105.0	102.0	113.0	108.7	134.0	139.0	136.5	136.8
14	Bio-237	177.7	175.7	164.7	141.7	164.9	156.3	172.0	117.0	153.0	149.6	115.7	102.7	105.3	105.7	105.7	113.7	108.1	135.3	127.3	131.3	135.6
15	JH 270	176.7	186.3	165.0	142.0	167.5	155.7	172.3	118.7	152.0	149.7	121.0	105.7	108.3	105.7	106.0	112.3	109.8	135.3	130.7	133.0	137.1
	CHECKS																					
16	BULAND	181.0	182.3	164.3	145.7	168.3	155.7	171.3	117.0	152.0	149.0	117.3	105.3	104.0	105.3	102.3	113.0	107.9	135.7	109.7	122.7	135.1
17	SEEDTECH 2324	176.7	181.7	165.3	148.0	167.9	156.3	169.3	116.0	151.3	148.3	120.7	103.0	105.0	106.0	103.7	113.3	108.6	135.0	126.0	130.5	136.1
18	BIO 9681	177.7	183.3	163.3	151.3	168.9	152.3	170.0	114.0	150.0	146.6	116.0	102.0	104.3	105.7	98.0	113.3	106.6	135.3	128.3	131.8	135.3
	Loc. Mean	**177.7**	**182.0**	**165.2**	**140.7**	**166.4**	**156.7**	**171.6**	**115.1**	**152.4**	**148.9**	**118.7**	**103.8**	**105.9**	**106.5**	**102.8**	**113.0**	**108.4**	**134.4**	**130.5**	**132.5**	**136.1**
	C.D. (5%)	3.99	1.88	2.62	2.29	5.44	1.77	2.07	22.25	1.40	6.19	6.27	2.08	1.70	2.98	1.01	2.69	1.78	2.75	3.37	10.41	2.40
	C.V. (%)	1.35	0.62	0.95	0.98	2.30	0.68	0.73	11.65	0.55	2.93	3.19	1.21	0.97	1.69	0.59	1.44	1.43	1.23	1.56	3.72	2.53
	F (Prob)	0.01	0.00	0.11	0.00	0.78	0.00	0.00	0.38	0.00	0.48	0.55	0.00	0.00	0.01	0.00	0.98	0.02	0.03	0.00	0.64	0.29

Table No. 4 (Cont..)

S.No.	PEDIGREE	PLANT HEIGHT(cm) DELH	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	BP-001	235	177	197	185	195	198	188	201	171	198	189	179	233	217	227	182	218	209	277	182	230	204
2	BP-003	240	202	228	202	200	214	206	206	162	195	192	212	226	217	222	203	218	216	312	190	251	214
3	BP-007	234	187	213	207	174	203	195	193	165	160	178	179	228	213	236	197	220	212	274	196	235	204
4	BP-008	265	200	227	210	183	217	225	209	183	208	206	202	234	218	227	201	236	220	259	186	222	216
5	HTMH 5105	234	183	232	210	193	210	222	191	164	200	194	195	224	210	212	190	219	208	289	196	242	209
6	PRO-385	224	177	207	177	194	196	206	162	169	168	176	190	222	212	221	191	230	211	276	187	231	201
7	KMH-7148	243	188	220	218	196	213	230	176	151	200	189	180	230	222	213	195	223	210	294	188	241	210
8	Bisco X 5141	225	183	217	183	197	201	199	176	177	178	182	181	216	207	235	210	219	211	267	201	234	204
9	NMH-1247	216	188	215	214	195	206	207	182	156	193	185	190	226	223	225	188	212	211	277	201	239	206
10	KH-3479	214	165	198	194	206	195	179	176	146	165	166	186	218	198	209	175	201	198	275	202	238	194
11	B-54	240	198	228	223	187	215	211	205	176	188	195	184	226	215	231	188	216	210	254	197	225	210
12	A 7501	219	173	190	173	188	189	199	160	158	170	172	197	198	207	227	170	207	201	292	179	235	195
13	X35B349	232	180	232	197	194	207	204	190	183	203	195	199	225	220	220	194	229	214	281	202	242	211
14	Bio-237	267	225	237	231	188	230	229	210	178	213	207	212	218	225	220	210	234	220	294	206	250	223
15	JH 270	250	202	237	213	186	217	212	197	191	200	200	198	243	215	225	211	225	219	301	206	253	218
	CHECKS																						
16	BULAND	239	188	208	225	190	210	201	186	189	183	190	171	229	215	232	198	223	211	287	189	238	209
17	SEEDTECH 2324	238	157	208	206	174	197	200	167	141	185	173	178	218	210	200	189	211	201	221	197	209	194
18	BIO 9681	228	173	220	195	187	201	190	192	174	188	186	183	216	215	223	191	224	209	287	185	236	204
	Loc. Mean	**236**	**186**	**217**	**203**	**190**	**207**	**206**	**188**	**169**	**188**	**188**	**190**	**224**	**214**	**222**	**193**	**220**	**211**	**279**	**194**	**236**	**207**
	C.D. (5%)	24.18	8.35	23.57	31.78	9.22	13.79	25.52	16.85	11.41	-	15.60	16.05	16.40	17.12	27.53	11.39	23.27	9.44	30.15	25.47	33.70	7.21
	C.V. (%)	6.18	2.71	6.53	9.42	2.92	5.29	7.48	5.41	4.08	-	5.86	5.10	4.42	4.81	7.46	3.55	6.37	3.90	6.52	7.92	6.76	5.15
	F (Prob)	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	-	0.00	0.00	0.01	0.31	0.55	0.00	0.27	0.00	0.00	0.60	0.59	0.00

Table No. 4 (Cont..)

		EAR HEIGHT(cm)																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	BP-001	139	88	103	75	98	101	67	111	76	103	89	86	112	112	101	98	126	106	114	80	97	99
2	BP-003	137	108	132	86	87	110	105	117	69	110	101	102	106	123	109	106	126	112	120	93	107	108
3	BP-007	144	108	115	86	69	104	99	105	70	108	95	81	103	117	105	108	127	107	107	91	99	103
4	BP-008	155	100	125	85	58	105	108	118	80	110	104	92	110	122	104	105	126	110	103	78	91	105
5	HTMH 5105	139	98	132	81	87	107	109	106	69	113	99	88	109	120	106	95	117	106	102	96	99	104
6	PRO-385	128	88	98	71	69	91	97	77	66	83	81	84	100	108	96	98	128	102	107	72	90	92
7	KMH-7148	128	87	120	73	58	93	92	75	51	78	74	87	98	118	71	93	121	98	102	73	87	90
8	Bisco X 5141	127	103	118	85	81	103	92	95	80	75	86	77	106	120	104	106	121	106	96	78	87	98
9	NMH-1247	122	102	118	95	79	103	108	96	70	93	92	88	111	127	94	102	114	106	113	89	101	101
10	KH-3479	123	75	110	74	96	96	93	95	54	83	81	87	101	95	89	88	102	93	103	89	96	92
11	B-54	134	108	132	84	87	109	102	99	68	80	87	88	99	113	107	96	116	103	102	79	90	100
12	A 7501	124	82	103	71	88	94	96	77	55	73	75	91	95	115	104	99	119	104	114	70	92	93
13	X35B349	124	78	128	68	80	96	97	90	71	85	86	95	104	113	89	104	132	106	107	85	96	97
14	Bio-237	155	115	125	82	87	113	130	115	76	100	105	98	104	128	98	113	125	111	109	94	101	109
15	JH 270	148	92	133	92	97	112	103	103	92	105	101	97	119	125	105	114	132	116	117	97	107	110
	CHECKS																						
16	BULAND	148	105	117	95	81	109	104	102	95	108	102	92	119	122	122	117	130	117	111	89	100	109
17	SEEDTECH 2324	157	82	127	86	66	104	99	99	56	98	88	92	109	127	96	99	118	107	104	89	96	100
18	BIO 9681	127	83	122	71	67	94	86	98	73	88	86	85	102	107	107	102	125	105	113	72	93	96
	Loc. Mean	**137**	**95**	**120**	**81**	**80**	**102**	**99**	**99**	**71**	**94**	**91**	**89**	**106**	**117**	**100**	**102**	**122**	**106**	**108**	**84**	**96**	**100**
	C.D. (5%)	17.43	7.64	23.12	18.53	11.84	12.43	32.52	16.75	5.78	-	13.59	16.41	12.79	18.48	19.07	4.81	18.28	7.13	12.42	19.05	14.65	5.58
	C.V. (%)	7.69	4.87	11.62	13.76	8.95	9.62	19.72	10.21	4.92	-	10.55	11.08	7.28	9.49	11.45	2.83	9.00	5.84	6.93	13.64	7.23	8.25
	F (Prob)	0.00	0.00	0.08	0.08	0.00	0.00	0.29	0.00	0.00	-	0.00	0.35	0.02	0.09	0.01	0.00	0.22	0.00	0.03	0.07	0.22	0.00

TABLE No. 5: **Performance of medium & early experimental hybrids at Delhi, Karnal, Ludhiana, Pantnagar, Kanpur, Bahraich, Dholi, Bhubaneshwar, Varanasi, Arbhavi, Karimnagar, Kolhapur, Mandya, Coimbatore, Vagarai, Banswara, Godhra in trial no. TR05(AVT1-M) & TR06(AVT1-E) during rabi 2012-13.**

	GRAIN YIELD (kg/ha) AT 15% MOISTURE																					
Sl											ZN 2										ZN 3	
No	PEDIGREE	DELH	R	KARN	R	LUDH	R	PANT	R	KANP	R	MEAN	R	BAHR	R	DHOL	R	BHUB	R	VARA	R	MEAN	R
1	VaMH 08014	11135	2	6496	14	10489	3	12285	3	4640	12	8639	4	6949	8	6188	9	5076	9	11356	4	7392	8
2	KH-6847	9670	7	7620	8	8902	8	11131	6	6422	5	8711	3	5751	14	7172	1	5015	10	12235	1	7543	6
3	VEH-11-1	7990	12	6922	12	5921	13	12012	4	6060	7	8246	9	8680	2	6878	2	6295	2	11620	3	8368	1
4	HKH 323	8719	8	8019	4	5688	14	9064	15	6016	8	7954	13	6235	12	6498	4	4706	14	8740	13	6545	13
5	HKH 324	10277	5	7749	7	6438	12	10347	11	4849	11	8306	7	8478	4	6654	3	5841	5	9403	9	7594	5
6	HKH 325	10156	6	7770	6	9706	6	12573	2	6888	3	9347	1	5030	15	5440	14	6042	4	9332	11	6461	14
7	HKH 326	8692	9	8459	2	12168	2	9665	13	4518	13	7833	14	8598	3	6280	6	5792	6	9371	10	7510	7
8	HKH 327	11147	1	8505	1	10359	5	9100	14	5359	10	8528	6	8154	6	6067	10	6067	3	10645	5	7733	3
9	HKH 328	10537	4	6900	13	12201	1	10901	8	4449	14	8197	10	9716	1	5962	11	5351	8	9558	7	7647	4
10	HKH 329	10728	3	7475	9	9431	7	11054	7	5806	9	8766	2	5953	13	5142	15	5615	7	10105	6	6704	11
11	HKH 330	7473	14	7429	10	6765	11	10338	12	6937	2	8044	12	8319	5	5574	12	5013	11	7918	15	6706	10
	CHECKS																						
12	PRAKASH	7864	13	7285	11	7214	10	13190	1	6099	6	8610	5	6370	10	5515	13	4824	12	7975	14	6171	15
13	BIO9637	8376	10	6064	15	10445	4	11191	5	4298	15	7482	15	8087	7	6474	5	4794	13	11832	2	7797	2
14	HM4	7121	15	8064	3	5565	15	10522	9	7365	1	8268	8	6505	9	6234	7	6388	1	9499	8	7157	9
15	HM8	8066	11	7803	5	7748	9	10364	10	6551	4	8196	11	6350	11	6196	8	4567	15	9246	12	6590	12
	Location Mean	**9197**		**7504**		**8603**		**10916**		**5750**		**8342**		**7278**		**6152**		**5426**		**9922**		**7194**	
	Mean Stand	30		30		30		30		30		30		30		30		30		30		30	
	C.D. (5%)	2960		491		3740		2586		291		1582		605		1355		236		801		749	
	C.V. (%)	19.21		3.9		**25.95**		14.14		3.02		**-**		4.96		13.15		2.6		4.82		**-**	
	F (Prob)	0.069		0		0.004		0.069		0				0		0.18		0		0			
	Plot Size	3		12		7.2		12		9.6		-		9.6		12		9.6		9.6		-	
	AGRONOMY DATA																						
	Sowing Date	6-12		18-11		30-11		6-12		26-12		-		3-12		17-11		30-11		26-11		-	
	Harvest Date	8-06		23-05		3-06		20-06		10-05		-		20-05		6-06		10-04		4-05		-	
	Irrigation Nos	8		7		12		6		4		-		4		-		10		5		-	
	Ferilizer Applied N	180		150		70		120		120		-		150		150		120		150		-	
	Ferilizer Applied P	80		60		24		60		60		-		75		70		60		75		-	
	Ferilizer Applied K	60		60		12		40		60		-		60		60		60		60		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 25.9 %

TABLE No. 5: **(Cont..)**

Sl No	PEDIGREE	ARBH	R	KARI	R	KOLH	R	MAND	R	COIM	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
1	VaMH 08014	6680	2	9491	5	6497	13	7060	6	9751	5	7554	3	7839	4	5915	9	9476	2	7696	2	7909	3
2	KH-6847	5792	5	10946	2	8692	3	6417	10	14310	1	7595	2	8959	1	6150	4	8628	3	7389	3	8347	2
3	VEH-11-1	5061	11	10165	3	10471	1	7126	4	9527	7	8673	1	8504	3	7462	1	10171	1	8816	1	8444	1
4	HKH 323	5818	4	8985	7	6508	12	6650	8	8011	14	5453	12	6904	11	6263	3	5793	11	6028	10	6967	14
5	HKH 324	4135	12	8780	10	7114	8	7495	2	9574	6	3729	15	6805	13	5961	7	4865	14	5413	14	7203	11
6	HKH 325	5730	6	8831	9	6919	11	7340	3	9507	8	5928	11	7376	7	5636	14	7899	4	6768	6	7564	6
7	HKH 326	6608	3	9083	6	7298	7	7062	5	8916	12	7025	5	7666	5	5547	15	6031	10	5789	11	7434	7
8	HKH 327	3932	13	8943	8	9257	2	6109	13	10005	4	6785	7	7505	6	6081	6	7285	7	6683	7	7715	5
9	HKH 328	5580	7	7962	13	7085	9	6255	12	9264	10	5255	13	6900	12	6097	5	7522	5	6810	5	7400	8
10	HKH 329	3754	14	8182	12	7973	4	6255	11	10393	3	7002	6	7260	8	5950	8	5575	13	5763	12	7310	9
11	HKH 330	3494	15	7055	15	5209	15	6078	14	9389	9	5229	14	6076	15	5726	13	5626	12	5676	13	6675	15
	CHECKS																						
12	PRAKASH	5116	9	8646	11	7637	5	5890	15	8726	13	6512	8	7088	10	5821	11	4171	15	4996	15	6977	13
13	BIO9637	7178	1	11613	1	6932	10	7723	1	11153	2	7253	4	8642	2	5744	12	7460	6	6602	8	7886	4
14	HM4	5064	10	7594	14	7406	6	6617	9	7135	15	6148	9	6661	14	5878	10	6728	9	6303	9	7142	12
15	HM8	5236	8	9502	4	6352	14	6663	7	9137	11	6104	10	7166	9	6520	2	7141	8	6831	4	7237	10
	Location Mean	**5279**		**9052**		**7423**		**6716**		**9653**		**6416**		**7423**		**6050**		**6958**		**6504**		**7481**	
	Mean Stand	30		30		30		30		30		30		30		30		30		30		30	
	C.D. (5%)	1181		906		997		699		556		1193		922		1065		677		871		1037	
	C.V. (%)	13.35		5.97		8.02		6.22		3.44		11.09		-		10.51		5.81		-		-	
	F (Prob)	0		0		0		0		0		0				0.125		0					
	Plot Size	12		12		12		11.2		9.6		9.6		-		12		9.6		-		-	
	AGRONOMY DATA																						
	Sowing Date	11-12		25-11		23-12		27-11		7-12		20-12		-		29-11		22-11		-		-	
	Harvest Date	18-04		26-03		30-05		29-04		2-04		22-04		-		7-05		9-04		-		-	
	Irrigation Nos	8		8		-		6		10		10		-		6		8		-		-	
	Ferilizer Applied N	150		200		120		150		150		200		-		150		120		-		-	
	Ferilizer Applied P	75		60		60		75		75		75		-		80		50		-		-	
	Ferilizer Applied K	37.5		60		40		40		75		75		-		-		-		-		-	

TABLE No. 5 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE PRAKASH																					
		ZN 2						ZN 3											ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	VaMH 08014	41.6	-	45.4	-	-	0.3	9.1	12.2	5.2	42.4	19.8	30.6	9.8	-	19.9	11.7	16	10.6	1.6	127.2	54	13.4
2	KH-6847	23	4.6	23.4	-	5.3	1.2	-	30	4	53.4	22.2	13.2	26.6	13.8	9	64	16.6	26.4	5.6	106.9	47.9	19.6
3	VEH-11-1	1.6	-	-	-	-	-	36.3	24.7	30.5	45.7	35.6	-	17.6	37.1	21	9.2	33.2	20	28.2	143.9	76.5	21
4	HKH 323	10.9	10.1	-	-	-	-	-	17.8	-	9.6	6.1	13.7	3.9	-	12.9	-	-	-	7.6	38.9	20.7	-
5	HKH 324	30.7	6.4	-	-	-	-	33.1	20.7	21.1	17.9	23.1	-	1.6	-	27.3	9.7	-	-	2.4	16.7	8.3	3.2
6	HKH 325	29.1	6.7	34.5	-	12.9	8.6	-	-	25.3	17	4.7	12	2.1	-	24.6	8.9	-	4.1	-	89.4	35.5	8.4
7	HKH 326	10.5	16.1	68.7	-	-	-	35	13.9	20.1	17.5	21.7	29.2	5.1	-	19.9	2.2	7.9	8.2	-	44.6	15.9	6.5
8	HKH 327	41.8	16.7	43.6	-	-	-	28	10	25.8	33.5	25.3	-	3.4	21.2	3.7	14.7	4.2	5.9	4.5	74.7	33.8	10.6
9	HKH 328	34	-	69.1	-	-	-	52.5	8.1	10.9	19.8	23.9	9.1	-	-	6.2	6.2	-	-	4.7	80.4	36.3	6.1
10	HKH 329	36.4	2.6	30.7	-	-	1.8	-	-	16.4	26.7	8.6	-	-	4.4	6.2	19.1	7.5	2.4	2.2	33.7	15.3	4.8
11	HKH 330	-	2	-	-	13.7	-	30.6	1.1	3.9	-	8.7	-	-	-	3.2	7.6	-	-	-	34.9	13.6	-
	CHECKS																						
12	PRAKASH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	BIO9637	6.5	-	44.8	-	-	-	26.9	17.4	-	48.4	26.3	40.3	34.3	-	31.1	27.8	11.4	21.9	-	78.9	32.1	13
14	HM4	-	10.7	-	-	20.8	-	2.1	13	32.4	19.1	16	-	-	-	12.3	-	-	-	1	61.3	26.2	2.4
15	HM8	2.6	7.1	7.4	-	7.4	-	-	12.3	-	15.9	6.8	2.3	9.9	-	13.1	4.7	-	1.1	12	71.2	36.7	3.7

Table No.5 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE BIO9637																					
						ZN 2						ZN 3								ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	VaMH 08014	32.9	7.1	0.4	9.8	8	15.5	-	-	5.9	-	-	-	-	-	-	-	4.1	-	3	27	16.6	0.3
2	KH-6847	15.4	25.7	-	-	49.4	16.4	-	10.8	4.6	3.4	-	-	-	25.4	-	28.3	4.7	3.7	7.1	15.7	11.9	5.8
3	VEH-11-1	-	14.1	-	7.3	41	10.2	7.3	6.2	31.3	-	7.3	-	-	51	-	-	19.6	-	29.9	36.3	33.5	7.1
4	HKH 323	4.1	32.2	-	-	40	6.3	-	0.4	-	-	-	-	-	-	-	-	-	-	9	-	-	-
5	HKH 324	22.7	27.8	-	-	12.8	11	4.8	2.8	21.8	-	-	-	-	2.6	-	-	-	-	3.8	-	-	-
6	HKH 325	21.2	28.1	-	12.4	60.3	24.9	-	-	26	-	-	-	-	-	-	-	-	-	-	5.9	2.5	-
7	HKH 326	3.8	39.5	16.5	-	5.1	4.7	6.3	-	20.8	-	-	-	-	5.3	-	-	-	-	-	-	-	-
8	HKH 327	33.1	40.2	-	-	24.7	14	0.8	-	26.5	-	-	-	-	33.5	-	-	-	-	5.9	-	1.2	-
9	HKH 328	25.8	13.8	16.8	-	3.5	9.5	20.1	-	11.6	-	-	-	-	2.2	-	-	-	-	6.1	0.8	3.1	-
10	HKH 329	28.1	23.3	-	-	35.1	17.2	-	-	17.1	-	-	-	-	15	-	-	-	-	3.6	-	-	-
11	HKH 330	-	22.5	-	-	61.4	7.5	2.9	-	4.6	-	-	-	-	-	-	-	-	-	-	-	-	-
	CHECKS																						
12	PRAKASH	-	20.1	-	17.9	41.9	15.1	-	-	0.6	-	-	-	-	10.2	-	-	-	-	1.4	-	-	-
13	BIO9637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	HM4	-	33	-	-	71.4	10.5	-	-	33.2	-	-	-	-	6.8	-	-	-	-	2.3	-	-	-
15	HM8	-	28.7	-	-	52.4	9.5	-	-	-	-	-	-	-	-	-	-	-	-	13.5	-	3.5	-

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 25.9 %

Table No.5 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HM4																						
							ZN 2					ZN 3								ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	VaMH 08014	56.4	-	88.5	16.8	-	4.5	6.8	-	-	19.5	3.3	31.9	25	-	6.7	36.7	22.9	17.7	0.6	40.9	22.1	10.7
2	KH-6847	35.8	-	60	5.8	-	5.4	-	15	-	28.8	5.4	14.4	44.1	17.4	-	100.6	23.5	34.5	4.6	28.2	17.2	16.9
3	VEH-11-1	12.2	-	6.4	14.2	-	-	33.4	10.3	-	22.3	16.9	-	33.9	41.4	7.7	33.5	41.1	27.7	26.9	51.2	39.9	18.2
4	HKH 323	22.4	-	2.2	-	-	-	-	4.2	-	-	-	14.9	18.3	-	0.5	12.3	-	3.7	6.5	-	-	-
5	HKH 324	44.3	-	15.7	-	-	0.5	30.3	6.7	-	-	6.1	-	15.6	-	13.3	34.2	-	2.2	1.4	-	-	0.9
6	HKH 325	42.6	-	74.4	19.5	-	13	-	-	-	-	-	13.1	16.3	-	10.9	33.2	-	10.7	-	17.4	7.4	5.9
7	HKH 326	22.1	4.9	118.6	-	-	-	32.2	0.7	-	-	4.9	30.5	19.6	-	6.7	25	14.3	15.1	-	-	-	4.1
8	HKH 327	56.5	5.5	86.1	-	-	3.1	25.4	-	-	12.1	8.1	-	17.8	25	-	40.2	10.4	12.7	3.5	8.3	6	8
9	HKH 328	48	-	119.2	3.6	-	-	49.4	-	-	0.6	6.9	10.2	4.9	-	-	29.8	-	3.6	3.7	11.8	8	3.6
10	HKH 329	50.7	-	69.5	5	-	6	-	-	-	6.4	-	-	7.7	7.6	-	45.7	13.9	9	1.2	-	-	2.4
11	HKH 330	4.9	-	21.6	-	-	-	27.9	-	-	-	-	-	-	-	-	31.6	-	-	-	-	-	-
	CHECKS																						
12	PRAKASH	10.4	-	29.6	25.4	-	4.1	-	-	-	-	-	1	13.9	3.1	-	22.3	5.9	6.4	-	-	-	-
13	BIO9637	17.6	-	87.7	6.4	-	-	24.3	3.8	-	24.6	8.9	41.7	52.9	-	16.7	56.3	18	29.7	-	10.9	4.7	10.4
14	HM4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	HM8	13.3	-	39.2	-	-	-	-	-	-	-	-	3.4	25.1	-	0.7	28.1	-	7.6	10.9	6.1	8.4	1.3

Table No.5 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HM8																						OV'L MEAN
							ZN 2					ZN 3							ZN 4			ZN 5		
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	
1	VaMH 08014	38.1	-	35.4	18.5	-	5.4	9.4	-	11.1	22.8	12.2	27.6	-	2.3	6	6.7	23.8	9.4	-	32.7	12.7	9.3
2	KH-6847	19.9	-	14.9	7.4	-	6.3	-	15.8	9.8	32.3	14.5	10.6	15.2	36.8	-	56.6	24.4	25	-	20.8	8.2	15.3
3	VEH-11-1	-	-	-	15.9	-	0.6	36.7	11	37.8	25.7	27	-	7	64.8	7	4.3	42.1	18.7	14.5	42.4	29.1	16.7
4	HKH 323	8.1	2.8	-	-	-	-	-	4.9	3	-	-	11.1	-	2.5	-	-	-	-	-	-	-	-
5	HKH 324	27.4	-	-	-	-	1.3	33.5	7.4	27.9	1.7	15.2	-	-	12	12.5	4.8	-	-	-	-	-	-
6	HKH 325	25.9	-	25.3	21.3	5.1	14	-	-	32.3	0.9	-	9.4	-	8.9	10.2	4.1	-	2.9	-	10.6	-	4.5
7	HKH 326	7.8	8.4	57	-	-	-	35.4	1.3	26.8	1.3	14	26.2	-	14.9	6	-	15.1	7	-	-	-	2.7
8	HKH 327	38.2	9	33.7	-	-	4	28.4	-	32.9	15.1	17.4	-	-	45.7	-	9.5	11.2	4.7	-	2	-	6.6
9	HKH 328	30.6	-	57.5	5.2	-	0	53	-	17.2	3.4	16	6.6	-	11.5	-	1.4	-	-	-	5.3	-	2.2
10	HKH 329	33	-	21.7	6.7	-	7	-	-	22.9	9.3	1.7	-	-	25.5	-	13.7	14.7	1.3	-	-	-	1
11	HKH 330	-	-	-	-	5.9	-	31	-	9.8	-	1.8	-	-	-	-	2.8	-	-	-	-	-	-
	CHECKS																						
12	PRAKASH	-	-	-	27.3	-	5	0.3	-	5.6	-	-	-	-	20.2	-	-	6.7	-	-	-	-	-
13	BIO9637	3.9	-	34.8	8	-	-	27.4	4.5	5	28	18.3	37.1	22.2	9.1	15.9	22.1	18.8	20.6	-	4.5	-	9
14	HM4	-	3.4	-	1.5	12.4	0.9	2.4	0.6	39.9	2.7	8.6	-	-	16.6	-	-	0.7	-	-	-	-	-
15	HM8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No.5 (Cont..)

		MOISTURE % AT HARVEST																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	VaMH 08014	25.4	25.9	28.1	21.9	12.0	22.7	24.4	18.0	18.9	26.9	22.0	24.1	12.8	9.5	16.7	22.6	17.2	17.1	16.5	15.8	16.1	19.8
2	KH-6847	13.0	27.7	26.0	17.9	14.3	19.8	24.1	18.4	18.5	22.9	21.0	16.3	7.4	9.9	16.3	20.2	13.3	13.9	17.4	17.0	17.2	17.7
3	VEH-11-1	27.7	29.0	29.3	24.8	14.0	24.9	25.2	18.4	19.8	27.7	22.8	23.0	14.7	9.3	15.6	24.6	17.8	17.5	17.6	17.9	17.7	20.9
4	HKH 323	20.4	24.3	30.2	22.7	15.0	22.5	23.1	18.8	18.8	26.5	21.8	26.1	11.8	9.4	16.3	24.5	18.4	17.7	17.5	21.8	19.6	20.3
5	HKH 324	18.5	24.5	28.4	21.7	15.0	21.6	25.1	18.7	19.8	25.5	22.3	17.7	7.3	9.8	16.2	21.7	15.8	14.7	17.1	17.7	17.4	18.8
6	HKH 325	16.3	26.5	27.7	21.1	14.0	21.1	22.3	18.9	19.0	25.4	21.4	18.9	10.8	10.0	16.1	20.6	14.9	15.2	17.7	18.6	18.1	18.7
7	HKH 326	20.0	22.0	27.8	22.6	14.0	21.3	22.9	18.0	19.4	27.1	21.8	27.2	11.8	9.6	15.5	24.2	12.9	16.8	16.6	22.3	19.5	19.6
8	HKH 327	16.4	21.7	27.1	22.7	12.0	20.0	23.9	17.3	19.5	23.9	21.1	21.6	9.5	9.5	16.1	20.7	19.5	16.1	17.7	16.6	17.1	18.6
9	HKH 328	20.0	27.0	27.5	22.6	14.3	22.3	23.0	17.7	19.5	28.0	22.0	25.4	14.6	10.2	15.8	21.5	18.5	17.7	17.1	18.9	18.0	20.1
10	HKH 329	22.1	25.2	27.8	20.0	15.0	22.0	23.1	18.4	19.5	27.8	22.2	19.1	11.7	9.2	16.8	21.9	16.0	15.8	17.1	20.9	19.0	19.5
11	HKH 330	14.3	21.5	29.2	18.3	15.0	19.6	22.2	17.6	18.1	24.5	20.6	11.8	5.2	9.3	16.2	21.4	12.3	12.7	17.4	15.9	16.6	17.1
	CHECKS																						
12	PRAKASH	22.9	23.3	26.0	19.2	14.0	21.1	21.9	18.2	17.9	24.0	20.5	13.1	7.3	9.3	16.4	19.2	13.1	13.1	17.0	18.6	17.8	17.7
13	BIO9637	28.7	25.9	27.6	23.8	12.0	23.6	23.9	19.8	19.4	26.1	22.3	25.7	7.4	9.9	15.7	24.4	13.9	16.1	16.8	23.8	20.3	20.3
14	HM4	17.0	22.6	25.6	19.7	14.3	19.8	27.1	17.0	17.6	25.6	21.8	18.6	11.3	9.6	16.1	26.3	16.6	16.4	17.4	19.3	18.4	18.9
15	HM8	17.7	25.8	30.3	22.2	14.0	22.0	23.8	19.4	18.0	26.2	21.9	23.5	8.1	9.6	15.7	23.8	17.9	16.4	17.2	18.4	17.8	19.5
	Loc. Mean	**20.0**	**24.8**	**27.9**	**21.4**	**13.9**	**21.6**	**23.7**	**18.3**	**18.9**	**25.8**	**21.7**	**20.8**	**10.1**	**9.6**	**16.1**	**22.5**	**15.9**	**15.8**	**17.2**	**18.9**	**18.0**	**19.2**
	C.D. (5%)	4.60	1.22	2.54	2.60	0.65	3.02	2.11	1.11	0.00	0.82	1.56	3.70	1.58	0.58	-	0.99	2.43	2.60	0.92	3.71	3.80	1.37
	C.V. (%)	13.77	2.94	5.44	7.26	2.80	11.05	5.33	3.64	0.00	1.89	5.05	10.65	9.35	3.62	-	2.63	9.17	14.28	3.21	11.75	9.82	10.57
	F (Prob)	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.03	-	0.00	0.00	0.00	0.29	0.00	0.62	0.00

Table No.5 (Cont..)

S.No.	PEDIGREE	GRAIN SHELLING % DELH	KARN	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	VaMH 08014	89.0	78.6	80.3	73.3	80.3	78.4	77.0	79.8	81.3	79.1	85.1	82.5	83.9	81.5	80.5	85.4	83.2	72.8	74.2	73.5	80.2
2	KH-6847	88.0	79.6	82.6	74.0	81.1	79.9	80.5	81.4	82.0	81.0	82.6	83.2	74.8	79.1	80.7	82.0	80.4	73.9	79.8	76.8	80.3
3	VEH-11-1	85.0	75.6	82.0	74.3	79.2	77.2	74.0	79.4	79.8	77.6	82.5	79.1	84.0	82.3	81.0	78.7	81.3	76.3	79.8	78.0	79.4
4	HKH 323	82.0	78.3	80.9	75.7	79.2	78.5	78.0	79.7	79.8	79.0	82.5	78.1	82.9	77.7	76.1	76.1	78.9	73.9	81.7	77.8	78.9
5	HKH 324	81.0	78.5	79.9	73.3	78.2	78.5	77.5	79.6	81.3	79.2	80.0	78.2	84.9	82.4	79.9	80.3	80.9	73.4	71.7	72.5	78.8
6	HKH 325	85.0	78.8	79.6	74.0	79.3	74.8	78.5	80.8	77.5	77.9	83.8	79.1	85.2	83.0	78.4	80.0	81.6	73.7	81.7	77.7	79.6
7	HKH 326	80.0	76.3	87.5	74.3	79.5	75.4	80.5	80.7	75.8	78.1	80.7	76.4	82.1	79.3	73.6	82.1	79.0	71.5	75.8	73.6	78.2
8	HKH 327	85.0	78.9	77.8	75.7	79.3	79.2	81.0	77.2	80.0	79.4	81.6	79.6	84.8	80.6	75.2	73.6	79.2	72.0	75.0	73.5	78.6
9	HKH 328	84.0	75.9	79.2	74.3	78.3	81.3	76.0	79.0	77.5	78.5	83.0	78.7	83.2	83.2	75.7	76.7	80.1	75.2	74.5	74.8	78.6
10	HKH 329	84.0	78.4	81.0	73.3	79.2	77.4	78.5	81.7	80.8	79.6	80.8	80.0	84.0	82.9	78.4	80.1	81.0	72.6	75.3	73.9	79.3
11	HKH 330	80.0	78.9	78.2	74.0	77.8	79.3	78.5	81.0	77.5	79.1	78.8	77.7	82.1	80.6	75.8	78.0	78.8	73.3	74.2	73.7	78.0
	CHECKS																					
12	PRAKASH	84.0	76.4	82.9	72.3	78.9	78.9	81.5	78.6	81.8	80.2	81.1	82.3	85.0	80.8	79.2	84.0	82.1	74.0	78.6	76.3	80.1
13	BIO9637	83.0	78.9	86.3	75.7	81.0	76.0	78.0	80.9	80.8	78.9	84.9	82.7	83.0	81.0	77.7	82.1	81.9	71.0	73.6	72.3	79.7
14	HM4	82.0	76.0	77.5	73.3	77.2	75.0	79.0	81.8	77.5	78.3	80.9	77.5	85.4	82.5	75.4	79.8	80.2	71.5	78.2	74.9	78.3
15	HM8	83.0	78.9	76.6	74.0	78.1	72.9	84.0	80.2	76.8	78.5	83.0	78.6	79.9	78.1	72.8	79.7	78.7	71.1	79.2	75.1	78.0
	Loc. Mean	**83.7**	**77.8**	**80.8**	**74.1**	**79.1**	**77.5**	**78.8**	**80.1**	**79.3**	**78.9**	**82.1**	**79.6**	**83.0**	**81.0**	**77.3**	**79.9**	**80.5**	**73.0**	**76.9**	**75.0**	**79.1**
	C.D. (5%)	-	0.84	5.18	1.75	3.11	1.61	4.50	0.00	0.69	3.06	1.78	1.54	0.84	-	0.83	4.05	2.48	2.23	4.95	4.67	1.53
	C.V. (%)	-	0.65	3.84	1.41	2.75	1.24	3.41	0.00	0.52	2.71	1.30	1.16	0.61	-	0.64	3.03	2.67	1.83	3.85	2.91	2.78
	F (Prob)	-	0.00	0.01	0.02	0.46	0.00	0.02	0.00	0.00	0.79	0.00	0.00	0.00	-	0.00	0.00	0.01	0.00	0.00	0.21	0.01

Table No.5 (Cont..)

STAND AT HARVEST ('000/ha)

S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	VaMH 08014	74.4	61.9	79.6	58.3	63.5	64.6	62.5	63.6	66.7	83.3	69.0	64.2	55.0	55.8	58.9	66.0	56.3	59.4	59.2	54.2	56.7	62.7
2	KH-6847	64.4	63.1	65.7	63.6	66.7	64.4	58.3	61.4	68.8	81.3	67.4	58.9	50.3	48.3	58.9	66.3	47.6	55.1	57.5	53.5	55.5	60.5
3	VEH-11-1	58.9	61.1	40.7	63.1	65.3	62.1	66.0	64.7	67.7	81.3	69.9	57.2	60.0	58.1	54.5	66.0	53.1	58.1	51.9	66.7	59.3	62.2
4	HKH 323	54.4	63.6	46.3	57.5	65.6	60.3	55.9	53.6	67.7	71.5	62.2	47.2	43.3	44.7	60.1	65.6	49.3	51.7	51.1	40.3	45.7	55.7
5	HKH 324	77.8	63.1	44.9	62.5	68.8	68.0	62.8	57.5	67.0	79.2	66.6	47.8	53.1	42.2	59.2	65.6	22.2	48.4	59.4	39.6	49.5	58.0
6	HKH 325	75.6	62.2	65.7	54.7	70.8	65.8	66.0	62.5	68.4	81.9	69.7	52.2	54.4	36.1	59.2	66.0	48.6	52.8	54.2	57.6	55.9	60.7
7	HKH 326	70.0	62.5	82.4	64.7	64.6	65.5	68.8	67.5	68.8	80.6	71.4	57.8	45.8	56.4	57.4	66.3	54.2	56.3	53.3	57.6	55.5	62.3
8	HKH 327	78.9	60.3	78.2	63.3	69.1	67.9	62.5	63.6	68.8	81.3	69.0	55.6	48.1	53.9	57.7	65.6	54.5	55.9	56.7	52.8	54.7	62.0
9	HKH 328	74.4	61.7	82.4	63.9	66.3	66.6	68.1	63.9	69.8	78.5	70.1	59.4	54.2	38.9	55.7	66.0	48.6	53.8	51.4	59.4	55.4	61.3
10	HKH 329	72.2	61.1	63.9	62.8	67.7	66.0	56.9	64.7	68.8	81.9	68.1	53.9	45.8	52.5	57.1	66.0	53.8	54.9	55.8	39.9	47.9	60.1
11	HKH 330	75.6	61.1	63.4	65.6	69.1	67.8	63.2	66.1	67.7	82.6	69.9	53.3	53.3	50.0	59.8	66.7	53.5	56.1	54.7	60.1	57.4	62.6
	CHECKS																						
12	PRAKASH	70.0	61.1	55.6	63.1	67.4	65.4	63.9	66.7	47.2	83.0	65.2	58.9	55.3	56.1	57.7	66.0	47.9	57.0	52.5	35.8	44.1	59.5
13	BIO9637	71.1	63.9	64.4	62.2	62.8	65.0	63.5	64.4	67.4	80.9	69.1	57.8	50.6	52.2	57.1	66.3	56.3	56.7	50.6	52.8	51.7	61.2
14	HM4	65.6	61.7	46.8	62.8	65.3	63.8	63.9	61.7	68.1	78.5	68.0	61.7	51.4	48.6	58.9	66.0	53.5	56.7	54.4	53.8	54.1	61.0
15	HM8	58.9	61.4	50.9	64.2	70.8	63.8	61.8	62.2	68.4	80.9	68.3	52.2	53.3	51.1	58.3	66.0	50.0	55.2	51.9	61.8	56.9	60.8
	Loc. Mean	**69.5**	**62.0**	**62.1**	**62.1**	**66.9**	**65.1**	**62.9**	**62.9**	**66.7**	**80.4**	**68.3**	**55.9**	**51.6**	**49.7**	**58.1**	**66.0**	**50.0**	**55.2**	**54.3**	**52.4**	**53.3**	**60.7**
	C.D. (5%)	16.47	1.34	32.44	5.83	3.98	6.03	3.29	7.09	15.60	3.98	5.44	10.66	3.93	4.82	4.09	0.87	7.82	5.45	6.12	4.53	15.63	3.27
	C.V. (%)	14.17	1.29	31.25	5.61	3.55	6.49	3.12	6.74	13.98	2.96	5.58	11.41	4.55	5.81	4.22	0.79	9.36	8.57	6.74	5.18	13.66	7.73
	F (Prob)	0.11	0.00	0.14	0.04	0.00	0.46	0.00	0.05	0.46	0.00	0.19	0.12	0.00	0.00	0.33	0.55	0.00	0.03	0.08	0.00	0.68	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : LUDHIANA 31.2%

Table No.5 (Cont..)

		DAYS TO 50% POLLEN SHED																					
							ZN 2					ZN 3							ZN 4				ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	VaMH 08014	127.3	138.7	126.0	125.3	94.7	122.4	124.3	126.7	66.0	104.0	105.3	73.0	63.7	69.7	65.0	52.3	50.7	62.4	88.0	80.7	84.3	92.7
2	KH-6847	122.7	142.0	123.3	123.7	89.0	120.1	126.3	128.0	68.0	108.3	107.7	75.3	61.3	67.7	65.0	54.7	50.0	62.3	82.0	82.7	82.3	92.4
3	VEH-11-1	126.3	140.3	127.3	124.0	93.3	122.3	126.3	128.7	67.7	110.7	108.3	75.3	63.7	71.3	66.7	56.7	52.0	64.3	88.0	85.0	86.5	94.3
4	HKH 323	127.3	139.7	126.7	124.0	84.0	120.3	125.7	126.7	67.0	109.0	107.1	74.3	61.3	71.0	65.7	56.0	52.3	63.4	92.3	84.7	88.5	93.4
5	HKH 324	127.3	141.3	126.0	123.7	82.3	120.1	122.0	124.7	65.0	105.0	104.2	71.7	59.7	69.0	63.0	49.0	50.0	60.4	84.0	84.3	84.2	91.1
6	HKH 325	128.7	141.0	124.3	125.3	81.7	120.2	127.7	128.7	67.7	109.7	108.4	74.0	60.3	67.3	64.0	55.3	49.7	61.8	85.0	81.7	83.3	92.5
7	HKH 326	127.3	144.3	125.3	122.3	77.0	119.3	121.7	129.7	67.0	109.7	107.0	76.7	61.7	70.0	65.7	55.7	50.7	63.4	86.3	84.7	85.5	92.7
8	HKH 327	128.7	145.0	124.7	125.7	75.7	119.9	123.0	127.3	65.0	107.7	105.8	76.0	60.7	70.7	65.3	56.0	51.0	63.3	87.7	86.3	87.0	92.7
9	HKH 328	129.0	143.3	125.3	122.7	77.3	119.5	124.7	128.0	68.7	110.7	108.0	76.7	61.0	70.3	66.3	55.0	51.0	63.4	92.0	85.0	88.5	93.4
10	HKH 329	126.0	134.7	122.0	121.0	79.0	116.5	120.0	126.0	67.0	107.0	105.0	74.0	60.3	68.7	63.0	50.0	50.0	61.0	85.3	82.3	83.8	90.4
11	HKH 330	124.0	137.0	123.0	118.0	83.7	117.1	119.0	124.0	66.0	103.7	103.2	72.7	59.7	67.0	62.3	49.3	47.7	59.8	82.3	77.3	79.8	89.2
	CHECKS																						
12	PRAKASH	126.0	140.0	125.0	122.3	81.7	119.0	120.7	124.7	61.7	104.0	102.8	70.3	58.3	67.7	61.0	49.7	48.7	59.3	84.3	74.3	79.3	89.4
13	BIO9637	125.7	141.3	127.3	128.3	82.3	121.0	125.7	129.0	68.0	110.0	108.2	76.0	62.7	69.3	65.7	56.3	51.7	63.6	86.0	85.3	85.7	93.6
14	HM4	127.3	145.7	125.3	123.0	81.7	120.6	123.7	126.7	61.7	108.3	105.1	71.3	59.3	69.7	63.0	49.7	48.7	60.3	85.0	81.0	83.0	91.2
15	HM8	125.3	141.0	126.0	124.3	78.0	118.9	127.7	129.0	68.3	111.0	109.0	76.0	64.7	71.0	65.7	56.0	51.7	64.2	87.3	87.3	87.3	93.5
	Loc. Mean	**126.6**	**141.0**	**125.2**	**123.6**	**82.8**	**119.8**	**123.9**	**127.2**	**66.3**	**107.9**	**106.3**	**74.2**	**61.2**	**69.4**	**64.5**	**53.4**	**50.4**	**62.2**	**86.4**	**82.8**	**84.6**	**92.2**
	C.D. (5%)	3.27	1.82	4.26	4.51	3.70	3.95	1.17	2.02	1.71	2.15	2.03	4.36	1.67	2.41	1.82	0.74	2.18	1.31	2.00	2.52	4.96	1.48
	C.V. (%)	1.55	0.77	2.03	2.18	2.68	2.60	0.56	0.95	1.54	1.19	1.34	3.51	1.63	2.07	1.69	0.82	2.59	1.84	1.39	1.82	2.74	2.38
	F (Prob)	0.02	0.00	0.41	0.03	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00

Table No.5 (Cont..)

S.No.	PEDIGREE	DAYS TO 50% SILKING																					
		DELH	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	VaMH 08014	130.0	141.0	128.7	129.0	98.3	125.4	126.3	128.3	68.0	108.7	107.8	76.3	65.3	70.7	68.7	54.7	54.3	65.0	91.0	85.0	88.0	95.5
2	KH-6847	125.3	144.7	125.3	127.0	93.0	123.1	128.3	130.0	70.3	112.0	110.2	77.3	63.3	68.7	67.3	57.3	52.3	64.4	85.3	86.7	86.0	95.0
3	VEH-11-1	129.0	142.7	129.7	128.0	97.7	125.4	128.3	130.7	69.7	114.0	110.7	77.0	66.0	72.3	69.3	58.7	55.0	66.4	91.3	89.3	90.3	97.0
4	HKH 323	128.3	142.3	130.0	127.7	88.0	123.3	127.7	127.7	70.0	113.7	109.8	76.7	63.0	72.0	68.3	58.0	53.7	65.3	95.7	89.3	92.5	96.0
5	HKH 324	130.0	143.7	128.3	128.3	86.7	123.4	124.0	125.7	67.3	109.0	106.5	74.7	61.7	70.0	65.3	51.0	52.0	62.4	87.0	88.0	87.5	93.7
6	HKH 325	129.3	143.3	127.0	128.7	86.7	123.0	129.7	130.7	70.7	112.3	110.8	76.3	61.7	68.3	67.0	57.3	51.7	63.7	88.3	86.0	87.2	95.0
7	HKH 326	129.7	147.0	128.3	125.7	81.3	122.4	123.7	132.0	69.7	114.3	109.9	79.3	63.7	71.0	68.3	57.7	53.0	65.5	89.7	86.0	87.8	95.3
8	HKH 327	131.0	147.7	127.0	128.7	80.3	122.9	125.0	128.7	67.3	110.7	107.9	76.0	62.3	71.7	67.0	58.0	52.7	64.6	90.7	90.3	90.5	95.0
9	HKH 328	130.7	145.7	128.0	126.3	81.3	122.4	126.7	129.7	72.0	112.7	110.3	79.0	63.0	71.3	69.0	57.0	53.0	65.4	95.3	89.3	92.3	95.9
10	HKH 329	128.0	137.3	124.7	124.3	84.0	119.7	122.0	127.0	69.3	110.0	107.1	76.0	62.0	69.7	64.0	52.0	52.3	62.7	88.3	86.3	87.3	92.8
11	HKH 330	125.3	139.3	125.7	121.0	87.7	119.8	121.0	124.3	67.7	107.0	105.0	75.3	61.0	68.0	64.0	51.3	49.3	61.5	85.7	80.7	83.2	91.4
	CHECKS																						
12	PRAKASH	127.3	142.3	127.0	125.3	86.7	121.7	122.7	125.7	63.7	107.7	104.9	71.7	60.3	68.7	63.0	52.0	50.3	61.0	87.7	78.3	83.0	91.8
13	BIO9637	127.3	144.0	129.7	131.7	86.7	123.9	127.7	130.7	70.0	114.0	110.6	77.0	64.0	70.3	69.3	58.3	52.7	65.3	89.0	88.3	88.7	95.9
14	HM4	96.3	148.0	128.0	126.7	86.7	117.1	125.7	128.0	63.7	111.7	107.3	73.3	61.7	70.7	65.7	51.7	51.0	62.3	88.3	85.7	87.0	91.9
15	HM8	127.0	144.0	129.0	127.3	82.7	122.0	129.7	130.7	70.7	114.3	111.3	77.3	66.0	72.0	68.3	58.0	53.7	65.9	90.3	91.7	91.0	96.0
	Loc. Mean	**126.3**	**143.5**	**127.8**	**127.0**	**87.2**	**122.4**	**125.9**	**128.6**	**68.7**	**111.5**	**108.7**	**76.2**	**63.0**	**70.4**	**67.0**	**55.5**	**52.5**	**64.1**	**89.6**	**86.7**	**88.2**	**94.6**
	C.D. (5%)	24.99	1.94	4.72	4.62	3.30	6.19	1.17	2.15	1.96	1.56	2.07	5.08	1.92	2.41	1.80	0.72	2.56	1.40	2.30	2.78	4.83	1.97
	C.V. (%)	11.83	0.81	2.21	2.18	2.26	3.99	0.56	1.00	1.71	0.84	1.33	3.98	1.82	2.04	1.61	0.78	2.91	1.89	1.53	1.91	2.55	3.09
	F (Prob)	0.51	0.00	0.48	0.03	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.00

Table No.5 (Cont..)

		DAYS TO 75% DRY HUSK																				
						ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	VaMH 08014	170.7	176.0	167.3	146.3	165.1	154.0	167.3	108.0	147.0	144.1	112.3	95.3	100.3	104.0	95.0	106.0	102.2	127.7	115.0	121.3	130.8
2	KH-6847	175.7	167.7	165.0	150.7	164.8	156.0	167.0	106.0	148.7	144.4	114.0	93.3	97.7	103.7	97.3	96.0	100.3	119.7	116.7	118.2	129.7
3	VEH-11-1	175.3	175.0	165.3	150.7	166.6	153.3	168.3	106.3	150.7	144.7	110.0	96.0	102.7	105.0	98.0	106.3	103.0	124.3	119.3	121.8	131.7
4	HKH 323	172.7	173.7	165.7	134.7	161.7	154.7	170.0	108.3	150.3	145.8	110.7	93.0	102.3	106.0	98.0	98.0	101.3	129.0	119.3	124.2	130.4
5	HKH 324	170.3	174.7	167.0	140.3	163.1	149.3	167.7	107.0	146.0	142.5	110.0	91.7	99.3	105.7	89.0	105.3	100.2	124.0	118.0	121.0	129.1
6	HKH 325	173.0	172.7	165.0	146.3	164.3	157.7	167.7	107.3	147.7	145.1	110.7	91.7	97.3	103.3	97.3	96.7	99.5	124.0	116.0	120.0	129.6
7	HKH 326	176.7	172.7	164.7	147.0	165.3	152.3	169.7	107.7	152.0	145.4	113.3	93.7	101.0	104.7	97.7	106.0	102.7	125.0	116.0	120.5	131.3
8	HKH 327	173.3	173.3	164.3	145.7	164.2	148.0	167.0	105.0	147.0	141.8	110.0	92.3	101.7	102.7	98.0	106.3	101.8	128.7	120.3	124.5	130.2
9	HKH 328	170.7	178.7	164.7	142.0	164.0	151.3	168.0	108.3	150.0	144.4	114.0	93.0	101.7	105.0	97.0	107.0	102.9	127.7	119.3	123.5	131.1
10	HKH 329	168.0	173.3	165.3	138.3	161.3	154.3	170.0	108.0	153.7	146.5	110.7	92.0	98.7	106.3	90.0	106.7	100.7	122.7	116.3	119.5	129.6
11	HKH 330	174.0	167.0	165.0	139.0	161.3	148.0	161.0	99.3	134.7	135.8	106.7	91.0	97.7	100.0	89.0	106.7	98.5	124.3	112.7	118.5	126.0
	CHECKS																					
12	PRAKASH	170.3	168.7	166.3	136.0	160.3	151.7	165.7	100.0	146.7	141.0	108.0	90.3	98.0	97.3	90.0	96.3	96.7	124.0	108.3	116.2	126.1
13	BIO9637	172.0	175.7	165.0	145.7	164.6	154.7	168.3	108.0	146.3	144.3	114.0	94.0	99.7	104.7	98.0	105.7	102.7	124.0	118.3	121.2	130.9
14	HM4	171.7	177.7	165.0	139.0	163.3	150.7	166.7	105.0	148.0	142.6	108.0	91.7	100.7	103.7	89.7	97.7	98.6	122.7	115.7	119.2	128.3
15	HM8	172.7	174.0	166.7	144.0	164.3	154.7	169.0	108.0	150.7	145.6	114.0	96.0	101.3	107.0	97.3	105.0	103.4	125.7	121.7	123.7	131.7
	Loc. Mean	**172.5**	**173.4**	**165.5**	**143.0**	**163.6**	**152.7**	**167.6**	**106.2**	**148.0**	**143.6**	**111.1**	**93.0**	**100.0**	**103.9**	**94.8**	**103.0**	**101.0**	**124.9**	**116.9**	**120.9**	**129.8**
	C.D. (5%)	5.37	2.03	3.44	4.61	4.54	1.06	2.25	2.07	3.56	2.76	6.98	1.92	2.93	4.58	0.57	2.04	2.83	4.14	3.35	5.15	1.83
	C.V. (%)	1.86	0.70	1.24	1.93	1.95	0.41	0.80	1.16	1.44	1.35	3.75	1.23	1.75	2.64	0.36	1.19	2.43	1.98	1.71	1.99	2.02
	F (Prob)	0.15	0.00	0.85	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.46	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.10	0.00

Table No. 5 (Cont..)

		PLANT HEIGHT(cm)																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	VaMH 08014	225.0	160.0	186.7	198.3	187.7	191.5	193.3	153.0	168.7	197.5	178.1	157.0	210.0	193.3	196.0	182.8	213.7	192.1	200.3	176.7	188.5	188.2
2	KH-6847	236.7	180.0	208.3	234.7	181.7	208.3	185.0	176.0	169.7	195.0	181.4	175.5	196.0	225.0	211.3	178.6	189.5	196.0	203.8	176.0	189.9	195.5
3	VEH-11-1	227.0	146.7	180.0	214.0	187.0	190.9	170.3	171.7	172.7	188.8	175.9	167.5	213.0	221.7	222.3	208.1	216.7	208.2	195.5	171.7	183.6	192.6
4	HKH 323	272.0	173.3	168.3	207.0	199.7	204.1	173.0	173.7	180.3	177.5	176.1	160.0	202.0	195.0	220.7	180.5	199.9	193.0	254.0	173.3	213.7	194.7
5	HKH 324	220.0	156.7	173.3	193.0	190.0	186.6	176.7	160.3	165.3	190.0	173.1	143.5	189.0	188.3	214.7	171.2	192.1	183.1	274.0	166.0	220.0	186.1
6	HKH 325	228.3	158.3	185.0	189.0	183.7	188.9	154.0	145.7	146.4	188.8	158.7	142.0	184.3	170.0	187.3	155.5	187.1	171.0	207.1	162.7	184.9	175.0
7	HKH 326	217.3	171.7	203.3	201.0	186.0	195.9	178.7	150.3	156.1	168.8	163.5	139.0	191.7	188.3	199.0	177.3	218.0	185.5	220.6	153.3	187.0	183.6
8	HKH 327	224.3	165.0	210.0	208.0	192.3	199.9	179.0	166.0	181.8	192.5	179.8	156.5	207.7	173.3	215.0	179.7	215.0	191.2	195.4	171.0	183.2	190.2
9	HKH 328	239.0	180.0	210.0	219.3	188.0	207.3	192.0	171.0	184.1	187.5	183.6	159.0	209.3	200.0	218.0	179.7	204.0	195.0	225.6	169.7	197.6	196.2
10	HKH 329	247.3	166.7	191.7	206.3	189.7	200.3	188.7	155.3	168.8	185.0	174.5	152.0	193.3	206.7	220.0	179.5	217.3	194.8	230.3	168.7	199.5	192.2
11	HKH 330	212.7	153.3	190.0	195.7	192.7	188.9	175.7	149.3	166.6	171.3	165.7	137.0	185.7	181.7	199.0	165.3	207.0	179.3	202.4	157.7	180.0	179.0
	CHECKS																						
12	PRAKASH	226.3	158.3	178.3	187.0	187.7	187.5	160.3	137.7	160.5	175.0	158.4	163.0	215.0	188.3	214.0	158.9	202.0	190.2	242.3	154.7	198.5	182.9
13	BIO9637	252.3	183.3	206.7	227.0	191.7	212.2	192.7	198.0	191.3	210.0	198.0	187.5	244.0	223.3	226.7	188.7	223.7	215.7	220.4	193.3	206.9	209.5
14	HM4	193.3	136.7	156.7	192.3	199.7	175.7	173.3	147.7	166.5	160.0	161.9	138.5	184.0	175.0	199.7	170.6	200.9	178.1	195.5	156.7	176.1	173.4
15	HM8	192.7	183.3	173.3	200.0	187.7	187.4	198.3	157.7	147.2	175.0	169.6	151.0	206.0	195.0	203.0	189.6	209.4	192.3	224.0	155.7	189.8	185.2
	Loc. Mean	**227.6**	**164.9**	**188.1**	**204.8**	**189.7**	**195.0**	**179.4**	**160.9**	**168.4**	**184.2**	**173.2**	**155.3**	**202.1**	**195.0**	**209.8**	**177.7**	**206.4**	**191.0**	**219.4**	**167.1**	**193.3**	**188.3**
	C.D. (5%)	52.82	6.26	29.96	23.38	11.47	15.72	21.22	20.71	8.91	17.12	13.40	10.68	10.02	35.66	22.23	7.21	27.59	10.85	49.14	21.88	39.89	8.03
	C.V. (%)	13.87	2.27	9.52	6.82	3.62	6.36	7.07	7.70	3.16	5.56	5.42	4.11	2.97	10.93	6.34	2.43	7.99	4.93	13.39	7.83	9.62	6.31
	F (Prob)	0.28	0.00	0.01	0.01	0.13	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.03	0.00	0.22	0.00	0.07	0.05	0.56	0.00

Table No.5 (Cont..)

		EAR HEIGHT(cm)																					
							ZN 2				ZN 3							ZN 4				ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	VaMH 08014	144.0	83.3	113.3	82.7	93.7	103.4	100.0	72.3	75.2	98.8	86.6	76.5	111.3	111.7	84.7	89.5	125.0	99.8	112.7	78.7	95.7	97.3
2	KH-6847	139.7	75.0	116.7	103.7	78.7	102.7	70.7	93.3	71.7	93.8	82.4	78.5	94.3	120.0	89.7	95.7	125.3	100.6	113.2	70.0	91.6	95.9
3	VEH-11-1	130.7	66.7	86.7	85.7	86.7	91.3	81.0	84.0	70.9	82.5	79.6	69.0	99.3	121.7	89.3	115.3	124.7	103.2	107.1	61.3	84.2	91.9
4	HKH 323	131.3	81.7	88.3	93.3	91.7	97.3	79.0	94.0	76.1	80.0	82.3	73.5	93.3	118.3	112.7	77.8	106.4	97.0	105.6	80.0	92.8	93.1
5	HKH 324	132.3	80.0	105.0	88.3	92.0	99.5	83.3	86.3	72.3	103.8	86.4	71.0	100.0	118.3	92.3	95.5	108.5	97.6	105.6	82.0	93.8	95.1
6	HKH 325	148.3	80.0	110.0	84.7	73.0	99.2	67.7	77.0	65.8	101.3	77.9	66.0	92.3	110.0	88.3	90.7	97.7	90.8	102.9	71.7	87.3	89.8
7	HKH 326	137.3	90.0	113.3	92.7	61.0	98.9	82.0	79.3	66.3	86.3	78.5	65.0	97.3	116.7	81.7	98.7	121.2	96.8	107.3	77.3	92.3	92.6
8	HKH 327	139.3	96.7	115.0	95.7	58.0	100.9	82.3	91.3	90.7	106.3	92.6	76.0	111.3	128.3	102.7	105.7	124.7	108.1	107.4	76.3	91.9	100.5
9	HKH 328	151.3	105.0	115.0	103.7	58.7	106.7	81.3	96.7	84.2	92.5	88.7	71.5	109.3	128.3	103.0	92.0	114.7	103.1	110.4	71.7	91.0	99.4
10	HKH 329	158.0	90.0	103.3	98.0	84.7	106.8	89.7	84.3	73.1	90.0	84.3	71.5	96.7	125.0	103.7	94.5	123.5	102.5	112.0	74.3	93.2	98.4
11	HKH 330	132.0	80.0	103.3	86.7	82.3	96.9	89.0	71.3	72.0	82.5	78.7	62.0	96.3	96.7	84.7	91.7	113.5	90.8	113.3	69.0	91.2	89.8
	CHECKS																						
12	PRAKASH	145.0	71.7	98.3	86.3	91.0	98.5	86.7	61.3	70.0	83.8	75.4	89.0	111.3	121.7	92.0	89.9	108.0	102.0	107.2	62.3	84.8	92.7
13	BIO9637	160.3	83.3	111.7	101.3	69.0	105.1	83.3	98.3	81.9	105.0	92.2	87.5	114.3	140.0	105.0	107.6	125.7	113.4	100.0	82.7	91.3	103.4
14	HM4	110.0	63.3	78.3	84.0	92.7	85.7	77.0	70.7	79.3	78.8	76.4	67.5	92.3	110.0	78.0	84.0	113.7	90.9	105.4	79.3	92.4	86.1
15	HM8	123.0	98.3	96.7	88.7	87.0	98.7	81.7	83.7	62.7	90.0	79.5	74.5	101.0	118.3	95.3	104.2	113.9	101.2	106.7	78.3	92.5	94.3
	Loc. Mean	**138.8**	**83.0**	**103.7**	**91.7**	**80.0**	**99.4**	**82.3**	**82.9**	**74.1**	**91.7**	**82.8**	**73.3**	**101.4**	**119.0**	**93.5**	**95.5**	**116.4**	**99.9**	**107.8**	**74.3**	**91.1**	**94.7**
	C.D. (5%)	19.45	8.44	27.87	18.36	14.12	14.33	10.02	20.41	6.37	13.26	11.67	9.00	9.65	23.58	22.30	5.85	33.67	8.13	16.42	17.38	13.19	5.81
	C.V. (%)	8.37	6.08	16.07	11.97	10.55	11.38	7.27	14.71	5.13	8.65	9.88	7.34	5.69	11.85	14.26	3.66	17.29	7.07	9.11	13.98	6.75	9.07
	F (Prob)	0.00	0.00	0.17	0.26	0.00	0.29	0.00	0.02	0.00	0.00	0.07	0.00	0.00	0.18	0.12	0.00	0.87	0.00	0.93	0.33	0.87	0.00

Table No.6: **Performance of late & medium maturing experimental hybrids at Delhi, Karnal, Ludhiana, Pantnagar, Kanpur, Bahraich, Dholi, Bhubaneshwar, Varanasi, Arbhavi, Karimnagar, Kolhapur, Mandya, Coimbatore, Vagarai, Banswara, Godhra in trial no. TR07 (AVT2-L & TR08 (AVT2- M) during rabi 2012-13.**

		GRAIN YIELD (kg/ha) AT 15% MOISTURE																			
Sl											ZN 2									ZN 3	
No	PEDIGREE	DELH	R	KARN	R	LUDH	R	PANT	R	KANP	R	MEAN	R	BAHR	R	DHOL	R	BHUB	R	VARA	R	MEAN	R
1	NK6607	11957	2	8731	1	13462	6	12751	5	3027	20	9117	4	11072	4	7951	2	6495	5	11037	5	9139	2
2	S 7720	12709	1	6989	8	16784	1	14515	1	4505	13	9680	1	13223	1	6469	15	6377	9	11422	3	9373	1
3	PR0-380	9275	12	6625	15	13357	7	12010	9	5491	9	8350	9	11249	3	7028	10	6594	4	9679	11	8637	6
4	CMH 08-282	6837	19	6658	14	6874	18	11501	14	4473	14	7367	19	7192	17	4611	20	5799	16	8685	16	6572	20
5	CMH 08-287	9528	10	5628	21	7602	15	10085	20	6100	4	7835	14	7829	16	4861	19	6644	3	8417	18	6938	17
6	KMH-25K45(2700)	10501	6	6137	19	5618	21	11667	13	5577	8	8471	7	8603	14	7196	8	6152	12	10248	8	8050	11
7	Bisco New 704	9436	11	6721	11	14875	3	11725	12	4089	16	7993	13	9178	11	7549	5	5778	17	10069	9	8144	9
8	BiscoX5129	9895	8	6681	12	14593	4	13877	2	3318	18	8443	8	11473	2	6762	13	6422	7	11135	4	8948	3
9	BiscoX9	7598	17	6673	13	7945	14	11877	11	3908	17	7514	17	9855	9	6883	11	6012	13	9046	13	7949	12
10	NMH-713	10201	7	7200	6	13277	8	12529	6	4520	12	8612	6	9890	8	7668	4	6423	6	11472	1	8863	4
11	NMH-731	8844	14	8607	2	6540	20	13231	3	6193	3	9218	3	9007	12	8463	1	5885	15	11457	2	8703	5
12	NMH-666	11534	3	7921	3	13887	5	12000	10	5655	7	9278	2	9244	10	6167	16	6770	1	10914	6	8274	7
13	RJ 2020	6754	20	6908	10	8776	13	11010	16	4442	15	7279	20	6444	20	5290	17	6648	2	8914	14	6824	18
14	NMH1242	11293	4	5788	20	11151	12	12793	4	5804	5	8920	5	8764	13	7397	7	5164	20	6744	21	7017	16
15	Bio-151	11265	5	6163	18	11543	11	7110	21	7949	1	8122	11	9993	6	6628	14	5965	14	9955	10	8135	10
	CHECKS																						
16	BIO 9637	9094	13	6920	9	11793	10	10661	17	5752	6	8107	12	9975	7	6849	12	4639	21	10294	7	7939	13
17	HM4	5058	21	7781	4	6714	19	10192	19	6625	2	7414	18	7073	18	5018	18	6241	10	8464	17	6699	19
18	HM8	7863	16	6527	16	7203	16	11196	15	5294	10	7720	16	5255	21	4598	21	5742	18	8011	20	5902	21
19	Buland	9751	9	7562	5	15025	2	10482	18	4858	11	8163	10	7052	19	7400	6	5692	19	8191	19	7084	15
20	SeedTech 2324	7206	18	6437	17	12833	9	12310	8	3001	21	7238	21	10087	5	7122	9	6201	11	9177	12	8147	8
21	Bio 9681	8722	15	7042	7	7154	17	12425	7	3097	19	7822	15	7971	15	7912	3	6391	8	8759	15	7758	14
	Location Mean	**9301**		**6938**		**10810**		**11712**		**4937**		**8222**		**9068**		**6658**		**6097**		**9623**		**7862**	
	C.D. (5%)	2971		322		7154		1291		307		1223		2071		1748		201		1588		1402	
	C.V. (%)	19.34		2.81		**40.07**		6.67		3.76		**-**		13.83		15.9		2		9.99		**-**	
	F (Prob)	0		0		0.029		0		0				0		0		0		0			
	Plot Size	6		18		7.2		18		14.4		-		14.4		18		14.4		14.4		-	
	AGRONOMY DATA																						
	Sowing Date	6-12		30-11		30-11		6-12		26-12		-		3-12		22-11		29-11		27-11		-	
	Harvest Date	14-06		30-05		3-06		20-06		10-05		-		22-05		10-06		11-04		6-05		-	
	Irrigation Nos	8		8		12		6		4		-		4		4		10		5		-	
	Ferilizer Applied N	180		150		70		120		120		-		150		150		120		150		-	
	Ferilizer Applied P	80		60		24		60		60		-		75		70		60		75		-	
	Ferilizer Applied K	60		60		12		40		60		-		60		60		60		60		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 40.1 %

Table No.6: **(Cont..)**

Sl No	PEDIGREE	ARBH	R	KARI	R	KOLH	R	MAND	R	COIM	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
1	NK6607	7754	9	10072	11	10783	4	7047	2	13555	4	7138	11	9392	5	7756	5	11144	7	9450	7	9267	3
2	S 7720	9515	1	11790	1	11099	3	6228	13	13316	8	8821	1	10128	1	5642	20	8062	13	6852	16	9418	1
3	PR0-380	8193	5	9782	12	11554	2	6575	11	11958	14	6799	14	9144	7	7624	7	9577	12	8600	9	8751	7
4	CMH 08-282	7061	13	8254	17	7690	17	6907	4	12916	11	5945	17	8129	16	7199	10	9689	10	8444	10	7588	17
5	CMH 08-287	7561	10	9281	14	8467	13	6799	7	13837	3	6995	12	8824	11	7181	11	5819	20	6500	19	7815	15
6	KMH-25K45(2700)	8851	2	11726	2	9297	8	5967	15	13347	7	8196	5	9564	3	8623	1	16282	1	12453	1	9273	2
7	Bisco New 704	6224	18	9181	15	8493	12	7240	1	9965	18	8696	2	8300	14	6957	15	6289	17	6623	17	7975	14
8	BiscoX5129	8025	7	8064	20	9235	9	7012	3	14277	2	7735	7	9058	8	6814	16	9945	9	8380	11	8792	6
9	BiscoX9	7209	12	10431	6	9040	10	6637	9	12576	12	6733	15	8771	12	7110	13	11977	5	9543	6	8348	12
10	NMH-713	8262	4	10275	8	7697	16	6633	10	13103	10	7163	10	8855	10	7031	14	4777	21	5904	21	8428	10
11	NMH-731	7990	8	10366	7	10505	5	5439	18	13502	6	8608	3	9402	4	7589	8	7511	15	7550	13	8950	5
12	NMH-666	6424	16	10512	5	9513	7	6876	5	13516	5	7427	9	9045	9	7859	4	12278	4	10068	4	9038	4
13	RJ 2020	3061	21	7280	21	4200	21	6008	14	6727	21	5857	18	5522	21	7269	9	13718	3	10493	3	6908	20
14	NMH1242	8644	3	11166	3	11969	1	4927	21	14818	1	8099	6	9937	2	7131	12	7255	16	7193	14	8610	9
15	Bio-151	8192	6	10148	10	8564	11	6821	6	13155	9	8496	4	9229	6	8306	2	11285	6	9796	5	8750	8
	CHECKS																						
16	BIO 9637	6704	14	10268	9	8210	14	6359	12	11321	15	6006	16	8145	15	5888	19	6040	19	5964	20	7811	16
17	HM4	6355	17	8708	16	6034	18	5801	16	8673	19	5335	20	6818	18	8082	3	6058	18	7070	15	6968	19
18	HM8	5934	19	8216	18	5965	19	6640	8	7376	20	5472	19	6601	20	5362	21	7670	14	6516	18	6695	21
19	Buland	5922	20	8207	19	4336	20	4980	20	11063	16	5186	21	6616	19	6403	18	9581	11	7992	12	7292	18
20	SeedTech 2324	6556	15	9659	13	9567	6	5319	19	12050	13	7527	8	8446	13	7675	6	14466	2	11071	2	8397	11
21	Bio 9681	7270	11	10642	4	7756	15	5729	17	10109	17	6933	13	8073	17	6768	17	10771	8	8769	8	8019	13
	Location Mean	**7224**		**9716**		**8570**		**6283**		**11960**		**7103**		**8476**		**7156**		**9533**		**8344**		**8242**	
	C.D. (5%)	1547		1392		953		455		1482		1365		1199		743		1303		1023		1234	
	C.V. (%)	12.97		8.68		6.74		4.39		7.5		11.64		-		6.29		8.28		-		-	
	F (Prob)	0		0		0		0		0		0				0		0					
	Plot Size	18		18		18		16.8		14.4		14.4		-		18		14.4		-		-	
	AGRONOMY DATA																						
	Sowing Date	11-12		25-11		23-12		29-11		11-12		24-12		-		29-11		22-11		-		-	
	Harvest Date	19-04		26-03		29-05		30-04		4-04		27-04		-		5-05		11-04		-		-	
	Irrigation Nos	8		8		-		6		10		11		-		6		8		-		-	
	Ferilizer Applied N	150		240		120		150		150		200		-		150		120		-		-	
	Ferilizer Applied P	75		80		60		75		75		75		-		80		50		-		-	
	Ferilizer Applied K	37.5		80		40		40		75		75		-		-		-		-		-	

Table No.6 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE BIO 9637																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	NK6607	31.5	26.2	14.1	19.6	-	12.5	11	16.1	40	7.2	15.1	15.7	-	31.3	10.8	19.7	18.8	15.3	31.7	84.5	58.4	18.6
2	S 7720	39.8	1	42.3	36.2	-	19.4	32.6	-	37.5	11	18.1	41.9	14.8	35.2	-	17.6	46.9	24.3	-	33.5	14.9	20.6
3	PR0-380	2	-	13.3	12.7	-	3	12.8	2.6	42.1	-	8.8	22.2	-	40.7	3.4	5.6	13.2	12.3	29.5	58.6	44.2	12
4	CMH 08-282	-	-	-	7.9	-	-	-	-	25	-	-	5.3	-	-	8.6	14.1	-	-	22.3	60.4	41.6	-
5	CMH 08-287	4.8	-	-	-	6.1	-	-	-	43.2	-	-	12.8	-	3.1	6.9	22.2	16.5	8.3	22	-	9	0
6	KMH-25K45(2700)	15.5	-	-	9.4	-	4.5	-	5.1	32.6	-	1.4	32	14.2	13.2	-	17.9	36.4	17.4	46.4	169.6	108.8	18.7
7	Bisco New 704	3.8	-	26.1	10	-	-	-	10.2	24.5	-	2.6	-	-	3.4	13.8	-	44.8	1.9	18.2	4.1	11.1	2.1
8	BiscoX5129	8.8	-	23.7	30.2	-	4.1	15	-	38.4	8.2	12.7	19.7	-	12.5	10.3	26.1	28.8	11.2	15.7	64.6	40.5	12.6
9	BiscoX9	-	-	-	11.4	-	-	-	0.5	29.6	-	0.1	7.5	1.6	10.1	4.4	11.1	12.1	7.7	20.8	98.3	60	6.9
10	NMH-713	12.2	4	12.6	17.5	-	6.2	-	11.9	38.5	11.5	11.6	23.2	0.1	-	4.3	15.7	19.3	8.7	19.4	-	-	7.9
11	NMH-731	-	24.4	-	24.1	7.7	13.7	-	23.6	26.9	11.3	9.6	19.2	1	28	-	19.3	43.3	15.4	28.9	24.4	26.6	14.6
12	NMH-666	26.8	14.5	17.7	12.6	-	14.4	-	-	45.9	6	4.2	-	2.4	15.9	8.1	19.4	23.7	11	33.5	103.3	68.8	15.7
13	RJ 2020	-	-	-	3.3	-	-	-	-	43.3	-	-	-	-	-	-	-	-	-	23.5	127.1	75.9	-
14	NMH1242	24.2	-	-	20	0.9	10	-	8	11.3	-	-	28.9	8.7	45.8	-	30.9	34.8	22	21.1	20.1	20.6	10.2
15	Bio-151	23.9	-	-	-	38.2	0.2	0.2	-	28.6	-	2.5	22.2	-	4.3	7.3	16.2	41.4	13.3	41.1	86.8	64.2	12
	CHECKS																						
16	BIO 9637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
17	HM4	-	12.4	-	-	15.2	-	-	-	34.5	-	-	-	-	-	-	-	-	-	37.3	0.3	18.5	-
18	HM8	-	-	-	5	-	-	-	-	23.8	-	-	-	-	-	4.4	-	-	-	-	27	9.3	-
19	Buland	7.2	9.3	27.4	-	-	0.7	-	8	22.7	-	-	-	-	-	-	-	-	-	8.7	58.6	34	-
20	SeedTech 2324	-	-	8.8	15.5	-	-	1.1	4	33.7	-	2.6	-	-	16.5	-	6.4	25.3	3.7	30.4	139.5	85.6	7.5
21	Bio 9681	-	1.8	-	16.5	-	-	-	15.5	37.8	-	-	8.5	3.6	-	-	-	15.4	-	14.9	78.3	47	2.7

Table No.6 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HM4																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	NK6607	136.4	12.2	100.5	25.1	-	23	56.5	58.5	4.1	30.4	36.4	22	15.7	78.7	21.5	56.3	33.8	37.8	-	84	33.7	33
2	S 7720	151.3	-	150	42.4	-	30.6	87	28.9	2.2	35	39.9	49.7	35.4	84	7.4	53.5	65.3	48.6	-	33.1	-	35.1
3	PR0-380	83.4	-	98.9	17.8	-	12.6	59	40.1	5.7	14.4	28.9	28.9	12.3	91.5	13.4	37.9	27.4	34.1	-	58.1	21.6	25.6
4	CMH 08-282	35.2	-	2.4	12.8	-	-	1.7	-	-	2.6	-	11.1	-	27.4	19.1	48.9	11.4	19.2	-	59.9	19.4	8.9
5	CMH 08-287	88.4	-	13.2	-	-	5.7	10.7	-	6.5	-	3.6	19	6.6	40.3	17.2	59.5	31.1	29.4	-	-	-	12.1
6	KMH-25K45(2700)	107.6	-	-	14.5	-	14.3	21.6	43.4	-	21.1	20.2	39.3	34.7	54.1	2.9	53.9	53.6	40.3	6.7	168.8	76.1	33.1
7	Bisco New 704	86.5	-	121.5	15	-	7.8	29.8	50.4	-	19	21.6	-	5.4	40.8	24.8	14.9	63	21.7	-	3.8	-	14.4
8	BiscoX5129	95.6	-	117.3	36.2	-	13.9	62.2	34.8	2.9	31.6	33.6	26.3	-	53.1	20.9	64.6	45	32.9	-	64.2	18.5	26.2
9	BiscoX9	50.2	-	18.3	16.5	-	1.4	39.3	37.2	-	6.9	18.7	13.4	19.8	49.8	14.4	45	26.2	28.7	-	97.7	35	19.8
10	NMH-713	101.7	-	97.7	22.9	-	16.2	39.8	52.8	2.9	35.6	32.3	30	18	27.6	14.3	51.1	34.3	29.9	-	-	-	20.9
11	NMH-731	74.8	10.6	-	29.8	-	24.3	27.3	68.7	-	35.4	29.9	25.7	19	74.1	-	55.7	61.3	37.9	-	24	6.8	28.4
12	NMH-666	128	1.8	106.8	17.7	-	25.1	30.7	22.9	8.5	29	23.5	1.1	20.7	57.7	18.5	55.8	39.2	32.7	-	102.7	42.4	29.7
13	RJ 2020	33.5	-	30.7	8	-	-	-	5.4	6.5	5.3	1.9	-	-	-	3.6	-	9.8	-	-	126.4	48.4	-
14	NMH1242	123.2	-	66.1	25.5	-	20.3	23.9	47.4	-	-	4.8	36	28.2	98.4	-	70.9	51.8	45.8	-	19.8	1.7	23.6
15	Bio-151	122.7	-	71.9	-	20	9.5	41.3	32.1	-	17.6	21.4	28.9	16.5	41.9	17.6	51.7	59.2	35.4	2.8	86.3	38.6	25.6
	CHECKS																						
16	BIO 9637	79.8	-	75.6	4.6	-	9.3	41	36.5	-	21.6	18.5	5.5	17.9	36.1	9.6	30.5	12.6	19.5	-	-	-	12.1
17	HM4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	HM8	55.4	-	7.3	9.8	-	4.1	-	-	-	-	-	-	-	-	14.5	-	2.6	-	-	26.6	-	-
19	Buland	92.8	-	123.8	2.8	-	10.1	-	47.5	-	-	5.7	-	-	-	-	27.6	-	-	-	58.2	13	4.6
20	SeedTech 2324	42.5	-	91.1	20.8	-	-	42.6	41.9	-	8.4	21.6	3.2	10.9	58.6	-	38.9	41.1	23.9	-	138.8	56.6	20.5
21	Bio 9681	72.4	-	6.5	21.9	-	5.5	12.7	57.7	2.4	3.5	15.8	14.4	22.2	28.5	-	16.6	30	18.4	-	77.8	24	15.1

Table No. 6 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HM8																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	NK6607	52.1	33.8	86.9	13.9	-	18.1	110.7	72.9	13.1	37.8	54.8	30.7	22.6	80.8	6.1	83.8	30.4	42.3	44.6	45.3	45	38.4
2	S 7720	61.6	7.1	133	29.7	-	25.4	151.6	40.7	11.1	42.6	58.8	60.3	43.5	86.1	-	80.5	61.2	53.4	5.2	5.1	5.2	40.7
3	PR0-380	18	1.5	85.4	7.3	3.7	8.2	114	52.8	14.8	20.8	46.4	38.1	19.1	93.7	-	62.1	24.2	38.5	42.2	24.9	32	30.7
4	CMH 08-282	-	2	-	2.7	-	-	36.8	0.3	1	8.4	11.3	19	0.5	28.9	4	75.1	8.6	23.2	34.3	26.3	29.6	13.3
5	CMH 08-287	21.2	-	5.5	-	15.2	1.5	49	5.7	15.7	5.1	17.6	27.4	13	42	2.4	87.6	27.8	33.7	33.9	-	-	16.7
6	KMH-25K45(2700)	33.6	-	-	4.2	5.4	9.7	63.7	56.5	7.1	27.9	36.4	49.2	42.7	55.9	-	81	49.8	44.9	60.8	112.3	91.1	38.5
7	Bisco New 704	20	3	106.5	4.7	-	3.5	74.6	64.2	0.6	25.7	38	4.9	11.7	42.4	9	35.1	58.9	25.7	29.7	-	1.6	19.1
8	BiscoX5129	25.8	2.4	102.6	23.9	-	9.4	118.3	47.1	11.8	39	51.6	35.2	-	54.8	5.6	93.6	41.3	37.2	27.1	29.7	28.6	31.3
9	BiscoX9	-	2.2	10.3	6.1	-	-	87.5	49.7	4.7	12.9	34.7	21.5	27	51.6	-	70.5	23	32.9	32.6	56.2	46.5	24.7
10	NMH-713	29.7	10.3	84.3	11.9	-	11.6	88.2	66.8	11.9	43.2	50.2	39.2	25.1	29	-	77.6	30.9	34.2	31.1	-	-	25.9
11	NMH-731	12.5	31.9	-	18.2	17	19.4	71.4	84	2.5	43	47.5	34.7	26.2	76.1	-	83.1	57.3	42.4	41.5	-	15.9	33.7
12	NMH-666	46.7	21.4	92.8	7.2	6.8	20.2	75.9	34.1	17.9	36.2	40.2	8.3	27.9	59.5	3.6	83.2	35.7	37	46.6	60.1	54.5	35
13	RJ 2020	-	5.8	21.8	-	-	-	22.6	15	15.8	11.3	15.6	-	-	-	-	-	7	-	35.6	78.9	61	3.2
14	NMH1242	43.6	-	54.8	14.3	9.6	15.5	66.8	60.9	-	-	18.9	45.7	35.9	100.7	-	100.9	48	50.6	33	-	10.4	28.6
15	Bio-151	43.3	-	60.2	-	50.2	5.2	90.2	44.1	3.9	24.3	37.8	38.1	23.5	43.6	2.7	78.4	55.2	39.8	54.9	47.1	50.3	30.7
	CHECKS																						
16	BIO 9637	15.7	6	63.7	-	8.7	5	89.8	49	-	28.5	34.5	13	25	37.6	-	53.5	9.8	23.4	9.8	-	-	16.7
17	HM4	-	19.2	-	-	25.1	-	34.6	9.1	8.7	5.6	13.5	7.1	6	1.2	-	17.6	-	3.3	50.7	-	8.5	4.1
18	HM8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	Buland	24	15.9	108.6	-	-	5.7	34.2	60.9	-	2.2	20	-	-	-	-	50	-	0.2	19.4	24.9	22.6	8.9
20	SeedTech 2324	-	-	78.2	9.9	-	-	91.9	54.9	8	14.5	38	10.5	17.6	60.4	-	63.4	37.6	28	43.1	88.6	69.9	25.4
21	Bio 9681	10.9	7.9	-	11	-	1.3	51.7	72.1	11.3	9.3	31.5	22.5	29.5	30	-	37.1	26.7	22.3	26.2	40.4	34.6	19.8

Table No.6 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Buland																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	NK6607	22.6	15.5	-	21.6	-	11.7	57	7.5	14.1	34.7	29	30.9	22.7	148.7	41.5	22.5	37.6	42	21.1	16.3	18.2	27.1
2	S 7720	30.3	-	11.7	38.5	-	18.6	87.5	-	12	39.4	32.3	60.7	43.6	156	25.1	20.4	70.1	53.1	-	-	-	29.2
3	PR0-380	-	-	-	14.6	13	2.3	59.5	-	15.8	18.2	21.9	38.3	19.2	166.4	32	8.1	31.1	38.2	19.1	-	7.6	20
4	CMH 08-282	-	-	-	9.7	-	-	2	-	1.9	6	-	19.2	0.6	77.3	38.7	16.8	14.6	22.9	12.4	1.1	5.7	4.1
5	CMH 08-287	-	-	-	-	25.6	-	11	-	16.7	2.8	-	27.7	13.1	95.3	36.5	25.1	34.9	33.4	12.2	-	-	7.2
6	KMH-25K45(2700)	7.7	-	-	11.3	14.8	3.8	22	-	8.1	25.1	13.6	49.5	42.9	114.4	19.8	20.7	58	44.6	34.7	69.9	55.8	27.2
7	Bisco New 704	-	-	-	11.9	-	-	30.1	2	1.5	22.9	15	5.1	11.9	95.9	45.4	-	67.7	25.5	8.7	-	-	9.4
8	BiscoX5129	1.5	-	-	32.4	-	3.4	62.7	-	12.8	35.9	26.3	35.5	-	113	40.8	29.1	49.1	36.9	6.4	3.8	4.9	20.6
9	BiscoX9	-	-	-	13.3	-	-	39.7	-	5.6	10.4	12.2	21.7	27.1	108.5	33.3	13.7	29.8	32.6	11	25	19.4	14.5
10	NMH-713	4.6	-	-	19.5	-	5.5	40.2	3.6	12.8	40.1	25.1	39.5	25.2	77.5	33.2	18.4	38.1	33.9	9.8	-	-	15.6
11	NMH-731	-	13.8	-	26.2	27.5	12.9	27.7	14.4	3.4	39.9	22.9	34.9	26.3	142.3	9.2	22.1	66	42.1	18.5	-	-	22.7
12	NMH-666	18.3	4.7	-	14.5	16.4	13.6	31.1	-	18.9	33.2	16.8	8.5	28.1	119.4	38.1	22.2	43.2	36.7	22.7	28.2	26	24
13	RJ 2020	-	-	-	5	-	-	-	-	16.8	8.8	-	-	-	-	20.6	-	12.9	-	13.5	43.2	31.3	-
14	NMH1242	15.8	-	-	22	19.5	9.3	24.3	-	-	-	-	46	36	176	-	33.9	56.2	50.2	11.4	-	-	18.1
15	Bio-151	15.5	-	-	-	63.6	-	41.7	-	4.8	21.5	14.8	38.3	23.7	97.5	37	18.9	63.8	39.5	29.7	17.8	22.6	20
	CHECKS																						
16	BIO 9637	-	-	-	1.7	18.4	-	41.4	-	-	25.7	12.1	13.2	25.1	89.3	27.7	2.3	15.8	23.1	-	-	-	7.1
17	HM4	-	2.9	-	-	36.4	-	0.3	-	9.6	3.3	-	7.3	6.1	39.1	16.5	-	2.9	3.1	26.2	-	-	-
18	HM8	-	-	-	6.8	9	-	-	-	0.9	-	-	0.2	0.1	37.6	33.3	-	5.5	-	-	-	-	-
19	Buland	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SeedTech 2324	-	-	-	17.4	-	-	43	-	8.9	12	15	10.7	17.7	120.6	6.8	8.9	45.1	27.7	19.9	51	38.5	15.2
21	Bio 9681	-	-	-	18.5	-	-	13	6.9	12.3	6.9	9.5	22.8	29.7	78.9	15	-	33.7	22	5.7	12.4	9.7	10

Table No.6 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE SeedTech 2324																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	NK6607	65.9	35.6	4.9	3.6	0.9	25.9	9.8	11.6	4.7	20.3	12.2	18.3	4.3	12.7	32.5	12.5	-	11.2	1.1	-	-	10.4
2	S 7720	76.4	8.6	30.8	17.9	50.1	33.7	31.1	-	2.8	24.5	15	45.1	22.1	16	17.1	10.5	17.2	19.9	-	-	-	12.1
3	PR0-380	28.7	2.9	4.1	-	83	15.4	11.5	-	6.3	5.5	6	25	1.3	20.8	23.6	-	-	8.3	-	-	-	4.2
4	CMH 08-282	-	3.4	-	-	49.1	1.8	-	-	-	-	-	7.7	-	-	29.9	7.2	-	-	-	-	-	-
5	CMH 08-287	32.2	-	-	-	103.3	8.2	-	-	7.1	-	-	15.3	-	-	27.8	14.8	-	4.5	-	-	-	-
6	KMH-25K45(2700)	45.7	-	-	-	85.9	17	-	1	-	11.7	-	35	21.4	-	12.2	10.8	8.9	13.2	12.3	12.6	12.5	10.4
7	Bisco New 704	30.9	4.4	15.9	-	36.3	10.4	-	6	-	9.7	-	-	-	-	36.1	-	15.5	-	-	-	-	-
8	BiscoX5129	37.3	3.8	13.7	12.7	10.6	16.6	13.7	-	3.6	21.3	9.8	22.4	-	-	31.8	18.5	2.8	7.2	-	-	-	4.7
9	BiscoX9	5.4	3.7	-	-	30.2	3.8	-	-	-	-	-	10	8	-	24.8	4.4	-	3.8	-	-	-	-
10	NMH-713	41.6	11.8	3.5	1.8	50.6	19	-	7.7	3.6	25	8.8	26	6.4	-	24.7	8.7	-	4.8	-	-	-	0.4
11	NMH-731	22.7	33.7	-	7.5	106.4	27.4	-	18.8	-	24.8	6.8	21.9	7.3	9.8	2.3	12.1	14.4	11.3	-	-	-	6.6
12	NMH-666	60.1	23.1	8.2	-	88.5	28.2	-	-	9.2	18.9	1.6	-	8.8	-	29.3	12.2	-	7.1	2.4	-	-	7.6
13	RJ 2020	-	7.3	-	-	48	0.6	-	-	7.2	-	-	-	-	-	13	-	-	-	-	-	-	-
14	NMH1242	56.7	-	-	3.9	93.4	23.2	-	3.9	-	-	-	31.8	15.6	25.1	-	23	7.6	17.7	-	-	-	2.5
15	Bio-151	56.3	-	-	-	164.9	12.2	-	-	-	8.5	-	25	5.1	-	28.2	9.2	12.9	9.3	8.2	-	-	4.2
	CHECKS																						
16	BIO 9637	26.2	7.5	-	-	91.7	12	-	-	-	12.2	-	2.3	6.3	-	19.6	-	-	-	-	-	-	-
17	HM4	-	20.9	-	-	120.8	2.4	-	-	0.6	-	-	-	-	-	9.1	-	-	-	5.3	-	-	-
18	HM8	9.1	1.4	-	-	76.4	6.7	-	-	-	-	-	-	-	-	24.8	-	-	-	-	-	-	-
19	Buland	35.3	17.5	17.1	-	61.9	12.8	-	3.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	SeedTech 2324	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
21	Bio 9681	21	9.4	-	0.9	3.2	8.1	-	11.1	3.1	-	-	10.9	10.2	-	7.7	-	-	-	-	-	-	-

Table No.6 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Bio 9681																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
		DELH	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	NK6607	37.1	24	88.2	2.6	-	16.6	38.9	0.5	1.6	26	17.8	6.7	-	39	23	34.1	3	16.3	14.6	3.5	7.8	15.6
2	S 7720	45.7	-	134.6	16.8	45.4	23.8	65.9	-	-	30.4	20.8	30.9	10.8	43.1	8.7	31.7	27.2	25.5	-	-	-	17.4
3	PR0-380	6.3	-	86.7	-	77.3	6.8	41.1	-	3.2	10.5	11.3	12.7	-	49	14.8	18.3	-	13.3	12.6	-	-	9.1
4	CMH 08-282	-	-	-	-	44.4	-	-	-	-	-	-	-	-	-	20.6	27.8	-	0.7	6.4	-	-	-
5	CMH 08-287	9.2	-	6.3	-	96.9	0.2	-	-	4	-	-	4	-	9.2	18.7	36.9	0.9	9.3	6.1	-	-	-
6	KMH-25K45(2700)	20.4	-	-	-	80.1	8.3	7.9	-	-	17	3.8	21.7	10.2	19.9	4.2	32	18.2	18.5	27.4	51.2	42	15.6
7	Bisco New 704	8.2	-	107.9	-	32	2.2	15.1	-	-	15	5	-	-	9.5	26.4	-	25.4	2.8	2.8	-	-	-
8	BiscoX5129	13.4	-	104	11.7	7.1	7.9	43.9	-	0.5	27.1	15.3	10.4	-	19.1	22.4	41.2	11.6	12.2	0.7	-	-	9.6
9	BiscoX9	-	-	11.1	-	26.2	-	23.6	-	-	3.3	2.5	-	-	16.6	15.9	24.4	-	8.6	5.1	11.2	8.8	4.1
10	NMH-713	17	2.2	85.6	0.8	45.9	10.1	24.1	-	0.5	31	14.2	13.6	-	-	15.8	29.6	3.3	9.7	3.9	-	-	5.1
11	NMH-731	1.4	22.2	-	6.5	99.9	17.9	13	7	-	30.8	12.2	9.9	-	35.4	-	33.6	24.2	16.5	12.1	-	-	11.6
12	NMH-666	32.2	12.5	94.1	-	82.6	18.6	16	-	5.9	24.6	6.6	-	-	22.7	20	33.7	7.1	12	16.1	14	14.8	12.7
13	RJ 2020	-	-	22.7	-	43.4	-	-	-	4	1.8	-	-	-	-	4.9	-	-	-	7.4	27.4	19.7	-
14	NMH1242	29.5	-	55.9	3	87.4	14	9.9	-	-	-	-	18.9	4.9	54.3	-	46.6	16.8	23.1	5.4	-	-	7.4
15	Bio-151	29.2	-	61.4	-	156.6	3.8	25.4	-	-	13.7	4.9	12.7	-	10.4	19.1	30.1	22.5	14.3	22.7	4.8	11.7	9.1
	CHECKS																						
16	BIO 9637	4.3	-	64.9	-	85.7	3.6	25.1	-	-	17.5	2.3	-	-	5.9	11	12	-	0.9	-	-	-	-
17	HM4	-	10.5	-	-	113.9	-	-	-	-	-	-	-	-	-	1.3	-	-	-	19.4	-	-	-
18	HM8	-	-	0.7	-	70.9	-	-	-	-	-	-	-	-	-	15.9	-	-	-	-	-	-	-
19	Buland	11.8	7.4	110	-	56.8	4.4	-	-	-	-	-	-	-	-	-	9.4	-	-	-	-	-	-
20	SeedTech 2324	-	-	79.4	-	-	-	26.5	-	-	4.8	5	-	-	23.3	-	19.2	8.6	4.6	13.4	34.3	26.2	4.7
21	Bio 9681	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No. 6 (Cont..)

S.No.	PEDIGREE	MOISTURE % AT HARVEST																					
		DELH	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	NK6607	26.3	27.3	27.8	25.2	14.3	24.2	26.2	24.0	17.5	29.4	24.3	28.0	13.2	9.4	16.4	25.0	17.9	18.3	17.8	23.5	20.6	21.7
2	S 7720	32.0	25.7	28.0	23.4	13.3	24.5	24.2	23.5	19.2	30.8	24.4	28.0	11.7	9.7	16.7	27.7	17.0	18.5	17.8	21.7	19.8	21.8
3	PR0-380	30.9	28.1	27.6	26.1	15.0	25.5	25.7	24.8	18.3	30.9	24.9	29.8	11.6	9.8	14.7	25.1	17.1	18.0	17.4	21.5	19.4	22.0
4	CMH 08-282	38.2	27.0	27.0	23.1	12.7	25.6	23.9	20.5	17.2	28.9	22.6	28.8	14.0	10.4	15.9	24.1	16.9	18.3	18.0	21.3	19.6	21.6
5	CMH 08-287	33.7	30.7	26.8	25.3	13.7	26.0	26.0	24.4	18.6	29.9	24.7	31.7	7.6	10.6	16.2	26.0	19.6	18.6	17.8	24.5	21.1	22.5
6	KMH-25K45(2700)	32.7	30.2	27.6	26.2	13.3	26.0	26.7	26.1	19.1	29.9	25.4	31.9	15.8	9.9	15.4	26.6	18.0	19.6	18.5	21.3	19.9	22.9
7	Bisco New 704	33.7	30.1	27.2	26.7	13.3	26.2	26.6	25.3	18.8	32.0	25.6	22.8	20.8	9.8	16.2	28.2	17.6	19.2	18.0	23.7	20.9	23.0
8	BiscoX5129	35.1	28.4	27.2	23.9	14.7	25.8	26.0	24.5	18.0	27.8	24.1	24.8	18.0	9.8	16.3	27.2	16.9	18.8	17.4	26.3	21.8	22.5
9	BiscoX9	28.6	31.3	27.4	23.0	15.3	25.1	27.0	23.5	20.1	27.9	24.6	26.8	14.9	9.8	14.9	26.9	17.3	18.4	17.6	22.5	20.0	22.0
10	NMH-713	34.5	29.7	27.1	22.4	13.7	25.5	25.2	21.9	19.0	29.9	24.0	28.2	12.4	9.7	16.1	28.6	18.3	18.9	17.5	26.1	21.8	22.4
11	NMH-731	25.1	28.8	27.2	22.2	14.0	23.4	24.7	23.4	18.0	28.6	23.7	30.3	11.4	9.8	16.2	25.3	17.8	18.4	17.8	20.1	18.9	21.2
12	NMH-666	29.7	30.1	27.8	24.6	14.3	25.3	27.2	20.7	18.5	28.5	23.7	27.7	11.9	9.7	15.9	27.4	18.3	18.5	17.9	18.5	18.2	21.7
13	RJ 2020	28.5	29.9	26.4	22.7	13.7	24.2	26.2	21.7	17.0	30.3	23.8	29.0	16.5	10.1	16.1	26.4	17.0	19.2	18.0	24.8	21.4	22.0
14	NMH1242	30.0	28.7	26.1	24.0	13.3	24.4	24.7	20.3	19.2	24.7	22.2	27.7	12.6	9.9	16.8	24.8	19.6	18.6	16.5	19.4	18.0	21.1
15	Bio-151	37.0	23.9	27.4	23.1	12.3	24.7	27.1	22.1	19.1	29.3	24.4	31.1	13.7	10.8	16.0	28.5	16.6	19.4	17.1	17.7	17.4	21.9
	CHECKS																						
16	BIO 9637	32.0	27.2	26.1	24.8	13.7	24.7	25.2	24.0	18.0	29.3	24.1	27.6	10.4	10.0	15.6	23.6	16.8	17.3	18.3	20.9	19.6	21.4
17	HM4	31.8	25.4	26.4	23.7	14.7	24.4	25.0	22.9	18.1	24.6	22.6	24.1	15.6	10.4	16.2	23.1	19.6	18.1	19.0	20.8	19.9	21.2
18	HM8	33.5	25.3	27.5	22.7	14.3	24.6	23.9	24.3	19.1	26.3	23.4	22.8	15.2	9.9	16.1	23.9	18.9	17.8	16.7	21.0	18.8	21.2
19	Buland	34.1	27.6	24.4	27.0	14.7	25.5	25.5	18.5	17.6	27.7	22.3	27.6	15.2	9.3	15.3	22.0	17.4	17.8	17.7	23.4	20.6	21.4
20	SeedTech 2324	30.8	31.1	27.7	26.9	14.3	26.1	26.0	25.5	18.6	28.1	24.5	31.3	10.9	10.0	15.9	27.5	18.5	19.0	17.6	24.0	20.8	22.6
21	Bio 9681	32.2	25.3	28.0	17.0	14.7	23.4	26.9	18.8	17.5	26.6	22.4	22.3	9.7	9.7	15.9	22.5	16.1	16.0	17.2	26.4	21.8	20.4
	Loc. Mean	**31.9**	**28.2**	**27.1**	**24.0**	**14.0**	**25.0**	**25.7**	**22.9**	**18.4**	**28.6**	**23.9**	**27.7**	**13.5**	**9.9**	**15.9**	**25.7**	**17.8**	**18.4**	**17.7**	**22.3**	**20.0**	**21.8**
	C.D. (5%)	5.56	0.95	0.90	2.99	1.20	2.66	0.81	3.39	-	0.56	2.02	3.92	2.02	0.57	-	1.44	1.39	2.26	0.78	4.78	3.77	1.24
	C.V. (%)	10.56	2.03	2.01	7.56	5.22	8.45	1.90	8.98	-	1.18	5.98	8.57	9.08	3.47	-	3.39	4.75	10.72	2.67	12.98	9.04	8.42
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.00	0.02	0.50	0.00

Table No. 6 (Cont..)

S.No.	PEDIGREE	GRAIN SHELLING %																				
		DELH	KARN	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	NK6607	89.0	76.6	83.7	75.0	81.1	77.0	84.0	79.2	78.8	79.7	83.5	81.7	85.2	81.7	79.4	77.6	81.5	75.8	82.5	79.1	80.7
2	S 7720	90.0	75.4	85.2	74.3	81.2	81.4	88.5	79.4	83.3	83.1	86.4	84.3	82.9	81.1	80.4	77.8	82.1	70.3	63.8	67.0	80.3
3	PR0-380	83.0	77.3	79.8	73.7	78.4	74.9	82.0	78.2	77.5	78.2	83.8	78.8	85.9	83.6	75.9	76.3	80.7	74.9	81.8	78.3	79.2
4	CMH 08-282	83.0	77.3	81.4	74.3	79.0	73.3	80.0	78.4	79.8	77.9	82.1	78.0	85.1	79.6	79.8	76.2	80.1	75.2	83.7	79.4	79.2
5	CMH 08-287	84.0	76.0	72.9	75.0	77.0	77.3	89.0	79.5	76.8	80.6	83.3	79.0	85.8	81.4	79.2	81.6	81.7	77.1	81.0	79.1	79.9
6	KMH-25K45(2700)	86.0	78.9	79.5	75.0	79.8	73.6	84.0	78.0	76.3	78.0	85.5	79.8	84.7	79.1	78.4	76.2	80.6	74.6	88.0	81.3	79.8
7	Bisco New 704	85.0	78.8	83.0	75.0	80.5	75.2	86.0	78.7	79.3	79.8	81.5	76.4	85.6	82.8	75.9	76.5	79.8	72.4	77.7	75.0	79.4
8	BiscoX5129	88.0	78.0	82.0	74.3	80.6	77.6	87.0	77.1	81.5	80.8	84.5	82.3	85.1	81.2	78.6	79.6	81.9	75.2	84.6	79.9	81.0
9	BiscoX9	89.0	76.8	84.3	73.7	80.9	76.2	86.0	79.4	80.5	80.5	85.7	81.9	86.9	82.5	79.0	75.9	82.0	75.8	80.6	78.2	80.9
10	NMH-713	85.0	80.6	82.8	73.7	80.5	78.1	89.0	78.7	77.3	80.8	84.1	79.0	76.2	82.0	79.0	72.0	78.7	73.7	83.0	78.3	79.6
11	NMH-731	87.0	78.4	83.3	73.7	80.6	77.5	89.0	78.2	81.5	81.5	85.1	80.5	86.8	81.3	77.4	79.9	81.8	76.6	72.5	74.5	80.5
12	NMH-666	87.0	78.8	83.2	73.0	80.5	78.1	79.5	80.7	79.8	79.5	84.2	82.1	84.8	80.7	80.6	82.8	82.6	77.3	83.3	80.3	81.0
13	RJ 2020	88.0	76.9	83.5	72.7	80.3	80.2	86.5	79.7	82.5	82.2	83.9	81.1	78.9	80.3	79.9	77.5	80.3	74.6	86.1	80.4	80.8
14	NMH1242	86.0	76.0	83.4	72.3	79.4	76.8	85.0	81.2	77.3	80.1	85.5	82.1	87.9	82.1	79.9	82.7	83.4	74.7	84.2	79.4	81.1
15	Bio-151	87.0	78.1	81.0	73.7	79.9	81.9	84.0	78.7	82.0	81.6	82.9	79.3	84.7	79.6	79.0	80.6	81.0	74.0	82.6	78.3	80.5
	CHECKS																					
16	BIO 9637	85.0	75.9	85.9	73.7	80.1	77.1	83.5	78.1	81.5	80.1	85.4	80.6	84.9	80.9	80.4	81.6	82.3	75.9	82.9	79.4	80.8
17	HM4	80.0	78.9	80.6	73.7	78.3	71.4	83.0	78.6	77.3	77.6	81.7	76.6	76.2	82.6	74.3	78.5	78.3	73.2	76.2	74.7	77.7
18	HM8	82.0	76.8	84.7	72.0	78.9	74.2	82.5	79.7	77.5	78.5	83.0	77.1	82.8	83.3	70.9	76.1	78.9	71.4	80.5	75.9	78.4
19	Buland	81.0	78.5	75.4	74.7	77.4	66.9	86.0	77.1	77.0	76.7	82.1	76.3	74.0	83.4	73.2	74.0	77.1	74.1	83.7	78.9	77.3
20	SeedTech 2324	86.0	78.7	86.1	72.7	80.9	73.9	86.5	78.8	76.8	79.0	84.0	78.6	84.6	82.6	78.8	79.2	81.3	73.4	84.8	79.1	80.3
21	Bio 9681	84.0	78.9	82.4	73.7	79.7	74.7	86.5	79.9	82.0	80.8	84.2	78.6	76.4	82.2	74.7	84.5	80.1	74.4	78.1	76.2	79.7
	Loc. Mean	**85.5**	**77.7**	**82.1**	**73.8**	**79.8**	**76.0**	**85.1**	**78.9**	**79.3**	**79.8**	**83.9**	**79.7**	**83.1**	**81.6**	**77.8**	**78.4**	**80.8**	**74.5**	**81.0**	**77.7**	**79.9**
	C.D. (5%)	0.00	0.57	4.70	2.20	3.11	1.24	4.31	0.00	1.25	3.10	1.10	1.76	0.84	-	1.30	3.92	2.71	2.00	7.74	7.07	1.80
	C.V. (%)	0.00	0.44	3.47	1.81	2.76	0.99	3.07	0.00	0.96	2.75	0.79	1.34	0.61	-	1.01	3.03	2.92	1.63	5.79	4.36	3.24
	F (Prob)	0.00	0.00	0.00	0.20	0.30	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.12	0.00

Table No.6 (Cont..)

S.No.	PEDIGREE	STAND AT HARVEST ('000/ha) DELH	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	NK6607	65.6	60.4	67.1	63.9	67.1	64.2	70.6	53.9	68.3	82.2	68.7	58.5	52.6	59.8	56.0	66.2	54.9	58.0	44.4	65.7	55.1	61.9
2	S 7720	73.9	60.6	83.3	64.3	68.5	66.8	72.5	44.4	69.0	82.2	67.0	59.1	55.0	58.0	57.1	66.7	55.8	58.6	52.4	73.4	62.9	63.3
3	PR0-380	72.8	61.3	65.3	66.7	71.8	68.1	72.7	51.7	68.8	82.2	68.8	63.5	44.3	58.3	56.5	65.5	50.9	56.5	48.1	81.7	64.9	63.5
4	CMH 08-282	62.8	61.1	34.7	61.9	67.4	63.3	65.7	29.3	67.4	65.5	57.0	48.7	35.9	46.9	57.1	66.2	52.1	51.2	49.6	59.0	54.3	56.0
5	CMH 08-287	54.4	60.9	31.9	59.4	69.9	61.2	62.7	28.0	69.2	77.1	59.2	51.3	46.5	51.3	56.0	66.0	52.1	53.8	52.0	76.4	64.2	58.3
6	KMH-25K45(2700)	63.3	60.6	31.9	61.7	68.5	63.5	66.9	47.8	66.7	77.3	64.7	56.7	55.7	56.7	56.3	66.0	52.3	57.3	50.2	68.5	59.4	60.9
7	Bisco New 704	70.0	61.9	76.4	60.4	66.7	64.7	66.4	54.6	68.5	79.2	67.2	49.3	50.2	52.2	55.6	65.7	51.2	54.0	49.4	72.0	60.7	60.8
8	BiscoX5129	76.7	60.6	79.6	65.9	64.8	67.0	70.8	45.6	66.7	79.6	65.7	60.0	52.0	58.1	55.8	65.7	50.7	57.1	52.4	74.3	63.4	62.5
9	BiscoX9	66.1	60.4	42.1	59.1	68.8	63.6	71.1	36.7	66.0	60.6	58.6	53.1	44.8	51.9	54.8	66.0	56.9	54.6	48.7	76.4	62.5	58.8
10	NMH-713	66.7	60.4	66.7	60.4	68.8	64.0	69.0	42.6	66.7	82.6	65.2	53.7	55.9	58.7	56.5	66.2	52.5	57.3	48.7	70.8	59.8	61.3
11	NMH-731	67.8	60.9	39.8	66.3	71.3	66.6	67.6	53.1	67.4	79.4	66.9	59.6	53.1	59.1	56.9	65.7	57.6	58.7	49.4	66.4	57.9	62.6
12	NMH-666	73.3	61.1	74.5	60.7	69.9	66.3	67.4	46.3	67.8	80.6	65.5	56.5	51.3	55.9	53.8	66.0	50.5	55.7	50.4	75.5	62.9	61.7
13	RJ 2020	36.7	60.9	46.8	58.7	68.8	56.3	62.5	35.9	66.0	51.6	54.0	26.5	29.6	29.3	56.5	65.3	53.0	43.4	48.9	69.7	59.3	51.2
14	NMH1242	78.3	60.2	69.9	64.6	69.9	68.3	68.1	54.6	68.8	78.5	67.5	57.6	51.7	59.3	55.0	65.7	55.6	57.5	51.5	73.1	62.3	63.3
15	Bio-151	72.8	60.2	70.8	60.6	70.8	66.1	68.8	43.1	66.2	77.8	64.0	57.8	52.8	53.0	55.8	66.0	56.5	57.0	51.1	72.5	61.8	61.6
	CHECKS																						
16	BIO 9637	72.8	60.2	67.1	66.7	69.7	67.3	70.4	53.3	68.5	80.1	68.1	49.8	51.5	51.7	54.2	66.0	54.2	54.5	48.5	71.3	59.9	61.8
17	HM4	54.4	60.6	50.5	61.1	69.7	61.4	63.0	35.2	66.7	75.0	60.0	47.0	47.2	45.9	55.0	66.2	50.7	52.0	42.8	50.0	46.4	55.7
18	HM8	52.2	60.6	36.1	59.4	68.8	60.2	62.3	32.6	67.4	69.7	58.0	49.1	43.1	45.2	53.6	66.2	51.2	51.4	50.6	74.3	62.4	56.6
19	Buland	76.7	61.1	85.2	62.2	68.8	67.2	66.7	51.5	67.8	81.5	66.9	62.0	45.6	56.1	55.0	65.7	53.5	56.3	49.6	76.4	63.0	62.5
20	SeedTech 2324	76.7	61.1	69.9	66.5	67.4	67.9	73.1	53.1	68.1	78.9	68.3	59.1	45.4	55.0	55.8	66.4	56.3	56.3	55.2	67.6	61.4	62.8
21	Bio 9681	63.9	61.5	36.6	65.2	68.8	64.8	66.0	55.9	69.2	81.9	68.3	56.1	54.6	53.7	51.2	66.4	54.4	56.1	48.3	60.4	54.4	61.1
	Loc. Mean	**66.6**	**60.8**	**58.4**	**62.6**	**68.8**	**64.7**	**67.8**	**45.2**	**67.7**	**76.4**	**64.3**	**54.0**	**48.5**	**53.1**	**55.4**	**66.0**	**53.5**	**55.1**	**49.6**	**70.3**	**59.9**	**60.4**
	C.D. (5%)	14.15	2.09	37.77	4.27	1.85	7.24	5.32	9.99	2.11	5.94	7.20	9.53	5.15	4.87	2.67	0.82	4.97	4.88	3.21	6.77	9.20	3.28
	C.V. (%)	12.88	2.09	39.19	4.13	1.62	7.91	4.75	13.40	1.89	4.72	7.92	10.69	6.43	5.56	2.92	0.75	5.63	7.74	3.92	5.84	7.35	7.82
	F (Prob)	0.00	0.99	0.04	0.00	0.00	0.15	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.24	0.06	0.00	0.00	0.00	0.07	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : LUDHIANA 39.2%

Table No.6 (Cont..)

S.No.	PEDIGREE	DAYS TO 50% POLLEN SHED																					
		DELH	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	NK6607	133.3	139.3	129.7	128.7	87.3	123.7	129.3	123.7	70.7	111.0	108.7	77.3	63.7	67.3	67.3	59.7	55.0	65.1	86.0	80.7	83.3	94.7
2	S 7720	130.7	135.0	126.3	129.0	91.3	122.5	128.7	124.0	71.3	111.3	108.8	77.0	64.0	70.0	69.0	60.3	56.7	66.2	97.0	82.7	89.8	95.5
3	PR0-380	133.3	134.3	128.0	127.0	95.7	123.7	129.3	124.0	71.3	114.7	109.8	77.0	63.3	68.0	65.7	60.3	56.0	65.1	98.0	82.7	90.3	95.8
4	CMH 08-282	135.0	139.7	127.3	124.7	91.3	123.6	128.3	121.3	70.0	113.3	108.3	77.0	63.7	67.7	66.0	57.3	55.7	64.6	98.0	82.0	90.0	95.2
5	CMH 08-287	140.0	143.7	129.3	130.7	94.7	127.7	129.7	121.7	71.3	115.3	109.5	78.3	64.3	70.0	68.3	61.3	57.0	66.6	92.7	80.3	86.5	97.0
6	KMH-25K45(2700)	137.3	140.0	130.3	127.0	97.0	126.3	130.7	123.3	71.7	113.0	109.7	78.0	63.0	70.3	68.0	62.0	55.7	66.2	96.7	84.0	90.3	96.9
7	Bisco New 704	133.3	140.0	128.3	131.7	86.3	123.9	130.7	121.3	73.7	116.3	110.5	83.0	63.7	71.7	70.0	60.7	57.7	67.8	98.3	86.0	92.2	97.2
8	BiscoX5129	130.3	138.0	125.3	126.0	96.0	123.1	128.3	123.0	70.7	108.7	107.7	76.7	63.7	65.3	66.3	58.3	55.0	64.2	88.3	83.0	85.7	94.3
9	BiscoX9	135.7	139.0	128.7	124.0	98.0	125.1	128.0	120.3	71.3	111.7	107.8	79.7	64.0	70.0	66.7	60.0	54.3	65.8	95.3	82.0	88.7	95.8
10	NMH-713	134.3	137.7	127.7	128.0	96.0	124.7	129.0	124.0	71.3	111.3	108.9	76.3	63.0	72.3	67.0	60.0	56.7	65.9	99.3	84.3	91.8	96.4
11	NMH-731	127.0	134.0	129.7	123.0	96.3	122.0	124.7	121.0	70.3	109.3	106.3	76.7	63.7	66.7	65.7	59.3	56.3	64.7	100.0	81.0	90.5	94.4
12	NMH-666	128.3	136.3	126.3	128.7	91.3	122.2	127.0	123.0	70.3	109.3	107.4	77.7	64.3	68.3	66.0	59.7	56.3	65.4	83.3	81.7	82.5	94.0
13	RJ 2020	131.7	138.7	126.7	129.0	94.7	124.1	128.7	126.0	71.0	110.7	109.1	80.0	63.7	70.3	67.7	61.3	56.7	66.6	89.7	81.3	85.5	95.7
14	NMH1242	128.3	132.3	122.7	122.3	99.7	121.1	126.0	119.7	70.3	108.3	106.1	75.3	62.7	65.0	63.3	57.0	55.0	63.1	87.0	81.0	84.0	92.7
15	Bio-151	133.3	138.7	128.0	129.3	101.3	126.1	128.3	121.7	73.0	108.7	107.9	76.3	63.3	69.3	68.3	58.7	55.7	65.3	100.7	81.7	91.2	96.3
	CHECKS																						
16	BIO 9637	133.3	137.0	124.0	127.0	98.7	124.0	127.0	119.3	70.3	110.3	106.8	76.0	63.3	66.0	65.7	57.7	54.7	63.9	101.3	81.7	91.5	94.9
17	HM4	132.0	135.3	126.0	123.3	99.0	123.1	128.3	118.3	70.3	108.7	106.4	76.0	61.0	63.7	64.0	54.3	55.0	62.3	83.7	80.7	82.2	92.9
18	HM8	130.7	137.3	126.0	128.0	96.3	123.7	129.3	120.7	70.0	113.3	108.3	77.0	63.3	68.7	66.3	56.3	56.3	64.7	96.0	82.3	89.2	95.2
19	Buland	136.3	139.0	128.7	131.3	94.3	125.9	130.7	121.7	72.7	114.7	109.9	81.3	66.3	72.3	72.0	60.0	57.7	68.3	89.3	84.0	86.7	97.2
20	SeedTech 2324	134.0	139.7	127.0	125.3	95.3	124.3	129.3	120.0	70.3	111.3	107.8	77.3	63.3	66.7	66.0	62.0	56.3	65.3	98.3	82.3	90.3	95.6
21	Bio 9681	130.7	133.3	125.7	124.7	96.3	122.1	126.3	117.7	70.3	110.3	106.2	73.3	61.7	63.3	65.3	54.7	54.0	62.1	82.3	80.0	81.2	92.4
	Loc. Mean	**132.8**	**137.5**	**127.2**	**127.1**	**95.1**	**123.9**	**128.5**	**121.7**	**71.1**	**111.5**	**108.2**	**77.5**	**63.5**	**68.2**	**66.9**	**59.1**	**55.9**	**65.2**	**93.4**	**82.2**	**87.8**	**95.2**
	C.D. (5%)	5.09	1.92	4.83	3.37	1.97	3.44	2.42	4.63	1.16	1.47	2.08	1.90	1.41	2.32	2.39	0.90	1.97	1.40	2.59	4.12	8.55	1.56
	C.V. (%)	2.32	0.85	2.30	1.61	1.25	2.20	1.14	2.30	0.99	0.80	1.36	1.49	1.34	2.06	2.16	0.93	2.14	1.88	1.68	3.04	4.67	2.43
	F (Prob)	0.00	0.00	0.23	0.00	0.00	0.04	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.42	0.19	0.00

Table No.6 (Cont..)

		DAYS TO 50% SILKING																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	NK6607	136.0	142.0	132.3	133.0	91.7	127.0	131.3	125.7	73.0	115.3	111.3	81.0	65.3	68.3	70.7	61.7	58.3	67.6	89.3	83.7	86.5	97.6
2	S 7720	134.0	137.3	129.7	132.0	95.7	125.7	130.7	125.3	73.7	115.7	111.3	80.3	65.3	71.0	72.7	62.3	59.0	68.4	100.3	88.0	94.2	98.4
3	PR0-380	136.7	136.7	130.7	130.3	100.0	126.9	131.0	126.0	74.3	119.7	112.8	83.0	65.0	69.0	70.0	62.3	58.0	67.9	101.3	86.7	94.0	98.9
4	CMH 08-282	139.0	142.0	130.3	128.3	94.7	126.9	130.3	123.3	72.0	116.3	110.5	77.7	65.3	68.7	68.3	59.3	57.7	66.2	101.0	84.7	92.8	97.6
5	CMH 08-287	142.0	146.0	131.7	134.3	99.3	130.7	131.7	124.0	74.0	118.0	111.9	79.0	66.0	71.0	73.0	63.3	60.0	68.7	95.7	84.0	89.8	99.6
6	KMH-25K45(2700)	139.3	143.0	133.0	130.3	100.7	129.3	132.7	126.0	74.7	117.7	112.8	83.0	64.7	71.3	72.0	64.0	58.7	68.9	100.0	87.3	93.7	99.9
7	Bisco New 704	136.3	142.7	131.7	135.0	91.0	127.3	132.7	123.3	76.7	120.3	113.3	84.7	66.3	72.7	73.3	62.7	59.7	69.9	101.3	90.0	95.7	100.0
8	BiscoX5129	133.3	140.3	127.7	129.0	100.3	126.1	130.3	125.3	73.0	113.0	110.4	78.0	64.7	66.3	69.3	60.3	57.3	66.0	91.7	87.0	89.3	96.9
9	BiscoX9	135.3	141.3	132.0	127.3	102.0	127.6	130.0	122.3	74.0	116.0	110.6	83.0	65.7	71.0	69.7	62.0	57.3	68.1	98.3	85.7	92.0	98.4
10	NMH-713	136.7	140.0	130.3	130.7	100.3	127.6	131.0	125.7	74.0	115.3	111.5	80.3	64.7	73.3	72.3	62.0	60.0	68.8	102.3	86.7	94.5	99.2
11	NMH-731	129.7	136.7	133.0	126.0	101.3	125.3	126.7	123.3	72.7	112.7	108.8	78.7	65.0	67.7	68.7	61.3	58.7	66.7	103.0	84.7	93.8	97.0
12	NMH-666	130.3	139.0	128.7	131.7	95.3	125.0	129.0	125.0	72.7	113.0	109.9	80.3	65.3	69.3	68.3	62.0	57.7	67.2	86.7	84.3	85.5	96.4
13	RJ 2020	133.7	141.3	129.0	132.0	99.3	127.1	130.7	128.0	73.0	115.0	111.7	83.3	66.0	71.3	70.0	64.0	59.0	68.9	92.7	84.0	88.3	98.4
14	NMH1242	131.0	135.0	125.3	126.0	103.0	124.1	128.0	121.0	73.0	113.0	108.8	76.0	64.0	66.0	67.3	59.0	56.7	64.8	90.3	84.3	87.3	95.2
15	Bio-151	135.3	141.7	129.7	132.3	104.7	128.7	130.3	123.7	75.0	113.3	110.6	78.0	64.7	70.3	72.0	61.0	59.0	67.5	103.7	81.3	92.5	98.6
	CHECKS																						
16	BIO 9637	136.7	139.3	126.7	130.0	103.0	127.1	129.0	121.3	72.3	114.7	109.3	77.3	64.3	67.0	69.0	59.7	57.0	65.7	104.3	85.3	94.8	97.5
17	HM4	134.0	137.7	129.0	126.7	104.0	126.3	130.3	120.3	72.7	113.7	109.3	77.0	62.7	64.7	67.0	56.3	57.3	64.2	86.7	84.7	85.7	95.6
18	HM8	134.3	139.7	128.3	131.3	100.7	126.9	131.3	122.7	72.3	116.0	110.6	79.3	64.3	70.3	70.3	58.3	58.7	66.9	99.3	86.0	92.7	97.8
19	Buland	135.3	141.7	131.7	134.7	99.3	128.5	132.7	123.7	75.0	119.0	112.6	83.7	70.0	73.3	74.7	62.3	60.3	70.7	92.3	88.0	90.2	99.9
20	SeedTech 2324	136.7	142.0	129.7	128.7	100.3	127.5	131.3	122.0	72.7	115.7	110.4	80.0	64.3	67.7	69.7	64.0	58.3	67.3	101.7	85.7	93.7	98.3
21	Bio 9681	132.0	136.3	128.7	128.0	100.3	125.1	128.3	119.7	72.7	115.3	109.0	75.3	64.0	64.3	69.7	56.7	56.3	64.4	85.3	83.7	84.5	95.1
	Loc. Mean	**135.1**	**140.1**	**130.0**	**130.4**	**99.4**	**127.0**	**130.4**	**123.7**	**73.5**	**115.7**	**110.8**	**80.0**	**65.1**	**69.3**	**70.4**	**61.2**	**58.3**	**67.4**	**96.5**	**85.5**	**91.0**	**97.9**
	C.D. (5%)	6.48	1.90	5.04	3.19	2.23	3.45	2.47	4.39	1.48	1.84	1.99	2.90	1.82	2.40	3.06	0.91	2.18	1.50	2.70	4.68	8.94	1.58
	C.V. (%)	2.90	0.82	2.35	1.48	1.36	2.16	1.15	2.15	1.22	0.97	1.27	2.20	1.70	2.10	2.64	0.90	2.26	1.94	1.69	3.32	4.71	2.39
	F (Prob)	0.06	0.00	0.21	0.00	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.18	0.26	0.00

Table No.6 (Cont..)

		DAYS TO 75% DRY HUSK																				
						ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	NK6607	181.0	166.7	168.0	139.3	163.8	157.7	165.7	117.0	152.0	148.1	120.7	100.3	102.3	104.0	102.0	115.7	107.5	125.0	113.7	119.3	133.2
2	S 7720	185.3	165.0	168.3	139.0	164.4	155.0	165.0	119.3	152.0	147.8	122.0	100.3	104.3	105.7	104.0	115.3	108.6	136.7	118.0	127.3	134.7
3	PR0-380	182.0	164.0	168.3	144.0	164.6	156.0	167.0	118.3	152.3	148.4	122.0	100.0	103.3	105.7	102.0	105.7	106.4	136.3	116.7	126.5	134.0
4	CMH 08-282	183.7	172.0	166.0	147.0	167.2	155.3	162.7	113.0	149.3	145.1	118.7	100.3	102.3	101.7	100.0	115.7	106.4	129.0	114.7	121.8	133.2
5	CMH 08-287	182.3	171.0	168.7	145.7	166.9	156.3	162.7	114.0	152.0	146.3	121.3	101.0	104.7	104.7	104.7	115.3	108.6	130.0	114.0	122.0	134.3
6	KMH-25K45(2700)	184.7	168.0	168.0	143.3	166.0	158.7	165.3	114.0	152.7	147.7	122.0	99.7	105.3	107.3	104.7	105.3	107.4	128.7	117.3	123.0	134.1
7	Bisco New 704	184.3	172.0	167.7	147.0	167.8	159.3	163.7	118.0	153.3	148.6	120.7	101.3	107.3	107.3	102.0	116.3	109.2	136.3	120.0	128.2	136.0
8	BiscoX5129	181.7	166.3	167.7	148.3	166.0	155.7	164.3	117.0	152.0	147.3	122.0	99.7	101.0	106.0	102.0	111.3	107.0	128.3	117.0	122.7	133.8
9	BiscoX9	185.7	170.3	168.3	153.3	169.4	155.7	162.7	115.0	153.0	146.6	122.0	100.7	105.0	105.3	102.0	115.0	108.3	130.3	115.7	123.0	135.0
10	NMH-713	181.3	164.7	168.7	157.7	168.1	157.0	164.7	117.7	151.3	147.7	122.0	99.7	107.0	105.7	102.0	106.3	107.1	133.3	116.7	125.0	134.7
11	NMH-731	182.0	163.0	169.0	156.3	167.6	155.0	143.3	116.3	150.7	141.3	122.0	100.0	102.0	103.7	102.0	115.0	107.4	141.3	114.7	128.0	133.5
12	NMH-666	183.7	164.3	168.0	152.3	167.1	157.0	164.7	119.7	152.0	148.3	121.0	100.3	104.0	105.3	102.7	117.0	108.4	130.7	114.3	122.5	134.8
13	RJ 2020	181.7	167.7	167.0	152.3	167.2	159.7	167.7	119.0	153.0	149.8	121.3	101.0	104.0	108.7	105.0	115.0	109.2	129.0	114.0	121.5	135.4
14	NMH1242	186.7	161.7	166.0	151.3	166.4	153.3	158.0	116.3	137.0	141.2	119.3	99.0	98.3	102.7	100.0	115.3	105.8	128.0	114.3	121.2	131.7
15	Bio-151	180.7	170.3	168.0	157.0	169.0	156.3	163.0	119.7	149.0	147.0	122.0	99.7	105.0	107.3	102.0	109.7	107.6	136.7	111.3	124.0	134.9
	CHECKS																					
16	BIO 9637	185.3	168.0	166.3	156.0	168.9	155.7	159.7	117.7	151.7	146.2	120.7	99.3	101.0	105.0	100.0	115.3	106.9	134.7	115.3	125.0	134.5
17	HM4	181.3	166.0	166.7	150.0	166.0	155.7	158.7	115.0	147.0	144.1	113.0	97.7	101.0	103.3	95.0	115.3	104.2	127.0	114.7	120.8	131.7
18	HM8	181.0	169.7	167.0	154.0	167.9	155.3	162.3	116.7	150.7	146.3	119.3	99.3	105.3	105.3	98.7	115.0	107.2	135.0	116.0	125.5	134.4
19	Buland	186.0	170.7	167.7	149.3	168.4	155.3	163.0	115.0	150.7	146.0	117.3	105.0	105.0	105.0	103.0	116.0	108.6	132.0	118.0	125.0	134.9
20	SeedTech 2324	176.3	168.0	167.7	143.7	163.9	159.0	161.0	116.0	151.3	146.8	121.3	99.3	101.0	105.0	104.3	115.7	107.8	129.3	115.7	122.5	133.4
21	Bio 9681	183.7	165.3	167.0	148.0	166.0	153.3	159.3	117.0	147.3	144.3	116.7	99.0	101.0	102.0	96.3	107.3	103.7	125.0	113.7	119.3	131.4
	Loc. Mean	**182.9**	**167.4**	**167.6**	**149.3**	**166.8**	**156.3**	**162.1**	**116.7**	**150.5**	**146.4**	**120.3**	**100.1**	**103.3**	**105.1**	**101.6**	**113.3**	**107.3**	**131.6**	**115.5**	**123.5**	**134.0**
	C.D. (5%)	7.56	2.43	2.61	5.43	4.86	3.13	13.09	1.88	6.40	4.07	3.35	1.82	3.58	2.64	0.90	3.96	2.58	1.69	4.68	6.29	2.03
	C.V. (%)	2.50	0.88	0.94	2.20	2.06	1.21	4.89	0.97	2.58	1.97	1.69	1.10	2.10	1.52	0.53	2.12	2.10	0.78	2.46	2.44	2.17
	F (Prob)	0.67	0.00	0.58	0.00	0.56	0.01	0.30	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.19	0.00

Table No.6 (Cont..)

S.No.	PEDIGREE	PLANT HEIGHT(cm) DELH	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	NK6607	243.7	186.7	205.0	221.7	188.0	209.0	200.0	183.3	216.5	188.8	197.1	197.0	223.0	226.7	231.3	178.4	187.9	207.4	280.4	209.0	244.7	209.8
2	S 7720	241.3	175.0	205.0	231.0	191.7	208.8	192.7	182.3	203.1	171.8	187.5	202.0	230.7	225.0	218.0	212.5	189.9	213.0	302.2	217.0	259.6	211.2
3	PR0-380	258.7	173.3	206.7	185.7	199.7	204.8	188.3	173.7	187.7	175.0	181.2	184.0	226.0	225.0	221.0	180.0	177.6	202.3	287.3	223.3	255.3	204.3
4	CMH 08-282	269.7	158.3	186.7	218.7	192.7	205.2	183.3	186.7	227.2	195.0	198.1	182.5	229.3	223.3	225.7	202.7	187.0	208.4	283.9	220.0	252.0	210.2
5	CMH 08-287	272.7	140.0	201.7	249.0	187.7	210.2	183.0	190.3	214.1	203.8	197.8	213.5	240.0	231.7	223.0	201.1	182.1	215.2	292.1	214.3	253.2	214.1
6	KMH-25K45(2700)	243.0	143.3	190.0	212.7	206.7	199.1	189.0	189.7	193.6	192.5	191.2	186.0	229.7	226.7	208.0	171.6	168.7	198.4	285.5	234.3	259.9	204.2
7	Bisco New 704	259.7	143.3	211.7	221.0	199.0	206.9	206.3	183.3	200.7	201.3	197.9	178.5	220.7	206.7	214.3	198.2	186.1	200.7	290.6	203.0	246.8	207.3
8	BiscoX5129	230.0	145.0	241.7	219.0	174.7	202.1	184.7	173.3	218.0	192.5	192.1	193.0	203.7	218.3	213.3	188.7	177.4	199.1	272.2	224.0	248.1	204.1
9	BiscoX9	249.0	148.3	185.0	241.3	188.3	202.4	198.3	196.0	202.8	212.5	202.4	189.5	226.3	223.3	222.3	177.9	201.3	206.8	269.0	240.0	254.5	210.1
10	NMH-713	228.3	158.3	225.0	210.3	179.0	200.2	189.0	190.3	190.3	191.3	190.2	174.5	228.3	208.3	209.3	203.9	181.9	201.0	282.3	208.0	245.2	203.4
11	NMH-731	241.7	161.7	190.0	207.7	196.7	199.5	190.7	181.0	191.3	136.0	174.8	187.5	212.3	213.3	226.7	148.1	194.5	197.1	294.1	228.7	261.4	200.1
12	NMH-666	247.0	180.0	203.3	234.0	187.3	210.3	207.3	183.0	208.8	201.3	200.1	181.0	233.7	213.3	224.7	207.2	192.7	208.8	285.1	224.0	254.6	212.6
13	RJ 2020	243.7	153.3	216.7	217.0	198.3	205.8	194.3	180.7	214.1	176.3	191.3	181.5	234.0	201.7	220.7	167.3	192.0	199.5	288.9	205.0	246.9	205.0
14	NMH1242	235.3	140.0	208.3	183.0	198.3	193.0	193.3	163.7	186.8	175.0	179.7	167.5	222.7	223.3	216.3	182.1	183.0	199.2	270.7	234.0	252.4	199.0
15	Bio-151	209.7	146.7	163.3	185.7	192.0	179.5	170.0	151.7	212.2	170.0	176.0	163.5	190.3	195.0	213.3	179.1	163.9	184.2	277.4	190.7	234.0	186.7
	CHECKS																						
16	BIO 9637	262.7	173.3	225.0	223.7	168.7	210.7	217.3	188.3	186.2	216.3	202.0	201.0	240.0	223.3	228.7	164.6	193.9	208.6	283.7	226.3	255.0	213.1
17	HM4	201.3	126.7	161.7	172.0	198.3	172.0	172.7	142.7	179.3	137.5	158.0	134.5	201.7	175.0	193.0	152.7	164.9	170.3	275.5	191.7	233.6	175.4
18	HM8	216.3	130.0	206.7	194.0	200.7	189.5	163.3	163.0	176.0	162.5	166.2	149.0	205.0	201.7	213.7	166.3	187.8	187.2	300.7	209.3	255.0	190.9
19	Buland	262.0	183.3	231.7	246.0	192.0	223.0	186.0	184.0	212.3	185.0	191.8	192.0	220.0	225.0	220.7	189.5	191.0	206.4	298.5	237.7	268.1	215.1
20	SeedTech 2324	241.3	135.0	203.3	192.0	168.7	188.1	195.0	166.3	177.7	170.0	177.3	174.0	205.7	196.7	203.0	144.7	174.0	183.0	282.2	217.7	250.0	191.0
21	Bio 9681	243.0	153.3	191.7	230.7	187.3	201.2	191.0	183.3	176.1	185.0	183.9	188.0	234.0	201.7	206.3	177.9	169.0	196.1	272.4	218.3	245.4	200.5
	Loc. Mean	**242.9**	**155.0**	**202.9**	**214.1**	**190.3**	**201.0**	**190.3**	**177.9**	**198.8**	**182.8**	**187.5**	**181.9**	**221.8**	**213.6**	**216.8**	**180.7**	**183.2**	**199.7**	**284.5**	**217.9**	**251.2**	**203.2**
	C.D. (5%)	27.80	6.25	50.87	27.05	7.25	19.71	28.42	16.26	14.20	17.87	17.16	12.37	20.39	21.51	17.29	9.02	30.65	12.20	16.30	33.71	25.16	8.41
	C.V. (%)	6.94	2.44	15.20	7.66	2.31	7.79	9.05	5.54	4.33	5.92	6.47	4.12	5.57	6.10	4.83	3.02	10.14	5.34	3.47	9.37	4.80	6.13
	F (Prob)	0.00	0.00	0.26	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.54	0.00	0.00	0.20	0.55	0.00

Table No.6 (Cont..)

		EAR HEIGHT(cm)																					
							ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	DELH	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	NK6607	138.7	83.3	96.7	75.7	90.7	97.1	91.7	76.0	90.4	73.8	83.0	90.5	100.3	121.7	101.3	100.3	89.7	100.6	107.8	94.0	100.9	95.4
2	S 7720	123.7	86.7	106.7	90.3	84.7	96.3	79.3	79.0	90.8	67.5	79.2	102.5	108.0	130.0	87.7	107.2	104.8	106.7	125.7	98.3	112.0	97.9
3	PR0-380	161.3	83.3	103.3	73.0	99.0	104.2	81.0	80.7	87.1	93.8	85.6	87.0	109.3	125.0	99.3	90.6	87.9	99.9	107.0	100.7	103.8	97.9
4	CMH 08-282	163.0	68.3	91.7	88.7	82.3	100.6	90.3	88.0	109.8	98.8	96.7	91.5	115.7	131.7	108.0	101.0	99.7	107.9	115.3	101.7	108.5	103.4
5	CMH 08-287	154.3	45.0	100.0	96.3	91.0	96.7	87.3	92.3	106.7	100.0	96.6	110.5	106.7	128.3	112.0	115.3	103.5	112.7	115.3	95.7	105.5	103.8
6	KMH-25K45(2700)	133.3	63.3	96.7	79.7	105.7	95.5	78.0	91.3	81.7	76.3	81.8	88.5	104.0	120.0	85.7	86.7	86.0	95.1	108.0	112.3	110.2	93.8
7	Bisco New 704	163.0	73.3	101.7	91.7	101.0	107.3	94.3	95.7	100.4	110.0	100.1	93.5	112.7	121.7	104.3	82.9	99.0	102.3	115.4	101.0	108.2	103.7
8	BiscoX5129	132.3	68.3	123.3	81.3	76.3	89.6	77.3	84.7	97.2	81.3	85.1	96.0	83.3	116.7	87.3	83.9	88.3	92.6	103.0	97.0	100.0	90.9
9	BiscoX9	148.0	75.0	93.3	105.0	80.3	102.1	96.0	99.0	101.3	102.5	99.7	100.0	116.7	121.7	103.7	109.9	99.1	108.5	118.1	120.0	119.0	106.0
10	NMH-713	122.0	63.3	121.7	67.7	88.7	85.4	86.7	89.7	77.1	86.3	84.9	83.5	107.3	116.7	89.0	103.1	94.0	98.9	107.7	93.0	100.3	92.2
11	NMH-731	139.3	80.0	81.7	82.7	92.0	98.5	93.0	75.0	83.0	71.3	80.6	90.5	102.7	118.3	105.3	79.2	97.0	98.8	107.2	107.0	107.1	95.2
12	NMH-666	127.0	83.3	93.3	82.7	87.0	95.0	100.0	75.7	86.2	88.8	87.7	79.0	102.7	111.7	98.3	103.5	86.8	97.0	117.2	101.0	109.1	95.7
13	RJ 2020	125.3	60.0	110.0	87.0	90.0	90.6	79.7	73.3	86.9	68.8	77.2	80.0	101.0	96.7	99.0	87.7	99.8	94.0	107.8	84.3	96.1	89.2
14	NMH1242	128.3	53.3	90.0	70.7	101.0	88.3	90.7	74.0	80.1	80.0	81.2	65.5	100.3	110.0	90.3	79.7	84.5	88.4	122.3	104.3	113.3	89.7
15	Bio-151	138.7	45.0	81.7	73.0	99.0	88.9	88.0	84.7	106.3	90.0	92.2	89.5	100.7	108.3	100.0	77.6	80.8	92.8	103.8	99.0	101.4	92.8
	CHECKS																						
16	BIO 9637	162.7	83.3	121.7	95.3	77.7	104.8	91.0	89.7	78.4	107.5	91.6	103.5	118.3	131.7	94.3	95.2	101.9	107.5	127.1	106.0	116.5	104.0
17	HM4	118.7	57.5	83.3	71.7	104.7	88.1	72.0	69.0	84.0	66.3	72.8	66.5	94.3	105.0	96.0	80.6	82.4	87.5	118.4	89.3	103.9	86.0
18	HM8	130.7	70.0	118.3	76.0	99.0	93.9	85.3	82.3	77.3	85.0	82.5	73.0	105.3	111.7	106.3	84.5	95.0	96.0	115.8	111.0	113.4	94.3
19	Buland	161.3	81.7	116.7	108.0	99.0	112.5	75.7	94.7	112.1	100.0	95.6	109.5	112.0	131.7	87.7	116.2	107.5	110.8	115.7	119.0	117.4	108.2
20	SeedTech 2324	159.3	63.3	121.7	89.3	87.7	99.9	91.0	91.0	88.7	96.3	91.7	98.0	103.7	116.7	89.0	74.2	92.9	95.7	105.4	107.0	106.2	97.1
21	Bio 9681	133.3	73.3	90.0	92.7	86.7	96.5	84.0	88.3	76.4	82.5	82.8	87.0	106.7	101.7	99.3	76.4	84.2	92.5	100.0	106.7	103.3	92.4
	Loc. Mean	**141.2**	**69.6**	**102.1**	**84.7**	**91.6**	**96.7**	**86.3**	**84.5**	**90.6**	**87.0**	**87.1**	**89.8**	**105.3**	**117.9**	**97.3**	**92.2**	**93.6**	**99.4**	**112.6**	**102.3**	**107.4**	**96.6**
	C.D. (5%)	25.00	5.02	36.93	18.01	3.41	16.59	23.14	20.02	9.11	8.59	11.56	8.54	14.69	17.00	19.42	7.32	18.27	8.88	9.95	24.76	15.97	6.24
	C.V. (%)	10.73	4.37	21.92	12.89	2.26	12.13	16.25	14.36	6.09	5.99	9.38	5.76	8.45	8.74	12.09	4.81	11.83	7.80	5.35	14.66	7.13	9.28
	F (Prob)	0.00	0.00	0.31	0.00	0.00	0.15	0.66	0.15	0.00	0.00	0.00	0.00	0.01	0.00	0.22	0.00	0.11	0.00	0.00	0.42	0.26	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : LUDHIANA 21.9%

TABLE No. 7: **Performance of Quality Protein Maize experimental hybrids at Karnal, Ludhiana, Pantnagar, Kanpur, Bahraich, Dholi, Bhubaneshwar, Varanasi, Arbhavi, Karimnagar, Kolhapur, Mandya, Coimbatore, Vagarai, Banswara, Godhra in trial no. QPM12 during rabi 2012-13.**

		GRAIN YIELD (kg/ha) AT 15% MOISTURE																			
Sl									ZN 2											ZN 3	
No	PEDIGREE	KARN	R	LUDH	R	PANT	R	KANP	R	MEAN	R	BAHR	R	DHOL	R	BHUB	R	VARA	R	MEAN	R
1	VEHQ-11-2 (QPM-2)	1207	7	1055	8	10711	7	5778	3	5899	8	4173	8	5948	7	4320	6	7760	8	5550	8
2	VEHQ-11-1 (QPM-2)	8970	1	7829	2	14397	1	3522	7	8963	2	8785	1	10376	1	5225	1	10794	1	8795	1
3	REHQ 2011-3 (QPM-1)	8021	2	1177	7	9131	8	3779	6	6977	6	5108	7	6205	6	4488	3	8206	7	6002	7
4	BAUQMH-17(QPM-1)	5246	6	8906	1	12632	4	6776	2	8218	4	7509	4	9185	2	4126	7	9572	4	7598	3
5	MHQPM-09-8(QPM-1)	7335	3	1304	6	12240	5	7451	1	9009	1	7129	5	7329	4	4378	5	8481	6	6829	5
	CHECKS																				
6	HQPM 1	6772	5	6577	3	14301	2	3362	8	8145	5	7767	2	6974	5	4436	4	9102	5	7070	4
7	HQPM 5	1158	8	3780	4	11737	6	5097	4	5997	7	7048	6	5625	8	3709	8	9868	2	6562	6
8	HQPM 7	7303	4	3311	5	14222	3	4446	5	8657	3	7711	3	8090	3	4949	2	9739	3	7622	2
	Location Mean	**5752**		**4243**		**12421**		**5027**		**7733**		**6904**		**7466**		**4454**		**9190**		**7004**	
	C.D. (5%)	1574		2806		1597		450		1207		850		1182		169		753		739	
	C.V. (%)	15.52		**37.5**		7.29		5.07		**-**		6.98		8.98		2.16		4.65		**-**	
	F (Prob)	0		0		0		0				0		0		0		0			
	Plot Size	12		3.6		12		9.6		-		9.6		12		9.6		9.6		-	
	AGRONOMY DATA																				
	Sowing Date	30-11		30-11		27-11		26-12		-		3-12		17-11		30-11		27-11		-	
	Harvest Date	27-05		4-06		6-03		10-05		-		16-05		7-06		9-04		11-05		-	
	Irrigation Nos	7		12		6		4		-		4		-		10		5		-	
	Ferilizer Applied N	150		70		120		120		-		150		150		120		150		-	
	Ferilizer Applied P	60		24		60		60		-		75		70		60		75		-	
	Ferilizer Applied K	60		12		40		60		-		60		60		60		60		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 37.5 %: VAGA 22.8 %

TABLE No. 7: **(Contd..)**

Sl No	PEDIGREE	ARBH	R	KARI	R	KOLH	R	MAND	R	COIM	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
1	VEHQ-11-2 (QPM-2)	5392	5	7146	7	4967	5	6859	5	8665	6	5084	5	6606	5	4405	3	6194	5	5300	5	5966	6
2	VEHQ-11-1 (QPM-2)	8095	1	8781	1	6724	2	7861	2	9948	3	5881	2	8282	1	4645	2	10159	1	7402	1	8449	1
3	REHQ 2011-3 (QPM-1)	3627	6	7333	5	4921	6	5918	8	7932	7	5143	4	5946	8	3467	8	5178	7	4323	7	5951	7
4	BAUQMH-17(QPM-1)	6627	2	7209	6	5599	4	6178	6	7866	8	4512	6	6696	4	3673	7	7521	4	5597	4	7123	4
5	MHQPM-09-8(QPM-1)	2525	8	6810	8	4131	7	6960	3	9316	4	3989	7	5948	7	4317	4	6074	6	5195	6	6748	5
	CHECKS																						
6	HQPM 1	6545	3	7638	4	6085	3	8353	1	9161	5	6079	1	7556	3	4759	1	9177	3	6968	3	7460	3
7	HQPM 5	3190	7	8628	2	2569	8	5927	7	10675	2	3215	8	6198	6	4033	6	3345	8	3689	8	5901	8
8	HQPM 7	6528	4	8035	3	6992	1	6944	4	11714	1	5412	3	8043	2	4224	5	10071	2	7148	2	7926	2
	Location Mean	**5316**		**7697**		**5249**		**6875**		**9410**		**4914**		**6909**		**4190**		**7215**		**5703**		**6940**	
	C.D. (5%)	1813		2256		993		789		668		1973		1304		507		837		672		1031	
	C.V. (%)	19.34		16.61		10.72		6.51		4.02		**22.76**		**-**		6.86		6.58		**-**		-	
	F (Prob)	0		0.464		0		0		0		0.076				0.001		0					
	Plot Size	12		12		12		11.2		9.6		9.6		-		12		9.6		-		-	
	AGRONOMY DATA																						
	Sowing Date	11-12		25-11		23-12		27-11		7-12		27-12		-		6-12		22-11		-		-	
	Harvest Date	18-04		30-03		30-05		29-04		3-04		27-04		-		5-05		16-04		-		-	
	Irrigation Nos	8		8		-		6		10		10		-		6		8		-		-	
	Ferilizer Applied N	150		200		120		150		150		200		-		150		120		-		-	
	Ferilizer Applied P	75		60		60		75		75		75		-		80		50		-		-	
	Ferilizer Applied K	37.5		60		40		40		75		75		-		-		-		-		-	

TABLE No. 7 (Cont..)

		GRAIN YIELD % SUPERIORITY OVER THE HQPM 1																				
Sl						ZN 2					ZN 3							ZN 4			ZN 5	OV'L
No	PEDIGREE	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	VEHQ-11-2 (QPM-2)	-	-	-	71.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	VEHQ-11-1 (QPM-2)	32.5	19	0.7	4.8	10	13.1	48.8	17.8	18.6	24.4	23.7	15	10.5	-	8.6	-	9.6	-	10.7	6.2	13.3
3	REHQ 2011-3 (QPM-1)	18.4	-	-	12.4	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-
4	BAUQMH-17(QPM-1)	-	35.4	-	101.6	0.9	-	31.7	-	5.2	7.5	1.2	-	-	-	-	-	-	-	-	-	-
5	MHQPM-09-8(QPM-1)	8.3	-	-	121.6	10.6	-	5.1	-	-	-	-	-	-	-	1.7	-	-	-	-	-	-
	CHECKS																					
6	HQPM 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	HQPM 5	-	-	-	51.6	-	-	-	-	8.4	-	-	13	-	-	16.5	-	-	-	-	-	-
8	HQPM 7	7.8	-	-	32.3	6.3	-	16	11.6	7	7.8	-	5.2	14.9	-	27.9	-	6.4	-	9.7	2.6	6.3
		GRAIN YIELD % SUPERIORITY OVER THE HQPM 5																				
Sl						ZN 2					ZN 3							ZN 4			ZN 5	OV'L
No	PEDIGREE	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	VEHQ-11-2 (QPM-2)	4.2	-	-	13.4	-	-	5.7	16.5	-	-	69	-	93.3	15.7	-	58.1	6.6	9.2	85.2	43.7	1.1
2	VEHQ-11-1 (QPM-2)	674.4	107.1	22.7	-	49.5	24.6	84.5	40.8	9.4	34	153.8	1.8	161.7	32.6	-	82.9	33.6	15.2	203.8	100.7	43.2
3	REHQ 2011-3 (QPM-1)	592.5	-	-	-	16.3	-	10.3	21	-	-	13.7	-	91.6	-	-	60	-	-	54.8	17.2	0.9
4	BAUQMH-17(QPM-1)	352.9	135.6	7.6	33	37	6.5	63.3	11.2	-	15.8	107.7	-	117.9	4.2	-	40.3	8	-	124.9	51.7	20.7
5	MHQPM-09-8(QPM-1)	533.3	-	4.3	46.2	50.2	1.2	30.3	18	-	4.1	-	-	60.8	17.4	-	24.1	-	7	81.6	40.8	14.4
	CHECKS																					
6	HQPM 1	484.7	74	21.8	-	35.8	10.2	24	19.6	-	7.7	105.2	-	136.8	40.9	-	89.1	21.9	18	174.4	88.9	26.4
7	HQPM 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	HQPM 7	530.5	-	21.2	-	44.4	9.4	43.8	33.4	-	16.1	104.6	-	172.1	17.2	9.7	68.3	29.8	4.7	201.1	93.8	34.3
		GRAIN YIELD % SUPERIORITY OVER THE HQPM 7																				
Sl						ZN 2					ZN 3							ZN 4			ZN 5	OV'L
No	PEDIGREE	KARN	LUDH	PANT	KANP	MEAN	BAHR	DHOL	BHUB	VARA	MEAN	ARBH	KARI	KOLH	MAND	COIM	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	VEHQ-11-2 (QPM-2)	-	-	-	30	-	-	-	-	-	-	-	-	-	-	-	-	-	4.3	-	-	-
2	VEHQ-11-1 (QPM-2)	22.8	136.5	1.2	-	3.5	13.9	28.3	5.6	10.8	15.4	24	9.3	-	13.2	-	8.7	3	9.9	0.9	3.6	6.6
3	REHQ 2011-3 (QPM-1)	9.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	BAUQMH-17(QPM-1)	-	169	-	52.4	-	-	13.5	-	-	-	1.5	-	-	-	-	-	-	-	-	-	-
5	MHQPM-09-8(QPM-1)	0.4	-	-	67.6	4.1	-	-	-	-	-	-	-	-	0.2	-	-	-	2.2	-	-	-
	CHECKS																					
6	HQPM 1	-	98.6	0.6	-	-	0.7	-	-	-	-	0.3	-	-	20.3	-	12.3	-	12.7	-	-	-
7	HQPM 5	-	14.2	-	14.6	-	-	-	-	1.3	-	-	7.4	-	-	-	-	-	-	-	-	-
8	HQPM 7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 37.5 %: VAGA 22.8 %

Table No. 7 (Continued)

		MOISTURE % AT HARVEST																				
						ZN 2					ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean
1	VEHQ-11-2 (QPM-2)	27.2	28.7	26.3	14.7	24.2	23.1	18.7	18.5	27.5	21.9	29.5	14.4	10.1	15.1	27.8	16.3	18.9	16.7	16.2	16.4	20.7
2	VEHQ-11-1 (QPM-2)	27.1	28.2	23.9	13.3	23.1	23.9	18.3	18.3	25.2	21.4	27.8	12.0	9.6	15.0	25.2	18.1	17.9	16.7	18.3	17.5	20.0
3	REHQ 2011-3 (QPM-1)	26.3	28.8	26.1	14.0	23.8	22.6	18.4	19.3	24.2	21.1	22.1	14.6	9.6	15.3	25.1	15.8	17.1	16.7	22.0	19.3	20.0
4	BAUQMH-17(QPM-1)	26.0	24.8	22.0	14.3	21.8	24.7	18.1	17.9	22.4	20.8	30.5	13.2	9.3	15.3	21.7	18.5	18.1	16.7	18.7	17.7	19.6
5	MHQPM-09-8(QPM-1)	29.1	28.9	21.8	14.0	23.4	23.9	18.1	18.0	25.2	21.3	25.7	13.3	9.5	15.6	25.1	18.0	17.9	17.0	19.4	18.2	20.1
	CHECKS																					
6	HQPM 1	24.2	28.1	25.0	14.0	22.8	24.0	18.9	18.1	26.4	21.8	28.7	13.3	9.5	16.2	24.6	14.3	17.8	17.8	19.9	18.8	20.2
7	HQPM 5	28.4	28.0	24.9	13.7	23.7	23.2	19.3	18.8	29.3	22.6	30.9	12.7	9.8	16.4	26.0	16.8	18.7	17.1	16.1	16.6	20.7
8	HQPM 7	29.8	25.7	24.6	13.3	23.3	25.3	17.9	17.5	24.7	21.3	24.9	13.6	9.5	16.7	24.1	17.6	17.7	16.9	18.3	17.6	20.0
	Loc. Mean	**27.2**	**27.6**	**24.3**	**13.9**	**23.3**	**23.8**	**18.5**	**18.3**	**25.6**	**21.5**	**27.5**	**13.4**	**9.6**	**15.7**	**24.9**	**16.9**	**18.0**	**16.9**	**18.6**	**17.8**	**20.2**
	C.D. (5%)	0.71	1.56	1.72	2.00	2.15	0.81	1.02	0.00	1.15	1.77	3.18	2.79	0.43	-	0.73	1.58	1.92	0.41	4.46	3.26	1.02
	C.V. (%)	1.49	3.22	4.04	8.20	6.29	1.95	3.15	0.00	2.56	5.59	6.59	11.95	2.57	-	1.66	5.33	9.11	1.38	13.71	7.76	7.20
	F (Prob)	0.00	0.00	0.00	0.82	0.44	0.00	0.14	0.00	0.00	0.51	0.00	0.58	0.04	-	0.00	0.00	0.65	0.00	0.18	0.47	0.49

		GRAIN SHELLING %																				
					ZN 2					ZN 3							ZN 4			ZN 5	OV'L	
S.No.	PEDIGREE	KARN	PANT	KANP	Mean	BAHR	DHOL	BHUB	VARA	Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	Mean	BANS	GODH	Mean	Mean	
1	VEHQ-11-2 (QPM-2)	82.0	82.3	73.0	79.1	76.0	81.0	77.7	77.8	78.1	83.0	76.1	82.0	82.7	76.6	75.4	79.3	71.1	82.9	77.0	78.6	
2	VEHQ-11-1 (QPM-2)	80.1	83.0	73.7	78.9	81.1	82.5	80.3	81.5	81.3	84.2	76.5	85.1	82.0	76.0	77.1	80.1	70.1	82.8	76.4	79.7	
3	REHQ 2011-3 (QPM-1)	77.2	81.1	74.7	77.7	78.4	79.0	77.8	80.8	79.0	81.9	78.6	85.1	80.8	77.1	77.3	80.1	68.8	78.8	73.8	78.5	
4	BAUQMH-17(QPM-1)	79.2	83.3	73.7	78.7	78.7	88.0	80.4	82.5	82.4	83.8	78.3	85.6	83.0	77.8	79.3	81.3	70.6	84.8	77.7	80.6	
5	MHQPM-09-8(QPM-1)	80.0	83.3	74.7	79.3	77.5	81.5	79.2	80.3	79.6	79.8	77.4	83.8	81.5	75.7	76.8	79.2	70.6	80.6	75.6	78.8	
	CHECKS																					
6	HQPM 1	76.4	85.0	75.3	78.9	77.0	75.0	79.4	78.0	77.3	84.1	77.9	85.9	83.0	76.6	75.8	80.5	70.0	82.4	76.2	78.8	
7	HQPM 5	78.7	82.1	73.3	78.0	74.1	80.5	78.2	81.5	78.6	82.5	77.6	84.0	81.0	74.9	76.7	79.4	69.4	75.9	72.7	78.0	
8	HQPM 7	78.9	83.0	74.3	78.7	78.2	77.5	77.7	78.0	77.9	81.7	72.5	84.0	79.9	77.8	74.1	78.3	71.8	82.7	77.2	78.1	
	Loc. Mean	**79.0**	**82.9**	**74.1**	**78.7**	**77.6**	**80.6**	**78.8**	**80.0**	**79.3**	**82.6**	**76.8**	**84.4**	**81.7**	**76.5**	**76.5**	**79.8**	**70.3**	**81.3**	**75.8**	**78.9**	
	C.D. (5%)	0.88	3.28	1.72	2.49	1.71	3.47	-	0.72	2.84	1.39	2.49	1.01	0.00	0.90	1.76	1.40	1.33	4.60	3.91	1.21	
	C.V. (%)	0.63	2.26	1.33	1.81	1.26	2.46	-	0.51	2.44	0.96	1.85	0.69	0.00	0.67	1.31	1.50	1.08	3.23	2.18	2.11	
	F (Prob)	0.00	0.42	0.14	0.85	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.15	0.00	

Table No. 7 (Continued)

STAND AT HARVEST ('000/ha)

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	VEHQ-11-2 (QPM-2)	9.7	10.2	44.7	68.1	40.8	57.6	36.7	66.3	69.8	57.6	41.4	30.8	39.4	57.4	66.3	46.9	47.1	47.8	42.7	45.2	48.4
2	VEHQ-11-1 (QPM-2)	59.2	84.3	65.3	68.4	64.3	64.9	65.6	67.0	80.9	69.6	61.4	38.3	57.5	58.3	65.6	52.4	55.6	49.2	54.2	51.7	60.5
3	REHQ 2011-3 (QPM-1)	58.1	6.5	47.8	71.5	59.1	59.0	42.2	66.3	71.9	59.9	33.9	31.9	34.7	59.2	66.3	35.4	43.6	47.8	37.2	42.5	50.9
4	BAUQMH-17(QPM-1)	52.5	80.6	66.1	69.1	62.6	66.3	60.6	67.7	82.6	69.3	61.4	38.3	57.8	59.2	66.0	54.9	56.3	48.1	55.9	52.0	60.4
5	MHQPM-09-8(QPM-1)	48.9	9.3	50.0	67.0	55.3	61.8	47.5	67.0	73.6	62.5	31.1	24.4	29.2	59.2	65.6	34.4	40.7	49.2	35.1	42.1	49.6
	CHECKS																					
6	HQPM 1	54.4	69.4	61.1	66.7	60.7	63.2	55.6	66.3	77.4	65.6	57.5	33.3	54.7	58.9	66.3	50.0	53.5	50.0	54.5	52.3	58.0
7	HQPM 5	10.6	35.2	45.6	67.7	41.3	61.5	29.4	66.7	75.0	58.1	32.5	30.8	21.9	60.1	65.6	29.9	40.1	48.9	21.2	35.0	44.5
8	HQPM 7	53.3	29.6	43.3	67.0	54.6	61.5	55.0	67.0	81.6	66.3	55.8	38.1	53.3	58.9	66.3	46.9	53.2	49.4	50.3	49.9	56.5
	Loc. Mean	**43.3**	**40.6**	**53.0**	**68.2**	**54.8**	**62.0**	**49.1**	**66.8**	**76.6**	**63.6**	**46.9**	**33.3**	**43.6**	**58.9**	**66.0**	**43.8**	**48.7**	**48.8**	**43.9**	**46.3**	**53.6**
	C.D. (5%)	2.29	28.33	5.22	2.55	20.52	2.67	5.79	2.54	5.68	8.16	8.55	8.77	5.83	3.30	0.89	11.04	7.79	2.47	3.74	20.19	5.47
	C.V. (%)	3.02	39.83	5.63	2.14	21.37	2.46	6.73	2.18	4.23	8.72	10.41	15.05	7.64	3.19	0.77	14.38	13.63	2.90	4.87	18.43	14.09
	F (Prob)	0.00	0.00	0.00	0.02	0.16	0.00	0.00	0.92	0.00	0.02	0.00	0.05	0.00	0.81	0.29	0.00	0.00	0.46	0.00	0.47	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : LUDHIANA 39.8%: Mean!ZN 2 21.4%

DAYS TO 50% POLLEN SHED

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	VEHQ-11-2 (QPM-2)	141.0	133.3	133.3	87.3	123.8	131.3	124.0	73.0	112.0	110.1	77.3	64.7	73.0	70.7	62.0	58.3	67.7	93.3	92.0	92.7	95.4
2	VEHQ-11-1 (QPM-2)	142.0	131.3	129.3	96.0	124.7	127.7	123.0	74.3	109.7	108.7	76.0	62.7	68.7	68.3	61.0	56.7	65.6	94.0	86.7	90.3	94.2
3	REHQ 2011-3 (QPM-1)	142.0	132.0	127.3	95.3	124.2	122.3	120.0	68.7	108.0	104.8	73.0	62.3	69.3	64.0	58.0	54.7	63.6	94.7	80.3	87.5	92.0
4	BAUQMH-17(QPM-1)	137.0	125.3	125.3	95.7	120.8	125.7	120.3	70.0	106.3	105.6	76.3	62.0	69.0	69.0	60.3	56.0	65.4	92.3	84.7	88.5	92.2
5	MHQPM-09-8(QPM-1)	143.0	129.0	129.7	99.7	125.3	125.0	125.0	70.7	110.7	107.8	77.0	61.7	72.3	68.3	60.3	56.7	66.1	96.0	84.7	90.3	94.4
	CHECKS																					
6	HQPM 1	138.0	131.3	128.7	98.3	124.1	127.3	124.0	72.0	109.3	108.2	76.7	62.7	73.0	68.3	62.0	56.7	66.6	95.0	88.0	91.5	94.5
7	HQPM 5	140.0	129.3	134.0	94.7	124.5	129.7	126.3	72.7	114.3	110.8	78.7	64.7	73.0	70.7	62.3	59.3	68.1	94.0	91.0	92.5	95.9
8	HQPM 7	141.0	130.3	132.3	96.0	124.9	128.0	125.0	70.3	112.3	108.9	76.0	62.3	71.0	68.3	60.0	58.3	66.0	90.0	87.0	88.5	94.3
	Loc. Mean	**140.5**	**130.3**	**130.0**	**95.4**	**124.0**	**127.1**	**123.5**	**71.5**	**110.3**	**108.1**	**76.4**	**62.9**	**71.2**	**68.5**	**60.8**	**57.1**	**66.1**	**93.7**	**86.8**	**90.2**	**94.1**
	C.D. (5%)	-	5.21	2.92	6.28	4.24	1.42	1.26	1.46	0.90	2.08	1.11	1.68	4.16	4.75	0.81	3.16	1.08	1.47	3.72	7.40	1.39
	C.V. (%)	-	2.28	1.28	3.76	2.33	0.64	0.58	1.17	0.46	1.31	0.83	1.53	3.34	3.96	0.76	3.16	1.40	0.90	2.45	3.47	2.10
	F (Prob)	-	0.13	0.00	0.03	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.13	0.18	0.00	0.12	0.00	0.00	0.00	0.63	0.00

Table No. 7 (Continued)

DAYS TO 50% SILKING

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	VEHQ-11-2 (QPM-2)	144.0	134.0	136.7	91.0	126.4	133.3	125.3	75.7	116.0	112.6	80.3	67.3	74.0	73.7	64.0	61.0	70.1	96.3	94.7	95.5	98.0
2	VEHQ-11-1 (QPM-2)	145.0	134.3	132.3	99.3	127.8	129.7	124.3	77.0	114.0	111.3	77.3	64.3	69.7	71.3	63.0	59.7	67.6	97.3	90.0	93.7	96.8
3	REHQ 2011-3 (QPM-1)	145.0	134.3	130.3	98.7	127.1	124.3	120.3	71.0	111.0	106.7	76.0	64.0	70.3	68.3	60.0	57.7	66.1	98.3	84.3	91.3	94.6
4	BAUQMH-17(QPM-1)	140.0	128.0	128.3	99.7	124.0	127.7	121.0	73.0	109.7	107.8	77.7	64.0	70.0	72.0	62.3	60.0	67.7	95.3	89.3	92.3	94.9
5	MHQPM-09-8(QPM-1)	146.0	131.7	132.7	103.0	128.3	127.0	126.0	73.0	114.3	110.1	79.3	62.7	73.3	71.0	62.3	60.0	68.1	99.0	90.0	94.5	97.0
	CHECKS																					
6	HQPM 1	141.0	133.7	131.7	102.0	127.1	129.3	125.0	74.3	113.3	110.5	80.0	64.3	74.0	71.7	64.0	60.3	69.1	98.3	92.3	95.3	97.2
7	HQPM 5	143.0	132.0	137.3	99.0	127.8	131.7	127.7	75.0	118.7	113.3	82.7	67.7	74.0	73.0	64.3	61.3	70.5	97.3	96.3	96.8	98.8
8	HQPM 7	144.0	133.0	135.3	99.7	128.0	130.0	126.0	72.7	116.3	111.3	78.0	64.7	72.0	71.0	62.3	61.0	68.2	94.3	90.3	92.3	96.9
	Loc. Mean	**143.5**	**132.6**	**133.1**	**99.0**	**127.1**	**129.1**	**124.5**	**74.0**	**114.2**	**110.4**	**78.9**	**64.9**	**72.2**	**71.5**	**62.8**	**60.1**	**68.4**	**97.0**	**90.9**	**94.0**	**96.8**
	C.D. (5%)	-	4.41	3.04	5.93	4.15	1.42	1.20	1.65	1.26	2.16	2.21	1.60	4.16	4.46	0.89	2.45	1.11	1.59	4.24	6.99	1.39
	C.V. (%)	-	1.90	1.31	3.42	2.22	0.63	0.55	1.27	0.63	1.33	1.60	1.41	3.29	3.56	0.81	2.33	1.39	0.94	2.66	3.15	2.04
	F (Prob)	-	0.11	0.00	0.03	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.38	0.00	0.12	0.00	0.00	0.00	0.60	0.00

DAYS TO 75% DRY HUSK

S.No.	PEDIGREE	KARN	LUDH	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	VEHQ-11-2 (QPM-2)	172.0	167.7	140.0	159.9	159.3	166.3	113.0	153.3	148.0	119.7	100.3	107.7	111.3	104.0	101.7	107.4	91.0	126.3	108.7	128.9
2	VEHQ-11-1 (QPM-2)	174.0	168.7	145.3	162.7	156.7	166.3	114.7	153.3	147.8	118.7	97.3	103.3	111.7	103.3	110.7	107.5	126.0	125.7	125.8	131.7
3	REHQ 2011-3 (QPM-1)	174.0	167.0	140.3	160.4	153.7	161.3	109.3	149.3	143.4	115.3	97.0	104.3	109.0	100.0	103.0	104.8	130.0	123.3	126.7	129.1
4	BAUQMH-17(QPM-1)	166.0	164.3	147.7	159.3	160.3	163.3	108.0	151.3	145.8	118.3	97.0	104.3	107.0	102.3	104.7	105.6	125.3	126.7	126.0	129.8
5	MHQPM-09-8(QPM-1)	178.0	165.3	147.7	163.7	155.3	165.0	108.3	153.0	145.4	115.0	95.7	107.3	111.3	102.0	110.3	106.9	132.0	123.0	127.5	131.3
	CHECKS																				
6	HQPM 1	168.0	168.3	147.7	161.3	160.3	166.0	114.3	154.0	148.7	119.7	97.3	108.0	112.0	104.0	106.3	107.9	129.7	125.0	127.3	132.0
7	HQPM 5	172.0	167.3	146.0	161.8	159.3	167.3	113.7	153.3	148.4	118.7	100.7	107.7	110.0	104.0	103.3	107.4	126.7	126.7	126.7	131.8
8	HQPM 7	174.0	166.3	147.7	162.7	160.3	165.7	109.0	151.3	146.6	118.7	97.7	105.7	111.3	102.0	105.7	106.8	125.0	123.7	124.3	130.9
	Loc. Mean	**172.3**	**166.9**	**145.3**	**161.5**	**158.2**	**165.2**	**111.3**	**152.4**	**146.8**	**118.0**	**97.9**	**106.0**	**110.5**	**102.7**	**105.7**	**106.8**	**123.2**	**125.0**	**124.1**	**130.7**
	C.D. (5%)	-	2.17	3.24	5.59	1.32	1.11	2.43	2.82	2.43	3.93	1.60	4.52	4.66	0.78	1.93	2.27	35.61	3.40	23.41	2.93
	C.V. (%)	-	0.74	1.27	1.98	0.48	0.39	1.25	1.06	1.12	1.90	0.94	2.43	2.41	0.43	1.04	1.81	16.50	1.55	7.98	3.09
	F (Prob)	-	0.01	0.00	0.69	0.00	0.00	0.00	0.05	0.00	0.13	0.00	0.23	0.35	0.00	0.00	0.11	0.33	0.15	0.60	0.20

Table No. 7 (Continued)

PLANT HEIGHT(cm)

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	VEHQ-11-2 (QPM-2)	111.7	161.7	243.0	198.0	178.6	181.7	189.7	176.2	202.5	187.5	165.5	233.7	208.3	212.3	174.5	169.8	194.0	200.7	166.0	183.3	187.2
2	VEHQ-11-1 (QPM-2)	126.7	165.0	233.7	188.3	178.4	186.3	188.7	164.7	201.3	185.2	152.5	221.3	213.3	214.7	171.6	178.3	192.0	191.6	165.3	178.5	185.2
3	REHQ 2011-3 (QPM-1)	111.7	139.3	214.7	185.3	162.8	177.3	170.3	156.5	182.5	171.7	146.0	211.0	205.0	195.0	176.4	168.3	183.6	195.2	164.3	179.8	174.9
4	BAUQMH-17(QPM-1)	105.0	146.7	208.3	168.7	157.2	164.0	164.3	148.3	175.0	162.9	149.5	202.7	190.0	209.3	164.6	163.7	180.0	201.4	137.7	169.5	168.7
5	MHQPM-09-8(QPM-1)	110.0	145.7	219.3	198.3	168.3	184.0	188.3	146.0	196.3	178.6	150.5	204.3	183.3	212.0	175.7	170.8	182.8	202.4	154.0	178.2	177.6
	CHECKS																					
6	HQPM 1	123.3	165.0	228.3	191.7	177.1	206.3	184.7	146.8	192.5	182.6	153.0	228.0	200.0	209.0	177.7	179.7	191.2	190.6	144.0	167.3	182.5
7	HQPM 5	110.0	165.3	223.7	197.3	174.1	175.7	182.3	167.2	182.5	176.9	159.5	197.0	208.3	211.0	177.8	172.2	187.6	192.4	164.3	178.4	180.4
8	HQPM 7	120.0	141.7	218.7	199.3	169.9	188.3	184.3	174.7	191.3	184.6	165.0	222.7	215.0	214.3	182.7	192.0	198.6	191.9	156.7	174.3	184.9
	Loc. Mean	**114.8**	**153.8**	**223.7**	**190.9**	**170.8**	**183.0**	**181.6**	**160.1**	**190.5**	**178.8**	**155.2**	**215.1**	**202.9**	**209.7**	**175.1**	**174.4**	**188.7**	**195.8**	**156.5**	**176.2**	**180.2**
	C.D. (5%)	7.61	53.51	14.17	3.67	11.22	10.35	18.64	7.70	13.34	12.36	4.36	16.24	28.48	16.81	5.17	27.04	8.40	17.48	27.12	21.31	5.50
	C.V. (%)	3.79	19.87	3.62	1.10	4.47	3.23	5.86	2.75	4.00	4.70	1.61	4.31	8.01	4.58	1.68	8.85	3.80	5.10	9.89	5.12	4.36
	F (Prob)	0.00	0.87	0.00	0.00	0.00	0.00	0.09	0.00	0.01	0.01	0.00	0.00	0.27	0.32	0.00	0.48	0.00	0.65	0.26	0.66	0.00

EAR HEIGHT(cm)

S.No.	PEDIGREE	KARN	LUDH	PANT	KANP	ZN 2 Mean	BAHR	DHOL	BHUB	VARA	ZN 3 Mean	ARBH	KARI	KOLH	MAND	COIM	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	VEHQ-11-2 (QPM-2)	58.3	65.0	107.3	97.7	87.8	90.0	106.7	83.9	101.3	95.5	76.0	116.0	128.3	103.0	92.6	86.0	100.3	107.8	89.3	98.6	96.3
2	VEHQ-11-1 (QPM-2)	63.3	70.0	95.3	92.3	83.7	82.0	99.7	66.2	97.5	86.3	61.5	108.3	120.0	91.0	89.2	90.7	93.5	104.0	75.7	89.8	89.1
3	REHQ 2011-3 (QPM-1)	58.3	61.7	83.3	91.3	77.7	81.3	90.7	68.9	91.3	83.0	56.0	102.0	115.0	90.3	83.0	79.0	87.6	102.5	67.7	85.1	84.0
4	BAUQMH-17(QPM-1)	48.3	70.0	81.3	94.7	74.8	86.0	92.7	56.8	83.8	79.8	61.0	102.0	110.0	92.0	94.8	75.2	89.2	100.6	63.3	82.0	82.8
5	MHQPM-09-8(QPM-1)	65.0	71.7	100.3	101.3	88.9	91.3	105.0	65.7	103.8	91.5	68.0	110.0	121.7	93.0	90.3	87.5	95.1	98.7	77.7	88.2	92.0
	CHECKS																					
6	HQPM 1	45.0	66.7	89.0	96.7	76.9	84.7	93.7	58.9	85.0	80.6	64.0	107.7	111.7	94.7	93.0	78.5	91.6	96.7	73.3	85.0	84.8
7	HQPM 5	63.3	73.0	83.3	91.0	79.2	77.0	104.3	73.0	86.3	85.1	71.0	99.3	115.0	82.7	88.8	85.7	90.4	94.0	78.3	86.2	86.2
8	HQPM 7	60.0	66.7	93.0	88.3	80.4	85.3	100.3	74.1	97.5	89.3	74.5	107.7	106.7	99.7	101.9	97.7	98.0	92.3	76.0	84.1	90.3
	Loc. Mean	**57.7**	**68.1**	**91.6**	**94.2**	**81.2**	**84.7**	**99.1**	**68.4**	**93.3**	**86.4**	**66.5**	**106.6**	**116.0**	**93.3**	**91.7**	**85.0**	**93.2**	**99.6**	**75.2**	**87.4**	**88.2**
	C.D. (5%)	7.31	35.13	13.14	8.32	10.78	12.01	11.79	3.89	11.73	7.46	6.70	14.62	23.12	28.92	8.08	13.40	6.03	10.74	15.83	13.84	3.74
	C.V. (%)	7.23	29.47	8.19	5.05	7.58	8.10	6.79	3.25	7.18	5.88	5.75	7.83	11.38	17.70	5.03	9.00	5.52	6.16	12.03	6.70	5.85
	F (Prob)	0.00	1.00	0.01	0.08	0.11	0.29	0.07	0.00	0.01	0.00	0.00	0.35	0.57	0.88	0.01	0.05	0.00	0.10	0.10	0.29	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : LUDHIANA 29.5%

AGRONOMY

Agronomy

The salient findings of AICRIP on maize agronomic trials conducted during *rabi*, 2012-13 at different centres are summarized here. These trials were mainly focused on genotypic response to nutrient (NPK) levels, nutrient and tillage practices, weed management and fertigation of nitrogen with drip irrigation in sweet corn.

Genotypic response to nutrient levels:

The pre release late maturing genotypes were evaluated under different nutrient levels of (150:50:40, 200:65:50 and 250:85:60 N:P_2O_5:K_2O kg/ha) in zone II (Delhi, Karnal, and Ludhiana), zone III (Bahraich, Bhubaneswar, Dholi and Varanasi), zone IV (Arbhavi, Karimnagar, Kolhapur and Vagarai) and zone V (Banswarar). At Delhi (Zone II)'S 7720' being at par with 'Bisco X 5129' and 'KMH-25k45'resulted in significantly higher yield than the best check (Seed Tech 2324) and remaining genotypes. At Karnal; 'KMH-25K45' being at par with 'S 7720' and 'Buland (Check)' were found superior genotypes. Similarly, at Ludhiana 'S 7720' and 'Pro-380'genotypes gave significantly higher yield than to best check (Seed Tech 2324) and other genotypes. At Baharaich (Zone III); 'Pro-380', 'NMH-713', 'NMH-731' and 'S 7720' out yielded over remaining genotypes including the best check 'Bio 9681'. At Bhubaneswar; 'Pro 380', 'NMH-666', 'S 7720' and 'KMH-25K45' genotypes significantly out yielded than best check (Bio 9681) and other genotypes. At Varanasi 'KMH-25K45' 'NMH-713', 'NMH-731' and 'NK 6607' gave higher yield over other genotypes, but remains statistically at par with best check (Seed Tech 2324). While at Dholi no pre release genotype were proven better than the best Check (Bio 9681). At Arbhavi (Zone IV); Pro-380'and 'S 7720' genotypes significantly out yielded than best check (Seed Tech 2324) and remaining genotypes. At Kolhapur; 'S 7720', 'Pro-380', 'NMH-713'and 'NMH-731'genotypes resulted the significantly better yield than to all the genotypes including the best check (Seed Tech 2324). At Karimnagar; 'NMH-731' found best than all other genotypes including the best check (Bio 9681). However, at Vagarai 'BISCOx5129','S 7720','NMH-713', 'NMH-731' and 'NMH 666' genotypes were found superior over best check (Seed Tech 2324) . At Banswara (Zone V); 'BISCOx5129','Bisco X9','KMH-25K45', 'S 7720', 'NMH-731','NK 6607' and 'NMH 666' genotypes were resulted significantly higher yield over to best check (Seed Tech 2324).

The pre release medium maturing genotypes were evaluated under the different nutrient levels of (100:40:30,150:50:40 and 200:60:50 N:P_2O_5:K_2O kg/ha) in zone II,III,IV and V. In Zone II 'NMH-1242' genotype perform significantly superior over to best check (BIO 9637), at Delhi and Ludhiana while at karnal and Pantnagar no genotype found significantly superior than to best checks 'BIO 9637' and 'HM 4 ',respectively. In Zone III at Ranchi and Varanasi 'NMH-1242' genotype resulted maximum yield than to best check (BIO 9637)and other genotypes, however at Bahraich, Bhubaneswar and Dholi no pre rereleased genotype significantly out yielded than to best check. In Zone IV ' NMH 1242' and ' Bio 151' pre released genotypes resulted significantly higher yield at Arbhavi, Vagarai and Kolhapur than to best check (BIO 9637), while at Karimnagar only ' NMH 1242' genotype perform significantly better over best check (BIO 9637).However, in Zone V at Banswara no pre released genotype was found significantly superior over the best check (BIO 9637).In all the zones (II, III, IV and V) of the country, it was observed that in general pre released genotypes of late maturing group responded up to the highest dose *i.e*. 250:80:60 N:P_2O_5: K_2O kg/ha. Similarly the medium maturing genotypes responded up to (200:60:50 N: P_20_5: K_2O kg/ha).

Tillage and site specific nutrient management (SSNM)

At Dholi zero till with 100% recommended dose of fertilizer (RDF) resulted significantly higher yield of succeeding wheat in maize system. In contrast to this, at Pantnagar conventional tillage resulted maximum wheat yield and system productivity with SSNM based nutrient management in maize system. But in this experiment (maize-wheat-mungbean cropping system) maximum B:C ratio was recorded with zero tillage and SSNM based crop management practices. In rice-maize system at Dholi, the maximum yield was obtained with the permanent beds planted maize with RDF application. At Hyderabad, maximum maize yield and system productivity was obtained in conventional till rice-zero till maize system with 100% RDF application.

Genotype and SSNM

The experiment on genotypic response to SSNM conducted at Pantnagar showed that the maximum system productivity, net returns and B:C ratio was obtained with the application of 100% RDF with PMH 1 maize hybrid in maize-wheat cropping sequence. In contrast to this at Banswara application of SSNM and use of hybrid DHM 117 gave maximum productivity of maize-wheat system.

Integrated weed management

The performance of succeeding wheat crop at Pantnagar was found significantly superior in terms of grain yield, net returns and B:C ratio where the maize + cowpea as cover crop was used as a weed management options in maize systems. In rice-zero-till maize system at Hyderabad; the maximum maize grain yield and net returns, B:C ratio, weed control efficiency and lowest weed count and weed index was obtained with the pre plant application of Glyphosate @ 1.0 kg/ha plus followed by application of 2,4-D sodium salt @ 0.4 kg/ha at 25-30 DAS.

Drip irrigation and fertigation in sweet corn

An experiment was conducted at Hyderabad to standardize dose of nitrogen in fertigation under drip irrigation and pan evaporation in sweet corn and it was found that the application of irrigation at 100 or 120% pan evaporation gave maximum green cob yield. However, the highest green cob yield in sweet corn was obtained with the application of 200 kg N/ha and which was at par with 250 kg N/ha.

Table 1: Relative performance of pre-release *late* maturing germplasm at different NPK levels in Zone II.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)			Cob yield (kg/ha)	Plants ('000/ha)		
		Delhi	Karnal	Ludhiana	Karnal	Delhi	Karnal	Ludhiana
150:50:40	NK6607	11815	9042	10764	10796	66.7	60.0	81.9
	S 7720	12390	9645	12185	11549	65.9	59.2	89.4
	PR0-380	11644	9450	11469	11322	70.4	60.3	81.5
	CMH 08-282	7904	-	8677	-	60.7	-	64.8
	CMH 08-287	8548	-	9548	-	61.5	-	66.2
	KMH-25K45(2700)	11622	9891	11710	11910	61.5	60.6	68.5
	Bisco New 704	11044	-	10829	-	60.0	-	74.5
	BiscoX5129	12437	9009	11520	10816	65.2	60.3	84.7
	BiscoX9	7970	-	10754	-	57.8	-	74.1
	NMH-713	9859	9416	8060	11287	60.0	60.6	73.1
	NMH-731	10519	9052	12027	10892	61.5	59.4	81.5
	NMH-666	8681	8839	11069	10641	57.8	61.1	81.0
	RJ 2020	6696	-	6130	-	51.9	-	39.4
	Buland (C)	9874	9597	11715	11559	61.5	61.1	81.5
	Seed Tech 2324 (C)	10637	9064	11961	10866	66.7	60.3	78.7
	Bio 9681(C)	9496	9134	10439	11029	63.7	60.3	74.1
200:65:50	NK6607	11474	9864	11526	11823	65.2	60.0	88.4
	S 7720	12133	10856	14627	13041	63.7	60.0	87.0
	PR0-380	10974	10553	14244	12746	65.2	59.7	87.0
	CMH 08-282	7659	-	10084	-	56.3	-	79.6
	CMH 08-287	7659	-	11162	-	49.6	-	68.1
	KMH-25K45(2700)	11141	10992	13128	13266	59.3	59.4	73.1
	Bisco New 704	11104	-	13811	-	60.7	-	89.4
	BiscoX5129	12000	9984	12489	12017	63.7	60.0	85.6
	BiscoX9	8104	-	9815	-	59.3	-	86.1
	NMH-713	10278	10125	12141	12231	60.7	60.8	88.9
	NMH-731	11496	9712	12065	11663	64.4	59.4	75.5
	NMH-666	11756	9744	11949	11709	63.0	60.6	90.7
	RJ 2020	7963	-	9690	-	53.3	-	56.5
	Buland (C)	9526	10604	13374	12759	61.5	60.3	95.4
	Seed Tech 2324 (C)	11007	9880	12819	11853	59.3	60.0	91.7
	Bio 9681(C)	9422	10019	11225	12060	60.7	60.0	79.6
250:85:60	NK6607	11615	10366	12073	12437	63.0	60.3	85.6
	S 7720	12104	11229	12905	13450	63.7	59.7	88.9
	PR0-380	11185	11000	13380	13195	67.4	60.0	83.3
	CMH 08-282	7304	-	9228	-	50.4	-	68.5
	CMH 08-287	8059	-	12390	-	51.9	-	82.4
	KMH-25K45(2700)	11904	11556	12614	13887	61.5	60.3	81.5
	Bisco New 704	9859	-	12567	-	58.5	-	87.0
	BiscoX5129	10704	11440	13421	13743	66.7	60.0	91.2
	BiscoX9	8519	-	10711	-	53.3	-	78.2
	NMH-713	11570	10626	12446	12822	60.0	60.3	85.2
	NMH-731	11370	10252	13089	12329	65.2	60.0	88.0
	NMH-666	10096	10220	13044	12349	62.2	60.3	80.1
	RJ 2020	8063	-	7332	-	54.8	-	32.4
	Buland (C)	9919	11161	12743	13358	62.2	60.3	84.7
	Seed Tech 2324 (C)	10926	10246	13097	12295	65.2	60.3	87.0
	Bio 9681(C)	9356	10351	10805	12373	60.0	59.7	82.4

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A4

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)			Cob yield (kg/ha)	Plants ('000/ha)		
		Delhi	Karnal	Ludhiana	Karnal	Delhi	Karnal	Ludhiana
Location mean		10153.9	10088.5	11559.5	12123.5	60.9	60.1	79.3
C.D.(5%) AiBj-AiBk		1702.4	846.9	1170.4	1043.9	8.3	1.3	18.7
C.D.(5%) AiBk-AjBk		2149.4	881.1	1283.4	1086.7	8.6	1.3	20.6
F(5%)		n.s.	n.s.	s	n.s.	n.s.	n.s.	n.s.
150:50:40		10071	9285	10554	11152	62.0	60.3	74.7
200:65:50		10231	10212	12134	12288	60.4	60.0	82.7
250:80:60		10159	10768	11990	12931	60.4	60.1	80.4
C.D.(5%) Ai-Aj		1577.4	365.8	624.3	452.4	3.5	0.4	10.2
C.V.(%) Error A		14.4	5.3	9.5	5.5	5.4	0.9	22.8
F(5%)		n.s.	s	s	s	n.s.	n.s.	n.s.
	NK6607	11635	9757	11454	11685	64.9	60.1	85.3
	S 7720	12209	10577	13239	12680	64.4	59.6	88.4
	PR0-380	11268	10334	13031	12421	67.7	60.0	84.0
	CMH 08-282	7622	-	9330	-	55.8	-	71.0
	CMH 08-287	8089	-	11033	-	54.3	-	72.2
	KMH-25K45(2700)	11556	10813	12484	13021	60.7	60.1	74.4
	Bisco New 704	10669	-	12402	-	59.8	-	83.6
	BiscoX5129	11714	10144	12477	12192	65.2	60.1	87.2
	BiscoX9	8198	-	10427	-	56.8	-	79.5
	NMH-713	10569	10056	10883	12113	60.2	60.6	82.4
	NMH-731	11128	9672	12394	11628	63.7	59.6	81.6
	NMH-666	10178	9601	12021	11567	61.0	60.6	84.0
	RJ 2020	7574	-	7717	-	53.3	-	42.7
	Buland (C)	9773	10454	12611	12559	61.7	60.6	87.2
	Seed Tech 2324 (C)	10857	9730	12626	11671	63.7	60.2	85.8
	Bio 9681(C)	9425	9835	10823	11821	61.5	60.0	78.7
C.D.(5%)Bi-Bj		982.9	489.0	675.8	602.7	4.8	0.8	10.8
C.V.(%)ErrorB		8.3	5.1	6.2	5.3	6.8	1.4	14.5
F(5%)		s	s	s	s	s	n.s.	s

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A5

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Cobs ('000/ha)		Plant height (cm)		
		Delhi	Ludhiana	Delhi	Karnal	Ludhiana
150:50:40	NK6607	77.0	88.9	188.4	151.7	206.1
	S 7720	69.6	99.1	184.2	155.0	201.7
	PR0-380	71.1	78.2	178.4	156.7	205.5
	CMH 08-282	64.4	70.4	175.0	-	209.4
	CMH 08-287	68.1	75.5	186.7	-	208.3
	KMH-25K45(2700)	60.7	69.4	180.0	153.3	200.6
	Bisco New 704	65.2	75.5	173.4	-	192.0
	BiscoX5129	77.0	90.3	173.4	158.3	202.8
	BiscoX9	58.5	78.7	175.0	-	205.0
	NMH-713	60.0	64.8	171.7	136.7	193.9
	NMH-731	63.7	83.3	167.5	166.7	186.1
	NMH-666	71.1	87.5	173.4	175.0	208.3
	RJ 2020	56.3	48.6	163.4	-	200.6
	Buland (C)	63.0	80.1	187.5	173.3	216.7
	Seed Tech 2324 (C)	68.1	80.6	170.9	170.0	198.3
	Bio 9681(C)	64.4	81.0	168.3	171.7	205.6
200:65:50	NK6607	77.8	97.7	170.0	162.3	224.4
	S 7720	63.7	99.5	185.9	165.8	219.4
	PR0-380	68.9	93.1	179.2	167.9	208.3
	CMH 08-282	57.0	88.0	180.9	-	213.3
	CMH 08-287	60.0	83.3	190.0	-	222.8
	KMH-25K45(2700)	59.3	75.9	180.0	164.4	222.2
	Bisco New 704	63.0	92.6	172.5	-	211.7
	BiscoX5129	78.5	95.8	184.2	169.5	213.9
	BiscoX9	63.7	93.5	160.0	-	194.4
	NMH-713	60.7	91.7	165.9	146.2	215.0
	NMH-731	67.4	81.0	171.7	177.9	198.3
	NMH-666	81.5	95.4	169.2	187.3	211.1
	RJ 2020	63.7	69.0	169.2	-	216.1
	Buland (C)	66.7	94.9	188.3	185.5	227.2
	Seed Tech 2324 (C)	60.7	91.7	165.0	181.9	189.4
	Bio 9681(C)	62.2	78.2	170.0	183.6	215.0
250:85:60	NK6607	71.1	94.4	198.3	165.0	217.8
	S 7720	63.0	92.6	190.9	168.7	222.2
	PR0-380	68.1	97.7	179.2	170.7	222.2
	CMH 08-282	50.4	74.1	193.4	-	225.6
	CMH 08-287	60.0	95.8	183.4	-	225.0
	KMH-25K45(2700)	61.5	75.0	184.2	167.1	218.3
	Bisco New 704	63.0	87.0	184.2	-	202.2
	BiscoX5129	75.6	100.9	161.7	172.5	218.3
	BiscoX9	60.0	78.2	175.0	-	203.3
	NMH-713	63.7	83.8	181.7	148.7	209.4
	NMH-731	65.9	87.0	174.2	181.0	202.8
	NMH-666	76.3	97.7	181.7	190.5	214.4
	RJ 2020	65.2	48.1	174.2	-	215.6
	Buland (C)	71.1	75.5	194.2	188.4	210.5
	Seed Tech 2324 (C)	65.9	89.4	167.5	184.9	195.5
	Bio 9681(C)	62.2	83.3	160.9	186.8	211.1

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A6

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Cobs ('000/ha)		Plant height (cm)		
		Delhi	Ludhiana	Delhi	Karnal	Ludhiana
Location mean		65.8	84.0	177.1	169.2	209.5
C.D.(5%) AiBj-AiBk		9.5	18.1	16.8	18.3	11.0
C.D.(5%) AiBk-AjBk		9.5	18.6	27.1	17.5	14.4
F(5%)		n.s.	n.s.	n.s.	n.s.	s
150:50:40		66.2	78.2	176.0	160.8	202.6
200:65:50		65.9	88.8	175.1	172.0	212.7
250:80:60		65.2	85.0	180.3	174.9	213.4
C.D.(5%) Ai-Aj		2.5	6.4	24.1	0.4	10.0
C.V.(%) Error A		3.6	13.5	12.6	0.4	8.4
F(5%)		n.s.	s	n.s.	s	n.s.
	NK6607	75.3	93.7	185.6	159.7	216.1
	S 7720	65.4	97.1	187.0	163.2	214.4
	PR0-380	69.4	89.7	178.9	165.1	212.0
	CMH 08-282	57.3	77.5	183.1	-	216.1
	CMH 08-287	62.7	84.9	186.7	-	218.7
	KMH-25K45(2700)	60.5	73.5	181.4	161.6	213.7
	Bisco New 704	63.7	85.0	176.7	-	202.0
	BiscoX5129	77.0	95.7	173.1	166.8	211.7
	BiscoX9	60.7	83.5	170.0	-	200.9
	NMH-713	61.5	80.1	173.1	143.8	206.1
	NMH-731	65.7	83.8	171.1	175.2	195.7
	NMH-666	76.3	93.5	174.7	184.3	211.3
	RJ 2020	61.7	55.2	168.9	-	210.7
	Buland (C)	66.9	83.5	190.0	182.4	218.1
	Seed Tech 2324 (C)	64.9	87.2	167.8	178.9	194.4
	Bio 9681(C)	63.0	80.9	166.4	180.7	210.6
C.D.(5%)Bi-Bj		5.5	10.5	9.7	10.6	6.3
C.V.(%)ErrorB		7.2	13.3	4.7	6.6	3.2
F(5%)		s	s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Days to 50% tasseling			Days to 50% silking	
		Delhi	Karnal	Ludhiana	Karnal	Ludhiana
150:50:40	NK6607	130.0	108.7	130.3	111.7	132.3
	S 7720	130.5	107.0	129.3	110.3	130.7
	PR0-380	133.5	108.0	128.7	110.7	131.0
	CMH 08-282	135.5	-	125.7	-	127.0
	CMH 08-287	135.5	-	128.7	-	130.7
	KMH-25K45(2700)	133.5	107.7	130.3	110.7	133.0
	Bisco New 704	136.5	-	130.3	-	132.0
	BiscoX5129	128.5	105.7	127.7	108.0	129.3
	BiscoX9	134.5	-	127.0	-	129.0
	NMH-713	134.5	107.0	132.3	109.7	134.3
	NMH-731	128.5	106.3	125.7	109.3	127.7
	NMH-666	131.5	107.3	129.0	109.7	131.0
	RJ 2020	133.0	-	130.7	-	132.7
	Buland (C)	136.5	108.0	132.0	111.0	133.7
	Seed Tech 2324 (C)	132.5	107.3	127.0	110.3	129.0
	Bio 9681(C)	128.0	106.3	123.3	109.0	125.3
200:65:50	NK6607	133.0	108.3	128.7	111.3	130.3
	S 7720	133.0	106.3	129.3	109.3	127.7
	PR0-380	134.0	107.0	127.0	109.7	129.0
	CMH 08-282	134.5	-	127.3	-	128.7
	CMH 08-287	134.5	-	129.0	-	130.3
	KMH-25K45(2700)	133.0	106.7	128.3	109.0	129.3
	Bisco New 704	135.0	-	128.3	-	130.0
	BiscoX5129	129.0	105.0	127.0	107.3	128.3
	BiscoX9	134.5	-	128.0	-	129.3
	NMH-713	134.5	106.0	126.7	109.3	128.7
	NMH-731	129.5	105.3	124.3	108.3	126.3
	NMH-666	130.5	106.0	128.0	109.0	129.7
	RJ 2020	131.5	-	129.7	-	131.0
	Buland (C)	135.0	106.7	129.3	109.7	131.0
	Seed Tech 2324 (C)	131.5	106.0	126.7	108.7	128.3
	Bio 9681(C)	129.5	104.7	124.0	106.7	126.0
250:85:60	NK6607	132.0	107.3	129.0	111.3	130.7
	S 7720	133.0	105.3	127.7	108.3	129.3
	PR0-380	134.0	106.3	128.0	109.3	130.7
	CMH 08-282	134.0	-	124.3	-	126.0
	CMH 08-287	136.5	-	128.0	-	129.7
	KMH-25K45(2700)	133.0	106.0	129.3	108.3	130.7
	Bisco New 704	135.5	-	129.0	-	130.7
	BiscoX5129	127.0	105.3	126.0	107.3	127.7
	BiscoX9	132.0	-	129.0	-	131.0
	NMH-713	132.0	106.3	128.3	108.7	130.0
	NMH-731	130.0	105.3	125.7	107.3	127.3
	NMH-666	130.5	106.0	126.7	108.3	128.7
	RJ 2020	133.0	-	128.3	-	130.3
	Buland (C)	135.5	106.7	131.3	109.3	133.3
	Seed Tech 2324 (C)	132.5	106.0	125.7	108.3	127.0
	Bio 9681(C)	128.0	105.3	124.7	107.3	126.3

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Days to 50% tasseling			Days to 50% silking	
		Delhi	Karnal	Ludhiana	Karnal	Ludhiana
Location mean		132.6	106.5	127.9	109.2	129.6
C.D.(5%) AiBj-AiBk		3.6	2.4	3.3	2.6	2.9
C.D.(5%) AiBk-AjBk		4.2	2.7	3.9	3.0	3.7
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.
150:50:40		132.7	107.2	128.6	110.0	130.5
200:65:50		132.7	106.2	127.6	108.9	129.0
250:80:60		132.4	106.0	127.6	108.5	129.3
C.D.(5%) Ai-Aj		2.8	1.6	2.4	1.7	2.4
C.V.(%) Error A		1.9	2.2	3.3	2.3	3.3
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.
NK6607		131.7	108.1	129.3	111.4	131.1
S 7720		132.2	106.2	128.8	109.3	129.2
PR0-380		133.8	107.1	127.9	109.9	130.2
CMH 08-282		134.7	-	125.8	-	127.2
CMH 08-287		135.5	-	128.6	-	130.2
KMH-25K45(2700)		133.2	106.8	129.3	109.3	131.0
Bisco New 704		135.7	-	129.2	-	130.9
BiscoX5129		128.2	105.3	126.9	107.6	128.4
BiscoX9		133.7	-	128.0	-	129.8
NMH-713		133.7	106.4	129.1	109.2	131.0
NMH-731		129.3	105.7	125.2	108.3	127.1
NMH-666		130.8	106.4	127.9	109.0	129.8
RJ 2020		132.5	-	129.6	-	131.3
Buland (C)		135.7	107.1	130.9	110.0	132.7
Seed Tech 2324 (C)		132.2	106.4	126.4	109.1	128.1
Bio 9681(C)		128.5	105.4	124.0	107.7	125.9
C.D.(5%)Bi-Bj		2.1	1.4	1.9	1.5	1.7
C.V.(%)ErrorB		1.4	1.4	1.6	1.4	1.4
F(5%)		s	s	s	s	s

Table 2: Relative performance of pre-release *late* maturing germplasm at different NPK levels in Zone III.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)				Cob yield (kg/ha)			
		Bahraich	Bhub.	Dholi	Varanasi	Bahraich	Bhub.	Dholi	Varanasi
150:50:40	NK6607	6382	6147	7297	12000	8111	7861	9333	15000
	S 7720	6708	6397	7318	10778	8576	8139	9452	13472
	PR0-380	7757	6474	7760	10000	9910	8278	9985	12500
	CMH 08-282	-	-	-	8278	-	-	-	10347
	CMH 08-287	-	-	-	9556	-	-	-	11944
	KMH-25K45(2700)	5292	6374	7734	10500	6771	7833	10074	13125
	Bisco New 704	-	-	-	11167	-	-	-	13958
	BiscoX5129	5708	5938	7463	9722	7292	7417	9511	12153
	BiscoX9	-	-	-	10444	-	-	-	13056
	NMH-713	7167	5553	7293	12111	8958	7083	9630	15139
	NMH-731	6424	5939	6861	11167	8035	7361	8830	13958
	NMH-666	5368	6386	6035	10944	6840	8000	7852	13681
	RJ 2020	-	-	-	9500	-	-	-	11875
	Buland (C)	4896	5653	7405	9111	6340	7139	9393	11389
	Seed Tech 2324 (C)	5347	5803	7515	11278	6896	7361	9778	14097
	Bio 9681(C)	5528	5661	7675	7444	7021	7611	9689	9306
200:65:50	NK6607	7944	6656	8399	11389	10035	8167	10756	14236
	S 7720	8125	6633	8456	12222	10160	8389	10726	15278
	PR0-380	9083	6905	8459	10500	10785	8833	10993	13125
	CMH 08-282	-	-	-	10056	-	-	-	12569
	CMH 08-287	-	-	-	9167	-	-	-	11458
	KMH-25K45(2700)	6896	6511	8445	13889	8694	8167	11081	17361
	Bisco New 704	-	-	-	12000	-	-	-	15000
	BiscoX5129	7826	6540	8532	11500	9792	8139	10993	14375
	BiscoX9	-	-	-	10667	-	-	-	13333
	NMH-713	8486	6658	8578	12000	10715	7750	11230	15000
	NMH-731	8167	6020	9440	12722	10139	7472	12178	15903
	NMH-666	7799	6749	8603	10278	9757	8611	11111	12847
	RJ 2020	-	-	-	10389	-	-	-	12986
	Buland (C)	7083	6205	8695	11556	8826	7889	11081	14444
	Seed Tech 2324 (C)	7938	6331	8302	11611	10014	7861	10815	14514
	Bio 9681(C)	8063	6453	9360	11389	10042	8000	12059	14236
250:85:60	NK6607	8931	6424	9706	12611	10993	8472	12326	15764
	S 7720	9132	6739	9188	12889	11146	8389	11852	16111
	PR0-380	9958	7385	10060	11222	12313	9083	12978	14028
	CMH 08-282	-	-	-	9667	-	-	-	12083
	CMH 08-287	-	-	-	10389	-	-	-	12986
	KMH-25K45(2700)	8090	6857	9372	13722	10000	8611	12207	17153
	Bisco New 704	-	-	-	11444	-	-	-	14306
	BiscoX5129	8681	6776	9588	12389	10729	8639	12474	15486
	BiscoX9	-	-	-	11389	-	-	-	14236
	NMH-713	9806	6012	10236	12667	12208	7694	13333	15833
	NMH-731	9861	6171	9753	13167	12042	7667	12415	16458
	NMH-666	9236	7071	10137	11611	11417	8861	13156	14514
	RJ 2020	-	-	-	11000	-	-	-	13750
	Buland (C)	8660	6378	10727	8111	10701	8111	13837	10139
	Seed Tech 2324 (C)	9569	6142	10245	12667	11826	7861	13511	15833
	Bio 9681(C)	9181	6520	10182	10167	11389	8306	13511	12708

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A10

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)				Cob yield (kg/ha)			
		Bahraich	Bhub.	Dholi	Varanasi	Bahraich	Bhub.	Dholi	Varanasi
Location mean		7730.0	6377.6	8630.8	11050.9	9650.7	8032.0	11156.0	13813.7
C.D.(5%) AiBj-AiBk		263.7	590.1	671.3	2128.1	135.6	691.3	865.4	2660.1
C.D.(5%) AiBk-AjBk		273.4	630.3	676.3	2557.5	137.6	723.6	871.7	3196.9
F(5%)		s	n.s.	s	n.s.	s	n.s.	s	n.s.
150:50:40		6052	6030	7305	10250	7705	7644	9411	12813
200:65:50		7946	6515	8661	11333	9905	8116	11184	14167
250:80:60		9191	6589	9927	11569	11342	8336	12873	14462
C.D.(5%) Ai-Aj		111.2	294.4	226.8	1564.1	49.1	309.6	292.1	1955.1
C.V.(%) Error A		2.1	6.8	3.8	25.0	0.7	5.6	3.8	25.0
F(5%)		s	s	s	n.s.	s	s	s	n.s.
	NK6607	7752	6409	8467	12000	9713	8167	10805	15000
	S 7720	7988	6590	8321	11963	9961	8306	10677	14954
	PR0-380	8933	6921	8760	10574	11002	8731	11319	13218
	CMH 08-282	-	-	-	9333	-	-	-	11667
	CMH 08-287	-	-	-	9704	-	-	-	12130
	KMH-25K45(2700)	6759	6581	8517	12704	8488	8204	11121	15880
	Bisco New 704	-	-	-	11537	-	-	-	14421
	BiscoX5129	7405	6418	8528	11204	9271	8065	10993	14005
	BiscoX9	-	-	-	10833	-	-	-	13542
	NMH-713	8486	6074	8702	12259	10627	7509	11398	15324
	NMH-731	8150	6043	8685	12352	10072	7500	11141	15440
	NMH-666	7468	6735	8258	10944	9338	8491	10706	13681
	RJ 2020	-	-	-	10296	-	-	-	12870
	Buland (C)	6880	6079	8942	9593	8623	7713	11437	11991
	Seed Tech 2324 (C)	7618	6092	8688	11852	9579	7694	11368	14815
	Bio 9681(C)	7590	6211	9072	9667	9484	7972	11753	12083
C.D.(5%)Bi-Bj		152.3	340.7	387.6	1228.6	78.3	399.1	499.6	1535.8
C.V.(%)ErrorB		2.1	5.7	4.8	11.9	0.9	5.3	4.8	11.9
F(5%)		s	s	s	s	s	s	s	s

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A11

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plants ('000/ha)				Cobs ('000/ha)		
		Bahraich	Bhub.	Dholi	Varanasi	Bahraich	Dholi	Varanasi
150:50:40	NK6607	80.6	66.4	64.9	66.7	74.3	67.6	68.1
	S 7720	78.5	67.5	63.1	66.0	77.1	67.3	67.4
	PR0-380	81.3	66.9	64.3	66.7	77.1	67.3	70.1
	CMH 08-282	-	-	-	65.3	-	-	63.9
	CMH 08-287	-	-	-	66.7	-	-	68.8
	KMH-25K45(2700)	77.8	68.9	64.9	64.6	79.2	67.9	63.2
	Bisco New 704	-	-	-	66.7	-	-	68.8
	BiscoX5129	79.2	66.1	63.7	65.3	77.1	67.3	70.1
	BiscoX9	-	-	-	66.7	-	-	68.8
	NMH-713	77.1	68.3	63.4	66.7	75.0	66.7	68.1
	NMH-731	77.8	65.6	64.0	65.3	75.7	67.6	66.7
	NMH-666	77.1	66.7	64.6	66.7	75.0	67.9	73.6
	RJ 2020	-	-	-	64.6	-	-	64.6
	Buland (C)	79.2	65.8	64.6	66.7	77.1	68.1	66.7
	Seed Tech 2324 (C)	76.4	65.8	64.6	66.7	76.4	67.9	68.8
	Bio 9681(C)	78.5	68.3	65.2	65.3	77.1	68.1	66.0
200:65:50	NK6607	81.9	67.2	63.1	66.0	78.5	68.1	70.8
	S 7720	80.6	68.3	65.8	66.7	77.8	70.5	68.8
	PR0-380	81.9	68.3	65.5	66.7	77.8	71.1	66.0
	CMH 08-282	-	-	-	66.0	-	-	68.1
	CMH 08-287	-	-	-	66.0	-	-	70.8
	KMH-25K45(2700)	79.9	67.2	64.6	66.7	77.8	70.2	66.7
	Bisco New 704	-	-	-	66.7	-	-	61.8
	BiscoX5129	81.3	67.5	64.0	66.7	77.1	69.6	70.8
	BiscoX9	-	-	-	61.8	-	-	63.2
	NMH-713	80.6	68.3	64.3	66.7	77.8	69.6	72.2
	NMH-731	79.9	67.5	64.0	66.0	77.8	69.6	70.1
	NMH-666	80.6	68.6	64.0	66.0	77.8	69.9	66.7
	RJ 2020	-	-	-	66.7	-	-	68.1
	Buland (C)	80.6	66.4	65.8	65.3	75.7	71.1	66.7
	Seed Tech 2324 (C)	79.2	68.1	65.8	64.6	77.1	71.7	68.8
	Bio 9681(C)	79.2	66.9	64.3	65.3	77.8	71.1	66.7
250:85:60	NK6607	82.6	67.5	65.2	66.7	80.6	73.2	69.4
	S 7720	82.6	67.5	64.9	65.3	79.9	72.9	71.5
	PR0-380	82.6	67.8	63.7	66.7	81.3	71.7	66.7
	CMH 08-282	-	-	-	66.0	-	-	67.4
	CMH 08-287	-	-	-	66.7	-	-	68.8
	KMH-25K45(2700)	81.9	68.9	63.1	66.7	81.3	71.1	66.7
	Bisco New 704	-	-	-	66.7	-	-	67.4
	BiscoX5129	82.6	68.9	65.2	66.7	80.6	72.6	76.4
	BiscoX9	-	-	-	66.0	-	-	66.7
	NMH-713	82.6	66.7	65.5	65.3	82.6	72.9	68.1
	NMH-731	81.9	66.7	64.6	63.9	80.6	71.7	68.1
	NMH-666	82.6	67.5	64.6	65.3	80.6	71.4	70.1
	RJ 2020	-	-	-	66.7	-	-	72.2
	Buland (C)	82.6	68.1	64.9	66.7	85.4	72.6	67.4
	Seed Tech 2324 (C)	81.9	68.6	64.6	66.0	80.6	72.6	69.4
	Bio 9681(C)	81.3	66.7	62.2	66.0	79.9	70.2	65.3

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plants ('000/ha)				Cobs ('000/ha)		
		Bahraich	Bhub.	Dholi	Varanasi	Bahraich	Dholi	Varanasi
Location mean		80.4	67.4	64.4	66.0	78.4	70.0	68.1
C.D.(5%) AiBj-AiBk		2.5	2.6	2.2	3.1	2.5	2.5	5.5
C.D.(5%) AiBk-AjBk		2.4	2.7	2.3	3.1	2.5	2.4	5.7
F(5%)		n.s.	n.s.	n.s.	n.s.	s	n.s.	n.s.
150:50:40		78.5	66.9	64.3	66.0	76.5	67.6	67.7
200:65:50		80.5	67.7	64.6	65.8	77.5	70.2	67.9
250:80:60		82.3	67.7	64.4	66.1	81.2	72.1	68.8
C.D.(5%) Ai-Aj		0.6	1.2	0.9	0.7	0.7	0.7	2.3
C.V.(%) Error A		1.1	2.7	2.1	2.0	1.3	1.4	5.9
F(5%)		s	n.s.	n.s.	n.s.	s	s	n.s.
	NK6607	81.7	67.0	64.4	66.4	77.8	69.6	69.4
	S 7720	80.6	67.8	64.6	66.0	78.2	70.2	69.2
	PR0-380	81.9	67.7	64.5	66.7	78.7	70.0	67.6
	CMH 08-282	-	-	-	65.7	-	-	66.4
	CMH 08-287	-	-	-	66.4	-	-	69.4
	KMH-25K45(2700)	79.9	68.3	64.2	66.0	79.4	69.7	65.5
	Bisco New 704	-	-	-	66.7	-	-	66.0
	BiscoX5129	81.0	67.5	64.3	66.2	78.2	69.8	72.5
	BiscoX9	-	-	-	64.8	-	-	66.2
	NMH-713	80.1	67.8	64.4	66.2	78.5	69.7	69.4
	NMH-731	79.9	66.6	64.2	65.0	78.0	69.6	68.3
	NMH-666	80.1	67.6	64.4	66.0	77.8	69.7	70.1
	RJ 2020	-	-	-	66.0	-	-	68.3
	Buland (C)	80.8	66.8	65.1	66.2	79.4	70.6	66.9
	Seed Tech 2324 (C)	79.2	67.5	65.0	65.7	78.0	70.7	69.0
	Bio 9681(C)	79.6	67.3	63.9	65.5	78.2	69.8	66.0
C.D.(5%)Bi-Bj		1.4	1.5	1.3	1.8	1.4	1.4	3.2
C.V.(%)ErrorB		1.9	2.3	2.1	2.9	1.9	2.2	5.0
F(5%)		s	n.s.	n.s.	n.s.	n.s.	n.s.	s

Cont…

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plant height (cm)				Days to 50% silking	
		Bahraich	Bhubaneswar	Dholi	Varanasi	Dholi	Varanasi
150:50:40	NK6607	177.0	205.7	162.5	216.7	131.3	116.7
	S 7720	187.0	193.7	163.4	202.7	129.7	117.0
	PR0-380	183.7	179.9	170.0	190.0	130.7	119.3
	CMH 08-282	-	-	-	210.7	-	117.3
	CMH 08-287	-	-	-	224.0	-	119.3
	KMH-25K45(2700)	169.7	204.1	160.3	214.0	130.3	118.7
	Bisco New 704	-	-	-	200.3	-	119.3
	BiscoX5129	167.7	211.3	157.6	188.7	128.0	114.0
	BiscoX9	-	-	-	226.7	-	117.0
	NMH-713	189.3	197.2	165.7	198.7	132.0	117.0
	NMH-731	175.7	208.9	149.1	188.0	128.0	114.7
	NMH-666	191.7	209.7	154.5	200.0	129.7	116.0
	RJ 2020	-	-	-	194.7	-	115.7
	Buland (C)	174.7	223.5	157.3	210.0	130.7	119.0
	Seed Tech 2324 (C)	195.3	194.6	146.8	183.7	127.7	116.3
	Bio 9681(C)	175.3	205.2	158.0	191.0	127.7	113.7
200:65:50	NK6607	181.3	202.0	165.3	207.3	131.0	118.3
	S 7720	202.0	205.7	167.1	208.7	130.0	117.3
	PR0-380	188.0	198.1	169.7	191.7	131.3	118.0
	CMH 08-282	-	-	-	214.0	-	114.7
	CMH 08-287	-	-	-	216.3	-	120.7
	KMH-25K45(2700)	176.7	211.9	157.7	219.7	130.3	118.3
	Bisco New 704	-	-	-	203.3	-	119.7
	BiscoX5129	174.0	211.8	163.0	197.7	128.7	113.3
	BiscoX9	-	-	-	231.7	-	116.0
	NMH-713	194.7	206.5	166.7	199.7	130.0	117.7
	NMH-731	181.0	209.1	161.4	195.7	127.7	112.7
	NMH-666	196.3	211.7	160.0	197.3	127.7	113.7
	RJ 2020	-	-	-	200.7	-	115.7
	Buland (C)	178.0	214.5	172.3	219.7	131.0	118.3
	Seed Tech 2324 (C)	199.3	205.3	168.8	190.0	127.3	115.0
	Bio 9681(C)	181.0	214.4	155.0	211.0	128.0	113.3
250:85:60	NK6607	184.3	217.7	170.1	222.3	130.3	115.7
	S 7720	205.7	210.9	164.7	204.0	128.3	116.7
	PR0-380	193.0	213.3	152.8	200.7	129.3	118.7
	CMH 08-282	-	-	-	212.0	-	115.7
	CMH 08-287	-	-	-	213.7	-	120.3
	KMH-25K45(2700)	180.7	213.2	158.8	214.0	130.0	118.0
	Bisco New 704	-	-	-	205.3	-	121.0
	BiscoX5129	178.0	212.1	161.8	188.3	128.3	114.0
	BiscoX9	-	-	-	227.0	-	116.0
	NMH-713	200.0	205.5	155.2	197.0	130.3	117.7
	NMH-731	185.0	200.6	165.4	189.7	126.3	113.3
	NMH-666	199.7	211.8	165.3	205.7	129.3	114.3
	RJ 2020	-	-	-	189.3	-	116.7
	Buland (C)	183.7	203.7	168.4	212.7	130.0	119.7
	Seed Tech 2324 (C)	203.3	190.9	150.3	189.3	127.7	115.7
	Bio 9681(C)	184.3	176.9	164.1	204.0	128.7	115.3

Cont…

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plant height (cm)				Days of 50% silking	
		Bahraich	Bhubneshwar	Dholi	Varanasi	Dholi	Varanasi
Location mean		186.0	205.5	161.5	204.6	129.3	116.7
C.D.(5%) AiBj-AiBk		1.4	18.0	16.5	18.2	1.9	1.8
C.D.(5%) AiBk-AjBk		1.6	21.0	16.9	22.4	2.8	3.4
F(5%)		s	s	n.s.	n.s.	n.s.	n.s.
150:50:40		180.6	203.1	158.7	202.5	129.6	116.9
200:65:50		186.6	208.3	164.3	206.5	129.4	116.4
250:80:60		190.7	205.1	161.5	204.7	129.0	116.8
C.D.(5%) Ai-Aj		0.9	12.5	6.5	14.3	2.2	2.9
C.V.(%) Error A		0.7	8.9	5.9	12.3	2.4	4.4
F(5%)		s	n.s.	n.s.	n.s.	n.s.	n.s.
	NK6607	180.9	208.5	166.0	215.4	130.9	116.9
	S 7720	198.2	203.4	165.1	205.1	129.3	117.0
	PR0-380	188.2	197.1	164.2	194.1	130.4	118.7
	CMH 08-282	-	-	-	212.2	-	115.9
	CMH 08-287	-	-	-	218.0	-	120.1
	KMH-25K45(2700)	175.7	209.7	158.9	215.9	130.2	118.3
	Bisco New 704	-	-	-	203.0	-	120.0
	BiscoX5129	173.2	211.7	160.8	191.6	128.3	113.8
	BiscoX9	-	-	-	228.4	-	116.3
	NMH-713	194.7	203.0	162.5	198.4	130.8	117.4
	NMH-731	180.6	206.2	158.6	191.1	127.3	113.6
	NMH-666	195.9	211.1	159.9	201.0	128.9	114.7
	RJ 2020	-	-	-	194.9	-	116.0
	Buland (C)	178.8	213.9	166.0	214.1	130.6	119.0
	Seed Tech 2324 (C)	199.3	196.9	155.3	187.7	127.6	115.7
	Bio 9681(C)	180.2	198.8	159.0	202.0	128.1	114.1
C.D.(5%)Bi-Bj		0.8	10.4	9.5	10.5	1.1	1.1
C.V.(%)ErrorB		0.5	5.4	6.2	5.5	0.9	1.0
F(5%)		s	s	n.s.	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Days to 50% tasseling			Nitrogen uptake (kg/ha)	Phosphorus uptake (kg/ha)	Potash uptake (kg/ha)
		Bhubneshwar	Dholi	Varanasi	Bahraich		
150:50:40	NK6607	67.0	128.0	111.3	159.9	25.5	44.9
	S 7720	68.0	127.7	113.3	178.7	26.9	47.0
	PR0-380	66.3	127.3	115.3	206.4	31.0	53.9
	CMH 08-282	-	-	114.3	-	-	-
	CMH 08-287	-	-	116.0	-	-	-
	KMH-25K45(2700)	68.3	127.0	115.7	140.8	21.2	38.0
	Bisco New 704	-	-	116.3	-	-	-
	BiscoX5129	66.0	124.0	110.3	153.5	23.1	40.9
	BiscoX9	-	-	113.3	-	-	-
	NMH-713	68.3	128.7	113.7	190.6	28.7	50.8
	NMH-731	67.0	124.0	111.3	171.1	25.7	45.2
	NMH-666	67.7	126.7	112.0	143.1	21.5	38.9
	RJ 2020	-	-	111.7	-	-	-
	Buland (C)	70.0	127.3	116.0	130.4	21.4	35.8
	Seed Tech 2324 (C)	66.0	124.0	113.3	142.4	21.3	39.1
	Bio 9681(C)	68.0	124.7	110.0	147.2	22.1	38.9
200:65:50	NK6607	68.0	127.7	112.0	211.4	31.8	55.6
	S 7720	68.3	127.3	112.7	216.2	32.5	56.6
	PR0-380	67.0	128.3	114.3	228.5	34.3	60.8
	CMH 08-282	-	-	112.0	-	-	-
	CMH 08-287	-	-	117.0	-	-	-
	KMH-25K45(2700)	67.7	127.0	115.3	183.4	27.6	49.3
	Bisco New 704	-	-	117.0	-	-	-
	BiscoX5129	65.3	124.7	110.0	208.3	31.3	55.0
	BiscoX9	-	-	114.0	-	-	-
	NMH-713	68.0	126.7	115.0	225.9	34.0	59.9
	NMH-731	67.7	123.7	109.3	218.5	32.8	57.8
	NMH-666	68.0	123.7	110.3	207.6	31.2	54.8
	RJ 2020	-	-	112.0	-	-	-
	Buland (C)	69.0	127.7	115.3	188.6	28.3	50.1
	Seed Tech 2324 (C)	67.0	123.3	111.7	211.3	31.8	54.9
	Bio 9681(C)	68.0	124.3	110.0	234.4	32.0	58.1
250:85:60	NK6607	66.7	127.0	111.3	237.8	35.8	62.5
	S 7720	67.3	124.7	114.3	243.0	36.5	63.2
	PR0-380	69.3	126.0	115.0	265.1	39.9	69.2
	CMH 08-282	-	-	113.0	-	-	-
	CMH 08-287	-	-	117.3	-	-	-
	KMH-25K45(2700)	70.0	126.7	115.0	215.4	32.4	56.8
	Bisco New 704	-	-	117.3	-	-	-
	BiscoX5129	68.0	124.7	110.0	231.1	34.8	61.6
	BiscoX9	-	-	113.0	-	-	-
	NMH-713	69.0	127.0	114.3	261.8	39.4	69.4
	NMH-731	68.0	122.3	110.3	262.6	39.5	70.5
	NMH-666	69.0	125.7	111.3	245.9	37.0	65.7
	RJ 2020	-	-	113.0	-	-	-
	Buland (C)	69.7	128.0	115.7	230.5	34.7	60.3
	Seed Tech 2324 (C)	68.3	123.7	112.7	254.8	38.5	67.7
	Bio 9681(C)	66.3	124.7	111.0	261.1	40.9	64.7

Cont…

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Days to 50% tasseling			Nitrogen uptake (kg/ha)	Phosphorus uptake (kg/ha)	Potash uptake (kg/ha)
		Bhubneshwar	Dholi	Varanasi	Bahraich		
Location mean		67.8	125.9	113.3	206.3	31.1	54.5
C.D.(5%) AiBj-AiBk		2.0	2.4	1.9	12.0	0.6	0.8
C.D.(5%) AiBk-AjBk		2.2	2.9	3.1	12.1	0.6	0.9
F(5%)		n.s.	n.s.	n.s.	s	s	s
150:50:40		67.5	126.3	113.4	160.4	24.4	43.0
200:65:50		67.6	125.8	113.0	212.2	31.6	55.7
250:80:60		68.3	125.5	113.4	246.3	37.2	64.7
C.D.(5%) Ai-Aj		1.3	1.9	2.6	4.0	0.1	0.4
C.V.(%) Error A		2.8	2.2	4.0	2.9	0.6	1.1
F(5%)		n.s.	n.s.	n.s.	s	s	s
	NK6607	67.2	127.6	111.6	203.0	31.0	54.3
	S 7720	67.9	126.6	113.4	212.6	32.0	55.6
	PR0-380	67.6	127.2	114.9	233.3	35.1	61.3
	CMH 08-282	-	-	113.1	-	-	-
	CMH 08-287	-	-	116.8	-	-	-
	KMH-25K45(2700)	68.7	126.9	115.3	179.9	27.0	48.0
	Bisco New 704	-	-	116.9	-	-	-
	BiscoX5129	66.4	124.4	110.1	197.6	29.7	52.5
	BiscoX9	-	-	113.4	-	-	-
	NMH-713	68.4	127.4	114.3	226.1	34.0	60.1
	NMH-731	67.6	123.3	110.3	217.4	32.7	57.8
	NMH-666	68.2	125.3	111.2	198.9	29.9	53.1
	RJ 2020	-	-	112.2	-	-	-
	Buland (C)	69.6	127.7	115.7	183.1	28.1	48.7
	Seed Tech 2324 (C)	67.1	123.7	112.6	202.8	30.5	53.9
	Bio 9681(C)	67.4	124.6	110.3	214.2	31.7	53.9
C.D.(5%)Bi-Bj		1.1	1.4	1.1	7.0	0.4	0.5
C.V.(%)ErrorB		1.8	1.2	1.0	3.6	1.2	0.9
F(5%)		s	s	s	s	s	s

Cont…

Table 3: Relative performance of pre-release *late* maturing germplasm at different NPK levels in Zone IV.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)				Cob yield (kg/ha)		
		Arbhavi	Kolhapur	Karimnagar	Vagarai	Arbhavi	Kolhapur	Vagarai
150:50:40	NK6607	6091	8460	10261	5137	7556	9924	6346
	S 7720	8131	10053	10791	5211	10556	12080	6286
	PR0-380	9611	9398	9242	4687	13000	11362	6053
	CMH 08-282	-	-	8686	-	-	-	-
	CMH 08-287	-	-	10969	-	-	-	-
	KMH-25K45(2700)	3848	8402	11868	5408	5167	10318	6674
	Bisco New 704	-	-	12902	-	-	-	-
	BiscoX5129	6393	6662	12255	6324	8111	7896	7803
	BiscoX9	-	-	12764	-	-	-	-
	NMH-713	6100	9253	13126	5526	7944	11040	6914
	NMH-731	5803	8740	11843	5662	7500	10662	6775
	NMH-666	4206	6900	12324	5830	5167	8267	6886
	RJ 2020	-	-	12891	-	-	-	-
	Buland (C)	4270	5858	11847	4394	5500	7109	5719
	Seed Tech 2324 (C)	6858	7918	8160	5230	9000	9547	6803
	Bio 9681(C)	4854	6376	12803	4621	5944	7571	5608
200:65:50	NK6607	7543	8898	11744	5697	9833	10464	6833
	S 7720	8334	11724	11790	6175	10944	14109	7469
	PR0-380	9641	11040	10258	5323	12944	13527	6736
	CMH 08-282	-	-	9435	-	-	-	-
	CMH 08-287	-	-	11049	-	-	-	-
	KMH-25K45(2700)	6651	8893	10708	5656	8556	11036	7181
	Bisco New 704	-	-	9984	-	-	-	-
	BiscoX5129	6284	8082	10045	7377	7944	9558	8478
	BiscoX9	-	-	10818	-	-	-	-
	NMH-713	7730	9513	10355	5962	10333	11376	7375
	NMH-731	8706	9811	12079	6146	11278	12033	7347
	NMH-666	4337	8282	10966	5869	5556	9858	7042
	RJ 2020	-	-	8482	-	-	-	-
	Buland (C)	5301	6162	6406	4986	6944	7356	6106
	Seed Tech 2324 (C)	9464	8536	10367	5681	12389	10220	7236
	Bio 9681(C)	6403	7591	9751	4989	8056	9004	6042
250:85:60	NK6607	7394	9131	12373	6211	9278	11038	7497
	S 7720	10595	11947	12633	6716	13389	14547	7997
	PR0-380	9120	12187	11314	5753	12167	14816	7219
	CMH 08-282	-	-	9917	-	-	-	-
	CMH 08-287	-	-	11445	-	-	-	-
	KMH-25K45(2700)	6669	9818	11880	6062	8667	12151	7719
	Bisco New 704	-	-	11831	-	-	-	-
	BiscoX5129	7272	8300	11451	7562	9556	9964	8969
	BiscoX9	-	-	11919	-	-	-	-
	NMH-713	7607	9616	10878	6394	10333	11778	7775
	NMH-731	8627	9989	12346	7094	11389	12173	8081
	NMH-666	4194	9093	11739	6636	5444	10729	8053
	RJ 2020	-	-	9204	-	-	-	-
	Buland (C)	5428	7733	7590	5651	7222	8267	6553
	Seed Tech 2324 (C)	7942	9747	11328	5889	10222	11622	7270
	Bio 9681(C)	6711	8080	10884	5411	8389	9853	6692

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)				Cob yield (kg/ha)		
		Arbhavi	Kolhapur	Karimnagar	Vagarai	Arbhavi	Kolhapur	Vagarai
Location mean		6912.7	8854.3	10952.1	5796.1	8978.1	10644.0	7076.9
C.D.(5%) AiBj-AiBk		1364.8	769.0	1352.0	550.4	1820.4	923.2	409.6
C.D.(5%) AiBk-AjBk		1497.5	763.2	1360.0	600.4	2115.5	903.5	505.8
F(5%)		s	s	s	n.s.	s	s	n.s.
150:50:40		6015	8002	11420	5275	7768	9616	6533
200:65:50		7308	8958	10264	5806	9525	10776	7077
250:80:60		7414	9604	11170	6307	9641	11540	7620
C.D.(5%) Ai-Aj		766.8	220.1	383.7	301.9	1248.4	211.9	330.9
C.V.(%) Error A		16.2	3.6	6.2	7.6	20.3	2.9	6.8
F(5%)		s	s	s	s	s	s	s
	NK6607	7009	8830	11459	5682	8889	10476	6892
	S 7720	9020	11241	11738	6034	11630	13579	7251
	PR0-380	9457	10875	10271	5254	12704	13235	6669
	CMH 08-282	-	-	9345	-	-	-	-
	CMH 08-287	-	-	11154	-	-	-	-
	KMH-25K45(2700)	5723	9038	11485	5709	7463	11168	7191
	Bisco New 704	-	-	11572	-	-	-	-
	BiscoX5129	6650	7681	11250	7088	8537	9139	8417
	BiscoX9	-	-	11833	-	-	-	-
	NMH-713	7146	9461	11453	5961	9537	11398	7355
	NMH-731	7712	9513	12089	6301	10056	11623	7401
	NMH-666	4246	8092	11676	6112	5389	9618	7327
	RJ 2020	-	-	10192	-	-	-	-
	Buland (C)	5000	6584	8614	5010	6556	7577	6126
	Seed Tech 2324 (C)	8088	8733	9951	5600	10537	10463	7103
	Bio 9681(C)	5989	7349	11146	5007	7463	8810	6114
C.D.(5%)Bi-Bj		788.0	444.0	780.6	317.8	1051.0	533.0	236.5
C.V.(%)ErrorB		12.1	5.3	7.6	5.8	12.4	5.3	3.5
F(5%)		s	s	s	s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plants ('000/ha)			Cobs ('000/ha)	
		Arbhavi	Kolhapur	Vagarai	Arbhavi	Vagarai
150:50:40	NK6607	56.9	54.4	63.0	56.9	61.7
	S 7720	63.9	60.0	59.4	61.9	58.1
	PR0-380	66.4	62.9	63.1	63.6	62.0
	CMH 08-282	-	-	-	-	-
	CMH 08-287	-	-	-	-	-
	KMH-25K45(2700)	59.2	60.9	62.2	51.9	60.4
	Bisco New 704	-	-	-	-	-
	BiscoX5129	65.0	56.2	59.7	65.6	58.3
	BiscoX9	-	-	-	-	-
	NMH-713	61.9	58.7	63.3	52.5	61.2
	NMH-731	65.6	57.8	62.5	55.0	61.9
	NMH-666	60.0	55.3	61.4	53.6	60.4
	RJ 2020	-	-	-	-	-
	Buland (C)	59.7	58.4	61.9	53.9	60.4
	Seed Tech 2324 (C)	67.8	62.0	62.5	62.2	60.8
	Bio 9681(C)	57.5	56.4	63.3	52.5	61.4
200:65:50	NK6607	63.1	62.2	64.7	61.7	62.9
	S 7720	64.2	60.9	58.9	60.3	57.9
	PR0-380	67.5	57.6	61.9	67.2	61.4
	CMH 08-282	-	-	-	-	-
	CMH 08-287	-	-	-	-	-
	KMH-25K45(2700)	63.1	64.2	61.9	56.1	60.9
	Bisco New 704	-	-	-	-	-
	BiscoX5129	66.4	58.4	59.7	63.6	58.0
	BiscoX9	-	-	-	-	-
	NMH-713	61.7	56.9	63.1	56.9	62.0
	NMH-731	65.0	53.3	63.1	60.0	62.0
	NMH-666	66.4	54.9	63.1	51.9	60.6
	RJ 2020	-	-	-	-	-
	Buland (C)	64.4	59.8	62.5	64.4	60.7
	Seed Tech 2324 (C)	68.1	55.8	63.1	65.8	62.3
	Bio 9681(C)	63.3	55.6	63.3	58.6	62.3
250:85:60	NK6607	65.3	58.0	64.4	59.7	62.8
	S 7720	65.8	61.1	59.2	64.7	57.8
	PR0-380	65.0	56.7	62.8	63.6	61.4
	CMH 08-282	-	-	-	-	-
	CMH 08-287	-	-	-	-	-
	KMH-25K45(2700)	63.3	61.6	63.1	53.3	60.6
	Bisco New 704	-	-	-	-	-
	BiscoX5129	62.8	55.3	59.7	63.9	58.1
	BiscoX9	-	-	-	-	-
	NMH-713	63.9	57.3	63.3	61.7	61.5
	NMH-731	61.4	60.9	62.5	58.9	61.2
	NMH-666	63.9	55.6	63.9	56.7	62.5
	RJ 2020	-	-	-	-	-
	Buland (C)	67.5	60.4	63.9	60.6	62.2
	Seed Tech 2324 (C)	70.3	58.9	63.1	61.9	61.1
	Bio 9681(C)	56.1	56.2	63.3	53.6	61.1

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A20

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plants ('000/ha)			Cobs ('000/ha)	
		Arbhavi	Kolhapur	Vagarai	Arbhavi	Vagarai
Location mean		63.7	58.3	62.3	59.2	60.8
C.D.(5%) AiBj-AiBk		6.4	5.6	3.0	6.7	2.8
C.D.(5%) AiBk-AjBk		6.8	7.4	3.0	7.0	2.8
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.
150:50:40		62.2	58.5	62.0	57.2	60.6
200:65:50		64.8	58.1	62.3	60.6	61.0
250:80:60		64.1	58.4	62.7	59.9	60.9
C.D.(5%) Ai-Aj		3.1	5.2	0.9	3.0	0.7
C.V.(%) Error A		7.2	13.2	2.2	7.4	1.6
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.
	NK6607	61.8	58.2	64.1	59.4	62.5
	S 7720	64.6	60.7	59.2	62.3	57.9
	PR0-380	66.3	59.0	62.6	64.8	61.6
	CMH 08-282	-	-	-	-	-
	CMH 08-287	-	-	-	-	-
	KMH-25K45(2700)	61.9	62.2	62.4	53.8	60.6
	Bisco New 704	-	-	-	-	-
	BiscoX5129	64.7	56.7	59.7	64.4	58.1
	BiscoX9	-	-	-	-	-
	NMH-713	62.5	57.6	63.2	57.0	61.6
	NMH-731	64.0	57.3	62.7	58.0	61.7
	NMH-666	63.4	55.3	62.8	54.1	61.2
	RJ 2020	-	-	-	-	-
	Buland (C)	63.9	59.6	62.8	59.6	61.1
	Seed Tech 2324 (C)	68.7	58.9	62.9	63.3	61.4
	Bio 9681(C)	59.0	56.1	63.3	54.9	61.6
C.D.(5%)Bi-Bj		3.7	3.2	1.7	3.8	1.6
C.V.(%)ErrorB		6.2	5.9	3.0	6.9	2.8
F(5%)		s	s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plant height (cm)			
		Arbhavi	Kolhapur	Karimnagar	Vagarai
150:50:40	NK6607	183.5	191.0	221.3	199.0
	S 7720	177.7	207.7	229.0	210.0
	PR0-380	192.3	211.3	231.0	202.7
	CMH 08-282	-	-	235.0	-
	CMH 08-287	-	-	234.7	-
	KMH-25K45(2700)	184.7	197.7	248.3	201.0
	Bisco New 704	-	-	233.3	-
	BiscoX5129	182.3	163.3	238.3	200.7
	BiscoX9	-	-	240.3	-
	NMH-713	171.3	188.7	254.3	186.0
	NMH-731	174.7	204.0	238.0	208.4
	NMH-666	183.7	192.7	235.7	194.3
	RJ 2020	-	-	231.0	-
	Buland (C)	179.7	203.3	228.7	199.7
	Seed Tech 2324 (C)	181.0	192.0	229.0	184.4
	Bio 9681(C)	182.0	189.0	230.7	188.8
200:65:50	NK6607	198.9	201.3	231.3	203.7
	S 7720	201.2	210.3	235.7	211.0
	PR0-380	204.3	202.0	231.7	203.4
	CMH 08-282	-	-	239.7	-
	CMH 08-287	-	-	240.3	-
	KMH-25K45(2700)	186.0	204.3	242.7	206.2
	Bisco New 704	-	-	248.0	-
	BiscoX5129	194.5	189.0	244.7	204.8
	BiscoX9	-	-	235.0	-
	NMH-713	187.4	185.3	253.0	193.7
	NMH-731	197.3	192.0	239.0	209.8
	NMH-666	191.3	190.7	250.7	201.2
	RJ 2020	-	-	228.7	-
	Buland (C)	196.9	197.7	225.7	207.2
	Seed Tech 2324 (C)	182.7	182.7	223.7	200.5
	Bio 9681(C)	186.3	200.7	246.0	202.1
250:85:60	NK6607	205.3	187.7	238.7	205.4
	S 7720	210.0	206.7	239.3	212.3
	PR0-380	194.4	191.0	235.7	205.5
	CMH 08-282	-	-	244.7	-
	CMH 08-287	-	-	251.0	-
	KMH-25K45(2700)	193.9	201.3	254.0	208.0
	Bisco New 704	-	-	248.3	-
	BiscoX5129	196.9	194.0	231.7	206.8
	BiscoX9	-	-	251.3	-
	NMH-713	191.2	194.0	252.7	194.7
	NMH-731	187.5	199.7	249.7	210.1
	NMH-666	185.9	201.3	239.0	201.7
	RJ 2020	-	-	235.7	-
	Buland (C)	201.3	194.3	244.3	209.3
	Seed Tech 2324 (C)	181.8	196.0	237.0	201.5
	Bio 9681(C)	181.9	199.7	234.3	204.7

Cont…

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plant height (cm)			
		Arbhavi	Kolhapur	Karim.	Vagarai
Location mean		189.4	195.8	238.8	202.4
C.D.(5%) AiBj-AiBk		11.5	15.7	23.3	8.1
C.D.(5%) AiBk-AjBk		11.3	15.3	23.5	9.0
F(5%)		s	s	n.s.	n.s.
150:50:40		181.2	194.6	234.9	197.7
200:65:50		193.4	196.0	238.5	204.0
250:80:60		193.6	196.9	243.0	205.5
C.D.(5%) Ai-Aj		2.6	3.4	6.9	4.8
C.V.(%) Error A		2.0	2.5	5.1	3.5
F(5%)		s	n.s.	n.s.	s
NK6607		195.9	193.3	230.4	202.7
S 7720		196.3	208.2	234.7	211.1
PR0-380		197.0	201.4	232.8	203.9
CMH 08-282		-	-	239.8	-
CMH 08-287		-	-	242.0	-
KMH-25K45(2700)		188.2	201.1	248.3	205.1
Bisco New 704		-	-	243.2	-
BiscoX5129		191.2	182.1	238.2	204.1
BiscoX9		-	-	242.2	-
NMH-713		183.3	189.3	253.3	191.4
NMH-731		186.5	198.6	242.2	209.4
NMH-666		187.0	194.9	241.8	199.1
RJ 2020		-	-	231.8	-
Buland (C)		192.6	198.4	232.9	205.4
Seed Tech 2324 (C)		181.8	190.2	229.9	195.5
Bio 9681(C)		183.4	196.4	237.0	198.5
C.D.(5%)Bi-Bj		6.7	9.1	13.4	4.7
C.V.(%)ErrorB		3.7	4.9	6.0	2.5
F(5%)		s	s	s	s

Cont…

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Days to 50% tasseling			Days to 50% silking		
		Kolhapur	Karimnagar	Vagarai	Arbhavi	Kolhapur	Vagarai
150:50:40	NK6607	68.3	61.7	55.0	77.0	69.0	59.0
	S 7720	70.0	65.0	55.7	78.3	71.0	59.0
	PR0-380	68.7	66.3	56.0	76.3	70.0	59.0
	CMH 08-282	-	62.3	-	-	-	-
	CMH 08-287	-	64.7	-	-	-	-
	KMH-25K45(2700)	69.3	64.7	54.3	78.3	70.7	57.0
	Bisco New 704	-	65.7	-	-	-	-
	BiscoX5129	69.3	63.0	56.0	76.7	71.3	59.0
	BiscoX9	-	65.0	-	-	-	-
	NMH-713	69.3	65.0	56.0	77.0	71.0	58.3
	NMH-731	68.7	62.0	56.0	76.3	71.0	58.3
	NMH-666	69.0	62.0	56.0	78.3	71.0	59.0
	RJ 2020	-	65.0	-	-	-	-
	Buland (C)	70.3	65.0	55.3	78.7	72.0	58.7
	Seed Tech 2324 (C)	69.0	65.7	55.3	77.0	70.0	58.7
	Bio 9681(C)	67.0	63.3	52.0	71.7	68.3	56.0
200:65:50	NK6607	68.7	65.0	55.7	76.0	70.7	58.7
	S 7720	69.3	64.0	56.3	77.7	70.7	59.3
	PR0-380	68.7	64.0	55.7	76.7	70.0	59.0
	CMH 08-282	-	63.0	-	-	-	-
	CMH 08-287	-	67.3	-	-	-	-
	KMH-25K45(2700)	69.3	63.7	54.7	78.0	71.0	59.0
	Bisco New 704	-	67.0	-	-	-	-
	BiscoX5129	67.7	64.0	54.3	77.7	68.7	58.3
	BiscoX9	-	65.0	-	-	-	-
	NMH-713	68.7	63.0	56.0	77.3	69.7	60.0
	NMH-731	69.0	63.0	56.0	74.7	70.3	59.3
	NMH-666	69.0	63.3	56.7	77.7	70.3	60.3
	RJ 2020	-	63.0	-	-	-	-
	Buland (C)	70.0	66.0	57.7	78.7	71.0	60.7
	Seed Tech 2324 (C)	68.3	63.0	56.0	77.0	69.7	60.0
	Bio 9681(C)	66.7	62.0	53.7	71.0	68.3	57.0
250:85:60	NK6607	68.7	62.3	55.3	77.7	70.0	58.0
	S 7720	69.0	62.7	56.0	76.3	70.3	58.7
	PR0-380	69.3	64.3	56.0	77.0	71.7	59.0
	CMH 08-282	-	62.0	-	-	-	-
	CMH 08-287	-	64.3	-	-	-	-
	KMH-25K45(2700)	68.7	63.3	54.7	76.3	71.3	58.7
	Bisco New 704	-	65.7	-	-	-	-
	BiscoX5129	68.7	62.7	56.3	76.3	70.3	59.0
	BiscoX9	-	63.7	-	-	-	-
	NMH-713	69.0	62.0	55.0	77.0	71.0	58.0
	NMH-731	68.3	62.0	55.7	74.7	70.3	57.7
	NMH-666	69.0	62.7	56.0	77.0	70.7	59.0
	RJ 2020	-	62.0	-	-	-	-
	Buland (C)	70.7	65.7	55.7	78.7	72.0	59.0
	Seed Tech 2324 (C)	67.7	61.3	56.0	76.3	70.7	58.7
	Bio 9681(C)	65.7	61.0	52.0	72.0	67.7	55.7

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Days to 50% tasseling			Days to 50% silking		
		Kolhapur	Karimnagar	Vagarai	Arbhavi	Kolhapur	Vagarai
Location mean		68.8	63.8	55.4	76.6	70.4	58.6
C.D.(5%) AiBj-AiBk		1.2	1.3	1.6	2.3	1.5	2.0
C.D.(5%) AiBk-AjBk		1.3	1.3	1.7	2.7	1.6	2.1
F(5%)		n.s.	s	n.s.	n.s.	n.s.	n.s.
150:50:40		69.0	64.1	55.2	76.9	70.5	58.4
200:65:50		68.7	64.1	55.7	76.6	70.0	59.2
250:80:60		68.6	63.0	55.3	76.3	70.5	58.3
C.D.(5%) Ai-Aj		0.6	0.2	0.8	1.6	0.8	0.9
C.V.(%) Error A		1.3	0.5	2.0	3.1	1.7	2.3
F(5%)		n.s.	s	n.s.	n.s.	n.s.	n.s.
	NK6607	68.6	63.0	55.3	76.9	69.9	58.6
	S 7720	69.4	63.9	56.0	77.4	70.7	59.0
	PR0-380	68.9	64.9	55.9	76.7	70.6	59.0
	CMH 08-282	-	62.4	-	-	-	-
	CMH 08-287	-	65.4	-	-	-	-
	KMH-25K45(2700)	69.1	63.9	54.6	77.6	71.0	58.2
	Bisco New 704	-	66.1	-	-	-	-
	BiscoX5129	68.6	63.2	55.6	76.9	70.1	58.8
	BiscoX9	-	64.6	-	-	-	-
	NMH-713	69.0	63.3	55.7	77.1	70.6	58.8
	NMH-731	68.7	62.3	55.9	75.2	70.6	58.4
	NMH-666	69.0	62.7	56.2	77.7	70.7	59.4
	RJ 2020	-	63.3	-	-	-	-
	Buland (C)	70.3	65.6	56.2	78.7	71.7	59.4
	Seed Tech 2324 (C)	68.3	63.3	55.8	76.8	70.1	59.1
	Bio 9681(C)	66.4	62.1	52.6	71.6	68.1	56.2
C.D.(5%)Bi-Bj		0.7	0.7	0.9	1.3	0.8	1.1
C.V.(%)ErrorB		1.0	1.2	1.7	1.8	1.3	2.1
F(5%)		s	s	s	s	s	s

Table 4: Relative performance of pre-release *late* maturing germplasm at different NPK levels in Zone V.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Days to 50% silking	Plant height (cm)
		Banswara					
150:50:40	NK6607	9111	11417	82.2	79.7	90.3	270.0
	S 7720	9167	11694	81.4	79.7	90.3	263.3
	PR0-380	7917	9861	83.3	69.2	90.3	283.3
	CMH 08-282	6222	7444	80.0	52.2	92.7	273.3
	CMH 08-287	6389	8611	81.4	68.9	92.0	275.0
	KMH-25K45(2700)	8333	11000	81.7	77.2	91.3	278.3
	Bisco New 704	7444	9389	79.7	75.0	91.0	281.7
	BiscoX5129	7889	10056	82.8	70.6	91.7	261.7
	BiscoX9	8583	10944	82.8	76.7	91.7	268.3
	NMH-713	8111	10667	79.7	74.7	91.7	270.0
	NMH-731	8389	11444	82.8	80.0	91.0	286.7
	NMH-666	7861	10528	80.6	73.9	90.0	238.3
	RJ 2020	5833	8528	81.1	68.1	90.3	260.0
	Buland (C)	7361	10167	82.8	61.1	92.7	285.0
	Seed Tech 2324 (C)	7222	10278	79.7	82.2	90.3	255.0
	Bio 9681(C)	7000	10000	78.9	70.0	92.3	283.3
200:65:50	NK6607	9833	12639	83.3	88.6	91.3	283.3
	S 7720	9694	11861	80.3	80.8	91.3	275.0
	PR0-380	8667	11222	82.2	78.6	92.3	285.0
	CMH 08-282	7139	9167	80.8	64.2	92.7	288.3
	CMH 08-287	7750	10139	82.2	81.1	92.3	280.0
	KMH-25K45(2700)	9167	12333	82.8	86.4	92.3	281.7
	Bisco New 704	7861	10250	82.5	81.9	92.0	288.3
	BiscoX5129	9083	11528	82.2	80.6	93.0	273.3
	BiscoX9	9639	11444	82.8	80.0	93.0	270.0
	NMH-713	8694	11639	81.4	81.4	93.0	278.3
	NMH-731	8389	11056	82.8	77.2	92.0	290.0
	NMH-666	9556	12028	82.8	84.4	91.3	251.7
	RJ 2020	6667	9028	79.7	72.2	91.3	271.7
	Buland (C)	8028	10389	83.1	62.2	92.3	286.7
	Seed Tech 2324 (C)	8167	11056	80.8	88.3	91.3	268.3
	Bio 9681(C)	7722	10944	81.7	76.7	93.0	293.3
250:85:60	NK6607	10222	12417	81.9	86.9	91.7	293.3
	S 7720	10028	12333	82.2	83.9	91.3	286.7
	PR0-380	9722	12194	82.8	85.3	92.0	290.0
	CMH 08-282	7139	9500	80.6	66.4	92.7	291.7
	CMH 08-287	8222	10278	82.2	82.2	92.3	308.3
	KMH-25K45(2700)	9139	11806	81.9	82.5	93.0	283.3
	Bisco New 704	8194	10583	82.2	84.7	92.3	290.0
	BiscoX5129	9917	13250	82.8	92.8	93.0	283.3
	BiscoX9	10194	12861	82.5	90.0	93.0	276.7
	NMH-713	9194	11667	81.1	81.7	93.0	285.0
	NMH-731	12000	14528	83.3	101.7	92.3	230.0
	NMH-666	10500	12917	82.8	90.6	91.7	256.7
	RJ 2020	7722	10556	82.8	84.4	91.7	275.0
	Buland (C)	8361	11167	83.3	66.9	92.7	290.0
	Seed Tech 2324 (C)	8778	12444	82.2	99.4	91.7	278.3
	Bio 9681(C)	8194	10889	82.8	76.2	93.0	296.7

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)	Cob yield (kg/ha)	No. of plants ('000/ha)	No. of cobs ('000/ha)	Days to 50% silking	Plant height (cm)
		Banswara					
Location mean		8467.0	11002.9	81.9	78.7	91.9	277.4
C.D.(5%) AiBj-AiBk		1371.8	1454.3	2.8	10.4	1.3	23.6
C.D.(5%) AiBk-AjBk		1384.9	1483.4	2.8	10.6	1.3	23.9
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	s
150:50:40		7677	10127	81.3	72.4	91.2	270.8
200:65:50		8503	11045	82.0	79.0	92.2	279.1
250:80:60		9220	11837	82.3	84.7	92.3	282.2
C.D.(5%) Ai-Aj		407.8	485.2	0.6	3.6	0.5	7.0
C.V.(%) Error A		8.5	7.8	1.4	8.2	0.9	4.5
F(5%)		s	s	s	s	s	s
	NK6607	9722	12157	82.5	85.1	91.1	282.2
	S 7720	9630	11963	81.3	81.5	91.0	275.0
	PR0-380	8769	11093	82.8	77.7	91.6	286.1
	CMH 08-282	6833	8704	80.5	60.9	92.7	284.4
	CMH 08-287	7454	9676	81.9	77.4	92.2	287.8
	KMH-25K45(2700)	8880	11713	82.1	82.0	92.2	281.1
	Bisco New 704	7833	10074	81.5	80.6	91.8	286.7
	BiscoX5129	8963	11611	82.6	81.3	92.6	272.8
	BiscoX9	9472	11750	82.7	82.2	92.6	271.7
	NMH-713	8667	11324	80.7	79.3	92.6	277.8
	NMH-731	9593	12343	83.0	86.3	91.8	268.9
	NMH-666	9306	11824	82.0	83.0	91.0	248.9
	RJ 2020	6741	9370	81.2	74.9	91.1	268.9
	Buland (C)	7917	10574	83.1	63.4	92.6	287.2
	Seed Tech 2324 (C)	8056	11259	80.9	90.0	91.1	267.2
	Bio 9681(C)	7639	10611	81.1	74.3	92.8	291.1
C.D.(5%)Bi-Bj		792.0	839.6	1.6	6.0	0.7	13.6
C.V.(%)ErrorB		10.0	8.1	2.1	8.1	0.9	5.2
F(5%)		s	s	s	s	s	s

Table 5: Relative performance of pre-release *medium* maturing germplasm at different NPK levels in Zone II.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)				Cob yield (kg/ha)	
		Delhi	Ludhiana	Pantnagar	Karnal	Karnal	Pantnagar
100:40:30	NMH1242	11126	11927	3786	9220	11047	4865
	Bio-151	9874	10805	4762	9120	10942	6020
	BIO 9637 (C)	9874	8424	3663	8960	10771	4770
	HM4 (C)	7711	7180	5817	8659	10404	7484
	HM8 (C)	6526	7221	5849	9009	10877	7405
150:50:40	NMH1242	12444	13508	6187	10137	12235	8067
	Bio-151	11444	11343	5329	10374	12485	6746
	BIO 9637 (C)	10237	11445	5849	9864	11909	7444
	HM4 (C)	7733	7629	6437	9440	11334	8286
	HM8 (C)	6926	8708	5671	9953	11963	7294
200:60:50	NMH1242	12356	11735	6552	10537	12682	8349
	Bio-151	8978	11465	6433	10710	12846	8040
	BIO 9637 (C)	10052	10499	6067	10260	12291	7841
	HM4 (C)	7007	9692	6706	9782	11731	8456
	HM8 (C)	7748	7531	5560	10354	12446	6960
Location mean		9335.8	9940.7	5644.4	9758.5	11730.9	7201.9
C.D.(5%) AiBj-AiBk		2179.6	2445.8	1091.1	652.9	787.6	1387.7
C.D.(5%) AiBk-AjBk		3367.1	2265.3	1053.9	781.0	948.9	1336.9
F(5%)		n.s.	n.s.	s	n.s.	n.s.	s
100:40:30		9022	9111	4775	8994	10808	6109
150:50:40		9757	10527	5894	9954	11985	7567
200:60:50		9228	10184	6263	10328	12399	7929
C.D.(5%) Ai-Aj		2981.7	607.6	410.6	530.7	650.4	512.4
C.V.(%) Error A		16.6	6.0	7.2	5.4	5.5	7.0
F(5%)		n.s.	s	s	s	s	s
NMH1242		11975	12390	5508	9965	11988	7094
Bio-151		10099	11204	5508	10068	12091	6935
BIO 9637 (C)		10054	10123	5193	9695	11657	6685
HM4 (C)		7484	8167	6320	9293	11156	8075
HM8 (C)		7067	7820	5693	9772	11762	7220
C.D.(5%)Bi-Bj		1258.4	1412.1	629.9	377.0	454.7	801.2
C.V.(%)ErrorB		10.7	14.6	11.5	4.0	4.0	11.4
F(5%)		s	s	s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	No. of plants ('000/ha)				No. of cobs ('000/ha)		
		Delhi	Karnal	Ludhiana	Pantnagar	Delhi	Ludhiana	Pantnagar
100:40:30	NMH1242	66.7	60.0	86.1	62.7	67.4	87.5	63.5
	Bio-151	65.9	60.0	70.8	65.1	71.9	91.7	65.1
	BIO 9637 (C)	65.9	60.0	50.0	61.9	68.9	64.4	61.9
	HM4 (C)	60.0	59.7	48.1	58.7	65.9	60.2	58.7
	HM8 (C)	56.3	60.6	42.6	62.7	61.5	57.9	64.3
150:50:40	NMH1242	68.9	60.6	88.9	61.1	70.4	95.8	61.9
	Bio-151	59.3	60.3	78.2	62.7	77.0	98.6	62.7
	BIO 9637 (C)	60.7	60.6	75.0	61.1	61.5	84.3	63.5
	HM4 (C)	59.3	60.0	59.3	57.1	63.0	70.8	57.1
	HM8 (C)	53.3	60.8	54.6	57.9	62.2	73.1	58.7
200:60:50	NMH1242	63.7	60.6	85.2	65.1	69.6	84.3	66.7
	Bio-151	63.0	60.3	75.5	62.7	63.0	92.1	62.7
	BIO 9637 (C)	63.7	60.0	60.6	57.1	65.2	70.8	61.1
	HM4 (C)	51.1	60.0	69.4	63.5	55.6	91.7	63.5
	HM8 (C)	54.1	60.6	42.1	59.5	62.2	60.6	59.5
Location mean		60.8	60.3	65.8	61.3	65.7	78.9	62.1
C.D.(5%) AiBj-AiBk		10.2	1.1	24.0	5.8	11.0	23.9	6.4
C.D.(5%) AiBk-AjBk		11.1	1.5	25.2	5.2	14.2	24.8	6.1
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
100:40:30		63.0	60.1	59.5	62.2	67.1	72.3	62.7
150:50:40		60.3	60.4	71.2	60.0	66.8	84.5	60.8
200:60:50		59.1	60.3	66.6	61.6	63.1	79.9	62.7
C.D.(5%) Ai-Aj		7.2	1.1	13.6	0.9	11.3	12.9	2.2
C.V.(%) Error A		6.2	1.8	20.5	1.4	8.9	16.1	3.6
F(5%)		n.s.	n.s.	n.s.	s	n.s.	n.s.	n.s.
NMH1242		66.4	60.4	86.7	63.0	69.1	89.2	64.0
Bio-151		62.7	60.2	74.8	63.5	70.6	94.1	63.5
BIO 9637 (C)		63.5	60.2	61.9	60.1	65.2	73.1	62.2
HM4 (C)		56.8	59.9	59.0	59.8	61.5	74.2	59.8
HM8 (C)		54.6	60.6	46.5	60.1	62.0	63.9	60.8
C.D.(5%)Bi-Bj		5.9	0.6	13.9	3.3	6.4	13.8	3.7
C.V.(%)ErrorB		7.7	1.1	21.7	5.6	7.7	18.0	6.1
F(5%)		s	n.s.	s	n.s.	s	s	n.s.

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Days to 50% tasseling				Days to 50% silking		
		Delhi	Karnal	Ludhiana	Pantnagar	Karnal	Ludhiana	Pantnagar
100:40:30	NMH1242	127.5	99.0	123.0	123.7	101.3	125.0	126.3
	Bio-151	129.0	103.0	126.3	126.7	105.3	128.3	129.3
	BIO 9637 (C)	128.0	102.0	126.0	125.3	104.3	127.7	128.3
	HM4 (C)	130.0	101.7	125.7	124.7	104.3	127.3	128.0
	HM8 (C)	130.0	101.3	127.3	128.0	104.0	129.0	130.7
150:50:40	NMH1242	126.5	98.3	121.3	123.7	100.7	123.3	127.0
	Bio-151	128.0	101.0	126.7	125.3	103.7	128.3	129.3
	BIO 9637 (C)	130.5	101.7	125.3	125.7	104.3	126.7	128.7
	HM4 (C)	128.0	101.3	124.7	124.7	103.3	126.3	127.7
	HM8 (C)	130.0	100.0	126.3	126.3	102.7	127.7	129.7
200:60:50	NMH1242	126.0	98.0	122.0	123.0	99.7	124.0	126.0
	Bio-151	130.0	100.7	126.3	126.7	103.0	128.0	129.0
	BIO 9637 (C)	127.0	101.3	125.0	127.0	104.0	126.3	130.0
	HM4 (C)	127.5	100.3	124.7	126.0	102.3	126.7	128.7
	HM8 (C)	131.5	100.3	127.0	125.0	102.7	129.0	127.7
Location mean		128.6	100.7	125.2	125.4	103.0	126.9	128.4
C.D.(5%) AiBj-AiBk		3.1	1.1	1.5	2.6	1.2	1.5	2.4
C.D.(5%) AiBk-AjBk		3.7	1.4	1.9	2.4	1.6	1.7	2.3
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
100:40:30		128.9	101.4	125.7	125.7	103.9	127.5	128.5
150:50:40		128.6	100.5	124.9	125.1	102.9	126.5	128.5
200:60:50		128.4	100.1	125.0	125.5	102.3	126.8	128.3
C.D.(5%) Ai-Aj		2.7	1.0	1.4	0.5	1.2	1.1	0.6
C.V.(%) Error A		1.1	1.0	1.1	0.4	1.1	0.9	0.5
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
NMH1242		126.7	98.4	122.1	123.4	100.6	124.1	126.4
Bio-151		129.0	101.6	126.4	126.2	104.0	128.2	129.2
BIO 9637 (C)		128.5	101.7	125.4	126.0	104.2	126.9	129.0
HM4 (C)		128.5	101.1	125.0	125.1	103.3	126.8	128.1
HM8 (C)		130.5	100.6	126.9	126.4	103.1	128.6	129.3
C.D.(5%)Bi-Bj		1.8	0.7	0.9	1.5	0.7	0.9	1.4
C.V.(%)ErrorB		1.1	0.7	0.7	1.2	0.7	0.7	1.1
F(5%)		s	s	s	s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plant height (cm)			
		Delhi	Karnal	Ludhiana	Pantnagar
100:40:30	NMH1242	172.5	156.7	196.1	161.0
	Bio-151	150.9	153.3	181.1	134.7
	BIO 9637 (C)	185.0	170.0	222.2	174.7
	HM4 (C)	145.9	140.0	182.8	125.7
	HM8 (C)	150.0	133.3	192.2	113.7
150:50:40	NMH1242	170.0	161.7	200.0	165.0
	Bio-151	163.4	158.3	180.6	139.3
	BIO 9637 (C)	195.9	174.3	222.2	184.0
	HM4 (C)	136.7	144.0	193.9	136.7
	HM8 (C)	139.2	138.3	191.1	120.3
200:60:50	NMH1242	189.2	165.0	202.2	164.3
	Bio-151	159.2	161.0	180.6	141.7
	BIO 9637 (C)	191.7	174.7	210.0	185.7
	HM4 (C)	138.4	146.3	193.3	135.3
	HM8 (C)	169.2	141.7	194.4	121.0
Location mean		163.8	154.6	196.2	146.9
C.D.(5%) AiBj-AiBk		21.4	6.2	16.5	14.4
C.D.(5%) AiBk-AjBk		24.6	6.6	16.8	13.7
F(5%)		n.s.	n.s.	n.s.	n.s.
100:40:30		160.8	150.7	194.9	141.9
150:50:40		161.0	155.3	197.6	149.1
200:60:50		169.5	157.7	196.1	149.6
C.D.(5%) Ai-Aj		17.4	3.7	8.2	4.9
C.V.(%) Error A		5.5	2.4	4.1	3.3
F(5%)		n.s.	s	n.s.	s
NMH1242		177.2	161.1	199.4	163.4
Bio-151		157.8	157.6	180.7	138.6
BIO 9637 (C)		190.8	173.0	218.1	181.4
HM4 (C)		140.3	143.4	190.0	132.6
HM8 (C)		152.8	137.8	192.6	118.3
C.D.(5%)Bi-Bj		12.3	3.6	9.6	8.3
C.V.(%)ErrorB		6.0	2.4	5.0	5.8
F(5%)		s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Cost of cultivation (`/ha)	Gross return (`/ha)	Net return (`/ha)	B:C ratio
		Pantnagar			
100:40:30	NMH1242	27853	49621	21768	0.8
	Bio-151	27853	62439	34586	1.2
	BIO 9637 (C)	27853	47987	20134	0.7
	HM4 (C)	27853	76177	48324	1.7
	HM8 (C)	27853	76620	48767	1.8
150:50:40	NMH1242	29256	81038	51782	1.8
	Bio-151	29256	69813	40557	1.4
	BIO 9637 (C)	29256	76619	47363	1.6
	HM4 (C)	29256	84352	55096	1.9
	HM8 (C)	29256	74234	44978	1.5
200:60:50	NMH1242	30660	85826	55166	1.8
	Bio-151	30660	84264	53604	1.7
	BIO 9637 (C)	30660	79527	48867	1.6
	HM4 (C)	30660	87819	57159	1.9
	HM8 (C)	30660	72821	42161	1.4
Location mean		29256.3	73943.8	44687.5	1.5
C.D.(5%) AiBj-AiBk		0.4	14290.1	14290.1	0.5
C.D.(5%) AiBk-AjBk		0.5	13825.6	13825.6	0.5
F(5%)		n.s.	s	s	s
100:40:30		27853	62569	34716	1.2
150:50:40		29256	77211	47955	1.6
200:60:50		30660	82052	51392	1.7
C.D.(5%) Ai-Aj		0.3	5435.8	5435.8	0.2
C.V.(%) Error A		0.0	7.3	12.0	11.9
F(5%)		s	s	s	s
NMH1242		29256	72162	42906	1.5
Bio-151		29256	72172	42916	1.5
BIO 9637 (C)		29256	68044	38788	1.3
HM4 (C)		29256	82783	53526	1.8
HM8 (C)		29256	74558	45302	1.6
C.D.(5%)Bi-Bj		0.3	8250.4	8250.4	0.3
C.V.(%)ErrorB		0.0	11.5	19.0	18.9
F(5%)		n.s.	s	s	s

Table 6: Relative performance of pre-release *medium* maturing germplasm at different NPK levels in Zone III.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)				
		Bahraich	Bhubaneswar	Dholi	Ranchi	Varanasi
100:40:30	NMH1242	6231	5286	5757	9094	12333
	Bio-151	6083	5806	6788	8189	10444
	BIO 9637 (C)	6368	5895	6813	7908	10611
	HM4 (C)	6403	5557	6532	7175	8556
	HM8 (C)	6396	5460	5458	5919	7833
150:50:40	NMH1242	7507	5811	7201	10625	12778
	Bio-151	7215	6349	8077	9192	11111
	BIO 9637 (C)	7722	6452	8059	8869	9944
	HM4 (C)	7903	6093	8299	8050	9056
	HM8 (C)	7924	5998	6286	7111	9000
200:60:50	NMH1242	8285	6428	8296	10897	13944
	Bio-151	8472	6343	9259	9750	11389
	BIO 9637 (C)	8576	6958	8672	9500	10611
	HM4 (C)	8875	6694	8606	8581	9667
	HM8 (C)	9160	6283	8914	7483	8833
Location mean		7541.4	6094.1	7534.6	8556.3	10407.4
C.D.(5%) AiBj-AiBk		156.8	566.0	1060.4	1689.7	1086.4
C.D.(5%) AiBk-AjBk		180.6	556.5	1094.9	1548.2	2924.0
F(5%)		s	n.s.	n.s.	n.s.	n.s.
100:40:30		6296	5601	6270	7657	9956
150:50:40		7654	6140	7585	8769	10378
200:60:50		8674	6541	8749	9242	10889
C.D.(5%) Ai-Aj		116.6	238.3	562.9	347.2	2774.4
C.V.(%) Error A		1.5	3.9	7.4	4.0	26.3
F(5%)		s	s	s	s	n.s.
NMH1242		7341	5842	7085	10206	13019
Bio-151		7257	6166	8041	9044	10981
BIO 9637 (C)		7556	6435	7848	8759	10389
HM4 (C)		7727	6115	7812	7935	9093
HM8 (C)		7826	5914	6886	6838	8556
C.D.(5%)Bi-Bj		90.5	326.8	612.2	975.6	627.2
C.V.(%)ErrorB		1.2	5.5	8.4	11.7	6.2
F(5%)		s	s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Cob yield (kg/ha)				
		Bahraich	Bhubneshwar	Dholi	Ranchi	Varanasi
100:40:30	NMH1242	8035	6611	7356	11083	15417
	Bio-151	7743	7250	8778	10028	13056
	BIO 9637 (C)	8139	7333	8778	9750	13264
	HM4 (C)	8076	7028	8111	8917	10694
	HM8 (C)	8104	7000	7067	7472	9792
150:50:40	NMH1242	9347	7333	9267	12889	15972
	Bio-151	8924	7889	10533	11194	13889
	BIO 9637 (C)	9583	8056	10511	10833	12431
	HM4 (C)	9688	7778	10667	9917	11319
	HM8 (C)	9833	7667	8178	8889	11250
200:60:50	NMH1242	10118	8028	10289	13139	17431
	Bio-151	10347	8083	11689	11778	14236
	BIO 9637 (C)	10472	8667	10844	11528	13264
	HM4 (C)	10833	8444	10600	10306	12083
	HM8 (C)	11181	8139	11267	9306	11042
Location mean		9361.6	7687.0	9595.6	10468.5	13009.3
C.D.(5%) AiBj-AiBk		181.1	711.6	1362.3	1545.1	1358.0
C.D.(5%) AiBk-AjBk		206.5	706.0	1392.0	1446.2	3655.0
F(5%)		s	n.s.	n.s.	n.s.	n.s.
100:40:30		8019	7044	8018	9450	12444
150:50:40		9475	7744	9831	10744	12972
200:60:50		10590	8272	10938	11211	13611
C.D.(5%) Ai-Aj		131.3	314.8	692.7	439.9	3468.0
C.V.(%) Error A		1.4	4.0	7.1	4.1	26.3
F(5%)		s	s	s	s	n.s.
NMH1242		9167	7324	8970	12370	16273
Bio-151		9005	7741	10333	11000	13727
BIO 9637 (C)		9398	8019	10044	10704	12986
HM4 (C)		9532	7750	9793	9713	11366
HM8 (C)		9706	7602	8837	8556	10694
C.D.(5%)Bi-Bj		104.6	410.8	786.5	892.1	784.1
C.V.(%)ErrorB		1.1	5.5	8.4	8.8	6.2
F(5%)		s	s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plants ('000/ha)					Nitrogen uptake (kg/ha)	Phosphorus uptake (kg/ha)	Potash uptake (kg/ha)
		Bahraich	Bhubnesh.	Dholi	Ranchi	Varanasi	Bahraich		
100:40:30	NMH1242	79.2	65.8	64.4	81.7	66.7	165.9	25.0	41.6
	Bio-151	79.9	68.1	64.2	81.9	66.0	162.0	24.4	38.2
	BIO 9637 (C)	79.2	68.3	63.8	73.6	66.7	169.5	25.4	44.7
	HM4 (C)	80.6	65.8	63.8	77.8	66.7	170.4	25.6	45.4
	HM8 (C)	81.9	66.4	63.3	73.6	66.0	170.3	25.6	45.3
150:50:40	NMH1242	82.6	66.1	63.8	82.8	66.7	199.8	30.0	70.5
	Bio-151	82.6	68.6	64.4	80.0	66.7	192.2	28.9	64.0
	BIO 9637 (C)	82.6	68.3	63.6	78.9	64.6	205.6	30.9	75.4
	HM4 (C)	82.6	68.3	63.8	74.7	66.7	210.4	31.6	79.5
	HM8 (C)	83.3	68.3	63.1	78.3	66.0	210.9	31.7	80.0
200:60:50	NMH1242	83.3	68.1	66.0	78.3	66.7	220.7	33.2	88.4
	Bio-151	82.6	67.8	63.8	78.6	66.0	225.6	33.9	92.6
	BIO 9637 (C)	83.3	68.1	64.0	79.4	66.0	228.4	34.3	92.9
	HM4 (C)	83.3	68.3	63.6	77.2	66.7	236.1	35.5	101.5
	HM8 (C)	82.6	68.1	62.9	76.1	66.7	243.8	36.9	105.7
Location mean		82.0	67.6	63.9	78.2	66.3	200.8	30.2	71.1
C.D.(5%) AiBj-AiBk		2.1	2.5	2.1	8.1	1.5	4.2	0.6	3.4
C.D.(5%) AiBk-AjBk		2.2	2.4	2.3	8.5	1.5	4.8	0.7	3.8
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	s	s	s
100:40:30		80.1	66.9	63.9	77.7	66.4	167.6	25.2	43.0
150:50:40		82.8	67.9	63.7	78.9	66.1	203.8	30.6	73.9
200:60:50		83.1	68.1	64.0	77.9	66.4	230.9	34.8	96.2
C.D.(5%) Ai-Aj		1.3	1.0	1.4	4.6	0.7	3.0	0.4	2.4
C.V.(%) Error A		1.5	1.5	2.1	5.8	1.1	1.5	1.4	3.3
F(5%)		s	n.s.	n.s.	n.s.	n.s.	s	s	s
NMH1242		81.7	66.7	64.7	80.9	66.7	195.5	29.4	66.8
Bio-151		81.7	68.1	64.1	80.2	66.2	193.3	29.1	64.9
BIO 9637 (C)		81.7	68.2	63.8	77.3	65.7	201.2	30.2	71.0
HM4 (C)		82.2	67.5	63.7	76.6	66.7	205.6	30.9	75.5
HM8 (C)		82.6	67.6	63.1	76.0	66.2	208.3	31.4	77.0
C.D.(5%)Bi-Bj		1.2	1.4	1.2	4.7	0.9	2.4	0.4	2.0
C.V.(%)ErrorB		1.5	2.2	2.0	6.1	1.4	1.2	1.2	2.8
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Cobs ('000/ha)				Plant height (cm)			
		Bahraich	Ranchi	Dholi	Varanasi	Bahraich	Dholi	Ranchi	Varanasi
100:40:30	NMH1242	80.6	81.7	63.3	68.8	168.7	150.0	170.7	177.0
	Bio-151	80.6	80.6	63.1	75.7	169.7	155.8	170.4	161.7
	BIO 9637 (C)	79.9	78.3	63.3	69.4	177.7	180.0	211.3	217.3
	HM4 (C)	79.9	72.2	63.3	67.4	176.0	140.0	169.2	156.3
	HM8 (C)	83.3	65.3	63.1	67.4	178.3	145.8	172.1	168.3
150:50:40	NMH1242	85.4	81.9	65.3	66.7	175.0	175.0	193.0	184.7
	Bio-151	84.0	78.9	67.1	76.4	173.0	156.7	175.4	173.0
	BIO 9637 (C)	88.2	74.7	66.0	65.3	182.3	190.0	224.7	204.3
	HM4 (C)	86.8	75.3	67.1	68.1	181.7	138.3	171.6	158.3
	HM8 (C)	86.8	75.0	67.6	73.6	185.0	151.7	175.9	164.0
200:60:50	NMH1242	88.2	82.2	71.6	68.8	179.0	172.0	183.4	193.0
	Bio-151	87.5	79.7	68.7	74.3	177.7	157.2	180.4	170.0
	BIO 9637 (C)	88.9	76.1	68.4	68.8	188.0	176.8	227.4	209.0
	HM4 (C)	90.3	78.3	68.7	67.4	189.0	145.0	177.1	153.7
	HM8 (C)	88.9	76.4	67.6	71.5	190.0	138.7	187.7	164.0
Location mean		85.3	77.1	66.3	70.0	179.4	158.2	186.0	177.0
C.D.(5%) AiBj-AiBk		2.7	9.8	2.5	4.5	1.5	15.4	19.8	13.8
C.D.(5%) AiBk-AjBk		3.7	9.0	2.9	5.2	1.5	18.7	21.4	30.1
F(5%)		n.s.	n.s.	n.s.	n.s.	s	n.s.	n.s.	n.s.
100:40:30		80.8	75.6	63.2	69.7	174.1	154.3	178.8	176.1
150:50:40		86.3	77.2	66.6	70.0	179.4	162.3	188.1	176.9
200:60:50		88.8	78.6	69.0	70.1	184.7	157.9	191.2	177.9
C.D.(5%) Ai-Aj		2.9	2.0	1.9	3.3	0.7	13.0	12.5	27.7
C.V.(%) Error A		3.3	2.5	2.9	4.6	0.4	8.1	6.6	15.4
F(5%)		s	s	s	n.s.	s	n.s.	n.s.	n.s.
NMH1242		84.7	81.9	66.7	68.1	174.2	165.7	182.4	184.9
Bio-151		84.0	79.7	66.3	75.5	173.4	156.6	175.4	168.2
BIO 9637 (C)		85.6	76.4	65.9	67.8	182.7	182.3	221.1	210.2
HM4 (C)		85.6	75.3	66.4	67.6	182.2	141.1	172.6	156.1
HM8 (C)		86.3	72.2	66.1	70.8	184.4	145.4	178.6	165.4
C.D.(5%)Bi-Bj		1.6	5.7	1.4	2.6	0.9	8.9	11.4	8.0
C.V.(%)ErrorB		1.9	7.6	2.2	3.9	0.5	5.8	6.3	4.6
F(5%)		s	s	n.s.	s	s	s	s	s

Cont…

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Days to 50% tasseling				Days to 50% silking			
		Bhubnesh.	Dholi	Ranchi	Varanasi	Bhubnesh.	Dholi	Ranchi	Varanasi
100:40:30	NMH1242	57.0	121.0	97.7	108.7	63.7	125.0	103.7	113.3
	Bio-151	64.0	123.0	95.3	113.3	70.3	126.3	101.3	116.7
	BIO 9637 (C)	61.0	124.7	93.3	113.7	67.3	128.0	99.3	118.0
	HM4 (C)	59.3	124.3	96.7	112.0	66.0	127.7	102.7	116.3
	HM8 (C)	59.0	123.7	93.7	116.0	66.0	127.3	99.3	119.0
150:50:40	NMH1242	61.3	120.0	97.3	109.0	64.3	124.0	103.0	113.3
	Bio-151	63.3	123.0	93.3	112.3	69.0	126.7	98.3	114.7
	BIO 9637 (C)	63.7	125.0	93.0	113.7	70.3	128.0	98.0	116.3
	HM4 (C)	60.0	122.7	93.7	113.7	65.3	126.7	98.7	117.0
	HM8 (C)	59.0	124.7	93.3	116.3	65.0	127.7	99.0	118.7
200:60:50	NMH1242	60.0	120.0	97.0	109.0	65.0	124.0	101.3	112.7
	Bio-151	64.0	124.7	92.7	113.0	70.0	128.0	98.0	117.0
	BIO 9637 (C)	64.0	124.0	92.7	113.7	69.7	127.3	98.0	117.7
	HM4 (C)	60.0	122.3	92.7	112.3	65.7	126.0	98.0	116.3
	HM8 (C)	61.0	124.3	92.7	115.3	66.3	127.7	97.0	118.3
Location mean		61.1	123.2	94.3	112.8	66.9	126.7	99.7	116.4
C.D.(5%) AiBj-AiBk		3.1	2.4	1.6	1.6	1.6	1.7	1.6	1.5
C.D.(5%) AiBk-AjBk		2.8	2.9	1.8	2.9	1.8	2.1	1.8	3.0
F(5%)		n.s.	n.s.	n.s.	n.s.	s	n.s.	s	n.s.
100:40:30		60.1	123.3	95.3	112.7	66.7	126.9	101.3	116.7
150:50:40		61.5	123.1	94.1	113.0	66.8	126.6	99.4	116.0
200:60:50		61.8	123.1	93.5	112.7	67.3	126.6	98.5	116.4
C.D.(5%) Ai-Aj		0.8	2.0	1.0	2.6	1.2	1.5	1.0	2.7
C.V.(%) Error A		1.3	1.6	1.1	2.3	1.8	1.1	1.0	2.3
F(5%)		s	n.s.	s	n.s.	n.s.	n.s.	s	n.s.
NMH1242		59.4	120.3	97.3	108.9	64.3	124.3	102.7	113.1
Bio-151		63.8	123.6	93.8	112.9	69.8	127.0	99.2	116.1
BIO 9637 (C)		62.9	124.6	93.0	113.7	69.1	127.8	98.4	117.3
HM4 (C)		59.8	123.1	94.3	112.7	65.7	126.8	99.8	116.6
HM8 (C)		59.7	124.2	93.2	115.9	65.8	127.6	98.4	118.7
C.D.(5%)Bi-Bj		1.8	1.4	0.9	0.9	0.9	1.0	0.9	0.9
C.V.(%)ErrorB		3.0	1.1	1.0	0.8	1.4	0.8	1.0	0.8
F(5%)		s	s	s	s	s	s	s	s

Table 7: Relative performance of pre-release *medium* maturing germplasm at different NPK levels in Zone IV.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)				Cob yield (kg/ha)			
		Arbhavi	Karimnagar	Vagarai	Kolhapur	Arbhavi	Karimnagar	Vagarai	Kolhapur
100:40:30	NMH1242	7664	10514	5808	10096	9611	14306	7338	11991
	Bio-151	6987	8352	7488	9873	9194	11696	9177	11922
	BIO 9637 (C)	4926	8230	5686	7167	6167	12352	6920	8602
	HM4 (C)	4350	8147	5219	7282	5417	9965	6542	8649
	HM8 (C)	3851	7124	5447	7411	4917	10461	6755	8793
150:50:40	NMH1242	7268	11807	6194	11913	9083	15953	7674	14164
	Bio-151	8184	8803	7702	11093	10583	13194	9449	13282
	BIO 9637 (C)	5426	8515	5936	7662	6750	12333	7265	9198
	HM4 (C)	4493	8429	5567	7440	5417	13007	6979	8887
	HM8 (C)	4656	7453	5641	7909	5944	10606	6965	9476
200:60:50	NMH1242	8213	12220	6457	12916	10361	16557	7952	15324
	Bio-151	8655	9080	7931	11596	11500	14366	9672	13996
	BIO 9637 (C)	6541	9836	6094	8673	8083	13583	7406	10433
	HM4 (C)	5291	8793	5719	8171	6278	11577	7260	9756
	HM8 (C)	4028	8214	5884	8482	5167	11637	7173	10107
Location mean		6035.6	9034.5	6184.8	9179.0	7631.5	12772.9	7635.1	10972.0
C.D.(5%) AiBj-AiBk		1149.3	1090.8	336.7	628.4	1437.2	1749.6	311.8	751.0
C.D.(5%) AiBk-AjBk		1698.0	1184.6	309.3	658.4	2104.8	1764.2	298.8	815.5
F(5%)		n.s.	n.s.	n.s.	s	n.s.	n.s.	n.s.	s
100:40:30		5555	8473	5929	8366	7061	11756	7346	9992
150:50:40		6005	9001	6208	9204	7555	13018	7666	11001
200:60:50		6545	9628	6417	9968	8277	13543	7892	11923
C.D.(5%) Ai-Aj		1374.4	689.9	72.8	352.7	1695.3	838.8	110.7	474.8
C.V.(%) Error A		22.5	7.5	1.2	3.8	21.9	6.5	1.4	4.3
F(5%)		n.s.	s	s	s	n.s.	s	s	s
NMH1242		7715	11513	6152	11641	9685	15605	7654	13827
Bio-151		7942	8745	7707	10854	1042	13085	9432	13067
BIO 9637 (C)		5630	8860	5905	7834	7000	12756	7197	9411
HM4 (C)		4711	8456	5501	7631	5703	11516	6926	9097
HM8 (C)		4178	7597	5657	7934	5342	10901	6964	9459
C.D.(5%)Bi-Bj		663.5	629.8	194.4	362.8	829.7	1010.1	180.0	433.6
C.V.(%)ErrorB		11.3	7.2	3.2	4.1	11.2	8.1	2.4	4.1
F(5%)		s	s	s	s	s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plants ('000/ha)			Cobs ('000/ha)		Plant height (cm)			
		Arbhavi	Kolhapur	Vagarai	Arbhavi	Vagarai	Arbhavi	Karim.	Kolhapur	Vagarai
100:40:30	NMH1242	66.1	59.1	62.8	61.7	62.2	180.9	196.7	197.0	191.7
	Bio-151	58.1	53.8	65.3	54.4	64.6	173.6	190.7	178.7	183.3
	BIO 9637 (C)	47.5	54.0	63.2	43.3	60.4	195.7	215.1	175.3	179.9
	HM4 (C)	56.1	54.2	61.8	53.9	62.5	134.5	164.8	166.3	170.5
	HM8 (C)	47.2	53.8	54.5	41.9	53.5	159.2	170.5	160.7	179.3
150:50:40	NMH1242	65.3	64.2	64.2	60.0	63.2	191.6	203.2	207.0	202.3
	Bio-151	58.6	54.0	64.2	56.1	62.2	166.9	198.4	195.0	188.9
	BIO 9637 (C)	50.8	54.0	62.8	46.7	62.2	197.0	216.6	208.7	186.3
	HM4 (C)	51.9	54.0	63.2	46.7	61.5	128.5	186.7	194.0	176.0
	HM8 (C)	51.1	53.8	56.6	45.3	54.2	147.9	179.2	181.0	183.1
200:60:50	NMH1242	62.5	58.2	64.9	59.7	62.5	176.3	210.7	218.3	202.4
	Bio-151	55.3	53.8	62.8	55.6	61.5	183.0	217.6	210.3	190.3
	BIO 9637 (C)	51.4	54.0	62.5	50.3	60.4	183.7	234.2	211.7	187.4
	HM4 (C)	49.7	53.6	62.5	49.2	60.1	146.8	183.0	209.3	178.3
	HM8 (C)	42.2	54.0	56.6	41.1	53.5	156.4	198.6	197.0	188.0
Location mean		54.3	55.2	61.9	51.1	60.3	168.1	197.7	194.0	185.8
C.D.(5%) AiBj-AiBk		7.6	3.7	3.4	7.0	3.5	11.3	25.8	17.1	5.0
C.D.(5%) AiBk-AjBk		8.6	4.5	3.6	8.9	3.2	15.1	28.0	18.1	4.6
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	s	n.s.	n.s.	n.s.
100:40:30		55.0	55.0	61.5	51.1	60.6	168.8	187.5	175.6	180.9
150:50:40		55.6	56.0	62.2	50.9	60.6	166.4	196.8	197.1	187.3
200:60:50		52.2	54.7	61.9	51.2	59.6	169.2	208.8	209.3	189.3
C.D.(5%) Ai-Aj		5.5	3.0	2.1	6.5	0.9	11.4	16.3	10.0	1.1
C.V.(%) Error A		9.9	5.4	3.3	12.6	1.4	6.7	8.1	5.1	0.6
F(5%)		n.s.	n.s.	n.s.	n.s.	s	n.s.	n.s.	s	s
NMH1242		64.6	60.5	64.0	60.5	62.6	183.0	203.5	207.4	198.8
Bio-151		57.3	53.9	64.1	55.4	62.7	174.5	202.2	194.7	187.5
BIO 9637 (C)		49.9	54.0	62.8	46.8	61.0	192.1	222.0	198.6	184.5
HM4 (C)		52.6	53.9	62.5	49.9	61.3	136.6	178.2	189.9	174.9
HM8 (C)		46.9	53.9	55.9	42.8	53.7	154.5	182.8	179.6	183.5
C.D.(5%)Bi-Bj		4.4	2.2	1.9	4.0	2.0	6.5	14.9	9.9	2.9
C.V.(%)ErrorB		8.3	4.0	3.2	8.1	3.4	4.0	7.7	5.2	1.6
F(5%)		s	s	s	s	s	s	s	s	s

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$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Days to 50% tasseling			Days to 50% silking		
		Karimnagar	Kolhapur	Vagarai	Arbhavi	Kolhapur	Vagarai
100:40:30	NMH1242	63.7	67.7	53.3	70.3	69.0	56.3
	Bio-151	62.3	68.3	53.7	73.7	70.3	58.0
	BIO 9637 (C)	62.0	68.7	52.0	73.0	69.7	54.0
	HM4 (C)	64.0	68.3	51.7	72.7	69.3	55.3
	HM8 (C)	63.7	68.7	54.7	73.7	70.0	58.7
150:50:40	NMH1242	62.3	68.0	53.0	72.0	69.0	56.3
	Bio-151	62.0	68.7	54.3	73.0	70.0	59.3
	BIO 9637 (C)	68.0	68.0	52.7	73.0	69.0	57.0
	HM4 (C)	61.0	67.3	50.7	72.7	68.7	53.0
	HM8 (C)	62.7	69.7	54.3	74.0	70.7	57.7
200:60:50	NMH1242	63.3	67.3	54.0	70.7	68.3	58.7
	Bio-151	62.3	69.3	54.3	72.3	70.3	58.7
	BIO 9637 (C)	62.7	67.7	52.3	73.7	69.0	55.0
	HM4 (C)	61.0	67.7	53.0	72.0	68.7	55.3
	HM8 (C)	63.3	69.0	54.0	75.0	70.3	57.7
Location mean		63.0	68.3	53.2	72.8	69.5	56.7
C.D.(5%) AiBj-AiBk		1.7	0.9	1.6	2.4	0.9	2.3
C.D.(5%) AiBk-AjBk		1.9	1.1	1.8	3.8	1.2	2.3
F(5%)		s	s	n.s.	n.s.	n.s.	s
100:40:30		63.1	68.3	53.1	72.7	69.7	56.5
150:50:40		63.2	68.3	53.0	72.9	69.5	56.7
200:60:50		62.5	68.2	53.5	72.7	69.3	57.1
C.D.(5%) Ai-Aj		1.2	0.9	1.1	3.1	1.0	1.2
C.V.(%) Error A		1.8	1.2	2.0	4.3	1.4	2.0
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
NMH1242		63.1	67.7	53.4	71.0	68.8	57.1
Bio-151		62.2	68.8	54.1	73.0	70.2	58.7
BIO 9637 (C)		64.2	68.1	52.3	73.2	69.2	55.3
HM4 (C)		62.0	67.8	51.8	72.4	68.9	54.6
HM8 (C)		63.2	69.1	54.3	74.2	70.3	58.0
C.D.(5%)Bi-Bj		1.0	0.5	0.9	1.4	0.5	1.3
C.V.(%)ErrorB		1.6	0.7	1.8	1.9	0.8	2.4
F(5%)		s	s	s	s	s	s

Table 8: Relative performance of pre-release medium maturing germplasm at different NPK levels in Zone V.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Days to 50% silking	Plant height (cm)
		Banswara					
100:40:30	NMH1242	7028	9200	82.5	73.6	76.7	246.7
	Bio-151	6500	8417	78.9	67.2	76.0	221.7
	BIO 9637 (C)	6158	7861	82.2	62.9	76.7	253.3
	HM4 (C)	5917	7778	78.6	62.2	74.7	215.0
	HM8 (C)	5389	7361	81.4	58.9	75.3	236.7
150:50:40	NMH1242	7278	9444	79.4	76.1	77.7	251.7
	Bio-151	7083	9250	80.0	74.4	77.3	236.7
	BIO 9637 (C)	6833	8922	79.2	71.1	77.0	260.0
	HM4 (C)	6167	8333	79.7	66.7	75.3	226.7
	HM8 (C)	5556	8250	80.6	60.4	77.3	250.0
200:60:50	NMH1242	7417	10556	80.0	83.9	78.7	259.3
	Bio-151	7167	10000	81.9	76.1	79.3	240.0
	BIO 9637 (C)	7056	9444	80.8	69.8	78.7	265.0
	HM4 (C)	6278	8417	81.4	66.2	78.0	248.3
	HM8 (C)	5778	8222	81.4	65.8	78.0	261.7
Location mean		6506.9	8763.7	80.5	69.0	77.1	244.8
C.D.(5%) AiBj-AiBk		1136.1	1652.9	4.1	13.2	1.5	16.0
C.D.(5%) AiBk-AjBk		1390.8	1773.5	5.1	14.3	1.5	15.2
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
100:40:30		6198	8123	80.7	65.0	75.9	234.7
150:50:40		6583	8840	79.8	69.8	76.9	245.0
200:60:50		6739	9328	81.1	72.4	78.5	254.9
C.D.(5%) Ai-Aj		971.1	1006.3	3.7	8.4	0.7	5.2
C.V.(%) Error A		14.7	11.3	4.5	12.0	0.9	2.1
F(5%)		n.s.	n.s.	n.s.	n.s.	s	s
NMH1242		7241	9733	80.6	77.9	77.7	252.6
Bio-151		6917	9222	80.3	72.6	77.6	232.8
BIO 9637 (C)		6682	8743	80.7	67.9	77.4	259.4
HM4 (C)		6120	8176	79.9	65.0	76.0	230.0
HM8 (C)		5574	7944	81.1	61.7	76.9	249.4
C.D.(5%)Bi-Bj		655.9	954.3	2.4	7.6	0.9	9.2
C.V.(%)ErrorB		10.4	11.2	3.0	11.3	1.1	3.9
F(5%)		s	s	n.s.	s	s	s

Table 9: Effect of tillage and nutrient management practices on wheat in maize- wheat cropping system at Dholi.

Tillage practice	Fertility levels	Grain yield (kg/ha)	Grain weight (kg/ha)	Spikelet	Plants/m^2	Days of 50% flowering	Days to maturity	Plant height (cm)	Spike length (cm)
T_1	F_1	3697	3831	47.0	409.3	83.3	122.7	98.9	10.8
	F_2	4179	4179	46.7	402.7	83.7	121.7	99.8	10.7
	F_3	4298	4299	46.3	395.7	83.7	121.3	98.4	10.4
T_2	F_1	3184	3319	45.7	390.0	87.0	121.7	96.4	11.2
	F_2	3413	3343	47.0	390.3	86.0	121.7	96.7	11.7
	F_3	4000	4000	45.0	398.7	86.3	122.3	95.6	11.8
T_3	F_1	3309	3351	45.7	468.0	85.0	123.3	92.3	10.7
	F_2	3632	3676	45.3	456.0	84.0	123.3	91.9	10.5
	F_3	4026	4082	45.3	470.3	83.0	123.3	92.7	10.9
Location mean		3748.8	3786.6	46.0	420.1	84.7	122.4	95.9	11.0
C.D.(5%) AiBj-AiBk		376.3	372.5	3.4	31.1	2.1	2.3	1.4	0.8
C.D.(5%) AiBk-AjBk		373.4	565.3	4.6	28.6	2.3	2.3	1.8	0.7
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
T_1		4058	4103	46.7	402.6	83.6	121.9	99.0	10.7
T_2		3532	3554	45.9	393.0	86.4	121.9	96.2	11.6
T_3		3656	3703	45.4	464.8	84.0	123.3	92.3	10.7
C.D.(5%) Ai-Aj		216.0	480.9	3.8	13.4	1.6	1.4	1.4	0.2
C.V.(%) Error A		4.4	9.7	6.2	2.4	1.5	0.9	1.1	1.5
F(5%)		s	n.s.	n.s.	s	s	n.s.	s	s
F_1		3397	3500	46.1	422.4	85.1	122.6	95.9	10.9
F_2		3741	3733	46.3	416.3	84.6	122.2	96.1	11.0
F_3		4108	4127	45.6	421.6	84.3	122.3	95.5	11.0
C.D.(5%)Bi-Bj		217.3	215.1	2.0	18.0	1.2	1.3	0.8	0.5
C.V.(%)ErrorB		5.6	5.5	4.2	4.2	1.4	1.1	0.8	4.2
F(5%)		s	s	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

Treatment details:

Main plot: Tillage practice

T_1 Zero till

T_2 Conventional Till

T_3 Permanent bed

Sub plots: Fertility levels ($N:P_2O_5:K_2O$ kg/ha)

F_1 50% RDF (60:30:20)

F_2 SSNM based on nutrient expert (150:60:40)

F_3 100% RDF (120:60:40)

Table 10: Effect of tillage and nutrient management practices on wheat in maize-wheat-green gram cropping system at Pantnagar.

Tillage practices	Fertility levels	Grain yield (kg/ha)	Stover yield (kg/ha)	Tillers/m^2	Plant height (cm)	Cost of cultivation (`/ha)	Gross returns (`/ha)	Net returns (`/ha)	B:C ratio
T_1	F_1	2672	4339	268.3	83.3	19026	36075	17049	0.9
	F_2	3339	5728	313.3	90.2	19026	45000	25974	1.4
	F_3	3356	5778	315.0	89.4	19026	45300	26274	1.4
T_2	F_1	3778	5206	330.0	88.2	24341	51000	26659	1.1
	F_2	4267	6178	360.0	94.5	24341	57600	33259	1.4
	F_3	4239	6239	361.7	93.1	24341	57075	32734	1.3
T_3	F_1	3032	5079	277.3	85.4	23096	40971	17875	0.8
	F_2	3532	5563	318.7	91.5	23096	47721	24625	1.1
	F_3	3492	5254	321.3	91.9	23096	47186	24090	1.0
Location mean		3522.8	5484.8	318.4	89.7	22154.3	47547.6	25393.3	1.1
C.D.(5%) AiBj-AiBk		614.2	875.4	70.6	5.6	0.6	8272.1	8272.1	0.4
C.D.(5%) AiBk-AjBk		585.8	982.6	65.2	6.1	0.6	7867.4	7867.4	0.4
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
T_1		3122	5281	298.9	87.6	19026	42125	23099	1.2
T_2		4094	5874	350.6	91.9	24341	55225	30884	1.3
T_3		3352	5299	305.8	89.6	23096	45293	22197	1.0
C.D.(5%) Ai-Aj		308.6	684.5	31.0	4.1	0.4	4112.6	4112.6	0.2
C.V.(%) Error A		6.7	9.5	7.4	3.5	0.0	6.6	12.4	12.1
F(5%)		s	n.s.	s	n.s.	s	s	s	s
F_1		3161	4875	291.9	85.6	22154	42682	20528	0.9
F_2		3712	5823	330.7	92.0	22154	50107	27953	1.3
F_3		3696	5757	332.7	91.4	22154	49854	27699	1.3
C.D.(5%)Bi-Bj		354.6	505.4	40.8	3.3	0.3	4775.9	4775.9	0.2
C.V.(%)ErrorB		9.8	9.0	12.5	3.5	0.0	9.8	18.3	19.3
F(5%)		s	s	n.s.	s	n.s.	s	s	s

Treatment details:

Main plots: Tillage practices	**Sub plot: Fertility levels ($N:P_2O_5:K_2O$ kg/ha)**
T_1: Zero tillage	F_1: 50% RDF
T_2: Conventional tillage	F_2: SSNM based on nutrient expert (120:30:37)
T_3: Permanent Beds	F_3: 100% RDF (120:60:40)

Table 11: Effect of tillage and nutrient management practices on system productivity and economics of maize-wheat-greengram cropping system at Pantnagar.

Tillage practices	Fertility levels	Maize equivalent yield of system (kg/ha)	Cost of cultivation (`/ha)	Gross returns (`/ha)	Net returns (`/ha)	B:C ratio
T_1	F_1	6444	42188	84423	42235	1.0
	F_2	7989	43389	104662	61273	1.4
	F_3	8134	45084	106554	61470	1.4
T_2	F_1	9326	60897	122171	61274	1.0
	F_2	10450	62098	136893	74795	1.2
	F_3	10244	63793	134202	70409	1.1
T_3	F_1	7606	57282	99647	42365	0.7
	F_2	9063	58483	118728	60245	1.0
	F_3	9042	60178	118459	58281	1.0
Location mean		8699.9	54821.3	113971.0	59149.6	1.1
C.D.(5%) AiBj-AiBk		873.5	0.6	11442.0	11442.0	0.2
C.D.(5%) AiBk-AjBk		888.6	0.6	11642.3	11642.3	0.2
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.
T_1		7522	43554	98546	54993	1.3
T_2		10007	62263	131088	68826	1.1
T_3		8571	58648	112278	53630	0.9
C.D.(5%) Ai-Aj		539.3	0.4	7069.1	7069.1	0.1
C.V.(%) Error A		4.7	0.0	4.7	9.1	6.9
F(5%)		s	s	s	s	s
F_1		7792	53456	102080	48625	0.9
F_2		9167	54657	120094	65438	1.2
F_3		9140	56352	119738	63387	1.1
C.D.(5%)Bi-Bj		504.3	0.3	6606.1	6606.1	0.1
C.V.(%)ErrorB		5.6	0.0	5.6	10.9	11.8
F(5%)		s	s	s	s	s

Treatment details:

Main plots: Tillage practices	**Sub plot: Fertility levels ($N:P_2O_5:K_2O$ kg/ha)**
T_1: Zero tillage	F_1: 50% RDF
T_2: Conventional tillage	F_2: SSNM based on nutrient expert (120:30:37)
T_3: Permanent Beds	F_3: 100% RDF (120:60:40)

Table 12: Effect of tillage and nutrient management practices on maize in rice-maize system at Dholi.

Tillage practice	Fertility levels	Grain yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Plant height (cm)	Days of 50% tasseling	Days of 50% silking
T_1	F_1	5514	7363	87.6	90.1	160.6	120.0	124.0
	F_2	6097	8040	88.8	91.9	166.9	120.3	124.3
	F_3	7100	9552	88.8	92.5	161.0	120.3	125.0
T_2	F_1	5103	6746	87.8	92.5	161.0	119.3	123.7
	F_2	6863	8896	87.6	93.7	165.3	121.0	125.0
	F_3	7719	10269	88.6	95.7	156.8	120.7	125.0
T_3	F_1	5512	7085	87.6	88.6	158.0	121.7	125.7
	F_2	7259	9433	87.6	90.9	161.9	119.3	123.7
	F_3	8408	10846	87.8	93.3	164.7	120.0	123.7
Location mean		6619.4	8692.1	88.0	92.2	161.8	120.3	124.4
C.D.(5%) AiBj-AiBk		394.9	522.6	1.9	1.1	17.2	3.2	2.8
C.D.(5%) AiBk-AjBk		460.0	610.0	2.2	1.7	28.6	3.6	3.3
F(5%)		s	s	n.s.	s	n.s.	n.s.	n.s.
T_1		6237	8318	88.4	91.5	162.8	120.2	124.4
T_2		6562	8637	88.0	94.0	161.0	120.3	124.6
T_3		7060	9121	87.6	90.9	161.6	120.3	124.3
C.D.(5%) Ai-Aj		332.8	442.2	1.6	1.4	25.1	2.4	2.4
C.V.(%) Error A		3.8	3.9	1.4	1.2	11.8	1.6	1.5
F(5%)		s	s	n.s.	s	n.s.	n.s.	n.s.
F_1		5376	7065	87.6	90.4	159.9	120.3	124.4
F_2		6740	8789	88.0	92.2	164.7	120.2	124.3
F_3		7742	10222	88.4	93.9	160.8	120.3	124.6
C.D.(5%)Bi-Bj		228.0	301.7	1.1	0.7	9.9	1.9	1.6
C.V.(%) ErrorB		3.4	3.4	1.2	0.7	6.0	1.5	1.2
F(5%)		s	s	n.s.	s	n.s.	n.s.	n.s.

Treatment details:

Main plot: Tillage practice		**Sub plots: Fertility levels ($N:P_2O_5:K_2O$ kg/ha)**	
T_1	Zero till	F_1	50% RDF (50:30:20)
T_2	Conventional Till	F_2	SSNM based on nutrient expert (150:50:40)
T_3	Permanent bed	F_3	100% RDF (120:60:40)

Table 13: Effect of nutrient management and tillage practices on rice-maize cropping systems at Hyderabad.

Table 13.1. Effect of nutrient management and tillage practices on growth and yield of maize at Hyderabad.

Treatment	Plants ('000 ha)	Plant Height (cm)	Days to 50% silking	Cobs (000' ha)	Grain Yield (kg/ha)
Tillage Practices					
CT-CT	61.9	200.6	63.8	58.0	6454
CT -ZT	61.6	203.0	64.5	58.9	6617
ZT-ZT	61.9	189.4	62.4	55.5	5832
CD (P=0.05)	NS	9.9	0.9	2.4	362
CV%	2.2	6.4	1.0	3.0	4.1
Nutrient management					
RDF	63.7	221.4	66.7	60.4	6989
SSNM	64.5	205.7	64.1	58.6	6490
50% RDF	57.2	189.4	59.9	53.5	5426
CD(P=0.05)	2.1	9.9	1.8	1.8	291.2
CV%	2.8	4.1	2.4	2.6	3.8
Interaction	NS	10.5	NS	1.9	NS

CT: Conventional Tillage; ZT: Zero-tillage
RDF: Recommended dose of fertilizers; SSNM: Site specific nutrient management

Table 13.2: Effect of nutrient management and tillage practices on system productivity of rice-maize system at Hyderabad.

Treatments	Rice yield (kg ha^{-1})	Maize equivalent of rice (kg ha^{-1})	Maize yield (kg ha^{-1})	System productivity (kg ha^{-1})
Tillage practices				
CT-CT	5459	6203	6454	12657
CT-ZT	5458	6202	6617	12819
ZT-ZT	4720	5363	5832	11195
Nutrient management				
RDF	5738	6520	6989	13509
SSNM	5411	6148	6490	12638
50% RDF	4490	5102	5426	10528

Selling price: Rice: ` 12.50 $kg^{-1}$ and Maize: `c11.00 kg^{-1}

Table 14: Effect of SSNM based nutrient management practices in different maize hybrids on performance of succeeding wheat crop in maize-wheat cropping system at Pantnagar.

Fertility levels	Hybrids	Grain yield (Wheat) (kg/ha)	Straw yield (Wheat) (kg/ha)	Kharif maize grain yield (kg/ha)	Plant height (cm)	Spike length (cm)	Effective tillers/m^2	Maize equivalent yield of wheat (kg/ha)	Maize equivalent yield of system (kg/ha)	Cost of cultivation of wheat (`/ha)
F_1	H_1	3581	4443	2835	88.0	7.0	320.0	4080	6915	24530
	H_2	3526	4356	4326	86.2	7.2	340.0	4016	8342	24530
	H_3	3665	4377	4824	86.5	7.4	366.7	4175	9000	24530
	H_4	3544	4559	4553	85.8	7.2	343.3	4038	8590	24530
	H_5	3723	4139	3375	79.5	7.6	355.0	4241	7616	24530
F_2	H_1	3618	4403	4797	84.7	6.9	325.0	4122	8920	24530
	H_2	3693	4827	6657	80.8	7.1	330.0	4207	10864	24530
	H_3	3669	4270	6576	80.8	7.3	335.0	4180	10756	24530
	H_4	3622	4667	5915	79.7	7.1	325.0	4126	10041	24530
	H_5	3770	4710	2991	86.5	6.8	350.0	4295	7286	24530
F_3	H_1	3637	4865	5039	84.2	6.6	318.3	4144	9182	24530
	H_2	4202	4382	5978	79.3	7.6	356.7	4787	10765	24530
	H_3	4017	4758	6482	79.2	7.1	330.0	4577	11059	24530
	H_4	3867	4643	6548	77.3	7.7	343.3	4406	10954	24530
	H_5	4127	4112	3190	75.3	7.4	331.7	4702	7892	24530
Location mean		3750.8	4500.9	4939.0	82.3	7.2	338.0	4273.0	9212.1	24530.0
C.D.(5%) AiBj-AiBk		169.7	197.9	473.3	3.7	0.6	26.9	193.3	473.4	0.4
C.D.(5%) AiBk-AjBk		231.4	436.2	573.3	6.8	1.2	30.9	263.7	538.2	0.5
F(5%)		s	s	s	s	n.s.	n.s.	s	s	n.s.
F_1		3608	4375	3983	85.2	7.3	345.0	4110.0	8093	24530
F_2		3674	4575	5387	82.5	7.0	333.0	4186.2	9573	24530
F_3		3970	4552	5447	79.1	7.3	336.0	4522.9	9970	24530
C.D.(5%) Ai-Aj		178.0	402.2	395.5	6.0	1.1	19.8	203.0	340.6	0.3
C.V.(%) Error A		4.7	8.8	7.9	7.2	15.3	5.8	4.7	3.6	0.0
F(5%)		s	n.s.	s	n.s.	n.s.	n.s.	s	s	n.s.
H_1		3612	4570	4224	85.6	6.8	321.1	4115.2	8339	24530
H_2		3807	4522	5654	82.1	7.3	342.2	4336.9	9991	24530
H_3		3784	4468	5961	82.2	7.3	343.9	4310.8	10271	24530
H_4		3678	4623	5672	80.9	7.3	337.2	4189.8	9862	24530
H_5		3873	4320	3185	80.4	7.3	345.6	4412.6	7598	24530
C.D.(5%)Bi-Bj		98.0	114.3	273.2	2.1	0.3	15.5	111.6	273.3	0.3
C.V.(%)ErrorB		2.7	2.6	5.7	2.7	4.8	4.7	2.7	3.0	0.0
F(5%)		s	s	s	s	s	s	s	s	n.s.

Cont….

Fertility levels	Hybrids	Gross return of wheat (`/ha)	Net return of wheat (`/ha)	B:C ratio of wheat	Cost of cultivation of maize-wheat system (`/ha)	Gross return of maize-wheat system (`/ha)	Net return of maize-wheat system (`/ha)	B:C ratio of maize-wheat system
F_1	H_1	48344	23814	1.0	41297	81938	40641	1.0
	H_2	47597	23066	0.9	41297	98859	57562	1.4
	H_3	49482	24952	1.0	41297	106650	65353	1.6
	H_4	47849	23319	1.0	41297	101798	60501	1.5
	H_5	50256	25726	1.0	41297	90250	48953	1.2
F_2	H_1	48848	24318	1.0	42498	105696	63198	1.5
	H_2	49860	25330	1.0	42829	128745	85916	2.0
	H_3	49532	25002	1.0	42951	127453	84502	2.0
	H_4	48893	24363	1.0	42951	118981	76030	1.8
	H_5	50895	26365	1.1	42951	86334	43383	1.0
F_3	H_1	49100	24570	1.0	44193	108808	64615	1.5
	H_2	56727	32197	1.3	44193	127566	83373	1.9
	H_3	54234	29704	1.2	44193	131046	86853	2.0
	H_4	52205	27675	1.1	44193	129802	85609	1.9
	H_5	55715	31185	1.3	44193	93520	49327	1.1
Location mean		50635.7	26105.6	1.1	42775.3	109163.2	66387.9	1.5
C.D.(5%) AiBj-AiBk		2290.3	2290.3	0.1	0.4	5610.1	5610.1	0.1
C.D.(5%) AiBk-AjBk		3123.5	3123.5	0.1	0.5	6378.6	6378.6	0.1
F(5%)		s	s	s	s	s	s	s
F_1		48705	24175	1.0	41297	95899	54602	1.3
F_2		49605	25075	1.0	42836	113442	70606	1.6
F_3		53596	29066	1.2	44193	118148	73955	1.7
C.D.(5%) Ai-Aj		2403.2	2403.2	0.1	0.3	4037.0	4037.0	0.1
C.V.(%) Error A		4.7	9.1	9.3	0.0	3.6	6.0	6.2
F(5%)		s	s	s	s	s	s	s
H_1		48764	24234	1.0	42663	98814	56151	1.3
H_2		51395	26864	1.1	42773	118390	75617	1.8
H_3		51083	26553	1.1	42814	121716	78903	1.8
H_4		49649	25119	1.0	42814	116861	74047	1.7
H_5		52289	27759	1.1	42814	90035	47221	1.1
C.D.(5%)Bi-Bj		1322.3	1322.3	0.1	0.3	3239.0	3239.0	0.1
C.V.(%)ErrorB		2.7	5.2	5.1	0.0	3.0	5.0	4.9
F(5%)		s	s	s	s	s	s	s

Treatment details:

Main plots: Fertility levels (N:P_2O_5:K_2O kg/ha)

F_1 – 50% RDF,

F_2 – SSNM based on nutrient expert (120:30:37 for H_1; 130:33:55 for H_2 ,H_3, H_4 and H_5:120:33:55)

F_3 – 100% RDF (120:60:40)

B. Sub plot: Maize hybrids

H_1- DMH-117 H_4 - PMH-3

H_2 - HQPM-1 H_5 - HM-5

H_3 - PMH-1

Table 15: Effect of SSNM based nutrient management practices on maize hybrids and performance of succeeding wheat in maize-wheat cropping system at Banswara.

Fertility levels	Hybrids	Grain yield of maize (kg/ha)	Grain yield of wheat (kg/ha)
F_1	H_1	2756	3582
	H_2	2556	3356
	H_3	1422	3622
	H_4	2667	3422
	H_5	2622	3511
F_2	H_1	5489	4403
	H_2	5044	4311
	H_3	3067	4578
	H_4	3978	4222
	H_5	3511	4378
F_3	H_1	5067	4081
	H_2	4244	4267
	H_3	2200	4044
	H_4	3044	4000
	H_5	2689	4067
Location mean		3357.0	3989.5
C.D.(5%) AiBj-AiBk		374.7	453.5
C.D.(5%) AiBk-AjBk		353.7	543.4
F(5%)		s	n.s.
F_1		2404	3499
F_2		4218	4378
F_3		3449	4092
C.D.(5%) Ai-Aj		116.8	370.1
C.V.(%) Error A		3.4	9.2
F(5%)		s	s
H_1		4437	4022
H_2		3948	3978
H_3		2230	4081
H_4		3230	3881
H_5		2941	3985
C.D.(5%)Bi-Bj		216.3	261.8
C.V.(%)ErrorB		6.6	6.7
F(5%)		s	n.s.

Main plots: Fertility levels N:P_2O_5:K_2O (kg/ha)

F_1 50% of RDF
F_2 SSNM based on nutrient expert
F_3 100% RDF

Sub plots: Maize hybrids

H_1 DHM-117
H_2 HQPM-1
H_3 PMH-3
H_4 PHM-1
H_5 HM-5

Table 16: Residual effect of weed management strategies practiced in maize on performance of succeeding wheat in maize - wheat cropping system at Pantnagar.

Treatments	Seed yield (kg/ha)	Effective tillers/m^2	Plant height (cm)	100-grain weight (g)	Cost of cultivation (`/ha)	Gross return (`/ha)	Net return (`/ha)	B:C ratio
T_1	3825	350.0	96.9	4.3	22471	51640	29169	1.3
T_2	3942	360.0	97.0	4.3	22471	53221	30750	1.4
T_3	4038	351.7	99.4	4.3	22471	54531	32060	1.4
T_4	4213	365.0	94.5	4.3	22471	56827	34356	1.5
T_5	4371	375.0	97.9	4.3	22471	58979	36508	1.6
T_6	3888	358.3	97.1	4.2	22471	52517	30046	1.3
T_7	4038	356.7	94.9	4.2	22471	54548	32077	1.4
T_8	3825	345.0	98.9	4.3	22471	51620	29149	1.3
Mean	4017.2	357.7	97.1	4.3	22471.0	54235.5	31764.5	1.4
CD	623.3	89.8	7.1	0.3	0.6	8428.2	8428.2	0.4
CV (%)	8.9	14.3	4.2	3.7	0.0	8.9	15.1	15.2
Significance	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.

Treatment imposed in maize crop in Kharif season:

T_1 Atrazine 1.0 kg a.i. /ha PE (National check)

T_2 Atrazine 1.0 kg a.i. /ha Post E 15-20 DAS

T_3 Pendimethalin 1.0 kg a.i. /ha PE

T_4 Organic mulch (wheat straw @ 6t/ha)

T_5 Maize + cover crop (cowpea 2 rows)

T_6 One hand weeding 20 DAS

T_7 Two hand weeding 20 and 40DAS

T_8 Weedy check

Table 17. Weed Management strategies for diverse weed flora in rice-maize system at Hyderabad.

Table 17.1: Effect of different weed management practices on growth and yield of zero-tillage maize under rice-maize system at Hyderabad.

Treatment	Plants ('000/ha)	Plant height (cm)	Cobs ('000/ha)	Cob length (cm)	Cob width (cm)	Grain rows/cob	100 seed weight	Cob yield (kg/ha)	Grain yield (kg/ha)
Atr* 1.0 kg *fb*^ Atr 0.75 kg 25-30 DAS	64.0	154.7	52.7	14.3	12.7	13.7	24.2	7066	5807
Atr 1.0 kg *fb* 2,4-D Sodium salt 0.4 kg 25-30 DAS	67.0	164.0	54.3	14.7	13.7	13.3	23.3	7373	5893
Glyphosate pre plant 1.0 kg *fb* 0.75 kg Atr 25-30 DAS	63.3	166.7	57.0	16.0	13.7	14.0	22.7	6973	6306
Glyphosate 1.0 fb + 2,4D Sodium salt 0.4 kg 25-30 DAS	67.3	181.7	59.3	18.3	14.7	15.3	3.0	9100	7483
Metribuzine 0.25 kg *fb* Atr 0..75 kg 25-30 DAS	62.00	162.7	52.7	14.3	13.0	13.7	24.3	6823	5146
Weedy check(Unwedded)	61.3	147.3	49.0	12.3	11.7	12.7	21.3	5296	4282
Weedy free (H.W twice 25 and 45 DAS)	64.0	178.3	60.0	18.3	14.7	14.0	29.7	8906	7366
Atr1.0 kg *fb* Topremezene 25.2 g/ha	62.7	170.3	56.0	14.6	13.7	14.7	24.7	7193	6203
SEm+	1.15	2.85	0.87	0.45	0.32	0.45	0.76	201	273
CD(P=0.05)	3.48	8.65	2.64	1.36	0.97	1.36	2.32	609	829
CV(%)	3.1	3.0	2.7	5.1	4.1	5.6	5.3	4.7	7.8

*Atr: Atrazine; ^fb: followed by

Table 17.2: Effect of different weed management practices on weed dynamics in zero-tillage maize under rice-maize system at Hyderabad.

Treatment	Weed count				Weed dry matter		Weed control efficiency (%)		Weed Index
	Grasses		BLW						
	50 DAS	Harvest	50 DAS	Harvest	50 DAS	Harvest	50 DAS	Harvest	
Atr* 1.0 kg *fb*^ Atr 0.75 kg 25-30 DAS	23.0	32.7	3.3	4.3	20.5	26.3	27.6	32.4	22.5
Atr 1.0 kg *fb* 2,4-D Sodium salt 0.4 kg 25-30 DAS	11.0	20.3	3.7	3.5	13.7	20.3	51.8	47.4	23.0
Glyphosate pre plant 1.0 kg *fb* 0.75 kg Atr 25-30 DAS	30.7	39.3	12.7	7.4	13.7	17.3	50.0	55.4	14.6
Glyphosate 1.0 fb + 2,4D Sodium salt 0.4 kg 25-30 DAS	5.3	11.0	2.3	3.7	11.3	16.0	60.5	59.1	8.77
Metribuzine 0.25 kg *fb* Atr 0..75 kg 25-30 DAS	47.7	57.3	10.6	13.0	24.7	31.7	14.0	18.8	29.9
Weedy check	52.0	52.7	12.7	13.6	28.7	39.0	--	--	--
Weed free	7.0	8.0	1.7	1.7	6.0	8.3	78.7	78.6	41.6
Atrazine 1.0 kg *fb* Topremezene 25.2 g/ha	12.7	14.7	4.0	3.3	16.7	19.7	41.0	49.2	14.6
SEm+	1.31	1.46	0.61	0.52	1.53	1.26	4.9		
CD(P=0.05)	3.96	4.43	1.84	1.6	4.66	3.82	15.1	---	---
CV(%)	9.6	8.6	16.4	14.3	15.7	9.8	21.3	---	---

*Atr: Atrazine; ^fb: followed by

Table 17.3: Effect of different weed management practices on economics of zero-tillage maize under rice-maize system at Hyderabad.

Treatment	Cost of cultivation (`/ha)	Gross Returns (`/ha)	Net returns (`/ha)	B:C ratio
Atr* 1.0 kg *fb*^ Atr 0.75 kg 25-30 DAS	23467.0	63877.0	40410.0	2.72
Atr 1.0 kg *fb* 2,4-D Sodiumsalt 0.4 kg 25-30 DAS	23430.0	64823.0	41393.0	2.76
Glyphosate pre plant 1.0 kg *fb* 0.75 kg Atr 25-30 DAS	23644.0	69366.0	45722.0	2.93
Glyphosate 1.0 *fb* 2,4D Sodium salt 0.4 kg 25-30 DAS	23307.0	82313.0	59006	3.53
Metribuzine 0.25 kg *fb* Atr 0..75 kg 25-30 DAS	23529.0	56606.0	33077	2.40
Weed check	22333.0	47102.0	24769	2.10
Weed free	24333.0	81026.0	56693	3.32
Atrazine 1.0 kg *fb* Topremezene 25.2 g ha^{-1} 25-30 DAS	--	--	--	-

Maize price `11.0/kg *Atr: Atrazine; ^fb: followed by

Table 17.4: Effect of different weed management practices on over the year grain yield of zero-tillage maize under rice-maize system at Hyderabad.

Treatment	Grain yield (kg/ ha) 2011-12	Grain yield (kg/ ha) 2012-13	Mean grain yield (kg/ ha)
Atr* 1.0 kg *fb* Atr^ 0.75 kg 25-30 DAS	4053	5807	4930
Atr 1.0 kg *fb* 2,4-D Sodium salt 0.4 kg 25-30 DAS	4349	5893	5121
Glyphosate pre plant 1.0 kg *fb* 0.75 kg Atr 25-30 DAS	6122	6306	6214
Glyphosate 1.0 fb + 2,4D Sodium salt 0.4 kg 25-30 DAS	7560	7483	7512
Metribuzine 0.25 kg 4475*fb* Atr 0..75 kg 25-30 DAS	4480	5146	4813
Weed check (unwedded)	3616	4282	3949
Weed free ((H.W twice 25&45 DAS)	7173	7366	7269
Atr1.0 kg *fb* Topremezene 25.2 g ha^{-1}	5244	6203	5723
CD(P=0.05)	1042	829	
CV%	11.2	7.8	

*Atr: Atrazine; ^fb: followed by

Table 18: Studies on quantification of irrigation water and nutrient doses through drip irrigation in sweet corn hybrid at Hyderabad.

Table 18.1: Green cob yield of sweet corn as influenced by drip irrigation and nitrogen fertigation at Hyderabad.

Treatments	Green cob yield (t/ha)
Irrigation levels (I)	
I_1 – Drip at 60% E pan	14.8
I_2 – Drip at 80% E pan	17.7
I_3 – Drip at 100% E pan	21.3
I_4 – Drip at 120% E pan	21.8
I_5 – Surface irrigation	14.3
SEm±	0.3
CD (P=0.05%)	0.6
Nitrogen levels (N) (Kg ha^{-1})	
N_1 – 120	16.2
N_2 – 160	16.9
N_3 – 200	19.2
N_4 – 240	19.5
SEm±	0.3
CD (P=0.05%)	0.6

Table 18.2: Interactive effect of drip irrigation and nitrogen fertigation levels on green cob yield of sweet corn at Hyderabad.

Irrigation levels (I)	Nitrogen levels (N) (kg/ ha)				
	N_1 – 120	**N_2 – 160**	**N_3 – 200**	**N_4 – 240**	**Mean**
I_1 – Drip at 60% E pan	14.0	14.5	15.2	15.6	14.8
I_2 – Drip at 80% E pan	15.4	16.3	19.6	19.4	17.7
I_3 – Drip at 100% E pan	19.0	19.7	23.0	23.6	21.3
I_4 – Drip at 120% E pan	19.6	20.2	23.5	24.0	21.8
I_5 – Surface irrigation	13.2	14.0	14.8	15.0	14.3
Mean	16.2	16.9	19.2	19.5	
SEm±		0.5			
CD (P=0.05%)		1.5			

PATHOLOGY

Summary

A total of 358 maize genotypes were evaluated comprising 122 experimental hybrids and 236 inbred lines for major disease of maize under artificial epiphytotic condition at various hot spot location i.e. TLB (Turcicum Leaf Blight) at Mandya and Dholi SDM. (Sorghum Downy Mildew) at Mandya and PFSR (Post Flowering Stalk Rot) at Ludhiana, Arbhavi and Hyderabad. Out of 122 experimental hybrids 10 genotypes were found resistant against TLB some of them are; CMH08-282; CMH08-287; BP-007: BP-008: IL 8534: REH2012-1: JH 8825: HKH 326 etc. 3 for SDM at Mandya which are A 7501: X35B349: Rasi-3022: 7 for PFSR at Ludhiana, Arbhavi and Hyderabad some of them are BP-008: DK C9120: PMH-2277: IVORY: GK-3149: K-25 Gold: JH 8825: The genotypes with multiple resistance to PFSR & TLB are BP-008: IVORY and JH 8825.

A total of 236 lines were evaluated against major disease of maize (Table: 3) under artificial epiphytotic condition at various hot spot location i.e. TLB & SDM at Mandya, PFSR at Ludhiana, Arbhavi and Hyderabad. Out of them 96 and 53 lines were found resistant against TLB and charcoal rot, respectively.

The lines resistant to charcoal rots were EC646067, CML 269, MRCY6334-2, MRCHY6345, MRCHY5019, MRCHY6341, CML-285, MRCHY 6358-1, MRCHY5182-1, CML 292, EC 4400248, MRCHY 6369, EC 655736, MRCHY5202-1, JM-8, HY10RN-11-18, MRCHY4855, MRCHY6370, MRCHY5092, EC 440662, HY10RN-10235-118, MRCHY 4956, MRCHY 5278, MRCHY 4855, MRCHY4839-1-1, MRCHY4845, MRCHY 5006-1C1, MRCHY5000-1-1, MRCHY-5223-1-1C1, MRCHY6339-1-1, LM-5C2, MRCHY 6348, EC595976-2, MRC 1772, MRC 197, MRCHY6367-1, MRCHY6367-1-2, MRCHY 5076, MRCHY 5092C2, MRCHY 5152-2, MRCHY 6330-2C5, MRCHY 6341C1, EC 618226, EC 4400419, EC4400419-1, MRCHY5278-2C5, MRCHY4959-1, MRCHY6369, DMR199, DMR202, DMR213, DMR219 & MRCHY5025-1 (Table: 3).

Resistant lines to TLB at Mandya are DMRPE 6, EC646067, MRCY6334-2, MRCHY 4970, MRCHY 5086, MRCHY 5114, CML-285, MRCHY 6348, MRCHY 4845, MRCHY 4854, MRCHY 5126, MRCHY5159-1-1, MRCHY 5202-1, EC440609, MRCHY4841, MRCHY4854, MRCHY5268, EC 4400248, HY10RN-10235-224, MRCHY5166, MRCHY 6369, HY10RN-10235-224, BLK 9-2, CML 117, JM-8, BLK4-37, EC 6137381, MRCHY4855, MRCHY6370, MRCHY205, EC 440662, HY10RN-10235-118, MRCHY 5191, MRCHY 5278, MRCHY 4854, MRCHY 4855, MRCHY5232, MRCHY4741, MRCHY4839-1-1, MRCHY5142-1-1-2, MRCHY4873-1-1, MRCHY 5177C2, MRCHY4854-1-1, CML-292-1-1, MRCHY6339-1-1, FRD 73-1-2, LM 18, BML- 7, MRCHY5133C2, MRCHY 4840, MRCHY 5158, DMRPE6, MRCHY 86C1, MRCHY 194C2, MRC 197, MRCHY5144-2, MRCHY 6348C1, MRCHY6349, MRCHY6367-1-2, MRCHY 4981-2, MRCHY 5076, MRCHY 5152-2, MRCHY 5152-1C3, MRCHY 5270, MRCHY 6330-2C5, MRCHY6327-1, CML 97, EC4400419-1, EC618225-2, EC 646007-1-2, DMRPE 6-4, MRCHY5353, MRCHY5278-2C5, CML-10C1, MRCHY4840C1, EC645987, EC 44612, MRCHY 5202, MRCHY-307(N) QPM, HM4-2-6-1, HM4-2-2-7, DMR197, DMR200, DMR212, DMR214, HM 4-1C1, DMR219, DMR221, DMR222, DMR223, DMR225, DHM117-20-1-1-5, DHM117-1-1-5-6, HQPM-9-1-5-3, HM4-2-6-2-1 & SEED TECH 2324-2-2-3 (Table: 3).

Table 1: Evaluation of maize genotypes in AVT and IVT Late maturity for various maize disease during *Rabi* 2013

S.No	Pedigree	TLB (1-5)	TLB (1-5)	SDM (%)	PFSR (1-9)			C.Rust
		MND	DHO	MND	HYD	LUD	ARB	KAR
AVTII-LATE								
1	NK6607	4.3	3.0	78.6	6.4	5.0	3.5	0.7
2	S 7720	4.5	2.5	100.0	4.9	4.7	5.8	2.2
3	PR0-380	4.3	3.0	100.0	5.2	4.7	5.0	2.2
4	CMH 08-282	2.5	2.5	24.8	5.1	5.4	4.5	0.0
5	CMH 08-287	2.3	2.5	63.0	6.1	5.2	6.8	0.2
6	KMH-25K45(2700)	4.5	1.5	100.0	6.0	4.3	6.5	0.3
7	Bisco New 704	2.8	2.0	75.0	5.4	4.5	5.0	2.2
8	BiscoX5129	4.8	3.0	100.0	4.0	5.5	5.5	1.0
9	BiscoX9	3.0	2.5	100.0	2.6	5.3	4.5	1.1
10	NMH-713	3.8	2.5	82.3	4.5	5.5	5.5	0.1
11	NMH-731	3.8	3.5	80.4	5.6	4.4	6.8	0.2
12	NMH-666	4.0	2.5	75.0	5.1	5.8	6.5	0.7
13	RJ 2020	5.0	2.5	100.0	5.9	4.3	2.5	0.9
AVT I- LATE								
14	BP-001	2.0	3.0	42.2	3.0	4.6	4.5	0.5
15	BP-003	3.8	2.0	52.3	5.6	4.9	7.5	0.0
16	BP-007	2.0	1.5	43.0	2.6	5.9	6.3	0.2
17	BP-008	2.0	2.5	35.3	3.3	4.5	4.5	0.0
18	HTMH 5105	4.3	2.0	68.0	2.5	5.7	5.5	2.2
19	PRO-385	3.8	2.5	100.0	6.0	4.3	5.5	0.1
20	KMH-7148	3.5	3.0	70.1	5.1	4.0	8.5	0.5
21	Bisco X 5141	4.3	2.0	69.5	3.1	5.2	3.5	0.0
22	NMH-1247	3.8	2.5	73.3	5.7	5.5	5.8	0.6
23	KH-3479	2.0	3.0	53.5	5.1	4.8	4.5	0.2
24	B-54	3.8	2.0	54.6	5.8	5.3	2.0	0.0
25	A 7501	3.8	3.5	13.9	2.8	4.1	5.5	0.4
26	X35B349	4.3	2.0	14.6	5.2	5.5	4.5	0.0
27	Bio-237	3.3	2.5	57.1	5.8	5.1	7.5	0.2
28	JH 270	2.0	3.0	100.0	3.0	4.4	6.5	2.4
29	DKC9120	3.0	2.5	85.2	2.5	4.4	2.5	2.2
30	IL 8534	2.0	2.0	76.2	6.2	4.4	4.5	0.0
31	II8212	4.3	2.5	100.0	5.3	5.0	6.5	0.1
32	TH2	2.0	3.0	72.1	5.6	4.7	3.5	2.2
33	DADA	4.8	2.0	100.0	5.9	4.6	7.3	0.2
34	TH22	2.5	3.0	100.0	5.7	5.9	5.5	2.3
35	PRO-389	3.3	2.0	100.0	3.7	4.6	5.3	0.4
36	PRO-390	2.5	2.5	84.0	5.9	3.6	5.8	0.2
37	KMH-2589	4.3	2.5	66.9	5.1	5.0	4.5	0.1
38	Rasi-3022	3.5	3.0	13.0	2.8	4.2	5.5	0.0
39	Rasi-750	2.8	2.5	26.7	5.3	4.4	2.5	0.2
40	Bisco x 6573	3.5	1.5	80.0	5.7	5.9	5.0	2.4
41	Venus	3.8	2.0	100.0	5.9	5.5	8.5	0.1
42	PMH-2277	4.3	2.0	100.0	4.9	4.1	5.0	2.3
43	IVORY	2.5	2.5	100.0	4.9	4.8	5.0	0.3
44	PMH-189	3.8	1.5	100.0	5.4	5.0	5.5	0.3
45	Meghan-G	3.8	2.5	80.8	5.8	6.5	4.5	0.0
IVT I-LATE								
46	GK-3149	3.0	2.0	45.6	4.9	4.0	5.0	0.7

47	GK-3150	2.0	3.0	53.6	3.4	5.8	5.5	0.1
48	X-1228	4.3	4.0	83.3	2.9	6.9	4.8	2.2
49	K-25 Gold	3.8	2.5	69.2	3.1	4.7	3.8	0.2
50	P3533	3.3	2.0	100.0	2.6	5.1	4.8	0.2
51	X35C526	3.0	2.0	32.1	6.1	4.7	5.5	0.0
52	X35C529	4.8	1.5	45.8	5.4	4.7	6.5	0.0
53	X35C535	3.3	2.5	55.3	3.4	5.8	5.5	0.3
54	X35C537	3.8	2.5	59.8	2.6	4.9	7.5	2.2
55	X35C538	5.0	2.5	100.0	5.9	5.1	5.0	0.0
56	X35C543	4.3	1.5	51.8	5.3	4.9	5.5	2.2
57	REH2012-1	2.5	2.0	76.8	5.4	6.4	4.8	0.1
58	REH2012-2	2.0	3.0	77.3	5.6	3.9	3.8	0.1
59	AH 1251	4.8	3.5	100.0	5.9	5.8	5.5	0.0
60	AH 1252	3.3	2.5	70.0	6.1	4.7	5.5	0.2
61	JH 8825	2.0	2.0	25.4	3.6	4.2	3.5	0.1
62	JH 9031	4.5	3.0	64.8	6.0	4.2	3.3	2.2
63	JH 8837	3.8	2.5	6.5	5.3	5.1	5.8	0.2
64	JH 9114	2.8	2.5	100.0	5.1	5.0	6.5	2.3
65	JH 211	3.3	3.0	33.8	3.0	3.2	5.3	0.3
66	JH 248	2.5	2.5	86.0	3.1	3.9	5.5	0.7
67	JH 293	4.3	2.0	100.0	3.9	3.8	5.3	2.3
68	JH 295	3.3	2.5	86.0	6.3	3.5	7.8	2.4
69	JH 367	4.0	3.0	100.0	5.1	3.8	3.5	0.5
70	JH 405	4.5	2.5	76.2	6.6	4.3	5.0	0.5
71	JH 417	3.3	3.5	65.3	5.9	5.1	4.3	0.3
72	JH 419	3.8	2.5	33.5	4.4	3.7	5.8	2.2
73	Buland (C)	2.8	2.0	79.2	6.3	6.1	6.5	2.2
74	Seed Tech 2324 (C)	3.3	3.0	29.8	5.1	4.8	4.5	0.4
75	Bio 9681(C)	4.3	2.5	40.6	6.0	4.6	6.5	0.2
76	CM-500(SC)	1.0	3.5	100.0	6.2	-	-	-
77	NAH-2049(RC)	4.8	-	4.8	3.2	-	-	-
78	Check fr h100	-	-	-	-	6.0	-	-

Table 2: Evaluation of maize genotypes AVT and IVT in medium and early maturity for various disease during *Rabi* 2013

S.No	Genotypes	TLB (1-5)		SDM (%)	PFSR (1-9)			C.Rust
		MND	DHO	MND	LUD	ARB	HYD	KAR
AVT II- MEDIUM								
1.	NMH1242	2.8	2.5	82.0	4.3	6.8	6.0	2.4
2.	Bio-151	3.8	3.5	17.7	4.4	7.3	3.0	1.3
AVT I- MEDIUM								
3.	VaMH 08014	4.5	2.5	84.1	3.9	6.0	5.9	2.2
4.	KH-6847	4.3	3.5	100.0	6.0	8.5	5.0	2.2
5.	VEH-11-1	4.8	2.0	79.9	4.4	8.0	2.8	2.3
6.	HKH 323	3.3	3.0	100.0	3.3	6.8	5.9	2.6
7.	HKH 324	3.5	3.5	91.7	4.2	3.5	4.8	1.0
8.	HKH 325	4.3	2.5	98.2	3.5	6.5	3.1	2.3
9.	HKH 326	2.0	2.5	100.0	3.9	5.5	5.3	2.2
10.	HKH 327	3.3	3.5	100.0	4.6	6.5	5.7	0.4

11.	HKH 328	4.0	2.5	100.0	4.0	7.0	5.4	1.3
IVT-MEDIUM								
12.	IJ8521	3.5	3.0	100.0	5.7	6.3	3.2	2.6
13.	IJ8214	4.3	3.0	68.8	4.7	6.5	5.7	2.3
14.	IL8536	3.3	2.5	54.7	5.3	6.5	5.0	2.2
15.	IL8537	2.5	2.5	85.5	4.5	5.3	5.0	2.3
16.	KMHI-6668	4.3	2.0	44.2	4.6	5.5	2.8	2.2
17.	KMH-4210	4.5	3.0	90.0	5.2	5.8	3.0	2.2
18.	PMH-2246	3.8	2.5	100.0	4.5	3.3	3.4	2.6
19.	k-26	3.8	2.5	96.3	7.0	7.5	2.9	2.7
20.	X-2816	2.0	2.0	100.0	3.5	6.3	4.4	2.2
21.	VEH-12-1	4.3	3.0	100.0	6.2	5.3	2.6	2.3
22.	MMH-12-11	4.5	2.5	100.0	3.9	8.3	4.0	1.4
23.	MMH-12-12	3.8	3.5	94.4	3.4	6.5	5.2	2.4
24.	MMH-12-13	4.3	2.5	80.0	4.8	5.5	4.8	0.4
25.	MMH12-14	2.0	2.5	92.2	3.6	6.5	2.4	2.4
26.	REH2012-3	4.3	2.5	93.3	4.8	8.0	2.6	2.7
27.	REH2012-4	3.8	3.0	69.4	4.6	6.0	2.4	2.4
28.	AH 1253	3.5	1.5	100.0	6.4	5.8	3.4	2.2
29.	AH 1254	4.3	3.0	86.8	4.8	5.8	4.8	1.8
30.	AH 1255	3.8	2.5	92.9	4.9	4.3	5.4	2.5
31.	HKH420	4.3	2.0	95.8	3.6	4.5	2.8	0.3
32.	HKH421	4.0	3.0	93.6	3.3	6.0	5.4	0.6
33.	HKH422	2.0	2.5	100.0	3.9	6.5	5.4	1.0
Checks Varieties-Medium								
34.	BIO 9637 (C)	2.0	2.5	56.5	4.3	6.0	3.9	2.2
35.	HM4 (C)	4.3	2.5	100.0	4.7	4.3	4.6	1.2
36.	HM 8 (C)	2.5	2.5	100.0	3.9	3.8	5.4	2.2
AVT I -EARLY								
37.	HKH 229	2.0	3.0	100.0	3.2	7.5	4.7	2.7
38.	HKH 230	4.8	2.0	98.7	4.6	8.3	2.8	2.7
IVT- EARLY								
39.	K-25	3.5	2.0	78.4	5.1	5.8	4.8	1.2
40.	REH2012-5	4.3	2.5	78.9	4.8	6.3	5.2	1.9
41.	REH2012-6	4.0	3.0	93.1	3.8	5.5	2.6	1.1
42.	AH 1256	2.5	2.5	98.7	5.0	6.0	2.8	2.2
43.	AH 1257	4.8	2.5	96.3	4.6	7.3	3.6	1.1
44.	AH 1258	4.3	2.5	96.3	4.2	7.8	3.3	1.5
45.	AH 1259	2.5	2.5	93.9	5.5	4.5	4.8	1.1
46.	HKH35	2.0	3.0	100.0	3.4	5.5	5.4	2.4
47.	HKH36	4.3	2.0	96.9	4.1	6.5	4.9	2.3
48.	HKH37	4.3	2.5	96.9	6.2	8.5	5.0	1.2
Check Variety- Early								
49.	PRAKASH (C)	5.0	2.5	100.0	5.3	6.3	3.1	2.4

QPM 1 & 2 Trial								
50.	VEHQ-11-2 (QPM-2)	4.3	2.5	100.0	3.8	6.5	3.2	0.0
51.	VEHQ-11-1 (QPM-2)	3.8	3.5	96.9	3.6	6.3	3.1	2.4
52.	REHQ 2011-3 (QPM-1)	3.0	2.5	83.3	2.9	6.8	3.9	2.2
53.	BAUQMH-17(QPM-1)	2.5	2.5	100.0	4.0	6.3	5.4	0.1
54.	MHQPM-09-8(QPM-1)	4.3	3.0	88.5	4.1	6.8	3.0	2.2
Checks Varieties-QPM								
55.	HQPM 1 (C)	2.0	3.5	100.0	2.9	6.0	3.0	0.3
56.	HQPM 5 (C)	2.0	2.0	95.8	3.5	6.8	3.1	-
57.	HQPM 7 (C)	3.3	2.5	98.3	3.0	6.5	5.7	0.1
58.	RC (Nithya shree)	1.0	4.0	100.0	-	-	3.0	-
59.	SC (219J)	4.8	3.5	6.1	-	-	6.5	-
60.	Check	-	-	-	6.3	-	-	-

Table 3: Evaluation of elite maize lines for identification of resistance sources against TLB and charcoal rot under artificial inoculated condition at Mandya & Hyderabad during Rabi 2012-13.

Resistant Sources for Turcicum Leaf Blight (TLB)		
S. No.	**Genotypes**	**Reaction (Scale-1-5)**
1.	DMRPE 6	2.0
2.	DML66	2.0
3.	DML35	2.0
4.	DML84	2.0
5.	DML36	2.0
6.	DML88	2.0
7.	CML-285	2.0
8.	DML38	2.0
9.	DML90	2.0
10.	DML126	2.0
11.	DML71	2.0
12.	DML101	2.0
13.	DML91	2.0
14.	DML27	2.0
15.	DML92	2.0
16.	DML41	2.0
17.	DML64	2.0
18.	DML45	2.0
19.	DML48	2.0
20.	DML75	2.0
21.	DML5	2.0
22.	DML52	2.0
23.	CML 117	2.0
24.	JM-8	2.0
25.	DML56	2.0

26.	DML58	2.0
27.	DML61	2.0
28.	DML78	2.0
29.	DML113	2.0
30.	DML116	2.0
31.	DML119	2.0
32.	DML121	2.0
33.	DML77	2.0
34.	DML127	2.0
35.	DML129	2.0
36.	DML133	2.0
37.	DML80	2.0
38.	DML82	2.0
39.	DML147	2.0
40.	DML72	2.0
41.	DML150	2.0
42.	CML-292-1-1	2.0
43.	DML151	2.0
44.	DML152	2.0
45.	LM 18	2.0
46.	BML- 7	2.0
47.	DML242	2.0
48.	DML2	2.0
49.	DML209	2.0
50.	DML273	2.0
51.	DML250	2.0
52.	DML276	2.0
53.	DML23	2.0
54.	DML38	2.0
55.	DML103	2.0
56.	DML257	2.0
57.	DML259	2.0
58.	DML33	2.0
59.	DML264	2.0
60.	DML263	2.0
61.	DML174	2.0
62.	DML271	2.0
63.	DML162	2.0
64.	CML 97	2.0
65.	DML164	2.0
66.	DML288	2.0
67.	DML166	2.0
68.	DMRPE 6-4	2.0

69.	DML167	2.0
70.	DML77	2.0
71.	CML-10	2.0
72.	DML11	2.0
73.	DML196	2.0
74.	DML91	2.0
75.	DML238	2.0
76.	DML6	2.0
77.	DML297	2.0
78.	DML370	2.0
79.	DML 341	2.0
80.	DML344	2.0
81.	DML371	2.0
82.	DML290	2.0
83.	**Resistant Check (Hema) (Nithya shree)**	**1.0**
84.	**Susceptible Check (219J)**	**5.0**
Resistant Sources for Charcoal Rot Disease		
S. No.	**Genotypes**	**Reaction(Scale-1-9)**
1.	DML66	2.0
2.	CML 269	2.6
3.	DML35	2.0
4.	DML68	2.0
5.	DML85	2.0
6.	DML285	2.8
7.	CML-285	2.4
8.	DML39	2.9
9.	DML63	3.0
10.	CML 292	3.0
11.	DML45	2.6
12.	DML5	2.3
13.	DML51	2.0
14.	DML53	3.0
15.	JM-8	2.5
16.	DML57	2.9
17.	DML61	2.8
18.	DML78	2.2
19.	DML111	2.4
20.	DML116	2.4
21.	DML119	2.4
22.	DML120	2.6
23.	DML77	2.4

24.	DML127	2.8
25.	DML80	2.6
26.	DML80	2.0
27.	DML155	3.0
28.	DML149	2.8
29.	DML230	2.7
30.	DML151	2.8
31.	LM-5	2.1
32.	DML38	2.0
33.	DML207	2.7
34.	DML249	2.6
35.	DML276	2.0
36.	DML256	2.3
37.	DML257	2.6
38.	DML33	2.8
39.	DML261	1.9
40.	DML264	2.0
41.	DML271	2.8
42.	DML67	2.1
43.	DML212	2.6
44.	DML164	2.8
45.	DML77	2.3
46.	DML200	2.0
47.	DML5	2.8
48.	DML241	2.0
49.	**Resistant Check (CM 117-3-4-1)**	**2.3**
50.	**Susceptible Check (Win orange sweet corn)**	**6.1**

Table 4: Meteorological data (Monthly average) *Rabi* 2013

S. No.	Station Name	Month	Temperature		Rainfall of month (mm)	R.H Min (in %)	R.H Max (in %)
			Min (°C)	Max (°C)			
1.	Mandya	October	17.54	30.14	253.8	58	93
		November	14.42	29.62	23.4	51	94
		December	13.76	29.72	3.9	47	94
		January	12.5	31.1	0	89	92
		February	14.7	32.6	40	43	90
2.	Coimbatore	January	16.2	33.5	0.0	41	95
		February	15.0	34.5	0.0	28	91
		March	16.8	36.2	0.0	22	90
		April	21.8	37.0	0.0	30	92

ENTOMOLOGY

CONTENTS

EXECUTIVE SUMMARY

Out of 53 maize germplasm screened under artificial infestation against stem borer, *C. partellus*, 5 entries *viz.;* S7720 (2.90), CMH 08-282 (2.55), PRO-385 (2.80), KMH-7148 (2.80) and PRAKASH (C) (3.00) were found to be least susceptible and 29 entries were found to be moderately susceptible to the stem borer infestation. However, remaining 19 entries were found to be highly susceptible.

Out of 212 maize inbred lines screened under artificial infestation against stem borer, *Chilo partellus*, 27 entries were found to be least susceptible, 73 entries were found to be moderately susceptible and 89 entries were found to be highly susceptible to stem borer infestation. Remaining 23 entries did not germinate. These entries were evaluated in the augmented design against *Sesamia inferens*. Thirty-three entries are found to be resistant.

RABI 2012-13

1. Trial No. 11- Screening of maize germplasm against stem borer, *Chilo partellus* Swinhoe under artificial infestation.
2. Screening and evaluation 212 inbred lines against Chilo partellus under artificial infestation.

3. Experiment details **:** AICRP, Maize, Kolhapur, 4 x 0.75 m, 120:60:40

4. Location **:** Kolhapur

5. Date of sowing, germination & infestation:

Sr. No.	Trial No.	No. of entries	Replication	Date of sowing	Date of germination	Date of infestation
1	11	53	2	02/01/2013	09/01/2013	21/01/2013
2	Inbred lines	212	1	18/01/2013	26/01/2012	09/02/2013

Table 1. Screening of maize germplasm against stem borer, *Chilo partellus* Swinhoe under artificial infestation.

Sr. No.	DMR code	Mean LIR	Category of Infestation
1	NK6607	5.40	MS
2	S 7720	2.90	**LS**
3	PR0-380	3.80	MS
4	CMH 08-282	2.55	**LS**
5	CMH 08-287	5.00	MS
6	KMH-25K45(2700)	4.60	MS
7	Bisco New 704	5.70	MS
8	BiscoX5129	4.50	MS
9	BiscoX9	4.70	MS
10	NMH-713	6.60	HS
11	NMH-731	5.00	MS

12	NMH-666	7.50	HS
13	RJ2020	6.30	HS
14	BP-001	5.80	MS
15	BP-003	8.00	HS
16	BP-007	5.20	MS
17	BP-008	6.20	HS
18	HTMH 5105	7.10	HS
19	PRO-385	2.80	**LS**
20	KMH-7148	2.80	**LS**
21	Bisco X 5141	7.10	HS
22	NMH-1247	4.70	MS
23	KH-3479	6.00	MS
24	B-54	5.70	MS
25	A 7501	6.20	HS
26	X35B349	6.60	HS
27	Bio-237	5.30	MS
28	JH 270	4.60	MS
29	Buland (C)	4.90	MS
30	Seed Tech 2324 (C)	4.60	MS
31	Bio 9681(C)	6.00	MS
32	NMH1242	5.50	MS
33	Bio-151	4.40	MS
34	VaMH 08014	6.10	HS
35	KH-6847	6.50	HS
36	VEH-11-1	6.80	HS
37	HKH 323	6.50	HS
38	HKH 324	7.08	HS
39	HKH 325	6.20	HS
40	HKH 326	6.00	MS
41	HKH 327	4.00	MS
42	HKH 328	5.50	MS
43	BIO 9637 (C)	6.40	HS
44	HM4 (C)	6.10	HS
45	HM 8 (C)	5.80	MS
46	HKH 229	4.50	MS
47	HKH 230	5.10	MS
48	PRAKASH (C)	3.00	**LS**
49	VEHQ-11-2	7.50	HS
50	VEHQ-11-1	7.30	HS
51	HQPM 1 (C)	3.20	MS
52	HQPM 5 (C)	5.95	MS
53	HQPM 7 (C)	5.80	MS

Table 2. Screening and evaluation of 212 inbred lines against *C. partellus* under artificial infestation

Sr. No.	Pedigree	Mean LIR	Category of Infestation
1	BML5	1.80	**LS**
2	AEBYC534-1-1	4.50	MS
3	BASILOCAL SELECTION	8.00	HS
4	WNZEXOTIC POOL1 Ä	7.00	HS
5	AEBYC555-1-1	8.00	HS
6	BML10	8.00	HS
7	T2SR1101	4.67	MS
8	WNZPBTL6	8.67	HS
9	SU2SU2COMP-7-B	8.33	HS
10	CM135	8.75	HS
11	JCS80106H	7.60	HS
12	LM13	7.67	HS
13	ITNA004	8.50	HS
14	E60 FC	7.33	HS
15	POBLAC70 C0	8.00	HS
16	CML44-B-B-B	7.33	HS
17	AEB(Y)	8.00	HS
18	PFSRS3	2.50	**LS**
19	LM16	3.00	**LS**
20	HKIPC5	5.50	MS
21	S99TLWQ-HG-BBB-65	7.33	HS
22	HKI193-1	6.00	MS
23	WINPOP3	3.33	MS
24	WINPOPIIXWINPOPIII	5.00	MS
25	97P65-BBB-26-B	6.67	HS
26	WSC1XMASMADHU	6.20	HS
27	EC610584	8.60	HS
28	CM118	8.25	HS
29	CM201	8.75	HS
30	CML77	Not Germinated	
31	CML321	Not Germinated	
32	BML11	8.50	HS
33	WNZPBTL8	9.00	HS
34	HKI164-3-(2-1)1	5.50	MS
35	AEBYC538-1-1	6.67	HS
36	POP31DMR-88-3#-13-1	8.67	HS
37	CM121	Not Germinated	
38	E62FC	6.00	MS
39	HKIPCBT3	7.00	HS
40	CM111	Not Germinated	
41	P61C1BBB-8	3.00	**LS**
42	AEBY1	2.67	**LS**
43	S991S1WQETBBB-32	5.00	MS
44	WINPOP21	4.50	MS

45	SWEETCORN SYNTHETIC	4.00	MS
46	DMRSC1	4.00	MS
47	CML73	Not Germinated	
48	CML151	Not Germinated	
49	WNZ EXOTIC POOLDC2	2.60	**LS**
50	WNS	2.75	**LS**
51	LM13	4.00	MS
52	P65C6-BBB-23	2.80	**LS**
53	CM117-3-4-1	2.75	**LS**
54	CM502	3.50	MS
55	JCY3-7	Not Germinated	
56	JCS2-7	8.33	HS
57	PFSRS2	8.25	HS
58	PFSR5106/1	7.75	HS
59	S0S1YQBBB-13	3.50	MS
60	BML14	7.33	HS
61	CML261	2.00	**LS**
62	CLQRCWQ02B-6	3.00	**LS**
63	CML281	7.50	HS
64	CML338	8.33	HS
65	TZAR106	5.50	MS
66	TZAR101	Not Germinated	
67	CM115	2.50	**LS**
68	CM208	6.67	HS
69	CML41	8.33	HS
70	AEBCYC534-2-1	Not Germinated	
71	BCK/BC8	8.33	HS
72	AEBY2Ä	7.67	HS
73	AEBCYC534-3-1	3.00	**LS**
74	WINPOP8	8.00	HS
75	CLQRCWQ31-B-6	4.50	MS
76	CML306	8.67	HS
77	CML162	6.67	HS
78	CML49	6.00	MS
79	CM211	9.00	HS
80	P3C4S5-33-11-BBBB-2	4.60	MS
81	HIGHOILQPMC13-BBB-61	5.00	MS
82	WNZPBTL5	8.33	HS
83	CM501	Not Germinated	
84	CM123	6.33	HS
85	HKI1105	2.25	**LS**
86	CM142	2.60	**LS**
87	AEBY2SELECTION	2.60	**LS**
88	WS2	3.00	**LS**
89	CM400	Not Germinated	
90	JCS789CH1	3.33	MS
91	CML304	2.50	**LS**

92	HKI484-5	8.67	HS
93	CM117	2.00	**LS**
94	P69(5869Q)BBB-24	6.00	MS
95	CM140	5.33	MS
96	G15QC7-BBB-6-BBB	Not Germinated	
97	V351	Not Germinated	
98	HKI1040C2	6.33	HS
99	CM131	2.33	**LS**
100	BML15	Not Germinated	
101	CM130	3.00	**LS**
102	BCK/BC2	3.00	**LS**
103	HKI170(1+2)	6.80	HS
104	CUBA378	7.50	HS
105	CML287	3.00	**LS**
106	DMSC28	3.20	MS
107	Sow1wq-2-BBB-B	4.20	MS
108	O2POOL33C23	6.80	HS
109	JCS796CH8	3.20	MS
110	HKI536-7	9.00	HS
111	JAHNGRAPOP	7.75	HS
112	CM119	6.00	MS
113	EC672591	8.67	HS
114	HKI488 EARLY	7.50	HS
115	CM125	Not Germinated	
116	WP21	Not Germinated	
117	SOS1YQBB26-B	6.00	MS
118	HKI586-1WG33	8.00	HS
119	CML116	3.25	MS
120	DMRPP1	7.50	HS
121	HKI577	8.00	HS
122	CML448	5.50	MS
123	EC618222	9.00	HS
124	CML73	3.25	MS
125	CML305	8.75	HS
126	HKI1532	3.75	MS
127	CML371	7.25	HS
128	CML384X176F3- 100-9	Not Germinated	
129	V335	5.00	MS
130	HKI163EARLY	3.75	MS
131	CML338	Not Germinated	
132	CML312	Not Germinated	
133	HKI326-3	5.25	MS
134	CML491-B6	5.50	MS
135	P63C2-BBB-17B	Not Germinated	
136	CML140	9.00	HS
137	CML212	Not Germinated	
138	CML227	Not Germinated	

139	CLQRCWQ16-B6	8.00	HS
140	CML288	9.00	HS
141	CML73	7.00	HS
142	CML435	8.50	HS
143	CML335	6.67	HS
144	CML408	5.50	MS
145	HKI287	3.40	MS
146	BML7	Not Germinated	
147	G18QC8-36	3.20	MS
148	CML282	6.50	HS
149	CML303	5.00	MS
150	WNZPBTL9	3.20	MS
151	CML376	8.67	HS
152	CML189	6.75	HS
153	(CML161/CML165)BBB7	3.80	MS
154	HKI209	5.50	MS
155	CML317	4.80	MS
156	EC598464	5.80	MS
157	CML256	3.60	MS
158	CML479	6.80	HS
159	CML90	9.00	HS
160	CML494	2.60	**LS**
161	HKI2-6-2-4	3.40	MS
162	EC655779	8.33	HS
163	CML23	6.75	HS
164	CML292	3.50	MS
165	CML50	6.25	HS
166	CML424	3.80	MS
167	EC614829	3.60	MS
168	CLQRCYQ42	3.20	MS
169	CML 491	3.60	MS
170	CML402	7.33	HS
171	CML420	2.80	**LS**
172	HKI335	3.25	MS
173	CML12	3.20	MS
174	CML327	3.20	MS
175	CML289	4.40	MS
176	CML451(susceptible check)	4.25	MS
177	CML482	7.67	HS
178	HYBRID 9415-BBB-4	8.50	HS
179	CML238	5.00	MS
180	S00TLWQHGBBB35-B	3.25	MS
181	G24QC19BBB-4	7.00	HS
182	CML187B	9.00	HS
183	G31QC2BB23	9.00	HS
184	CML481	8.50	HS
185	CML290	7.25	HS

186	CML411	3.75	MS
187	CML120	4.75	MS
188	HKI209	8.00	HS
189	CML344BB	3.75	MS
190	CML111BBB	3.50	MS
191	S87P66Q-BBB-30	6.67	HS
192	LTP1	7.67	HS
193	CML114	6.25	HS
194	DMRN7CH7	4.25	MS
195	CLQ6310	6.33	HS
196	G33QC20-BBB-37	4.33	MS
197	HKISCSTPINK	7.25	HS
198	HKI1831	4.25	MS
199	COMPMODBCOBBB-48	2.75	**LS**
200	CML336	6.25	HS
201	CML18	3.50	MS
202	EC440414	4.75	MS
203	CML298	7.25	HS
204	P70C0BBB-5	6.00	MS
205	CML55BB	3.50	MS
206	CML485BBB	5.00	MS
207	CLQRCY47B6	6.50	HS
208	CML249	2.75	**LS**
209	CML423	9.00	HS
210	CML165BBB	6.50	HS
211	HKI 586	5.33	MS
212	P390AM/CMLC4F230-B-2	3.75	MS

Table 3. Evaluation of maize germplasm against Pink Stem Borer, *Sesamia inferens Walker* during rabi 2012 in augmented design

S. No.	Pedigree	Mean Leaf injury rating (LIR on 1-9 scale)	S. No.	Pedigree	Mean Leaf injury rating (LIR on 1-9 scale)
1	BML5	5.3±0.7(0.081)	31	CM201	7.4±0.4(0.714)
2	**AEBYC534-1-1**	**4.9±0.4(-0.027)**	32	CML77	8.0±0.4(0.930)
3	**BASILOCAL SELECTION**	**4.3±0.8(-0.189)**	33	CML321	7.3±0.4(0.678)
4	**WNZEXOTIC POOL1 Ä**	**3.6±0.3(-0.390)**	34	BML11	5.8±0.5(0.216)
5	**AEBYC5 55-1-1**	**3.5±0.5(-0.420)**	35	**WNZPBTL8**	**3.4±0.3(-0.450)**
6	BML10	6.6±0.8(0.450)	36	HKI164-3-(2-1)1	5.8±0.6(0.216)
7	**T2SR1101**	**4.6±0.4(-0.108)**	37	AEBYC538-1-1	4.7±0.6(-0.081)
8	**WNZPBTL6**	**3.0±0.4(0.570)**	38	POP31DMR-88-3#-13-1	7.2±0.6(0.642)
9	SU2SU2COMP-7-B	8.5±0.5(1.210)	39	CM121	8.3±0.7(1.098)
10	CM135	6.2±0.7(0.330)	40	E62FC	7.0±1.2(0.570)
11	CM500 (Resistant Check)	2.9±0.2(-0.606)	41	HKIPCBT3	8.6±0.3(1.266)
12	JCS80106H	5.5±0.2(0.135)	42	CM111	6.2±0.4(.33)
13	**LM13**	**4.4±0.4(-0.162)**	43	P61C1BBB-8	5.7±0.2(.189)
14	ITNA004	5.9±0.4(0.243)	44	**AEBY1**	**2.8±0.3(-0.642)**
15	**E60 FC**	**3.8±0.4(-0.330)**	45	S991S1WQETBBB-32	6.5±0.8(0.420)
16	POBLAC70 C0	6.7±0.8(0.480)	46	CM500 (Resistant Check)	2.9±0.2(-0.606)
17	CML44-B-B-B	5.7±0.6(0.189)	47	WINPOP21	5.8±0.2(0.216)
18	AEB(Y)	6.9±0.690.540)	48	SWEETCORN SYNTHETIC	5.5±0.8(0.135)
19	PFSRS3	5.5±0.8(0.135)	49	DMRSC1	7.3±1.0(0.678)
20	LM16	7.5±0.7(0.750)	50	CML73	6.3±0.9(0.360)
21	HKIPC5	7.4±0.4(0.714)	51	CML151	5.8±0.8(0.216)
22	S99TLWQ-HG-BBB-65	7.4±0.5(0.714)	52	**WNZ EXOTIC POOLDC2**	**4.0±0.3(-0.270)**
23	CML451(susceptible check)	7.7±0.4(0.822)	53	**WNS**	**5.0±0.3(0.000)**
24	HKI193-1	5.2±0.5(0.054)	54	LM13	5.8±1.0(0.216)
25	WINPOP3	5.5±1.0(0.135)	55	P65C6-BBB-23	5.2±0.2(0.054)
26	WINPOPIIXWINPOPIII	5.3±0.6(0.081)	56	CM117-3-4-1	6.3±0.7(0.360)
27	**97P65-BBB-26-B**	**4.7±0.7(-0.081)**	57	CM502	5.3±0.7(0.081)
28	WSC1XMASMADHU	6.2±0.7(0.330)	58	**JCY3-7**	**5.0±0.6(0.000)**
29	EC610584	6.0±0.6(0.270)	59	JCS2-7	7.0±0.7(0.570)
30	CM118	7.0±0.5(0.570)	60	CML451(susceptible check)	7.9±0.3(0.894)

S. No.	Pedigree	Mean Leaf injury rating (LIR on 1-9 scale)	S. No.	Pedigree	Mean Leaf injury rating (LIR on 1-9 scale)
61	PFSRS2	5.6±0.2(0.162)	92	WS2	6.1±0.3(0.300)
62	**PFSR5106/1**	**4.2±0.3(-0.216)**	93	CM400	7.8±0.5(0.858)
63	S0S1YQBBB-13	6.3±0.5(0.360)	94	JCS789CH1	7.5±0.4(0.750)
64	BML14	6.3±0.4(0.360)	95	CML304	6.6±0.7(0.450)
65	CML261	7.0±0.8(0.570)	96	CM500 (Resistant Check)	3.0±0.2(-0.570)
66	CLQRCWQ02B-6	7.1±0.4(0.606)	97	HKI484-5	7.5±0.4(0.750)
67	CML281	6.8±0.9(0.510)	98	CM117	6.5±0.3(0.420)
68	CML338	6.0±0.4(0.270)	99	P69(5869Q)BBB-24	7.7±0.5(0.822)
69	TZAR106	5.3±0.3(0.081)	100	CM140	8.2±0.5(1.042)
70	TZAR101	5.1±0.6(0.027)	101	G15QC7-BBB-6-BBB	7.0±1.0(0.570)
71	CM115	5.2±0.2(0.054)	102	V351	6.6±0.3(0.450)
72	CM208	7.6±0.6(0.786)	103	HKI1040C2	6.9±0.5(0.540)
73	CML41	5.4±0.6(0.108)	104	CM131	7.4±0.4(0.714)
74	AEBCYC534-2-1	7.0±0.4(0.570)	105	BML15	7.1±0.4(0.606)
75	BCK/BC8	6.5±0.6(0.420)	106	CM130	6.3±0.5(0.3600
76	**AEBY2Ä**	**4.0±0.3(-0.270)**	107	BCK/BC2	6.8±0.4(0.5100
77	AEBCYC534-3-1	6.3±0.6(0.360)	108	HKI170(1+2)	6.3±0.4(0.360)
78	WINPOP8	6.6±0.7(0.4500	109	CML451 (susceptible check)	8.1±0.3(0.986)
79	CLQRCWQ31-B-6	7.2±0.3(0.642)	110	CUBA378	5.4±0.5(0.1080
80	CML306	6.9±0.3(0.540)	111	CML287	8.1±0.3(0.986)
81	CML162	6.9±0.4(0.540)	112	DMSC28	7.7±0.6(0.822)
82	CML49	7.3±0.5(0.678)	113	Sow1wq-2-BBB-B	7.8±0.4(0.858)
83	CM211	7.5±0.5(0.750)	114	O2POOL33C23	7.4±0.5(0.714)
84	P3C4S5-33-11-BBBB-2	6. ±0.5(0.390)	115	JCS796CH8	6.6±0.7(0.450)
85	HIGHOILQPMC13-BBB-61	6.3±0.3(0.360)	116	HKI536-7	6.6±0.4(0.450)
86	**WNZPBTL5**	**2.2±0.3(-1.042)**	117	JAHNGRAPOP	7.9±0.5(0.894)
87	CM501	5.2±0.6(0.054)	118	CM119	7.6±0.3(0.786)
88	CM123	7.0±0.4(0.570)	119	EC672591	5.8±0.3(0.216)
89	HKI1105	7.2±0.49(0.642)	120	HKI488 EARLY	8.1±0.4(0.986)
90	CM142	8.2±0.39(1.042)	121	CM125	6.0±0.4(0.270)
91	AEBY2SELECTION	7.2±0.5(0.642)	122	**WP21**	**4.5±0.5(-0.135)**

S. No.	Pedigree	Mean Leaf injury rating (LIR on 1-9 scale)	S. No.	Pedigree	Mean Leaf injury rating (LIR on 1-9 scale)
123	SOS1YQBB26-B	5.3±0.3(0.081)	154	G18QC8-36	5.9±0.3(0.243)
124	HKI586-1WG33	6.7±0.4(0.480)	155	CML282	6.0±0.4(0.270)
125	CML116	7.0±0.3(0.570)	156	CML303	7.7±0.4(0.822)
126	DMRPP1	8.3±0.5(1.098)	157	CML451(susceptible check)	8.2±0.3(1.042)
127	HKI577	6.9±0.6(0.540)	158	**WNZPBTL9**	3.0±0.8(-1.042)
128	CML448	8.6±0.4(1.266)	159	CML376	6.6±0.4(0.450)
129	EC618222	7.5±0.7(0.750)	160	CML189	6.0±0.3(0.270)
130	CML73	6.5±0.3(0.420)	161	(CML161/CML165)BBB7	7.0±0.4(0.570)
131	**CML305**	**4.7±0.2(-0.081)**	162	HKI209	6.8±0.4(0.510)
132	HKI1532	6.3±0.3(0.360)	163	CML317	5.5±0.4(0.135)
133	CML371	6.0±0.4(0.270)	164	**EC598464**	**4.3±0.3(-0.189)**
134	CML384X176F3- 100-9	7.7±0.5(0.822)	165	CML256	7.1±0.6(0.606)
135	V335	5.6±0.2(0.162)	166	CML479	6.8±0.4(0.510)
136	HKI163EARLY	7.5±0.4(0.750)	167	CML90	5.3±0.3(0.081)
137	**CML338**	**3.6±0.2(-0.390)**	168	**CML494**	**5.0±0.3(0.000)**
138	CML312	6.0±0.3(0.270)	169	**HKI2-6-2-4**	**4.3±0.7(-0.189)**
139	HKI326-3	6.3±0.4(0.360)	170	EC655779	6.6±0.3(0.450)
140	CML491-B6	7.3±0.9(0.678)	171	CML23	4.6±0.6(-0.108)
141	P63C2-BBB-17B	6.8±0.5(0.510)	172	CML292	5.8±0.3(0.216)
142	CML140	8.5±0.2(1.210)	173	CML50	5.2±0.4(0.054)
143	CM500 (Resistant Check)	3.1±0.2(-0.540)	174	**CML424**	**4.4±0.5(-0.162)**
144	CML212	6.7±0.3(0.480)	175	EC614829	6.2±0.4(0.330)
145	CML227	6.1±0.3(0.300)	176	**CLQRCYQ42**	**5.0±0.9(0.000)**
146	CLQRCWQ16-B6	6.3±0.4(0.360)	177	**CML 491**	**4.4±0.4(-0.162)**
147	CML288	6.7±0.5(0.480)	178	CML402	6.4±0.3(0.390)
148	**CML73**	**4.8±0.9(-0.050)**	179	CML420	7.3±0.5(0.678)
149	CML435	6.7±0.3(0.480)	180	HKI335	7.0±0.3(0.570)
150	CML335	5.6±0.4(0.162)	181	CML12	7.4±0.5(0.714)
151	CML408	6.5±0.3(0.420)	182	**CML327**	**5.0±0.3(0.000)**
152	HKI287	7.0±0.6(0.570)	183	CML289	5.7±0.3(0.189)
153	BML7	7.3±0.4(0.678)	184	CML451(susceptible check)	7.6±0.4(0.786)

S. No.	Pedigree	Mean Leaf injury rating (LIR on 1-9 scale)	S. No.	Pedigree	Mean Leaf injury rating (LIR on 1-9 scale)
185	CML482	7.4±0.6(0.714)	204	CLQ6310	6.7±0.6(0.480)
186	HYBRID 9415-BBB-4	7.3±0.6(0.678)	205	G33QC20-BBB-37	5.2±0.4(0.054)
187	CML238	7.7±0.4(0.822)	206	HKISCSTPINK	6.0±0.7(0.270)
188	S00TLWQHGBBB35-B	7.1±0.3(0.606)	207	HKI1831	6.7±0.6(0.480)
189	G24QC19BBB-4	7.3±0.5(0.678)	208	COMPMODBCOBBB-48	5.5±0.3(0.135)
190	CML187B	7.0±0.5(0.570)	209	CML336	5.9±0.4(0.243)
191	CM500 (Resistant Check)	2.6±0.3(-0.714)	210	CML18	7.0±0.5(0.570)
192	G31QC2BB23	6.1±0.3(0.300)	211	EC440414	6.3±0.4(0.360)
193	CML481	7.6±0.5(0.786)	212	CML298	7.0±0.4(0.570)
194	CML290	5.2±0.5(0.054)	213	P70C0BBB-5	6.4±0.4(0.390)
195	CML411	5.7±0.6(0.189)	214	CML55BB	7.0±0.5(0.570)
196	CML120	6.4±0.3(0.390)	215	CML485BBB	6.5±0.2(0.420)
197	**HKI209**	**4.2±0.3(-0.216)**	216	CML451(susceptible check)	8.3±0.2(1.098)
198	CML344BB	5.9±0.5(0.243)	217	CLQRCY47B6	6.1±0.3(0.300)
199	**CML111BBB**	**3.9±0.3(-0.300)**	218	CML249	6.2±0.3(0.330)
200	S87P66Q-BBB-30	5.4±0.4(0.108)	219	CML423	7.5±0.5(0.750)
201	**LTP1**	**4.4±0.5(-0.162)**	220	CML165BBB	8.9±0.1(1.434)
202	CML114	5.3±0.2(0.081)	221	HKI 586	5.5±0.4(0.135)
203	DMRN7CH7	5.9±0.3(0.243)	222	**P390AM/CMLC4F230-B-2**	**3.2±0.2(-0.510)**
	Mean			**6.18**	**0.348**

Figures in parenthesis are transformed values. Bold entries are resistant ones.

Standard Error of differences Critical Differences (Between)	
Two Control Treatments	0.15(0.065)
	0.69(0.298)
	0.42(0.180)
Two Test Treatments (Same Block)	0.34(0.145)
	1.55(0.666)
	0.93(0.402)
Two Test Treatments(Different Blocks)	0.41(0.177)
	1.90(0.816)
	1.14(0.492)
A Test Treatment and A Control Treatment	0.30(0.129)
	1.38(0.596)
	0.83(0.359)

BIOCHEMISTRY

Biochemistry

Maize is a major cereal crop for both livestock feed and human nutrition, worldwide. It provides sufficient quantities of carbohydrates, protein, fat, minerals and vitamins to the consumers. The major nutritional component of the maize kernel is starch, which occupies approximately 70 percent of the kernel weight. Starch is defined as the polymeric carbohydrate consisting of glucose unit joined together through α-D (1- 4) glucoside bonds. It is mainly present in the kernel endoperm. The starch in maize is made up of two glucose polymers: amylose, an essentially linear molecule, and amylopectin, a branched form. The composition of maize starch is genetically controlled. In normal maize, amylose makes up 25 to 30 percent of the starch and amylopectin makes up 70 to 75 percent. Waxy maize contains a starch that is 100 percent amylopectin. An endosperm mutant called amylose-extender (ae) induces an increase in the amylose proportion of the starch to 50 percent and higher. Other carbohydrates present in maize kernel are simple sugars and complex carbohydrates. Simple sugars are present in the germ as well as endosperm and comprised of glucose, sucrose and fructose in quantities ranging from 1 to 6 percent of the kernel weight. Complex carbohydrate content of the maize kernel comes from the pericarp and the tip cap, although it is also provided by the endosperm cell walls and to a smaller extent the germ cell walls. It is composed of hemicellulose (≈75 %), cellulose (≈25 %) and negligible concentrations of lignin. Protein is the second largest and very important component of maize kernel. It is mainly found in the endosperm, followed by germ to a lesser extent. The protein quality of normal maize endosperm is poor as it is lacking in two essential amino acids such as tryptophan and lysine. The discovery of the association of *opaque-2* gene with improved protein quality of maize endosperm led to the development of quality protein maize (QPM). Therefore, in the QPM development programme, the analysis of maize endosperm for protein quality is of paramount importance. The oil content of the maize kernel comes mainly from the germ, although very small concentrations are also contributed by the endosperm. The oil content in normal maize ranges from 2 - 6 per cent, whereas high oil maize provides more than 6 per cent of oil. High-oil maize has a greater feed efficiency than normal maize due to its higher caloric content. Moreover, corn oil is nutritionally superior to other edible oils because of its better fatty acid composition. It also contains natural anti-oxidants such as vitamin E which is highly beneficial for use in human nutrition. Maize is rich in a number of carotenoids such as beta-carotene, zeaxanthene, lutene, cryptoxanthene which have highly diverse health benefits.

1. EVALUATION OF QPM GERMPLASM RECEIVED FROM DMR, NEW DELHI

Development of quality protein maize (QPM) requires continuous monitoring of protein quality and thus needed a strong support from biochemical laboratory. A set

of 109 inbreds, received from DMR, New Delhi, were analyzed for protein quality. Protein quality (protein, tryptophan and lysine) was analyzed in the endosperm, as it is deficient in essential amino acids. The kernels were screened on the basis of opaqueness to select the representative sample. Out crossed as well as non uniform grains were discarded. The endosperm was separated, defatted and processed for protein quality. The tryptophan and lysine as expressed as percentage of endosperm protein. Maximum number of lines were found to be possess threshold concentration of protein quality (Table 1).

Table 1: Evaluation of maize germplasm for protein quality

S. No.	Pedigree	Protein (%)	Tryptophan (%)	Lysine (%)	Sp. Gr.	100 K. Wt.
1	DQL 2001	9.08	0.66	3.83	1.29	28.40
2	DQL2002	11.25	0.67	3.89	1.05	29.44
3	DQL 2002-1	9.24	0.78	3.61	1.15	17.27
4	DQL 2003	9.72	0.74	3.33	1.095	21.89
5	DQL 2006	9.82	0.71	4.12	1.00	18.02
6	DQL 2007	9.14	0.78	4.10	1.10	16.39
7	DQL 2008	12.33	0.59	3.62	1.09	10.33
8	DQL 2009	11.62	0.64	3.95	1.14	13.98
9	DQL 2010	9.87	0.61	2.50	1.15	16.14
10	DQL 2011	8.60	0.72	3.89	1.35	21.64
11	DQL 2012	11.66	0.60	2.73	1.18	16.57
12	DQL 2016	10.70	0.65	2.89	1.29	23.27
13	DQL 2017	10.14	0.70	3.80	1.17	22.12
14	DQL 2019	8.96	0.70	3.72	1.11	18.95
15	DQL 2020	10.68	0.66	3.59	1.05	18.86
16	DQL 2022	9.19	0.74	3.00	1.19	16.69
17	DQL 2023	9.47	0.74	2.99	1.27	16.45
18	DQL 2024	10.56	0.62	2.89	1.12	17.88
19	DQL 2025	8.33	0.70	3.50	1.35	17.49
20	DQL 2026	8.88	0.69	3.47	1.28	20.51
21	DQL 2027	7.71	0.89	3.37	1.16	15.07
22	DQL 2028	7.94	0.86	3.50	1.37	21.94
23	DQL 2029	7.27	0.93	4.10	1.25	19.99
24	DQL 2030	8.21	0.79	4.23	1.59	15.90
25	DQL 2031	10.50	0.63	3.19	1.22	24.46
26	DQL 2032	12.82	0.62	2.78	1.23	23.59
27	DQL 2033	9.91	0.60	3.12	1.02	18.41

28	DQL 2034	8.40	0.68	3.70	1.10	20.85
29	DQL 2036	11.20	0.67	3.01	1.10	19.74
30	DQL 2037	7.41	0.84	4.03	1.24	26.05
31	DQL 2038	10.88	0.55	2.20	1.30	23.34
32	DQL 2039	9.25	0.63	2.59	1.04	20.87
33	DQL 2041	11.53	0.62	3.10	1.10	22.04
34	DQL 2041-1	7.98	0.83	4.21	1.30	15.58
35	DQL 2042	8.91	0.76	3.42	1.21	25.50
36	DQL 2043	10.11	0.68	3.00	1.45	15.91
37	DQL 2044	9.34	0.65	4.10	1.34	14.78
38	DQL 2045	10.30	0.67	3.87	1.10	12.04
39	DQL 2046	8.27	0.74	3.97	1.12	20.08
40	DQL 2047	10.80	0.56	2.35	1.34	16.12
41	DQL 2048	9.61	0.69	3.41	1.17	22.23
42	DQL 2050	8.05	0.66	2.79	1.25	18.70
43	DQL 2051	8.34	0.76	3.29	1.10	23.10
44	DQL 2052	9.74	0.72	3.17	1.10	16.46
45	DQL 2054	9.76	0.75	3.89	1.16	20.81
46	DQL 2054-1	12.02	0.60	2.95	1.13	21.47
47	DQL 2056	10.48	0.65	2.65	1.25	15.01
48	DQL 2057	11.65	0.60	2.83	1.17	17.59
49	DQL 2058	12.26	0.52	2.31	1.21	18.19
50	DQL 2059	9.91	0.70	2.93	1.10	17.42
51	DQL 2060	6.50	0.87	4.00	1.00	19.94
52	DQL 2061	9.48	0.72	3.81	1.16	17.34
53	DQL 2062	8.62	0.81	4.35	1.10	24.20
54	DQL 2062-1	9.13	0.74	4.10	1.87	24.26
55	DQL 2064	9.00	0.67	3.17	1.02	24.49
56	DQL 2067	9.13	0.70	3.90	1.27	20.25
57	DQL 2068	9.77	0.67	3.10	1.18	16.46
58	DQL 2070	9.21	0.64	2.98	1.17	16.40
59	DQL 2072	10.39	0.66	3.12	1.16	21.99
60	DQL 2073	10.10	0.61	2.74	1.14	26.03
61	DQL 2074	9.12	0.71	3.62	1.11	26.75
62	DQL 2076	9.64	0.74	3.66	1.11	25.49
63	DQL 2077	12.00	0.61	3.12	1.11	30.97
64	DQL 2078	9.90	0.75	3.31	1.14	15.98

65	DQL 2080	11.22	0.62	2.62	1.60	30.04
66	DQL 2081	10.34	0.63	2.92	1.17	25.70
67	DQL 2082	10.13	0.64	3.01	1.06	23.32
68	DQL 2083	10.95	0.71	3.71	1.12	24.42
69	DQL 2084	9.24	0.80	4.12	1.02	24.47
70	DQL 2085	8.35	0.77	3.54	1.14	23.90
71	DQL 2086	10.45	0.66	2.99	1.09	26.42
72	DQL 2087	10.62	0.66	3.00	1.07	23.59
73	DQL 2088	11.9	0.63	2.50	1.12	24.72
74	DQL 2089	9.21	0.81	4.03	1.34	21.48
75	DQL 2091	9.31	0.71	2.80	1.14	32.00
76	DQL 2092	8.96	0.71	3.80	1.14	27.00
77	DQL 2093	11.80	0.52	2.75	1.19	17.88
78	DQL 2094	11.69	0.58	2.53	1.04	16.56
79	DQL 2095	10.47	0.68	2.78	1.00	19.95
80	DQL 2096	11.30	0.64	2.79	1.14	27.44
81	DQL 2097	10.79	0.65	3.47	1.14	29.66
82	DQL 2100	11.45	0.62	2.80	1.15	17.26
83	DQL 2102	9.48	0.76	3.71	1.06	22.15
84	DQL 2104	8.42	0.76	3.29	1.10	22.07
85	DQL 2105	11.5	0.67	2.91	1.12	17.89
86	DQL 2107	10.84	0.61	2.53	1.22	20.67
87	DQL 2108	6.41	0.68	2.71	1.22	26.77
88	DQL 2109	9.82	0.71	3.12	1.16	27.81
89	DQL 2110	12.42	0.53	2.37	1.31	26.21
90	DQL 2111	10.57	0.62	3.31	1.22	19.53
91	DQL 2112	8.44	0.74	3.79	1.16	23.27
92	DQL 2114	7.54	0.73	3.73	1.08	20.92
93	DQL 2115	9.57	0.74	2.99	1.26	25.26
94	DQL 2116	10.61	0.69	2.92	1.03	19.52
95	DQL 2117	9.01	0.62	2.89	1.09	21.71
96	DQL 2118	11.03	0.60	2.70	1.04	29.1
97	DQL 2119	10.14	0.64	2.70	1.04	22.93
98	DQL 2120	8.49	0.62	2.70	1.16	23.21
99	DQL 2121	8.58	0.65	3.05	1.21	25.46
100	DQL 2122-1	7.89	0.71	3.57	1.21	26.58
101	DQL 2123	12.10	0.55	2.44	1.00	25.91

102	DQL 2125	9.79	0.65	2.73	1.18	16.47
103	DQL 2126	10.44	0.62	2.61	1.26	31.39
104	DQL 2127	9.67	0.72	3.58	1.13	25.94
105	DQL 2128	9.93	0.67	2.71	1.21	21.80
106	DQL 2129	11.53	0.64	2.71	0.87	15.6
107	DQL 2131	10.73	0.72	3.60	1.08	20.45
108	DQL 2132	11.26	0.55	2.41	1.08	23.7
109	DQL 2133	10.47	0.65	3.01	1.09	23.87

Table 2: Biochemical evaluation of normal maize germplasm

A set of 80 inbreds were analyzed for protein, oil and starch. The purpose was to identify some promising material for these characters. A wide variability was observed in the quality parameters. The results are expressed as percentage of mature maize kernels (Table 2). The promising germplasm is expressed in Table 3.

S. No.	Genotypes	Protein (%)	Oil (%)	Starch (%)
1.	DML 70	12.16	4.47	73.25
2.	DML 175	11.43	5.22	70.62
3.	DML182	10.66	3.72	75.12
4.	DML 202	12.32	3.96	68.64
5.	DML 174	12.46	4.28	74.31
6.	DML114	10.93	4.37	73.25
7.	DML276	12.78	4.36	69.85
8.	DML 171	12.89	2.64	71.96
9.	DML 187	12.82	5.17	72.89
10.	DML 214	12.18	3.10	75.88
11.	DML 86	10.70	4.24	72.89
12.	DML 261	12.71	2.89	71.01
13.	DML 284	12.83	3.69	69.38
14.	DML 122	12.08	3.19	68.70
15.	DML 135	9.71	3.39	70.07
16.	DML 36	12.53	3.34	68.01
17.	DML 43	13.04	3.26	61.92
18.	DML 121	11.99	4.57	67.00

19.	DML 133	12.42	4.00	70.86
20.	Dpcl 100	11.88	3.76	70.51
21.	DML 187	13.15	3.91	68.37
22.	DML 5	11.90	3.31	72.37
23.	DML 205	9.55	3.19	69.77
24.	DML 158	10.65	2.89	69.73
25.	DML 126	12.89	4.55	67.13
26.	DML 153	11.79	4.30	69.17
27.	DML 75	11.48	3.94	71.47
28.	DML 224	9.71	3.85	72.43
29.	DML 120	10.75	2.81	75.69
30.	DML 46	9.87	2.72	74.89
31.	DML 127	12.15	3.14	68.13
32.	DML 54	11.75	2.95	74.18
33.	DML 98	12.74	2.99	67.72
34.	DML 12	11.73	4.65	72.83
35.	DML 81	11.97	2.81	72.79
36.	DML 191	10.83	2.85	65.05
37.	DML 218	10.19	2.62	75.28
38.	DML 48	10.61	2.78	74.68
39.	DML 57	9.73	2.65	62.19
40.	DML 202	11.59	5.56	75.48
41.	DML 137	11.71	3.87	72.33
42.	DML 88	11.68	3.63	69.71
43.	KDMI 10	11.49	2.91	67.40
44.	LM 16	9.75	4.23	73.93
45.	DML 14	10.84	4.13	68.44
46.	DQL 1000	8.24	----	----
47.	VIL 29	9.62	3.85	70.64
48.	DML 136	10.78	5.24	66.42
49.	CML 353-1	10.73	3.96	71.18

50.	CML 292-1-1	12.47	3.19	72.03
51.	CML 116	11.41	3.21	74.04
52.	CML 196	10.42	3.62	71.56
53.	HKI 1105	11.40	3.55	72.60
54.	HKI 323	11.98	2.31	68.00
55.	DML 198	10.24	2.22	73.28
56.	CML 24-1	10.92	3.32	74.63
57.	CML 375	11.90	2.72	71.14
58.	DML 181	10.83	2.85	70.71
59.	DML 183	12.76	2.81	71.65
60.	DML 232	11.03	2.75	73.36
61.	DML 192	10.97	----	72.58
62.	DML 60	9.38	2.83	74.69
63.	DML 94	11.56	2.79	69.48
64.	DML 134	----	----	71.88
65.	DML 289	10.02	----	---
66.	DML 227	11.52	2.61	76.31
67.	DML 117	12.98	3.35	68.14
68.	DML 179	11.03	3.14	75.86
69.	DML 233	11.67	2.70	73.70
70.	DML 235	12.79	3.25	71.31
71.	DML 233	11.88	---	---
72.	DML 216	9.69	3.00	75.81
73.	DML 237	8.81	----	----
74.	DML 180	12.67	3.60	74.81
75.	DML 13	11.63	3.52	73.86
76.	DML 194	8.12	3.87	75.29
77.	DMR DE 6-4	11.16	3.56	75.71
78.	DML 94	12.85	4.02	69.43
79.	DML 226	13.18	2.62	68.29
80.	DML 37	12.74	4.85	67.34

Table 3: Promising high starch lines

S. No.	Genotypes	Starch (%)
1.	DML 70	73.25
2.	DML 114	73.25
3.	DML 198	73.28
4.	DML 232	73.36
5.	DML 233	73.70
6.	LM 16	73.93
7.	CML 116	74.04
8.	DML 54	74.18
9.	DML 174	74.31
10.	CML 24-1	74.63
11.	DML 48	74.68
12.	DML 60	74.69
13.	DML 46	74.89
14.	CML 121	75.08
15.	DML 182	75.12
16.	DML 218	75.28
17.	DML 194	75.29
18.	DML 202	75.48
19.	DML 120	75.69
20.	DMRPE-6	75.71
21.	DML 216	75.81
22.	DML 179	75.86
23.	DML 214	75.88
24.	DML 227	76.31

Appendix-A

Maize Area, Production and Yield

State/ UT	Season	Area('000 Hectares)			Production ('000 Tonnes)			Yield (Kg./Hectare)		
		2009-10	2010-11	2011-12*	2009-10	2010-11	2011-12*	2009-10	2010-11	2011-12*
Andhra Pradesh	Kharif	502.0	440.0	531.0	997.0	1641.0	1493.0	1986	3730	2812
	Rabi	281.0	304.0	333.0	1765.0	2315.0	2165.0	6281	7615	6502
	Total	783.0	744.0	864.0	2762.0	3956.0	3658.0	3527	5317	4234
Arunachal Pradesh	Kharif	37.5	39.3	40.5	51.1	54.9	58.1	1363	1397	1434
	Rabi	6.1	5.8	6.0	9.1	9.8	10.4	1485	1690	1736
	Total	43.6	45.1	46.5	60.2	64.7	68.5	1380	1435	1473
Assam	Kharif	19.5	19.8	21.3	14.1	14.3	15.3	726	722	719
Bihar	Autumn	227.0	231.3	263.9	402.4	417.8	622.4	1773	1806	2358
	Rabi	404.7	414.2	411.0	1076.3	1021.8	988.3	2660	2467	2404
	Total	631.7	645.5	675.0	1478.7	1439.6	1610.7	2341	2230	2386
Chattisgarh	Kharif	102.4	102.7	104.0	143.3	185.6	172.0	1399	1807	1654
Goa	Kharif	0.1	0.0		0.6	0.0		6000		
Gujarat	Kharif	411.0	423.0	387.0	396.0	692.0	539.0	964	1636	1393
	Rabi	86.0	78.0	129.0	137.0	128.3	247.0	1593	1645	1915
	Total	497.0	501.0	516.0	533.0	820.3	786.0	1072	1637	1523
Haryana	Kharif	12.0	10.0	9.0	27.0	19.0	24.0	2250	1900	2667
Himachal Pradesh	Kharif	295.4	296.4	294.2	543.2	670.9	715.4	1839	2263	2432
Jammu & Kashmir	Kharif	311.0	308.2	314.0	487.0	527.7	505.0	1566	1712	1608
Jharkhand	Autumn	148.4	207.2	207.4	163.2	244.8	305.6	1100	1181	1473
	Rabi	14.8	8.2	8.1	27.5	16.9	15.9	1858	2061	1970
	Total	163.2	215.4	215.5	190.7	261.7	321.5	1168	1215	1492
Karnataka	Kharif	1108.0	1141.0	1206.0	2676.0	4011.0	3644.0	2415	3515	3022
	Rabi	104.0	116.0	143.0	260.0	330.0	441.0	2500	2845	3084
	Summer	28.0	31.0		77.0	103.0		2750	3323	
	Total	1240.0	1288.0	1349.0	3013.0	4444.0	4085.0	2430	3450	3028
Kerala				0.1						
Madhya Pradesh	Kharif	832.3	830.6	862.8	1045.2	1051.5	1287.4	1256	1266	1492
Maharashtra	Kharif	673.0	731.0	736.0	1531.0	2209.0	2127.0	2275	3022	2890
	Rabi	121.0	160.0	145.0	297.0	393.0	306.0	2455	2456	2110
	Total	794.0	891.0	881.0	1828.0	2602.0	2433.0	2302	2920	2762
Manipur	Kharif	4.8	22.4	20.0	11.7	41.5	35.4	2436	1856	1768
	Rabi			4.9			10.5			2165
	Total			24.9			45.9			
Meghalaya	Kharif	17.2	17.3	17.4	26.3	25.9	26.5	1529	1499	1529
Mizoram	Kharif	8.3	8.7	6.7	11.1	13.1	8.1	1337	1502	1214
	Rabi	0.2	0.3	0.2	0.4	0.5	0.3	1667	1667	1238
	Total	8.5	9.0	6.9	11.5	13.6	8.4	1347	1508	1214

State/ UT	Season	Area('000 Hectares)			Production ('000 Tonnes)			Yield (Kg./Hectare)		
		2009-10	2010-11	2011-12*	2009-10	2010-11	2011-12*	2009-10	2010-11	2011-12*
Nagaland	Kharif	68.1	68.4	68.5	73.2	134.0	134.3	1075	1958	1960
Orissa	Kharif	78.9	112.7	98.9	170.0	286.3	202.3	2155	2540	2046
	Rabi	2.3	4.5	4.0	5.1	12.5	9.9	2247	2778	2496
	Total	81.2	117.2	102.9	175.1	298.8	212.2	2157	2549	2063
Punjab	Kharif	139.0	133.0	126.0	475.0	491.0	502.0	3417	3692	3984
Rajasthan	Kharif	1096.2	1143.1	1039.1	1144.7	2052.9	1644.9	1044	1796	1583
	Rabi	0.7	0.0	6.5	1.0	0.0	22.2	1429		3434
	Total	1096.9	1143.1	1045.6	1145.7	2052.9	1667.0	1044	1796	1594
Sikkim	Kharif	39.5	40.2	40.0	66.0	66.2	66.2	1671	1648	1657
Tamil Nadu	Kharif	161.2	143.8	176.3	693.4	554.8	1001.7	4301	3858	5682
	Rabi	83.0	86.7	104.3	450.9	472.7	693.8	5431	5452	6649
	Total	244.2	230.5	280.6	1144.3	1027.5	1695.5	4685	4458	6042
Tripura	Kharif	2.0	3.1	3.7	2.0	4.1	5.1	1006	1322	1353
Uttar Pradesh	Kharif	704.0	748.0	745.0	1025.0	1098.0	1232.0	1456	1468	1654
	Rabi	5.0	6.0	42.0	14.0	16.0	76.0	2800	2667	1810
	Total	709.0	754.0	787.0	1039.0	1114.0	1308.0	1465	1477	1662
Uttarakhand	Kharif	28.0	28.3	28.0	38.0	42.5	41.0	1357	1503	1464
	Rabi		0.1			0.1			1000	
	Total	28.0	28.4	28.0	38.0	42.6	41.0	1357	1501	1464
West Bengal	Kharif	36.3	32.3	34.1	79.3	83.6	77.3	2183	2588	2270
	Rabi	23.6	17.2	63.8	132.5	84.4	286.8	5619	4904	4497
	Summer	37.8	39.1		173.4	184.4		4587	4716	
	Total	97.7	88.6	97.8	385.2	352.3	364.1	3942	3977	3722
A & N Islands	Kharif	0.2	0.2	0.2	0.4	0.4	0.3	2000	2476	2125
D & N Haveli	Kharif			0.1			0.1			1000
	Rabi			0.0			0.0			1000
	Total			0.2			0.2			
Delhi	Kharif	0.0	0.1	0.0	0.0	3.6	0.8	0	36000	20750
All India	Kharif	7063.4	7282.0	7381.2	12293.3	16637.4	16486.3	1740	2285	2234
	Rabi	1198.2	1271.1	1400.7	4426.2	5088.4	5273.1	3694	4003	3765
	Total	8261.6	8553.2	8781.9	16719.5	21725.8	21759.4	2024	2540	2478

* Final estimate



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