

**THIRTY FIFTH
ANNUAL RABI MAIZE PROGRESS REPORT**

2009-2010

**DIRECTORATE OF MAIZE RESEARCH
PUSA CAMPUS, NEW DELHI-110012**

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SUMMARY

All India coordinated Research Project (AICRP) on Maize conduct trials in both Kharif and Rabi seasons across different agro-climatic conditions of the country. Rabi maize is becoming more and more important because of high yield potential and less incidence of pests and diseases. It is very popular in states of Bihar, West Bengal, Andhra Pradesh etc. Further due to changing climate and lowering water table Rabi maize has become a viable alternative to Rabi rice because of its high yield especially in Andhra Pradesh. For example in Guntur district of Andhra Pradesh Rabi maize is covered in large area under zero tillage after the harvest of Kharif rice, the Guntur district average maize productivity is close to 9t/ha which is more than per day maize productivity of USA. The coordinated trials during Rabi season will identify high yield potential single cross maize hybrids suitable for Rabi season across different zones.

Breeding:

During Rabi 2009-10 coordinated trials 36 entries of different maturity groups were evaluated in 9 trials across different zones. Out of which 7 and 5 entries were promoted from initial evaluation trial (IET) to advanced evaluation trial first year (AET I) and AET I to advanced evaluation trial second year (AET II) respectively based on at least 10% yield superiority over the best check of the zone. In quality protein (QPM) trial one entry, VEHQPM-3018 was promoted from QPM 2 to QPM 3. No entries were promoted from Trial 2, Trail 3, Trail 6 and QPM 1. Two entries *viz.*, MON-29, X6B302 were shown 11% and 14% yield superiority over best check Seed Tech 2324 in zone II and zone IV respectively, which may be considered for identification to release during 2011 annual maize workshop.

Agronomy:

Test entry Mon-29 and X6B303 were significantly superior to best check (Seed Tech-2324) at Banswara and Ludhiana. However, X6B302 produced significantly higher yield at Baharaich and Kolhapur, while Mon-29 produced significantly higher yield at Udaipur. Response of maize hybrids to fertilizer levels (200:80:80) was significant over to 100:50:50 at all locations and at par with 150:65:65 at Banswara, Delhi, Ludhiana.

Entomology:

Out of 21 maize germplasms screened under artificial infestation of stem borer, *C. partellus*, at Kolhapur, 6 (six) entries viz.: DMR-228 (2.90), DMR -234 (3.00), DMR – 237 (2.70), DMR -241 (2.25), DMR – 243 (2.42) and DMR – 244 (2.90) were found to be the least susceptible. The remaining 12 (twelve) entries were found to be moderately susceptible to the stem borer infestation. At Hyderabad these germplasm were screened for *Sesamia inferens*, all of them were found to be highly susceptible to *S. inferens*.

For the management of pests maize crop was grown with Napier Millet as trap crop and compared with chemical treatment in sole maize. The incidence of *Sesamia* was considerably higher in trap crop. Like was cauliflower was used as trap crop for *Spodoptera* which again was found to attract this pest thus reducing in maize crop.

Out of 190 maize inbreds screened under artificial infestation of *S. inferens* 42, 110 and 37 entries were found to be least, moderately and highly susceptible respectively to pink borer infestation.

Pathology:

During Rabi 2009 -10, various maize genotypes were screened and evaluated against various diseases viz Turcicum Leaf Blight (TLB), Sorghum Downy Mildew, (SDM), and Post Flowering Stalk Rots (PFSR) in one coordinated trial no. (11) in different centers of maize under artificial epiphytotic conditions.

In maize genotypes evaluation program, some genotypes were identified with multiple disease resistant were PAC-746, HKH-315, X35A035, MON-30, KMH-25K55 found resistance against TLB, C. Rust and PFSR, DMRH-2, JH-8277, JH-9078, HKH-311, HQPM-1 (C), X6B302 found resistant against TLB and C. Rust, X35A019, HKH-406 were resistant against C. Rust and PFSR, BIO-265 against TLB and PFSR. Whereas genotypes found resistant against single diseases were HKH-312, JH-9072, JH-9124, MAIZE X440, PRO-378, HKH-405, VEHQPM -3018, MON-29, KMH-Super 244, SEED TECH 2324 (C), HQPM-5 (C), VEHQPM -3027 for TLB, DMRH-1, HKH-301, HKH-400, HM 10 (C), MON-31 (Filler), HQPM-7 (C),

MON-29, MON-31, MON-31 (Filler), HM 8 (C), HKH-307 found resistant for C. Rust whereas VEH-3019, MAIZE 115-08-01 were found resistant against PFSR.

In Inbred line evaluation programme, 18 High oil lines of maize were evaluated against TLB at Mandya. Out of them two lines viz, DMHOC – 14 – X – NA – 2008 K and DMHOC – 15 – X – NA – 2008 K were found resistant against TLB. In another programme 358 inbred lines were screened against TLB at Mandya out of them 127 lines were found resistant.

TRIAL NO 1			IET (L)		
YEAR & SEASON			LATE MATURITY (ALL ZONES)		
NO. OF ROWS			2009-2010 RABI		
ROW LENGTH			2		
NO. OF REPLICATION			4 METRE		
			3		
			REPLICATIONS		
ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3
1	BULAND (C)	DMR -101	2014	2035	2059
2	HM 10 (C)	DMR -102	2005	2030	2052
3	HM 9 (C)	DMR -103	2018	2037	2044
4	HM 8 (C)	DMR -104	2011	2036	2048
5	DMRH-2	DMR -105	2008	2024	2057
6	MAIZE 115-08-01	DMR -106	2017	2034	2043
7	X35A035	DMR -107	2010	2029	2041
8	VEH-3019	DMR -108	2009	2033	2050
9	X35A019	DMR -109	2012	2023	2056
10	JH-8277	DMR -110	2002	2031	2055
11	HKH-406	DMR -111	2015	2025	2047
12	DMRH-1	DMR -112	2013	2028	2045
13	PAC-746	DMR -113	2016	2038	2042
14	JH-9072	DMR -114	2019	2027	2053
15	JH-9124	DMR -115	2006	2039	2054
16	JH-9078	DMR -116	2003	2026	2060
17	PRO-378	DMR -117	2001	2040	2046
18	MAIZE X440	DMR -118	2020	2021	2051
19	PRO-379	DMR -119	2004	2032	2058
20	BIO-265	DMR -120	2007	2022	2049
LOCATION	18				
BREEDING	LUDHIANA, KARNAL, DELHI (DMR), JOHRAT, KANPUR. VARANASI, BAHARAICH DHOLI, RANCHI, HYDERABAD, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, GODHRA, BANSWARA, BHUBANESHWAR, CHHINDWARA				

TRIAL NO 2			IET (M)		
YEAR&SEASON			MEDIUM MATURITY (ALL ZONES)		
NO. OF ROWS			2009-2010 RABI		
ROW LENGTH			2		
NO. OF REPLICATION			4 METRE		
			3		
			REPLICATIONS		
ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3
1	HKH-315	DMR -141	2113	2118	2127
2	HM 8 (C)	DMR -142	2115	2120	2129
3	HM 9 (C)	DMR -143	2117	2121	2128
4	HKH-312	DMR -144	2112	2124	2125
5	BIO 9637	DMR -145	2116	2123	2130
6	HKH-400	DMR -146	2114	2122	2126
7	HKH-311	DMR -147	2111	2119	2131
LOCATION	18				
BREEDING	LUDHIANA, KARNAL, DELHI (DMR), JOHRAT, KANPUR. VARANASI, BAHARAICH DHOLI, RANCHI, HYDERABAD, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, GODHRA, BANSWARA, BHUBANESHWAR, CHHINDWARA				

TRIAL NO 3			IET (E)		
YEAR&SEASON			EARLY MATURITY (ALL ZONES)		
NO. OF ROWS			2009-2010 RABI		
ROW LENGTH			2		
NO. OF REPLICATION			4 METRE		
			4		
			REPLICATIONS		
ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3
1	HKH-305	DMR -161	2154	2158	2162
2	HKH-301	DMR -162	2152	2156	2163
3	HM 11 (C)	DMR -163	2153	2160	2164
4	TMC 89-1	DMR -164	2151	2159	2165
5	BULAND	DMR -165	2155	2157	2161
LOCATION	18				
BREEDING	LUDHIANA, KARNAL, DELHI (DMR), JOHRAT, KANPUR. VARANASI, BAHARAICH DHOLI, RANCHI, HYDERABAD, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, GODHRA, BANSWARA, BHUBANESHWAR, CHHINDWARA				

			AET 1ST (L)		
TRIAL NO 4	LATE MATURITY (ALL ZONES)				
YEAR&SEASON	2009-2010 RABI				
NO. OF ROWS	4				
ROW LENGTH	4 METRE				
NO. OF REPLICATION	3				
	REPLICATIONS				
ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3
1	KMH-3669	DMR -121	2067	2072	2083
2	MON-31	DMR -122	2063	2078	2081
3	HM 10 (C)	DMR -123	2061	2075	2087
4	MON-30	DMR -124	2065	2070	2080
5	HM 9 (C)	DMR -125	2062	2071	2085
6	HM 8 (C)	DMR -126	2069	2077	2079
7	KMH-25K55	DMR -127	2066	2073	2086
8	SEED TECH 2324 (C)	DMR -128	2064	2074	2084
9	BULAND (C)	DMR -129	2068	2076	2082
LOCATION	18				
BREEDING	LUDHIANA, KARNAL, DELHI (DMR), JOHRAT, KANPUR. VARANASI, BAHARAICH DHOLI, RANCHI, HYDERABAD, COIMICOIMBATORE, VAGARAI, ARBHAVI, AKOLA GODHRA, BANSWARA, BHUBANESHWAR, CHHINDWARA				

			AET 1ST (M)		
TRIAL NO 5	MEDIUM MATURITY (ALL ZONES)				
YEAR&SEASON	2009-2010 RABI				
NO. OF ROWS	4				
ROW LENGTH	4 METRE				
NO. OF REPLICATION	3				
	REPLICATIONS				
ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3
1	HM 9 (C)	DMR -151	2132	2140	2149
2	HM 8 (C)	DMR -152	2135	2142	2145
3	KMH-Super 244	DMR -153	2136	2143	2146
4	BIO 9637 (C)	DMR -154	2134	2138	2148
5	HKH-307	DMR -155	2137	2141	2147
6	BULAND	DMR -156	2133	2139	2144
LOCATION	18				
BREEDING	LUDHIANA, KARNAL, DELHI (DMR), JOHRAT, KANPUR. VARANASI, BAHARAICH DHOLI, RANCHI, HYDERABAD, COIMICOIMBATORE, VAGARAI, ARBHAVI, AKOLA GODHRA, BANSWARA, BHUBANESHWAR, CHHINDWARA				

			AET 1ST (E)				
TRIAL NO 6	EARLY MATURITY (ALL ZONES)						
YEAR&SEASON	2009-2010 RABI						
NO. OF ROWS	4						
ROW LENGTH	4 METRE						
NO. OF REPLICATION	5						
	REPLICATIONS						
ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3	R4	R5
1	BIO 9637 (C)	DMR -171	2168	2169	2172	2177	2179
2	HKH-405	DMR -172	2167	2170	2173	2176	2178
3	HM 11 (C)	DMR -173	2166	2171	2174	2175	2180
LOCATION	18						
BREEDING	LUDHIANA, KARNAL, DELHI (DMR), JOHRAT, KANPUR. VARANASI, BAHARAICH DHOLI, RANCHI, HYDERABAD, COIMICOIMBATORE, VAGARAI, ARBHAVI, AKOLA GODHRA, BANSWARA, BHUBANESHWAR, CHHINDWARA						

AET 2ND (L)

TRIAL NO 7
 YEAR&SEASON 2009-2010 RABI
 NO. OF ROWS 6
 ROW LENGTH 4 METRE
 NO. OF REPLICATION 3

REPLICATIONS

ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3
1	HM 8 (C)	DMR -131	2091	2101	2102
2	HM 9 (C)	DMR -132	2094	2095	2108
3	MON-29	DMR -133	2092	2098	2103
4	SEED TECH 2324 (C)	DMR -134	2090	2099	2106
5	HM 10 (C)	DMR -135	2093	2097	2107
6	X6B302	DMR -136	2088	2096	2104
7	BULAND (C)	DMR -137	2089	2100	2105

LOCATION 18

BREEDING

LUDHIANA, KARNAL, DELHI (DMR), JOHRAT, KANPUR, VARANASI, BAHARAICH
 DHOLI, RANCHI, HYDERABAD, COIMCOIMBATORE, VAGARAI, ARBHAVI, AKOLA
 GODHRA, BANSWARA, BHUBANESHWAR, CHHINDWARA

QPM-1

TRIAL NO QPM-1
 YEAR&SEASON 2009-2010 RABI
 NO. OF ROWS 2
 ROW LENGTH 4 METRE
 NO. OF REPLICATION 3

REPLICATIONS

ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3
1	HQPM-1 (C)	DMR -181	2203	2206	2215
2	HQPM-20	DMR -182	2205	2208	2211
3	HQPM-5 (C)	DMR -183	2204	2209	2212
4	HQPM-7 (C)	DMR -184	2201	2210	2213
5	HQPM-22	DMR -185	2202	2207	2214

LOCATION 18

BREEDING

LUDHIANA, KARNAL, DELHI (DMR), JOHRAT, KANPUR, VARANASI, BAHARAICH
 DHOLI, RANCHI, HYDERABAD, COIMCOIMBATORE, VAGARAI, ARBHAVI, AKOLA
 GODHRA, BANSWARA, BHUBANESHWAR, CHHINDWARA

QPM-2

TRIAL NO QPM-2
 YEAR&SEASON 2009-2010 RABI
 NO. OF ROWS 4
 ROW LENGTH 4 METRE
 NO. OF REPLICATION 3

REPLICATIONS

ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3
1	VEHQPM-3027	DMR -186	2220	2223	2230
2	HQPM-1 (C)	DMR -187	2218	2224	2228
3	HQPM-5 (C)	DMR -188	2217	2221	2227
4	HQPM-7 (C)	DMR -189	2216	2225	2226
5	VEHQPM-3018	DMR -190	2219	2222	2229

ENTOMOLOGY**TRIAL 11**

TRIAL NO 11
 YEAR&SEASON 2009-2010 RABI
 NO. OF ROWS 2
 ROW LENGTH 4 METRE
 NO. OF REPLICATION 3

REPLICATIONS

ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2
1	HM 10 (C)	DMR-223	1034	1076
2	MON-30	DMR-224	1029	1070
3	MON-31	DMR-225	1014	1066
4	HQPM-7 (C)	DMR-226	1009	1071
5	SEED TECH 2324 (C)	DMR-227	1041	1093
6	MON-29	DMR-228	1008	1091
7	HQPM-1 (C)	DMR-229	1011	1049
8	HKH-405	DMR-230	1038	1082
9	VEHQPM -3018	DMR-231	1018	1057
10	VEHQPM -3027	DMR-232	1046	1072
11	MON-31	DMR-233	1015	1083
12	MON-29	DMR -234	1017	1053
13	KMH-Super 244	DMR -235	1043	1069
14	HM 8 (C)	DMR -236	1040	1087
15	KMH-3669	DMR -237	1030	1060
16	HQPM-5 (C)	DMR -238	1047	1080
17	HKH-307	DMR -240	1024	1063
18	KMH-25K55	DMR -241	1026	1054
19	BIO 9637 (C)	DMR -242	1012	1090
20	X6B302	DMR -243	1022	1065
21	MON-29	DMR -244	1001	1048

AGRONOMY			LATE MATURITY (ALL ZONES)		
N X E			2009-2010 RABI		
YEAR&SEASON			2		
NO. OF ROWS			4 METRE		
ROW LENGTH			3		
NO. OF REPLICATION			REPLICATIONS		
ENTRY NO.	HYBRID NAME	PEDIGREE CODE	R1	R2	R3
		AET 2ND (L)			
1	HM 8 (C)	DMR-191	1097	1106	1110
2	HM 9 (C)	DMR-192	1101	1102	1108
3	SEED TECH 2324 (C)	DMR-193	1095	1103	1114
4	MON-29	DMR-194	1098	1104	1111
5	X6B302	DMR-195	1099	1107	1113
6	BULAND (C)	DMR-196	1096	1108	1109

PATHOLOGY			TRIAL 11		
TRIAL NO 11			2009-2010 RABI		
YEAR&SEASON			2		
NO. OF ROWS			4 METRE		
ROW LENGTH			3		
NO. OF REPLICATION			REPLICATIONS		
ENTRY NO.	Hybrid Name	PEDIGREE CODE	R1	R2	
1	PAC-746	DMR-201	1021	1061	
2	X35A019	DMR-202	1025	1089	
3	PRO-379	DMR-203	1007	1077	
4	HKH-312	DMR-204	1044	1084	
5	TMC 89-1	DMR-205	1010	1050	
6	DMRH-1	DMR-206	1042	1068	
7	DMRH-2	DMR-207	1037	1055	
8	HKH-406	DMR-208	1023	1074	
9	JH-8277	DMR-209	1028	1064	
10	HKH-301	DMR-210	1039	1052	
11	JH-9078	DMR-211	1002	1079	
12	JH-9072	DMR-212	1013	1075	
13	HKH-400	DMR-213	1004	1067	
14	JH-9124	DMR-214	1006	1094	
15	MAIZE X440	DMR-215	1027	1085	
16	VEH-3019	DMR-216	1005	1081	
17	HKH-311	DMR-217	1032	1062	
18	MAIZE 115-08-01	DMR-218	1045	1078	
19	HKH-315	DMR-219	1033	1059	
20	X35A035	DMR-220	1031	1056	
21	BIO-265	DMR-221	1003	1073	
22	PRO-378	DMR-222	1035	1086	
23	HM 10 (C)	DMR-223	1034	1076	
24	MON-30	DMR-224	1029	1070	
25	MON-31	DMR-225	1014	1066	
26	HQPM-7 (C)	DMR-226	1009	1071	
27	KMH-3669	DMR-227	1041	1093	
28	MON-29	DMR-228	1008	1091	
29	HQPM-1 (C)	DMR-229	1011	1049	
30	HKH-405	DMR-230	1038	1082	
31	MON-31	DMR-231	1018	1057	
32	VEHQPM -3018	DMR-232	1046	1072	
33	MON-31	DMR-233	1015	1083	
34	MON-29	DMR -234	1017	1053	
35	KMH-Super 244	DMR -235	1043	1069	
36	HM 8 (C)	DMR -236	1040	1087	
37	SEED TECH 2324 (C)	DMR -237	1030	1060	
38	HQPM-5 (C)	DMR -238	1047	1080	
39	HKH-307	DMR -240	1024	1063	
40	KMH-25K55	DMR -241	1026	1054	
41	BIO 9637 (C)	DMR -242	1012	1090	
42	X6B302	DMR -243	1022	1065	
43	MON-29	DMR -244	1001	1048	
44	HKH-305	DMR -245	1036	1092	
45	VEHQPM -3027	DMR -246	1016	1058	
46	MON-29	DMR -247	1019	1088	

WEATHER DATA

Mean maximum and minimum temperature during 2009 at various research centers of AICRP(Maize)

Centre		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Almora	Max	21.1	22.7	25.3	29.8	30.0	33.3	30.1	30.4	28.4	26.8	23.2	-
	Min	0.1	1.7	5.4	8.8	13.7	16.3	20.9	20.7	18.3	9.7	4.3	-
Ambikapur	Max	25.7	29.3	33.2	37.4	39.6	39.3	30.1	30.5	31.3	29.8	26.5	24.8
	Min	10.3	10.6	15.1	19.8	24.0	25.6	22.7	22.3	21.3	15.1	11.9	8.1
Arbhavi	Max	31.3	34.6	37.1	39.5	38.4	33.3	29.0	31.0	31.3	31.6	29.7	-
	Min	11.8	14.4	18.5	21.6	22.0	21.7	22.0	22.5	22.1	21.1	17.6	-
Hyderabad	Max	30.2	33.9	36.0	38.9	40.3	36.3	32.0	31.2	31.4	31.0	29.6	28.5
	Min	13.7	16.8	19.0	23.7	26.4	24.8	23.4	23.3	22.2	19.5	18.1	14.1
Jorhat	Max	24.0	26.4	28.8	28.5	30.5	32.8	32.9	31.8	33.0	31.0	27.1	-
	Min	11.3	13.2	15.9	20.5	23.1	25.4	26.0	25.7	25.8	21.9	16.4	-
Kangra	Max	20.6	22.4	26.4	29.3	34.6	36.4	32.4	30.3	30.0	28.2	24.1	20.3
	Min	8.0	7.0	8.8	12.4	18.4	17.8	21.9	21.9	17.8	11.6	7.0	8.2
Kolhapur	Max	31.0	27.8	36.0	37.7	35.9	31.8	28.9	28.6	29.5	31.1	29.7	30.4
	Min	15.4	14.0	20.0	22.4	22.5	22.5	21.7	21.6	21.0	19.4	18.7	14.5
Mandya	Max	31.4	34.0	34.1	35.4	33.6	31.5	29.2	30.4	30.0	31.0	30.9	-
	Min	13.6	15.4	18.7	21.2	21.5	20.4	20.4	20.4	20.5	18.8	19.2	-
Ranchi	Max	24.5	28.2	31.9	35.5	35.6	36.2	30.0	29.9	29.8	28.0	25.8	24.3
	Min	8.1	8.9	13.5	17.9	21.4	23.0	22.6	22.7	19.4	15.4	12.1	7.2

Total Rainfall (mm)

Centre	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Almora	4.0	50.0	19.0	46.5	94.0	7.5	137.5	189.5	226.0	93.5	12.5	-
Ambikapur	14.5	0.0	0.0	0.0	1.8	47.8	314.5	262.4	114.3	116.1	76.0	7.8
Arbhavi	-	-	5.8	-	56.6	115.2	70.7	29.8	96.2	306.5	56.9	-
Hyderabad	0.0	0.0	0.0	10.4	16.4	82.0	54.0	203.7	165.5	96.0	30.2	5.0
Jorhat	4.7	16.4	23.4	107.1	190.5	116.6	304.4	278.8	167.8	47.6	22.4	-
Kangra	25.6	22.9	23.5	65.0	12.2	43.2	321.4	324.4	105.7	6.3	108.3	0.0
Kolhapur	-	-	11.1	14.7	31.5	18.8	528.8	89.4	159.0	115.6	109.1	-
Mandya	-	-	31.0	44.0	142.4	60.8	24.0	204.3	131.2	47.6	62.0	-
Ranchi	1.8	0.0	5.6	2.6	132.7	40.5	267.8	256.4	430.2	86.0	15.6	9.6

LOCATIONS AND SOIL CHARACTERISTICS OF RESEARCH CENTERS

S. No.	CENTRE	LATITUDE	LONGITUDE	ALTITUDE (M)	SOIL TYPE	PH
1	Srinagar	34.06 N	74.51'E	1652	Silty clay loam	-
2	Almora	29.36 N	79.40'E	1250	Clay loam	5.8
3	Auli	30.31 N	79.34' - 10 E	2680	Sandy loam	6.7-7.1
4	Bajaura	32.2 N	77.0'E	1090	Sandy loam	6.5
5	Salooni	-	-	1768	Silty loam	6.5
6	Dhaura Kuan	30.5 N	77.5'E	456	Sandy loam	6.7
7	Jorhat	26.46 N	94.16'E	91	Sandy loam	5.7
8	Kalimpong	27 N	88'E	1070	Sandy loam	-
9	Kalyani	23.5 N	89'E	9.75	Sandy loam	-
10	Delhi	28.38 N	77.12'E	228.1	Loam to sandy loam	7.5-8.5
11	Ludhiana	30.45 N	75.40'E	247	Sandy loam	7.8
12	Udaipur	24.55 N	73.41'E	572	Loam to sandy loam	8.2-8.4
13	Banswara	23.5 N	73.58'E	218	Pleustertt	-
14	Kanpur	26.28 N	80.40'E	125.9	Sandy loam	-
15	Karnal	29.43 N	76.58'E	245	Clay loam	-
16	Jaipur	26.51N	75.47'E	122	Clay loam	-
17	Pantnagar	29.0 N	79.3'E	243.8	Clay loam	7.4
18	Dholi	25.59 N	85.75'E	51.8	Sandy loam	-
19	Hyderabad	17.2N	78.3'E 78.10'-79-	530	Black clay loam	8.3
20	Chhindwara	21.28'N	24'E	682	Medium clay	-
21	Arbhavi	16.12 N	74.54'E	640	Medium black	-
22	Godhra	22.45 N	77.40'E	119.4	Sandy loam	6.8-7.2
23	Kolhapur	16.43 N	74.14'E	574	Light to medium black	7.5-8.0 GTC 5.5-6.5 Shenda Park
24	Coimbatore	11.0 N	77.0'E	411.5	Black	8.5
25	Nagenahalli	12.22 N	76.42'E	762	Sandy loam to gravel	5.4
26	Mandya	12 N	76'E	695	Light red sandy loam	-
27	Varanasi	25.20 N	83.0 E	128.93	Sandy loam -loam	6
28	Bahraich	27.34 N	81.36 E	130	Sandy loam	8.4
29	Sabour	25.15 N	87.02'E	37.04	Sandy loam	-
30	Jalna	19.51N	75.53'E	550	Medium black	7.5-8.0
31	Dharwad				Medium black Red laterite -Sandy loam	7.5 Acidic
32	Jashipur	21.57N	86.00 E	400	loam	Acidic
33	Ambikapur	23.18N	83.15 E	592.62	Sandy loam	5.7
34	Barapani	25.4N	91.63 E	1010	Sandy loam	4.5-5
35	Kangra	32.5N	76.18E	700	Clay loam	6.4
36	Karimnagar	18.28N	79.06E	264	Red sandy	6.8
37	Ranchi	23.23N	85.23E	625	Red acidic	5-6

BREEDING

RABI 2009-10

TABLE NO.	C O N T E N T S	PAGE NO.
1.	PERFORMANCE OF LATE MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, DELHI, KANPUR, VARANASI, BAHRAICH, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, BANSWARA IN IET, TRIAL No. TR01 DURING RABI (2009).	1-19
2.	PERFORMANCE OF MEDIUM MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, KANPUR, VARANASI, BAHRAICH, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, BANSWARA IN IET, TRIAL No. TR02 DURING RABI (2009).	20-27
3.	PERFORMANCE OF EARLY MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, DELHI, KANPUR, VARANASI, BAHRAICH, BHUVANESHWAR, KARIMNAGAR, BANSWARA, IN IET TRIAL No. TR03 DURING RABI (2009).	28-32
4.	PERFORMANCE OF LATE MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, DELHI, KANPUR, VARANASI, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, AKOLA, BANSWARA IN AET 1st YEAR TRIAL No. TR04 DURING RABI (2009).	33-42
5.	PERFORMANCE OF MEDIUM MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, DELHI, KANPUR, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, BANSWARA IN AET 1st YEAR TRIAL No. TR05 DURING RABI (2009).	43-50
6.	PERFORMANCE OF EARLY MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, DELHI, KANPUR, VARANASI, DHOLI, BHUVANESHWAR, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, GODHRA, BANSWARA IN AET 1st YEAR TRIAL No. TR06 DURING RABI (2009).	51-56
7.	PERFORMANCE OF LATE MATURING EXPERIMENTAL HYBRIDS & COMPOSITE AT LUDHIANA, KARNAL, DELHI, KANPUR, VARANASI, BAHRAICH, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, BANSWARA IN AET 2nd YEAR TRIAL No. TR07 DURING RABI (2009).	57-65
8.	PERFORMANCE OF QPM EXPERIMENTAL HYBRIDS AT KANPUR, VARANASI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, AKOLA, BANSWARA, IN TRQPM1 DURING RABI (2009).	66-71
9.	PERFORMANCE OF QPM EXPERIMENTAL HYBRIDS AT LUDHIANA, KANPUR, VARANASI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, BANSWARA IN TRIAL QPM2 DURING RABI (2009).	72-78

TABLE No. 1

PERFORMANCE OF FULL SEASON EXPERIMENTAL HYBRIDS AT LUDHIANA, DELHI, KANPUR, VARANASI, BAHRAICH, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, BANSWARA IN IET, TRIAL No. TR01 DURING RABI(2009-10).

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE													
		LUDH	R	DELH	R	KANP	R	ZN 2 MEAN	R	VARA	R	BAHR	R	DHOL	R
1	DMRH-2	5946	14	5170	18	9734	1	6950	12	7167	14	11474	10	6856	10
2	MAIZE 115-08-01	7397	5	6749	6	7818	15	7321	6	7312	12	12779	6	7251	6
3	X35A035	8232	2	6815	4	8362	10	7803	3	8714	4	14181	4	8532	1
4	VEH-3019	3201	20	3794	20	8975	4	5323	20	6440	18	7533	20	4408	20
5	X35A019	7899	3	8205	1	8402	9	8169	1	10042	1	15426	1	7163	7
6	JH-8277	6902	6	5168	19	7892	14	6654	14	7799	9	11487	9	6158	15
7	HKH-406	3915	18	5712	14	8202	12	5943	17	5951	20	9132	15	6330	13
8	DMRH-1	5814	15	5549	15	6254	20	5872	18	6664	17	9048	16	5565	19
9	PAC-746	6287	13	7587	2	7113	19	6996	11	7414	11	11351	11	6465	12
10	JH-9072	6710	10	7097	3	8560	6	7456	4	6957	15	12187	7	6924	9
11	JH-9124	6818	7	5960	11	8974	5	7251	7	7816	7	10953	13	6281	14
12	JH-9078	6332	12	5328	16	8468	8	6709	13	7180	13	9006	17	5908	17
13	PRO-378	9459	1	6059	10	7952	13	7823	2	8898	3	15089	2	8245	2
14	MAIZE X440	5024	17	5252	17	9454	2	6577	16	7812	8	11538	8	6538	11
15	PRO-379	6756	8	6788	5	7807	16	7117	10	9573	2	14991	3	7485	4
16	BIO-265	3666	19	6206	9	7439	18	5771	19	7991	6	10332	14	7515	3
CHECKS															
17	BULAND	6367	11	6700	7	8326	11	7131	9	7464	10	12900	5	5824	18
18	HM 10	6753	9	5942	12	9331	3	7342	5	8422	5	8758	18	7386	5
19	HM 9	7504	4	6352	8	7776	17	7211	8	6844	16	10972	12	5929	16
20	HM 8	5446	16	5838	13	8557	7	6614	15	6287	19	7557	19	6938	8
Location Mean		6321		6114		8270		6902		7637		11335		6685	
Mean Stand		29		34		36		33		30		32		31	
C.D. (5%)		1938		1985		1117		1680		1473		1264		1503	
C.V. (%)		18.53		19.62		8.16		-		11.66		6.74		13.59	
F (Prob)		0		0.002		0		-		0		0		0	
Plot Size		3.6		6		4.8		-		4.8		4.8		6	
AGRONOMY DATA															
Sowing Date		26-11		12-04		23-12		-		24-11		12-12		24-11	
Harvest Date		20-05		28-05		20-05		-		9-05		27-05		-	
Irrigation Nos		12		8		5		-		5		6		-	
Fertilizer Applied N		70		-		120		-		150		150		120	
Fertilizer Applied P		24		-		60		-		60		75		60	
Fertilizer Applied K		12		-		60		-		60		60		40	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : KARN 25.2 %: GODH 28.4 %

TABLE No. 1 (CONT.)

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% <i>MOISTURE</i>											
		BHUV	R	ZN 3 MEAN	R	KARI	R	COIM	R	VAGA	R	ARBH	R
1	DMRH-2	4663	18	7540	11	7379	10	10834	8	9624	1	7605	9
2	MAIZE 115-08-01	4282	20	7906	6	8786	5	11584	5	6968	9	6499	16
3	X35A035	5768	4	9299	4	10755	1	11779	4	6671	11	9965	4
4	VEH-3019	5736	5	6029	20	4668	17	9493	16	4360	19	4469	20
5	X35A019	6352	1	9746	1	8654	6	12603	2	7278	7	9245	5
6	JH-8277	5707	6	7788	8	8167	7	9678	15	6052	16	7387	12
7	HKH-406	5189	10	6651	17	4483	20	9836	14	7006	8	6881	14
8	DMRH-1	4429	19	6427	19	9093	4	6894	20	5374	17	5731	19
9	PAC-746	4887	14	7529	12	7599	8	10359	10	5229	18	8358	6
10	JH-9072	4816	16	7721	9	9371	3	9887	12	6790	10	5810	18
11	JH-9124	4745	17	7449	13	4666	18	9988	11	6496	13	5847	17
12	JH-9078	5945	2	7010	16	5973	13	7942	19	6188	15	7550	10
13	PRO-378	5272	9	9376	2	9991	2	12881	1	9403	2	11153	2
14	MAIZE X440	5846	3	7933	5	4637	19	9312	17	7453	5	6827	15
15	PRO-379	5292	7	9335	3	7590	9	11318	6	6512	12	11892	1
16	BIO-265	4894	13	7683	10	5818	14	11927	3	8592	3	9977	3
CHECKS													
17	BULAND	5044	11	7808	7	5421	16	9864	13	8329	4	7899	7
18	HM 10	4858	15	7356	14	5747	15	8702	18	7320	6	7688	8
19	HM 9	4940	12	7171	15	7224	11	10753	9	6315	14	7135	13
20	HM 8	5278	8	6515	18	6831	12	11025	7	3121	20	7501	11
Location Mean		5197		7714		7143		10333		6754		7771	
Mean Stand		29		31		36		33		33		34	
C.D. (5%)		175		1104		639		1308		1216		1506	
C.V. (%)		2.03		-		5.41		7.65		10.89		11.71	
F (Prob)		0				0		0		0		0	
Plot Size		4.8		-		6		4.8		4.8		6	
AGRONOMY DATA													
Sowing Date		13-12		-		18-11		23-12		6-01		4-12	
Harvest Date		15-05		-		16-03		15-04		2-05		22-04	
Irrigation Nos		12		-		-		10		11		9	
Fertilizer Applied N		120		-		200		150		150		150	
Fertilizer Applied P		60		-		80		75		75		75	
Fertilizer Applied K		60		-		60		75		75		37.5	

TABLE No. 1 (CONT.)

Sl No	PEDIGREE	AKOL	GRAIN YIELD (kg/ha) AT 15% MOISTURE						
			ZN 4		ZN 5		OV'L		
			R	MEAN	R	BANS	R	MEAN	R
1	DMRH-2	6742	12	8437	7	7091	13	7714	7
2	MAIZE 115-08-01	8494	6	8466	6	7145	12	7928	6
3	X35A035	5827	16	9000	5	8555	4	8781	4
4	VEH-3019	2898	20	5178	20	6313	18	5561	20
5	X35A019	12214	2	9999	3	9894	1	9491	2
6	JH-8277	8507	5	7958	8	7699	9	7585	8
7	HKH-406	7991	7	7239	13	5891	20	6655	17
8	DMRH-1	5046	19	6428	19	6592	17	6312	19
9	PAC-746	7948	8	7899	9	7259	11	7527	10
10	JH-9072	5947	15	7561	10	6878	15	7534	9
11	JH-9124	6768	11	6753	17	7786	7	7161	15
12	JH-9078	7085	10	6948	16	7087	14	6922	16
13	PRO-378	11003	4	10886	1	8713	3	9548	1
14	MAIZE X440	7242	9	7094	15	7734	8	7282	14
15	PRO-379	12776	1	10018	2	9489	2	9098	3
16	BIO-265	11998	3	9662	4	7896	6	8019	5
CHECKS									
17	BULAND	5595	17	7422	12	7328	10	7466	11
18	HM 10	6413	13	7174	14	8297	5	7355	12
19	HM 9	6347	14	7555	11	6739	16	7295	13
20	HM 8	5184	18	6732	18	6214	19	6598	18
	Location Mean	7601		7920		7530		7592	
	Mean Stand	28		33		30		32	
	C.D. (5%)	1894		1313		1449		1344	
	C.V. (%)	15.06		-		11.63		-	
	F (Prob)	0				0			
	Plot Size	4.5		-		4.8		-	
AGRONOMY DATA									
	Sowing Date	24-01		-		25-11		-	
	Harvest Date	6-06		-		20-04		-	
	Irrigation Nos	-		-		6		-	
	Fertilizer Applied N	120		-		150		-	
	Fertilizer Applied P	60		-		60		-	
	Fertilizer Applied K	40		-		-		-	

GRAIN YIELD % SUPERIORITY OVER THE BULAND																		
S1		ZN 2					ZN 3					ZN 4	ZN 5	OV'L				
No	PEDIGREE	LUDH	DELH	KANP	MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARICOIM	VAGA	ARBH	AKOLMEAN	BANS	MEAN		
1	DMRH-2	-	-	17	-	-	-	18	-	-	36	10	16	-	21	14	-	3
2	MAIZE 115-08-	16	1	-	3	-	-	25	-	1	62	17	-	-	52	14	-	6
3	X35A035	29	2	0	9	17	10	47	14	19	98	19	-	26	4	21	17	18
4	VEH-3019	-	-	8	-	-	-	-	14	-	-	-	-	-	-	-	-	-
5	X35A019	24	22	1	15	35	20	23	26	25	60	28	-	17	118	35	35	27
6	JH-8277	8	-	-	-	4	-	6	13	-	51	-	-	-	52	7	5	2
7	HKH-406	-	-	-	-	-	-	9	3	-	-	-	-	-	43	-	-	-
8	DMRH-1	-	-	-	-	-	-	-	-	-	68	-	-	-	-	-	-	-
9	PAC-746	-	13	-	-	-	-	11	-	-	40	5	-	6	42	6	-	1
10	JH-9072	5	6	3	5	-	-	19	-	-	73	0	-	-	6	2	-	1
11	JH-9124	7	-	8	2	5	-	8	-	-	-	1	-	-	21	-	6	-
12	JH-9078	-	-	2	-	-	-	1	18	-	10	-	-	-	27	-	-	-
13	PRO-378	49	-	-	10	19	17	42	5	20	84	31	13	41	97	47	19	28
14	MAIZE X440	-	-	14	-	5	-	12	16	2	-	-	-	-	29	-	6	-
15	PRO-379	6	1	-	-	28	16	29	5	20	40	15	-	51	128	35	29	22
16	BIO-265	-	-	-	-	7	-	29	-	-	7	21	3	26	114	30	8	7
CHECKS																		
17	BULAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
18	HM 10	6	-	12	3	13	-	27	-	-	6	-	-	-	15	-	13	-
19	HM 9	18	-	-	1	-	-	2	-	-	33	9	-	-	13	2	-	-
20	HM 8	-	-	3	-	-	-	19	5	-	26	12	-	-	-	-	-	-

GRAIN YIELD % SUPERIORITY OVER THE HM 10																		
S1		ZN 2					ZN 3					ZN 4		ZN 5		OV'L		
No	PEDIGREE	LUDH	DELH	KANP	MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARICOIM	VAGA	ARBH	AKOLMEAN	BANS	MEAN		
1	DMRH-2	-	-	4	-	-	31	-	-	3	28	24	31	-	5	18	-	5
2	MAIZE 115-08-	10	14	-	-	-	46	-	-	7	53	33	-	32	18	-	8	
3	X35A035	22	15	-	6	3	62	16	19	26	87	35	-	30	-	25	3	19
4	VEH-3019	-	-	-	-	-	-	-	18	-	-	9	-	-	-	-	-	
5	X35A019	17	38	-	11	19	76	-	31	32	51	45	-	20	90	39	19	29
6	JH-8277	2	-	-	-	-	31	-	17	6	42	11	-	-	33	11	-	3
7	HKH-406	-	-	-	-	-	4	-	7	-	-	13	-	-	25	1	-	-
8	DMRH-1	-	-	-	-	-	3	-	-	-	58	-	-	-	-	-	-	-
9	PAC-746	-	28	-	-	-	30	-	1	2	32	19	-	9	24	10	-	2
10	JH-9072	-	19	-	2	-	39	-	-	5	63	14	-	-	-	5	-	2
11	JH-9124	1	0	-	-	-	25	-	-	1	-	15	-	-	6	-	-	-
12	JH-9078	-	-	-	-	-	3	-	22	-	4	-	-	-	10	-	-	-
13	PRO-378	40	2	-	7	6	72	12	9	27	74	48	28	45	72	52	5	30
14	MAIZE X440	-	-	1	-	-	32	-	20	8	-	7	2	-	13	-	-	-
15	PRO-379	0	14	-	-	14	71	1	9	27	32	30	-	55	99	40	14	24
16	BIO-265	-	4	-	-	-	18	2	1	4	1	37	17	30	87	35	-	9
	CHECKS																	
17	BULAND	-	13	-	-	-	47	-	4	6	-	13	14	3	-	3	-	2
18	HM 10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
19	HM 9	11	7	-	-	-	25	-	2	-	26	24	-	-	-	5	-	-
20	HM 8	-	-	-	-	-	-	-	9	-	19	27	-	-	-	-	-	-

GRAIN YIELD % SUPERIORITY OVER THE HM 9																		
Sl No	PEDIGREE	ZN 2						ZN 3					ZN 4		ZN 5		OV'L MEAN	
		LUDH	DELH	KANP	MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARICOIM	VAGA	ARBH	AKOLMEAN	BANS	MEAN		
1	DMRH-2	-	-	25	-	5	5	16	-	5	2	1	52	7	6	12	5	6
2	MAIZE 115-08-	-	6	1	2	7	16	22	-	10	22	8	10	-	34	12	6	9
3	X35A035	10	7	8	8	27	29	44	17	30	49	10	6	40	-	19	27	20
4	VEH-3019	-	-	15	-	-	-	-	16	-	-	-	-	-	-	-	-	-
5	X35A019	5	29	8	13	47	41	21	29	36	20	17	15	30	92	32	47	30
6	JH-8277	-	-	2	-	14	5	4	16	9	13	-	-	4	34	5	14	4
7	HKH-406	-	-	5	-	-	-	7	5	-	-	-	11	-	26	-	-	-
8	DMRH-1	-	-	-	-	-	-	-	-	26	-	-	-	-	-	-	-	-
9	PAC-746	-	19	-	-	8	3	9	-	5	5	-	-	17	25	5	8	3
10	JH-9072	-	12	10	3	2	11	17	-	8	30	-	8	-	-	0	2	3
11	JH-9124	-	-	15	1	14	-	6	-	4	-	-	3	-	7	-	16	-
12	JH-9078	-	-	9	-	5	-	-	20	-	-	-	-	6	12	-	5	-
13	PRO-378	26	-	2	8	30	38	39	7	31	38	20	49	56	73	44	29	31
14	MAIZE X440	-	-	22	-	14	5	10	18	11	-	-	18	-	14	-	15	-
15	PRO-379	-	7	0	-	40	37	26	7	30	5	5	3	67	101	33	41	25
16	BIO-265	-	-	-	-	17	-	27	-	7	-	11	36	40	89	28	17	10
CHECKS																		
17	BULAND	-	5	7	-	9	18	-	2	9	-	-	32	11	-	-	9	2
18	HM 10	-	-	20	2	23	-	25	-	3	-	-	16	8	1	-	23	1
19	HM 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
20	HM 8	-	-	10	-	-	-	17	7	-	-	3	-	5	-	-	-	-

GRAIN YIELD % SUPERIORITY OVER THE HM 8																		
Sl	PEDIGREE	ZN 2						ZN 3						ZN 4		ZN 5		OV'L
No		LUDH	DELH	KANP	MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARICO	IM	VAGA	ARBH	AKOL	MEAN	BANS	MEAN
1	DMRH-2	9	-	14	5	14	52	-	-	16	8	-	208	1	30	25	14	17
2	MAIZE 115-08-	36	16	-	11	16	69	5	-	21	29	5	123	-	64	26	15	20
3	X35A035	51	17	-	18	39	88	23	9	43	57	7	114	33	12	34	38	33
4	VEH-3019	-	-	5	-	2	-	-	9	-	-	-	40	-	-	-	2	-
5	X35A019	45	41	-	24	60	104	3	20	50	27	14	133	23	136	49	59	44
6	JH-8277	27	-	-	1	24	52	-	8	20	20	-	94	-	64	18	24	15
7	HKH-406	-	-	-	-	-	21	-	-	2	-	-	125	-	54	8	-	1
8	DMRH-1	7	-	-	-	6	20	-	-	-	33	-	72	-	-	-	6	-
9	PAC-746	15	30	-	6	18	50	-	-	16	11	-	68	11	53	17	17	14
10	JH-9072	23	22	0	13	11	61	-	-	19	37	-	118	-	15	12	11	14
11	JH-9124	25	2	5	10	24	45	-	-	14	-	-	108	-	31	0	25	9
12	JH-9078	16	-	-	1	14	19	-	13	8	-	-	98	1	37	3	14	5
13	PRO-378	74	4	-	18	42	100	19	-	44	46	17	201	49	112	62	40	45
14	MAIZE X440	-	-	10	-	24	53	-	11	22	-	-	139	-	40	5	24	10
15	PRO-379	24	16	-	8	52	98	8	0	43	11	3	109	59	146	49	53	38
16	BIO-265	-	6	-	-	27	37	8	-	18	-	8	175	33	131	44	27	22
CHECKS																		
17	BULAND	17	15	-	8	19	71	-	-	20	-	-	167	5	8	10	18	13
18	HM 10	24	2	9	11	34	16	6	-	13	-	-	135	2	24	7	34	11
19	HM 9	38	9	-	9	9	45	-	-	10	6	-	102	-	22	12	8	11
20	HM 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No. 1(Cont.)

Sl No	PEDIGREE	DAYS TO 50% <i>SILKING</i>													
		LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH
1	DMRH-2	137.0	132.7	120.0	102.0	122.9	85.0	122.3	119.7	85.3	103.1	67.3	59.0	59.3	69.7
2	MAIZE 115-08-01	136.3	135.0	122.0	103.3	124.2	94.7	124.3	124.3	84.0	106.8	71.3	61.0	59.0	74.7
3	X35A035	137.3	134.0	124.0	101.3	124.2	96.3	126.7	122.3	85.7	107.8	71.3	60.7	62.3	73.0
4	VEH-3019	139.7	136.0	123.0	102.0	125.2	96.3	123.7	123.7	84.0	106.9	70.7	58.3	62.3	73.0
5	X35A019	138.0	135.3	122.3	104.0	124.9	86.3	123.3	122.0	80.0	102.9	71.7	58.7	62.3	71.3
6	JH-8277	137.3	133.3	122.3	101.7	123.7	90.0	125.7	124.0	80.3	105.0	70.7	58.3	60.0	72.7
7	HKH-406	137.3	135.0	124.3	100.0	124.2	92.3	124.7	124.7	85.0	106.7	70.7	60.7	61.3	73.3
8	DMRH-1	136.3	133.3	120.7	98.0	122.1	96.0	121.0	119.3	79.3	103.9	66.0	57.7	58.0	70.3
9	PAC-746	135.0	133.3	120.7	102.3	122.8	93.7	123.7	124.0	79.7	105.3	70.7	58.7	60.7	72.3
10	JH-9072	144.0	133.3	124.0	99.0	125.1	94.7	122.3	122.0	85.0	106.0	69.0	59.0	60.0	72.0
11	JH-9124	137.3	134.3	121.0	101.3	123.5	95.3	123.7	124.0	82.0	106.3	70.7	59.3	60.3	74.0
12	JH-9078	138.0	135.0	125.0	102.3	125.1	96.7	127.7	124.7	84.0	108.3	72.0	59.0	60.0	72.7
13	PRO-378	135.3	134.0	119.0	98.0	121.6	87.3	120.7	116.0	81.7	101.4	68.3	57.3	58.7	69.7
14	MAIZE X440	140.7	140.0	126.7	105.0	128.1	95.0	125.7	125.7	81.0	106.8	73.7	61.3	60.3	76.3
15	PRO-379	137.3	133.3	119.7	102.7	123.3	90.7	124.3	122.7	85.0	105.7	71.7	60.0	59.7	70.7
16	BIO-265	138.3	141.0	123.3	100.3	125.8	95.3	125.7	125.7	82.0	107.2	74.0	60.7	62.3	73.3
CHECKS															
17	BULAND	138.3	137.0	127.7	100.3	125.8	96.3	124.7	126.7	85.0	108.2	73.3	60.7	60.0	74.3
18	HM 10	136.3	132.7	118.7	100.3	122.0	90.0	120.3	116.7	79.7	101.7	67.7	58.0	60.7	69.0
19	HM 9	135.7	133.0	120.0	98.0	121.7	89.7	119.7	120.7	85.0	103.8	66.0	55.7	59.0	69.7
20	HM 8	137.0	134.3	120.0	99.3	122.7	95.3	120.7	122.7	86.0	106.2	70.0	61.0	61.3	71.7
	Loc. Mean	137.6	134.8	122.2	101.1	123.9	92.9	123.5	122.6	83.0	105.5	70.3	59.3	60.4	72.2
	C.D. (5%)	5.09	1.71	1.97	0.69	2.40	2.86	1.35	2.17	1.54	3.20	2.10	1.02	4.36	1.85
	C.V. (%)	2.24	0.77	0.97	0.42	1.37	1.87	0.66	1.07	1.12	2.14	1.80	1.04	4.37	1.55
	F (Prob.)	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00

Table No. 1(Cont.)

Sl No	PEDIGREE	DAYS TO 50% <i>SILKING</i>						DAYS TO 50% <i>POLLEN SHED</i>									
		AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean
1	DMRH-2	61.7	63.4	81.0	85.0	83.0	92.5	136.7	129.7	117.7	94.0	119.5	81.0	120.3	118.3	82.0	100.4
2	MAIZE 115-08-01	65.3	66.3	84.0	94.7	89.3	95.6	134.7	132.0	121.0	97.0	121.2	90.7	122.3	122.3	81.0	104.1
3	X35A035	62.0	65.9	86.0	96.3	91.2	96.0	136.0	131.0	123.0	93.3	120.8	92.7	124.7	121.7	82.3	105.3
4	VEH-3019	62.7	65.4	83.3	96.3	89.8	95.7	137.3	133.0	121.0	94.0	121.3	91.7	121.7	120.7	81.0	103.8
5	X35A019	62.3	65.3	85.7	86.3	86.0	94.0	135.3	132.3	121.3	97.0	121.5	82.3	121.3	121.3	77.0	100.5
6	JH-8277	60.3	64.4	81.3	90.0	85.7	93.9	135.3	130.3	121.0	95.0	120.4	86.3	123.7	122.0	77.0	102.3
7	HKH-406	62.3	65.7	83.7	92.3	88.0	95.2	136.0	132.0	123.0	94.0	121.3	88.7	122.7	122.0	81.7	103.8
8	DMRH-1	61.0	62.6	79.3	96.0	87.7	92.8	135.3	130.3	118.0	90.0	118.4	92.3	119.0	117.7	76.3	101.3
9	PAC-746	62.0	64.9	84.3	93.7	89.0	94.3	134.7	130.3	118.3	96.0	119.8	89.7	121.7	121.7	76.7	102.4
10	JH-9072	63.0	64.6	85.3	94.7	90.0	95.2	136.0	130.3	121.0	93.7	120.3	90.7	120.3	119.7	81.7	103.1
11	JH-9124	62.7	65.4	83.7	95.3	89.5	95.0	135.7	131.3	118.7	93.0	119.7	91.7	121.7	121.7	79.0	103.5
12	JH-9078	63.0	65.3	85.7	96.7	91.2	96.2	136.7	132.0	122.3	95.0	121.5	93.0	125.7	123.0	80.7	105.6
13	PRO-378	61.3	63.1	79.7	87.3	83.5	91.6	133.7	131.0	117.0	92.0	118.4	84.0	118.7	115.3	79.0	99.3
14	MAIZE X440	65.3	67.4	83.3	95.0	89.2	97.0	137.7	137.0	124.7	98.0	124.3	91.3	123.7	123.3	78.0	104.1
15	PRO-379	61.3	64.7	83.0	90.7	86.8	94.2	135.7	130.7	117.7	95.3	119.8	87.0	122.3	121.0	82.0	103.1
16	BIO-265	65.3	67.1	83.7	95.3	89.5	96.4	136.7	138.0	121.3	93.0	122.3	91.7	123.7	124.0	79.0	104.6
17	CHECKS																
	BULAND	65.0	66.7	85.7	96.3	91.0	96.8	135.3	134.0	126.3	94.0	122.4	92.7	122.0	123.7	81.7	105.0
18	HM 10	62.0	63.5	83.0	90.0	86.5	92.3	134.3	129.7	117.0	93.0	118.5	86.3	118.7	115.3	76.3	99.2
19	HM 9	60.3	62.1	86.7	89.7	88.2	92.6	134.0	130.0	119.0	92.0	118.8	86.0	117.7	120.3	81.7	101.4
20	HM 8	61.7	65.1	83.3	95.3	89.3	94.6	136.0	131.3	119.0	92.0	119.6	91.7	118.7	121.3	83.0	103.7
	Loc. Mean	62.5	64.9	83.6	92.9	88.2	94.6	135.7	131.8	120.4	94.1	120.5	89.1	121.5	120.8	79.9	102.8
	C.D. (5%)	1.25	1.42	4.72	2.86	5.41	1.32	2.81	1.75	1.61	1.10	2.23	2.81	1.38	2.00	1.37	3.14
	C.V. (%)	1.21	1.74	3.41	1.87	2.93	1.94	1.25	0.80	0.81	0.71	1.31	1.91	0.69	1.00	1.04	2.16
	F (Prob.)	0.00	0.00	0.13	0.00	0.14	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table No. 1(Cont.)

Sl No	PEDIGREE	DAYS TO 50% <i>POLLEN SHED</i>						ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean
		KARI	COIM	VAGA	ARBH	AKOL						
1	DMRH-2	65.3	56.3	55.7	70.3	60.7	61.7	79.3	81.0	80.2	89.9	
2	MAIZE 115-08-01	69.3	59.0	58.0	72.0	64.3	64.5	82.3	90.7	86.5	93.1	
3	X35A035	69.3	58.0	59.3	71.7	61.0	63.9	83.3	92.7	88.0	93.3	
4	VEH-3019	68.3	56.0	57.0	71.7	61.7	62.9	82.0	91.7	86.8	92.6	
5	X35A019	69.7	56.0	59.0	70.7	61.3	63.3	83.3	82.3	82.8	91.4	
6	JH-8277	68.0	56.0	57.0	71.0	59.3	62.3	79.0	86.3	82.7	91.2	
7	HKH-406	68.0	58.7	58.7	72.0	61.3	63.7	81.7	88.7	85.2	92.6	
8	DMRH-1	64.0	55.3	55.3	70.7	60.0	61.1	78.0	92.3	85.2	90.3	
9	PAC-746	68.7	56.3	56.3	71.0	61.0	62.7	82.7	89.7	86.2	91.6	
10	JH-9072	66.7	56.7	57.7	71.0	62.0	62.8	83.0	90.7	86.8	92.1	
11	JH-9124	67.3	57.3	57.3	71.0	61.7	62.9	82.0	91.7	86.8	92.1	
12	JH-9078	69.7	57.0	56.0	72.3	62.0	63.4	83.7	93.0	88.3	93.5	
13	PRO-378	65.7	55.0	55.3	69.3	60.3	61.1	78.3	84.0	81.2	89.2	
14	MAIZE X440	71.3	59.7	58.3	73.3	64.3	65.4	81.7	91.3	86.5	94.2	
15	PRO-379	69.7	58.0	56.3	70.7	60.3	63.0	81.7	87.0	84.3	91.7	
16	BIO-265	72.0	58.7	58.3	72.0	64.3	65.1	81.7	91.7	86.7	93.7	
	CHECKS											
17	BULAND	71.3	59.0	56.3	73.3	64.0	64.8	82.7	92.7	87.7	93.9	
18	HM 10	65.3	56.0	58.0	70.0	61.0	62.1	81.3	86.3	83.8	89.9	
19	HM 9	63.7	54.3	56.0	70.3	59.3	60.7	84.3	86.0	85.2	90.3	
20	HM 8	67.3	59.0	58.7	71.0	60.7	63.3	81.3	91.7	86.5	92.2	
	Loc. Mean	68.0	57.1	57.2	71.3	61.5	63.0	81.7	89.1	85.4	91.9	
	C.D. (5%)	2.05	0.91	2.84	1.17	1.25	1.34	4.76	2.81	5.30	1.27	
	C.V. (%)	1.82	0.97	3.00	0.99	1.23	1.69	3.53	1.91	2.97	1.92	
	F (Prob.)	0.00	0.00	0.10	0.00	0.00	0.00	0.38	0.00	0.17	0.00	

Table No. 1(Cont.)

Sl No	PEDIGREE	DAYS TO 50% DRY HUSK											
		LUDH	KARN	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH
1	DMRH-2	165.3	165.7	165.5	129.0	156.7	158.3	137.3	145.3	104.7	110.0	111.0	114.0
2	MAIZE 115-08-01	163.0	165.7	164.3	137.0	158.3	158.7	135.0	147.3	103.7	112.0	111.3	113.3
3	X35A035	163.7	164.7	164.2	137.0	159.7	161.0	138.0	148.9	102.7	112.0	110.7	114.3
4	VEH-3019	165.3	167.3	166.3	134.7	158.0	159.3	137.0	147.3	103.0	109.3	108.7	113.0
5	X35A019	165.3	165.7	165.5	127.7	157.7	159.7	135.0	145.0	103.0	110.0	110.3	113.0
6	JH-8277	163.3	165.3	164.3	128.3	157.7	155.0	132.0	143.3	103.3	110.0	110.3	112.0
7	HKH-406	166.3	166.3	166.3	129.0	159.3	160.0	135.3	145.9	103.7	112.0	111.0	113.0
8	DMRH-1	166.3	164.7	165.5	136.3	156.3	155.3	132.3	145.1	102.7	108.0	109.0	113.7
9	PAC-746	163.0	166.0	164.5	137.0	156.7	157.7	128.3	144.9	102.7	110.0	110.0	113.3
10	JH-9072	162.7	165.7	164.2	138.3	156.7	153.7	138.0	146.7	102.7	110.0	109.3	113.0
11	JH-9124	164.7	165.3	165.0	137.0	157.7	158.3	137.0	147.5	103.3	112.0	110.7	113.3
12	JH-9078	166.7	165.3	166.0	138.0	159.3	158.7	138.0	148.5	103.3	111.3	110.3	113.0
13	PRO-378	164.0	165.7	164.8	126.7	156.7	156.3	133.3	143.3	103.7	109.3	109.0	113.3
14	MAIZE X440	167.3	171.0	169.2	137.0	159.3	161.7	137.0	148.8	103.3	112.0	111.7	115.0
15	PRO-379	163.3	165.0	164.2	131.0	159.0	157.7	135.0	145.7	104.3	112.0	110.3	114.0
16	BIO-265	166.7	168.7	167.7	135.0	159.7	162.7	133.7	147.8	104.0	112.0	110.0	115.7
17	CHECKS BULAND	166.7	169.0	167.8	135.0	158.7	158.0	137.3	147.3	104.3	112.0	110.3	114.7
18	HM 10	163.0	164.3	163.7	127.7	155.3	160.0	129.0	143.0	103.0	110.0	109.3	114.0
19	HM 9	162.7	164.3	163.5	123.3	157.0	156.0	137.0	143.3	102.7	108.0	109.0	112.3
20	HM 8	164.0	165.3	164.7	137.0	156.7	159.0	137.3	147.5	106.3	112.0	109.7	113.3
	Loc. Mean	164.7	166.1	165.4	133.1	157.8	158.4	135.2	146.1	103.5	110.7	110.1	113.6
	C.D. (5%)	3.13	2.86	2.03	2.11	1.12	3.67	1.42	3.89	2.79	0.74	2.05	1.54
	C.V. (%)	1.15	1.04	0.59	0.96	0.43	1.40	0.64	1.88	1.63	0.40	1.13	0.82
	F (Prob.)	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.64	0.00	0.19	0.00

Table No. 1(Cont.)

Sl No	PEDIGREE	DAYS TO 50% DRY HUSK						MOISTURE						
		AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	BAHR	DHOL
1	DMRH-2	110.0	109.9	109.3	129.0	119.2	130.8	25.1	32.3	26.5	15.0	24.7	24.9	20.0
2	MAIZE 115-08-01	113.3	110.7	111.7	137.0	124.3	132.3	24.8	34.0	30.7	15.0	26.1	24.7	19.0
3	X35A035	110.3	110.0	113.0	137.0	125.0	132.6	21.0	29.7	21.9	15.0	21.9	27.0	20.2
4	VEH-3019	110.0	108.8	112.3	134.7	123.5	131.7	24.8	30.0	25.6	15.0	23.8	23.7	21.8
5	X35A019	109.7	109.2	112.3	127.7	120.0	130.5	25.2	29.7	25.2	15.0	23.8	26.0	18.8
6	JH-8277	107.7	108.7	108.7	128.3	118.5	129.4	24.6	30.4	25.4	15.0	23.8	24.1	20.0
7	HKH-406	109.7	109.9	109.7	129.0	119.3	131.1	25.6	32.9	21.9	15.0	23.8	27.0	19.1
8	DMRH-1	108.3	108.3	107.0	136.3	121.7	130.5	23.0	30.4	22.7	15.0	22.8	23.5	19.3
9	PAC-746	109.3	109.1	111.7	137.0	124.3	131.0	21.6	33.3	21.8	15.0	22.9	24.8	18.4
10	JH-9072	110.3	109.1	114.0	138.3	126.2	131.7	25.1	34.0	27.0	15.0	25.3	25.7	18.4
11	JH-9124	110.0	109.9	111.0	137.0	124.0	132.1	23.2	33.0	27.1	15.0	24.6	24.4	26.1
12	JH-9078	110.7	109.7	111.3	138.0	124.7	132.6	25.2	29.4	28.3	15.0	24.5	24.1	21.8
13	PRO-378	108.7	108.8	106.0	126.7	116.3	129.2	24.7	31.3	29.4	15.0	25.1	26.4	21.6
14	MAIZE X440	113.3	111.1	109.3	137.0	123.2	133.5	26.1	32.7	34.2	15.0	27.0	25.2	30.2
15	PRO-379	108.7	109.9	110.0	131.0	120.5	130.9	25.4	34.4	28.3	15.0	25.8	26.9	26.7
16	BIO-265 CHECKS	113.3	111.0	110.3	135.0	122.7	132.8	25.1	31.4	29.6	15.0	25.3	24.3	23.2
17	BULAND	113.0	110.9	110.3	135.0	122.7	132.6	25.7	33.0	29.9	15.0	25.9	25.2	21.1
18	HM 10	109.3	109.1	109.3	127.7	118.5	129.4	20.9	32.4	20.2	15.0	22.1	24.4	17.2
19	HM 9	107.7	107.9	110.7	123.3	117.0	128.8	22.6	33.7	22.2	15.0	23.4	24.2	19.0
20	HM 8	109.0	110.1	110.0	137.0	123.5	132.1	25.2	32.4	22.4	15.0	23.7	24.1	20.6
	Loc. Mean	110.1	109.6	110.4	133.1	121.8	131.3	24.2	32.0	26.0	15.0	24.3	25.0	21.1
	C.D. (5%)	1.67	1.18	5.48	2.11	6.36	1.61	1.46	0.00	2.81	-	2.80	0.82	-
	C.V. (%)	0.92	0.85	3.01	0.96	2.50	1.59	3.66	0.00	6.53	-	8.15	1.99	-
	F (Prob.)	0.00	0.00	0.48	0.00	0.11	0.00	0.00	0.00	0.00	-	0.04	0.00	0.00

Table No. 1(Cont.)

Sl No	PEDIGREE	MOISTURE										OV'L Mean	
		BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS		ZN 5 Mean
1	DMRH-2	17.1	20.7	13.5	23.2	22.3	19.5	12.2	18.1	13.8	15.9	14.8	20.1
2	MAIZE 115-08-01	17.4	20.4	12.8	24.8	24.8	15.3	12.8	18.1	16.3	16.9	16.6	20.6
3	X35A035	16.8	21.3	13.2	20.8	21.5	16.3	11.1	16.6	14.8	16.6	15.7	19.0
4	VEH-3019	17.6	21.0	14.0	21.6	21.1	13.3	12.4	16.4	14.0	16.8	15.4	19.4
5	X35A019	17.9	20.9	13.7	20.7	21.3	14.6	11.5	16.3	14.8	16.2	15.5	19.3
6	JH-8277	18.0	20.7	13.1	21.7	22.3	20.9	12.9	18.2	14.1	16.1	15.1	19.9
7	HKH-406	18.5	21.5	12.7	21.3	21.4	14.7	12.8	16.6	14.9	16.0	15.4	19.5
8	DMRH-1	18.4	20.4	13.3	20.9	20.0	19.7	12.4	17.2	12.6	16.0	14.3	19.1
9	PAC-746	17.1	20.1	13.5	18.1	18.3	14.4	11.5	15.2	12.6	16.8	14.7	18.4
10	JH-9072	17.5	20.5	12.9	21.5	21.5	20.0	10.9	17.4	16.5	16.0	16.2	20.1
11	JH-9124	17.9	22.8	13.3	23.8	25.2	15.3	12.9	18.1	14.0	15.4	14.7	20.4
12	JH-9078	16.8	20.9	13.5	21.4	21.6	19.7	13.4	17.9	16.0	16.1	16.0	20.1
13	PRO-378	17.9	22.0	13.9	24.4	22.7	25.9	13.5	20.1	15.2	16.8	16.0	21.3
14	MAIZE X440	17.0	24.1	13.9	26.2	26.2	22.1	14.4	20.5	20.1	15.8	17.9	22.8
15	PRO-379	18.3	24.0	12.7	24.5	24.3	27.1	12.6	20.2	14.9	15.8	15.3	21.9
16	BIO-265	17.1	21.5	12.9	22.5	21.2	22.9	14.4	18.8	16.5	16.1	16.3	20.9
17	BULAND	18.5	21.6	13.1	22.6	21.7	13.5	10.8	16.3	13.8	16.6	15.2	20.0
18	HM 10	17.2	19.6	13.1	20.2	21.2	21.6	12.3	17.7	15.6	16.3	15.9	19.1
19	HM 9	18.0	20.4	13.7	18.2	18.8	15.4	11.8	15.6	14.8	16.4	15.6	18.8
20	HM 8	17.8	20.8	12.9	20.6	20.9	19.2	11.1	16.9	15.5	16.0	15.8	19.5
	Loc. Mean	17.6	21.3	13.3	21.9	21.9	18.6	12.4	17.6	15.0	16.2	15.6	20.0
	C.D. (5%)	-	3.27	1.29	0.58	1.43	3.80	1.21	2.46	2.16	0.66	2.59	1.36
	C.V. (%)	-	9.30	5.86	1.59	3.94	12.38	5.93	11.08	8.68	2.47	7.94	9.15
	F (Prob.)	0.00	0.41	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00

Table No. 1(Cont.)

Sl No	PEDIGREE	PLANT HEIGHT CM				ZN 2					ZN 3				
		LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH
1	DMRH-2	172.0	203.3	156.7	179.0	177.8	206.5	181.0	150.8	161.9	175.1	202.0	225.0	172.0	208.5
2	MAIZE 115-08-01	161.7	218.3	153.3	188.7	180.5	214.5	162.0	162.5	174.0	178.3	211.0	200.3	205.7	170.0
3	X35A035	186.3	261.7	183.7	164.3	199.0	235.7	199.0	200.0	158.3	198.3	239.7	252.3	186.7	212.0
4	VEH-3019	147.7	200.0	151.3	200.7	174.9	196.7	165.7	145.8	146.4	163.6	210.0	182.4	201.1	176.5
5	X35A019	187.3	258.3	183.7	169.3	199.7	223.3	216.0	187.5	204.9	207.9	232.7	228.9	185.0	216.0
6	JH-8277	175.7	216.7	180.0	172.3	186.2	134.8	168.3	170.0	196.3	167.4	205.0	215.5	160.4	202.5
7	HKH-406	135.3	193.3	159.3	189.0	169.3	189.8	156.7	146.7	171.6	166.2	197.7	180.7	159.7	195.0
8	DMRH-1	152.7	210.0	152.7	196.7	178.0	211.6	173.0	160.0	165.3	177.5	246.0	199.8	164.8	177.0
9	PAC-746	175.0	223.3	120.3	170.0	172.2	218.5	185.3	170.0	183.5	189.3	212.0	216.1	186.7	198.5
10	JH-9072	167.7	235.0	175.3	187.7	191.4	205.5	195.7	170.8	154.3	181.6	226.0	225.9	166.7	198.0
11	JH-9124	162.3	203.3	152.7	186.3	176.2	198.0	173.3	160.8	175.9	177.0	226.0	202.3	181.3	193.5
12	JH-9078	175.3	213.3	165.3	188.0	185.5	218.8	167.3	164.5	170.3	180.2	228.3	205.3	149.7	197.5
13	PRO-378	142.3	200.0	135.7	195.0	168.3	175.7	173.0	140.8	167.0	164.1	210.0	198.5	165.6	176.5
14	MAIZE X440	140.0	226.7	158.7	190.7	179.0	230.6	160.7	155.0	161.3	176.9	229.3	206.6	182.3	193.5
15	PRO-379	144.0	206.7	145.0	197.0	173.2	191.7	166.0	151.7	148.7	164.5	223.7	188.8	178.1	195.0
16	BIO-265	150.0	250.0	163.3	193.3	189.2	207.2	167.0	187.3	192.6	188.5	221.0	223.3	181.3	207.0
CHECKS															
17	BULAND	164.3	220.0	156.0	194.0	183.6	233.2	178.0	164.2	183.0	189.6	228.7	212.7	175.2	206.0
18	HM 10	176.7	220.0	174.3	191.3	190.6	227.4	169.3	176.7	155.3	182.2	208.7	218.7	182.4	199.0
19	HM 9	165.0	216.7	152.0	197.3	182.8	192.8	181.0	156.7	152.7	170.8	215.3	200.4	153.7	174.5
20	HM 8	144.7	213.3	149.0	188.0	173.8	191.4	163.3	154.2	155.3	166.1	215.3	202.5	144.7	176.5
	Loc. Mean	161.3	219.5	158.4	186.9	181.5	205.2	175.1	163.8	168.9	178.2	219.4	209.3	174.2	193.7
	C.D. (5%)	22.52	24.38	36.41	9.78	20.71	9.34	28.81	19.68	4.83	21.38	9.22	6.13	33.83	5.88
	C.V. (%)	8.44	6.72	13.91	3.17	8.06	2.75	9.95	7.27	1.73	8.47	2.54	1.77	11.75	1.84
	F (Prob.)	0.00	0.00	0.12	0.00	0.11	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.05	0.00

Table No. 1(Cont.)

Sl No	PEDIGREE	PLANT HEIGHT CM						EAR HEIGHT CM									
		AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean
1	DMRH-2	170.0	195.5	157.7	206.5	182.1	183.5	81.0	63.3	76.7	76.7	74.4	75.6	67.3	75.0	63.1	70.3
2	MAIZE 115-08-01	185.0	194.4	160.7	214.5	187.6	185.5	99.0	115.0	85.7	82.0	95.4	106.2	73.3	96.7	70.5	86.7
3	X35A035	181.7	214.5	174.0	235.7	204.9	204.7	93.3	128.3	100.3	60.0	95.5	102.8	88.3	122.5	62.9	94.1
4	VEH-3019	180.0	190.0	150.7	196.7	173.7	176.8	74.0	93.3	86.3	98.0	87.9	87.7	67.0	80.0	55.3	72.5
5	X35A019	185.0	209.5	161.0	223.3	192.1	204.1	84.0	130.0	102.7	71.3	97.0	99.1	83.0	102.5	77.4	90.5
6	JH-8277	188.3	194.3	169.7	134.8	152.3	179.4	93.3	116.7	102.0	82.7	98.7	92.8	78.7	91.7	69.5	83.1
7	HKH-406	168.3	180.3	168.7	189.8	179.2	173.4	62.7	100.0	87.0	80.0	82.4	85.9	72.3	85.3	74.9	79.6
8	DMRH-1	180.0	193.5	154.7	211.6	183.1	183.7	84.7	98.3	75.0	89.3	86.8	93.7	77.0	89.2	65.0	81.2
9	PAC-746	183.3	199.3	159.0	218.5	188.7	188.0	79.3	108.3	87.3	75.3	87.6	107.2	80.3	97.5	72.5	89.4
10	JH-9072	166.7	196.7	158.3	205.5	181.9	189.3	84.0	123.3	95.7	80.7	95.9	103.5	93.3	96.7	69.3	90.7
11	JH-9124	175.0	195.6	152.0	198.0	175.0	182.7	90.7	96.7	86.3	88.7	90.6	82.7	73.3	79.2	78.7	78.5
12	JH-9078	193.3	194.8	144.0	218.8	181.4	186.7	93.7	113.3	95.3	70.7	93.2	102.4	63.7	95.2	74.3	83.9
13	PRO-378	168.3	183.8	150.7	175.7	163.2	171.6	80.0	101.7	69.3	91.3	85.6	92.6	63.7	83.2	63.5	75.7
14	MAIZE X440	166.7	195.7	156.7	230.6	193.6	185.9	79.7	113.3	96.0	83.3	93.1	110.8	80.7	93.7	70.1	88.8
15	PRO-379	181.7	193.4	146.7	191.7	169.2	177.1	77.0	100.0	77.3	96.0	87.6	75.6	73.0	88.3	59.3	74.1
16	BIO-265	193.3	205.2	163.0	207.2	185.1	193.8	71.3	126.7	85.7	82.3	91.5	96.4	76.7	96.7	93.3	90.8
	CHECKS																
17	BULAND	175.0	199.5	171.3	233.2	202.3	193.0	92.3	106.7	96.0	95.7	97.7	107.2	80.3	95.8	70.9	88.6
18	HM 10	186.7	199.1	159.3	227.4	193.4	191.5	84.3	106.7	82.7	94.7	92.1	111.2	82.0	93.3	63.1	87.4
19	HM 9	161.7	181.1	146.7	192.8	169.7	177.3	87.7	105.0	83.7	93.0	92.3	85.4	90.0	85.8	63.3	81.1
20	HM 8	176.7	183.2	155.7	191.4	173.5	174.8	71.0	110.0	80.3	85.0	86.6	86.3	77.7	91.7	61.9	79.4
	Loc. Mean	178.3	195.0	158.0	205.2	181.6	185.1	83.2	107.8	87.6	83.8	90.6	95.3	77.1	92.0	68.9	83.3
	C.D. (5%)	30.49	15.53	28.75	9.34	35.45	9.74	18.9	16.0	13.2	16.9	15.4	9.9	18.2	17.2	5.8	10.9
	C.V. (%)	10.34	6.32	11.01	2.75	9.33	7.31	13.8	9.0	9.1	12.2	12.0	6.3	14.3	11.3	5.1	9.2
	F (Prob.)	0.75	0.00	0.80	0.00	0.38	0.00	0.04	0.00	0.00	0.00	0.32	0.00	0.09	0.00	0.00	0.00

Table No. 1(Cont.)

Sl No	PEDIGREE	EAR HEIGHT CM					SHELLING %									
		KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean
1	DMRH-2	78.7	111.9	100.3	95.5	105.0	98.3	51.0	75.6	63.3	79.8	75.0	76.0	81.5	73.0	76.4
2	MAIZE 115-08-01	86.0	117.7	102.6	94.0	110.0	102.1	58.0	106.2	82.1	93.5	79.0	84.0	78.5	72.0	78.4
3	X35A035	107.7	123.3	111.9	100.5	110.0	110.7	64.7	102.8	83.7	98.6	87.0	80.0	82.0	75.0	81.0
4	VEH-3019	80.7	94.5	101.0	83.5	113.3	94.6	53.3	87.7	70.5	83.7	79.0	78.0	75.0	73.5	76.4
5	X35A019	86.0	114.7	103.4	104.5	103.3	102.4	56.3	99.1	77.7	94.5	75.0	80.0	84.0	75.0	78.5
6	JH-8277	87.0	116.9	110.9	101.0	113.3	105.8	59.0	92.8	75.9	93.9	78.5	75.0	80.0	74.5	77.0
7	HKH-406	85.3	98.7	94.5	98.0	103.3	96.0	60.7	85.9	73.3	85.0	73.5	77.0	79.5	73.0	75.8
8	DMRH-1	82.7	94.5	92.2	78.0	115.0	92.5	53.0	93.7	73.4	85.4	78.5	81.0	81.0	71.0	77.9
9	PAC-746	89.3	111.8	110.7	102.0	108.3	104.4	53.3	107.2	80.3	92.7	77.0	78.0	81.5	73.0	77.4
10	JH-9072	106.3	116.9	103.1	95.0	100.0	104.3	59.3	103.5	81.4	95.4	76.5	81.0	81.5	75.0	78.5
11	JH-9124	87.3	101.7	101.8	93.0	113.3	99.4	52.7	82.7	67.7	87.3	80.0	80.0	81.5	74.0	78.9
12	JH-9078	77.0	105.6	107.9	97.5	113.3	100.3	43.3	102.4	72.9	90.4	81.0	79.0	80.0	73.0	78.3
13	PRO-378	73.7	94.8	81.5	83.5	98.3	86.4	47.7	92.6	70.1	81.2	78.0	79.0	81.5	74.0	78.1
14	MAIZE X440	85.3	113.7	100.4	96.5	106.7	100.5	54.0	110.8	82.4	93.0	61.0	84.0	73.5	75.0	73.4
15	PRO-379	85.3	95.4	97.9	91.5	113.3	96.7	53.3	75.6	64.5	83.9	71.0	81.0	77.5	72.0	75.4
16	BIO-265	86.7	112.6	114.8	96.0	118.3	105.7	59.0	96.4	77.7	94.2	69.0	82.0	79.0	72.0	75.5
CHECKS																
17	BULAND	110.0	125.0	103.5	112.5	106.7	111.5	64.0	107.2	85.6	98.3	72.5	79.0	72.5	72.0	74.0
18	HM 10	82.0	111.1	100.9	98.0	111.7	100.7	55.0	111.2	83.1	92.5	75.5	80.0	79.5	74.0	77.3
19	HM 9	80.7	96.6	93.5	81.0	105.0	91.4	54.0	85.4	69.7	86.0	74.5	82.0	77.5	73.0	76.8
20	HM 8	75.0	103.2	83.2	86.5	103.3	90.3	54.3	86.3	70.3	83.7	75.0	79.0	80.0	73.0	76.8
	Loc. Mean	86.6	108.0	100.8	94.4	108.6	99.7	55.3	95.3	75.3	89.6	75.8	79.8	79.4	73.4	77.1
	C.D. (5%)	5.4	3.5	17.9	4.9	20.7	8.0	20.6	9.9	16.3	5.8	7.11	-	3.81	1.94	4.51
	C.V. (%)	3.7	2.0	10.8	3.2	11.6	6.4	22.5	6.3	10.4	8.9	5.67	-	2.90	1.60	4.13
	F (Prob.)	0.00	0.00	0.04	0.00	0.91	0.00	0.95	0.00	0.21	0.00	0.00	-	0.00	0.00	0.27

Table No. 1(Cont.)

Sl No	PEDIGREE	SHELLING %			ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean
		VARA	BAHR	BHUV											
1	DMRH-2	75.6	73.0	77.5	75.4	75.9	79.1	77.1	87.5	77.1	79.3	83.1	75.6	79.3	77.6
2	MAIZE 115-08-01	74.5	71.5	78.5	74.8	76.8	79.8	81.5	82.0	79.9	80.0	81.3	74.5	77.9	78.1
3	X35A035	75.8	74.1	77.2	75.7	79.5	76.1	75.9	85.9	78.9	79.3	84.9	75.8	80.3	79.1
4	VEH-3019	74.0	73.8	76.1	74.6	77.2	79.7	79.9	82.4	79.8	79.8	85.5	74.0	79.7	77.7
5	X35A019	76.2	76.9	79.7	77.6	75.7	83.2	84.1	88.3	86.0	83.4	84.8	76.2	80.5	80.3
6	JH-8277	73.0	77.5	79.0	76.5	82.3	84.4	85.1	88.7	86.8	85.5	84.6	73.0	78.8	80.2
7	HKH-406	71.0	70.2	78.1	73.1	76.8	78.2	77.1	84.3	79.9	79.3	81.1	71.0	76.1	76.5
8	DMRH-1	71.3	71.5	78.4	73.7	77.4	79.1	79.9	88.2	79.0	80.7	81.9	71.3	76.6	77.8
9	PAC-746	71.3	71.3	76.2	72.9	78.9	81.4	81.0	87.3	81.9	82.1	84.7	71.3	78.0	78.2
10	JH-9072	73.3	74.0	77.0	74.7	80.6	82.8	84.9	87.1	79.9	83.1	82.5	73.3	77.9	79.2
11	JH-9124	70.3	77.0	76.1	74.4	79.8	81.8	81.7	85.6	83.1	82.4	82.9	70.3	76.6	78.9
12	JH-9078	74.6	70.4	78.9	74.6	82.6	76.8	75.7	87.0	85.7	81.6	84.8	74.6	79.7	78.9
13	PRO-378	75.0	73.3	77.2	75.2	77.1	75.5	74.8	88.3	84.1	79.9	82.0	75.0	78.5	78.2
14	MAIZE X440	73.4	71.9	76.3	73.9	75.6	75.1	72.3	85.0	79.1	77.4	82.6	73.4	78.0	75.6
15	PRO-379	74.1	71.9	79.4	75.1	76.9	75.1	75.3	85.4	82.1	78.9	82.7	74.1	78.4	77.0
16	BIO-265	77.3	73.5	77.0	75.9	76.0	79.8	81.7	87.5	84.0	81.8	82.9	77.3	80.1	78.5
CHECKS															
17	BULAND	71.7	73.1	78.3	74.3	75.3	80.4	80.1	85.0	76.5	79.4	79.7	71.7	75.7	76.3
18	HM 10	72.3	71.9	77.3	73.8	74.8	77.4	82.1	85.4	83.9	80.7	80.9	72.3	76.6	77.7
19	HM 9	72.7	69.1	77.7	73.1	77.5	83.0	82.9	85.5	79.1	81.6	81.4	72.7	77.1	77.7
20	HM 8	70.0	69.7	77.1	72.3	80.6	79.9	76.0	87.5	81.0	81.0	83.3	70.0	76.6	77.3
	Loc. Mean	73.4	72.7	77.7	74.6	77.9	79.4	79.4	86.2	81.4	80.9	82.9	73.4	78.1	78.0
	C.D. (5%)	3.00	2.08	-	2.86	3.99	1.34	1.15	1.20	0.38	2.95	2.88	3.00	3.20	1.84
	C.V. (%)	2.48	1.73	-	2.32	3.10	1.02	0.88	0.84	0.28	2.89	2.11	2.48	1.96	3.17
	F (Prob.)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.09	0.00

Table No. 1(Cont.)

Sl No	PEDIGREE	STAND ('000/ha)				ZN 2				ZN 3	
		LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean
1	DMRH-2	77.8	53.9	60.6	67.4	64.9	63.9	68.8	55.6	61.1	62.3
2	MAIZE 115-08-01	81.5	53.3	57.8	76.4	67.2	68.8	70.1	52.8	62.5	63.5
3	X35A035	76.9	52.2	57.2	75.7	65.5	63.2	75.7	51.7	56.3	61.7
4	VEH-3019	72.2	54.4	31.1	75.0	58.2	56.3	57.6	50.6	58.3	55.7
5	X35A019	81.5	50.6	57.8	76.4	66.6	69.4	73.6	56.7	57.6	64.3
6	JH-8277	86.1	55.0	66.1	72.9	70.0	66.0	66.0	54.4	62.5	62.2
7	HKH-406	63.0	46.7	35.0	79.9	56.1	54.9	50.0	47.2	62.5	53.6
8	DMRH-1	86.1	55.6	55.6	77.1	68.6	61.1	67.4	53.9	64.6	61.7
9	PAC-746	69.4	52.2	60.0	73.6	63.8	66.0	74.3	45.6	63.9	62.4
10	JH-9072	78.7	51.7	65.0	75.7	67.8	63.9	60.4	54.4	61.8	60.1
11	JH-9124	83.3	51.1	65.0	70.1	67.4	59.0	68.8	50.0	58.3	59.0
12	JH-9078	76.9	53.3	54.4	79.2	65.9	63.2	50.0	38.3	60.4	53.0
13	PRO-378	88.0	53.3	61.7	77.8	70.2	64.6	70.8	52.8	61.1	62.3
14	MAIZE X440	80.6	51.7	56.1	76.4	66.2	68.1	63.9	51.1	56.9	60.0
15	PRO-379	82.4	52.8	54.4	74.3	66.0	63.2	77.8	53.3	59.0	63.3
16	BIO-265	78.7	59.4	55.0	72.9	66.5	63.9	70.1	51.1	60.4	61.4
	CHECKS										
17	BULAND	79.6	56.1	66.7	77.8	70.0	62.5	78.5	54.4	63.9	64.8
18	HM 10	83.3	53.9	65.0	72.9	68.8	65.3	72.9	53.3	58.3	62.5
19	HM 9	81.5	53.9	61.1	78.5	68.7	62.5	71.5	47.8	58.3	60.0
20	HM 8	81.5	52.2	49.4	75.0	64.5	61.1	64.6	49.4	58.3	58.4
	Loc. Mean	79.4	53.2	56.8	75.2	66.2	63.3	67.6	51.2	60.3	60.6
	C.D. (5%)	11.4	6.6	11.3	2.8	7.6	6.8	8.5	10.2	4.5	6.3
	C.V. (%)	8.7	7.5	12.1	2.3	8.1	6.5	7.6	12.0	4.5	7.3
	F (Prob.)	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0

Table No. 1(Cont.)

Sl No	PEDIGREE	STAND ('000/ha)					ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean
		KARI	COIM	VAGA	ARBH	AKOL					
1	DMRH-2	57.8	68.1	70.1	62.8	66.7	65.1	66.7	63.9	65.3	64.3
2	MAIZE 115-08-01	61.1	69.4	68.1	62.8	60.0	64.3	79.2	68.8	74.0	66.2
3	X35A035	53.9	70.1	68.1	51.1	63.7	61.4	75.7	63.2	69.4	63.6
4	VEH-3019	61.7	69.4	68.8	41.7	60.7	60.5	64.6	56.3	60.4	58.6
5	X35A019	57.8	70.1	68.1	65.6	66.7	65.6	68.1	69.4	68.7	66.0
6	JH-8277	58.3	69.4	70.1	63.9	66.7	65.7	77.1	66.0	71.5	66.7
7	HKH-406	59.4	69.4	70.1	38.9	45.9	56.8	71.5	54.9	63.2	56.6
8	DMRH-1	60.0	69.4	69.4	58.9	61.5	63.9	56.3	61.1	58.7	63.9
9	PAC-746	60.6	70.1	70.1	50.0	65.9	63.4	63.2	66.0	64.6	63.4
10	JH-9072	60.6	69.4	68.1	51.7	64.4	62.8	64.6	63.9	64.2	63.6
11	JH-9124	60.6	68.1	62.5	57.2	65.9	62.9	68.1	59.0	63.5	63.1
12	JH-9078	61.7	68.8	72.2	52.8	66.7	64.4	65.3	63.2	64.2	61.8
13	PRO-378	58.3	70.1	70.8	67.2	64.4	66.2	70.8	64.6	67.7	66.4
14	MAIZE X440	58.9	70.1	70.8	51.7	65.9	63.5	70.8	68.1	69.4	64.1
15	PRO-379	54.4	70.1	70.1	65.0	63.7	64.7	66.7	63.2	64.9	64.7
16	BIO-265	60.0	70.1	71.5	59.4	66.7	65.6	60.4	63.9	62.2	64.2
CHECKS											
17	BULAND	60.0	68.8	68.8	57.2	65.9	64.1	60.4	62.5	61.5	65.5
18	HM 10	61.7	69.4	68.8	63.9	61.5	65.0	79.9	65.3	72.6	66.4
19	HM 9	59.4	69.4	69.4	55.6	61.5	63.1	68.8	62.5	65.6	64.1
20	HM 8	62.2	69.4	68.1	48.9	61.5	62.0	75.0	61.1	68.1	62.5
	Loc. Mean	59.4	69.5	69.2	56.3	63.3	63.5	68.6	63.3	66.0	63.8
	C.D. (5%)	5.0	2.1	6.0	11.4	8.2	5.3	19.6	6.8	9.7	3.3
	C.V. (%)	5.1	1.8	5.2	12.3	7.8	6.6	17.3	6.5	7.0	7.2
	F (Prob.)	0.1	0.7	0.6	0.0	0.0	0.2	0.6	0.0	0.2	0.0

TABLE No. 2

PERFORMANCE OF MEDIUM MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, KANPUR, VARANASI, BAHRAICH, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, BANSWARA IN IET, TRIAL No. TR02 DURING RABI(2009-10).

GRAIN YIELD (kg/ha) AT 15% MOISTURE																				
S1	ZN 2																		ZN 3	
No	PEDIGREE	LUDH	R	KARN	R	KANP	R	MEAN	R	VARA	R	BAHR	R	DHOL	R	BHUV	R	MEAN	R	
1	HKH-315	3213	7	6756	2	7803	4	5924	6	10776	6	7371	6	4506	5	6386	2	7260	5	
2	HKH-312	6609	2	7336	1	7966	3	7304	1	11269	3	9000	3	7372	1	6578	1	8555	2	
3	HKH-400	5468	5	5358	7	6955	6	5927	5	10855	4	8158	5	5002	4	5836	3	7463	4	
4	HKH-311	3222	6	5965	6	8434	1	5874	7	10782	5	6489	7	4001	7	4671	6	6486	7	
CHECKS																				
5	HM 8	6276	4	6120	5	6542	7	6313	4	9836	7	8181	4	5024	3	4946	5	6997	6	
6	HM 9	6702	1	6341	3	7093	5	6712	3	12866	2	9105	2	4019	6	5009	4	7750	3	
7	BIO 9637	6407	3	6283	4	8040	2	6910	2	14298	1	10052	1	5405	2	4657	7	8603	1	
	Location Mean	5414		6308		7548		6423		11526		8337		5047		5440		7587		
	Mean Stand	23		31		36		30		36		32		32		30		32		
	C.D. (5%)	1584		1139		857		1194		2017		1485		1578		182		1316		
	C.V. (%)	16.28		10.05		6.32		-		9.74		9.91		17.4		1.86		-		
	F (Prob)	0		0.045		0.002		-		0		0		0.002		0		-		
	Plot Size	3.6		6		4.8		-		4.8		4.8		6		4.8		-		
AGRONOMY DATA																				
	Sowing Date	26-11		13-11		23-12		-		1-12		12-12		25-11		13-12		-		
	Harvest Date	20-05		5-04		16-05		-		8-05		25-05		-		15-05		-		
	Irrigation Nos	12		10		5		-		5		6		-		12		-		
	Fertilizer Applie	70		150		120		-		150		150		120		120		-		
	Fertilizer Applie	24		60		60		-		60		75		60		60		-		
	Fertilizer Applie	12		60		60		-		60		60		40		60		-		

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : DELH 25.8 %: GODH 31.0 %

Sl No	PEDIGREE	KARI	R	COIM	R	VAGA	R	ARBH	R	AKOL	R	ZN 4 MEAN	R	ZN 5 BANS	R	OV'L MEAN	R
1	HKH-315	4955	7	12249	1	5688	7	6539	5	5173	4	6921	6	5137	7	6658	6
2	HKH-312	10761	1	11658	3	7220	4	7570	2	5864	2	8615	1	6604	3	8139	1
3	HKH-400	6059	5	11840	2	7274	3	7731	1	5512	3	7683	3	5307	6	7027	4
4	HKH-311	5515	6	10332	5	6060	6	5410	7	3941	7	6251	7	5548	5	6182	7
CHECKS																	
5	HM 8	7858	4	8138	7	9342	1	7204	3	4452	5	7399	4	6359	4	6944	5
6	HM 9	9199	3	10565	4	9146	2	7057	4	6201	1	8434	2	7666	2	7767	2
7	BIO 9637	9408	2	9356	6	7043	5	5659	6	4002	6	7094	5	9543	1	7704	3
	Location Mean	7679		10591		7396		6739		5021		7485		6595		7203	
	Mean Stand	36		33		33		29		24		31		29		31	
	C.D. (5%)	686		2032		1434		1928		671		1350		539		1241	
	C.V. (%)	4.97		10.68		10.79		15.92		7.43		-		4.55		-	
	F (Prob)	0		0.003		0		0.008		0		-		0		-	
	Plot Size	6		4.8		4.8		6		4.5		-		4.8		-	
AGRONOMY DATA																	
	Sowing Date	18-11		23-12		6-01		4-12		25-01		-		25-11		-	
	Harvest Date	16-03		15-04		27-04		24-04		6-07		-		20-04		-	
	Irrigation Nos	-		10		11		9		-		-		6		-	
	Fertilizer Applie	200		150		150		150		120		-		150		-	
	Fertilizer Applie	80		75		75		75		60		-		60		-	
	Fertilizer Applie	60		75		75		37.5		40		-		60		-	

TABLE No. 2 (CONT.)

Sl No	PEDIGREE	DAYS TO 50% <i>SILKING</i>															
		LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH		
1	HKH-315	139.0	134.0	124.0	97.0	123.5	115.0	124.3	123.7	84.3	111.8	68.7	59.0	60.0	69.3		
2	HKH-312	137.0	131.7	121.3	98.3	122.1	114.7	119.3	119.3	80.7	108.5	65.3	57.7	57.7	67.7		
3	BIO 9637	135.7	134.3	122.7	102.0	123.7	114.7	122.0	122.3	77.3	109.1	67.3	56.3	54.0	68.3		
4	HKH-400	136.0	134.7	123.0	95.0	122.2	118.3	122.7	123.3	80.7	111.3	72.3	59.3	58.0	70.0		
5	HKH-311	137.0	133.3	119.3	98.3	122.0	112.3	119.0	122.3	79.0	108.2	65.7	57.7	56.3	69.0		
	CHECKS																
6	HM 8	136.3	134.3	124.3	101.0	124.0	117.7	123.0	123.3	80.7	111.2	70.3	60.3	58.3	69.0		
7	HM 9	135.3	133.3	121.7	102.7	123.3	115.0	118.7	123.0	82.0	109.7	67.0	57.7	54.7	68.0		
	Loc. Mean	136.6	133.7	122.3	99.2	123.0	115.4	121.3	122.5	80.7	110.0	68.1	58.3	57.0	68.8		
	C.D. (5%)	3.05	1.79	2.29	0.59	2.78	1.95	1.24	1.34	1.27	2.37	1.68	1.03	0.84	1.90		
	C.V. (%)	1.26	0.75	1.05	0.34	1.52	0.95	0.57	0.61	0.88	1.45	1.39	0.99	0.83	1.55		
	F (Prob.)	0.25	0.05	0.01	0.00	0.57	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.20		
Sl No	PEDIGREE	DAYS TO 50% <i>SILKING</i>					DAYS TO 50% <i>POLLEN SHED</i>										
		AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean
1	HKH-315	61.0	63.6	82.0	86.7	84.3	95.2	137.0	131.0	122.3	90.0	120.1	111.0	122.3	122.3	81.0	109.2
2	HKH-312	59.3	61.5	81.7	83.3	82.5	93.0	134.7	129.0	120.0	92.0	118.9	110.3	117.3	119.7	78.0	106.3
3	BIO 9637	60.7	61.3	80.0	81.7	80.8	93.3	134.0	131.3	119.3	96.0	120.2	110.3	119.7	120.3	74.3	106.2
4	HKH-400	61.7	64.3	83.0	85.0	84.0	94.9	134.3	131.7	120.7	88.0	118.7	115.7	120.7	121.7	77.7	108.9
5	HKH-311	59.3	61.6	80.0	83.7	81.8	92.8	135.0	130.3	118.3	91.0	118.7	109.0	116.7	120.7	76.7	105.8
	CHECKS																
6	HM 8	61.0	63.8	86.3	85.0	85.7	95.4	134.7	131.3	122.3	96.0	121.1	113.7	121.0	121.3	77.7	108.4
7	HM 9	60.3	61.5	81.0	83.0	82.0	93.6	134.0	130.3	120.7	96.0	120.3	111.3	116.3	121.3	79.0	107.0
	Loc. Mean	60.5	62.5	82.0	84.0	83.0	94.0	134.8	130.7	120.5	92.7	119.7	111.6	119.1	121.0	77.8	107.4
	C.D. (5%)	1.38	1.57	5.21	1.86	3.25	1.12	2.98	1.47	1.31	-	2.90	1.72	1.37	1.20	1.67	2.39
	C.V. (%)	1.28	1.92	3.57	1.25	1.60	1.64	1.24	0.63	0.61	-	1.63	0.87	0.65	0.56	1.21	1.50
	F (Prob.)	0.02	0.00	0.21	0.00	0.09	0.00	0.39	0.03	0.00	-	0.50	0.00	0.00	0.01	0.00	0.03

TABLE No. 2 (CONT.)

GRAIN YIELD % SUPERIORITY OVER THE HM 8																		
S1																		
No	PEDIGREE	LUDH	KARN	ZN 2		VARA	BAHR	DHOL	ZN 3		KARI	COIM	VAGA	ARBH	ZN 4		ZN 5	OV'L
				KANP	MEAN				BHUV	MEAN					AKOL	MEAN	BANS	MEAN
1	HKH-315	-	10	19	-	10	-	-	29	4	-	51	-	-	16	-	-	-
2	HKH-312	5	20	22	16	15	10	47	33	22	37	43	-	5	32	16	4	17
3	HKH-400	-	-	6	-	10	-	-	18	7	-	45	-	7	24	4	-	1
4	HKH-311	-	-	29	-	10	-	-	-	-	-	27	-	-	-	-	-	-
	CHECKS																	
5	HM 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	HM 9	7	4	8	6	31	11	-	1	11	17	30	-	-	39	14	21	12
7	BIO 9637	2	3	23	9	45	23	8	-	23	20	15	-	-	-	-	50	11

GRAIN YIELD % SUPERIORITY OVER THE HM 9																		
S1																		
No	PEDIGREE	LUDH	KARN	ZN 2		VARA	BAHR	DHOL	ZN 3		KARI	COIM	VAGA	ARBH	ZN 4		ZN 5	OV'L
				KANP	MEAN				BHUV	MEAN					AKOL	MEAN	BANS	MEAN
1	HKH-315	-	7	10	-	-	-	12	27	-	-	16	-	-	-	-	-	-
2	HKH-312	-	16	12	9	-	-	83	31	10	17	10	-	7	-	2	-	5
3	HKH-400	-	-	-	-	-	-	24	17	-	-	12	-	10	-	-	-	-
4	HKH-311	-	-	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CHECKS																	
5	HM 8	-	-	-	-	-	-	25	-	-	-	-	2	2	-	-	-	-
6	HM 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	BIO 9637	-	-	13	3	11	10	34	-	11	2	-	-	-	-	-	24	-

GRAIN YIELD % SUPERIORITY OVER THE BIO 9637																		
S1																		
No	PEDIGREE	LUDH	KARN	ZN 2		VARA	BAHR	DHOL	ZN 3		KARI	COIM	VAGA	ARBH	ZN 4		ZN 5	OV'L
				KANP	MEAN				BHUV	MEAN					AKOL	MEAN	BANS	MEAN
1	HKH-315	-	8	-	-	-	-	37	-	-	31	-	16	29	-	-	-	-
2	HKH-312	3	17	-	6	-	-	36	41	-	14	25	3	34	47	21	-	6
3	HKH-400	-	-	-	-	-	-	25	-	-	27	3	37	38	8	-	-	-
4	HKH-311	-	-	5	-	-	-	0	-	-	10	-	-	-	-	-	-	-
	CHECKS																	
5	HM 8	-	-	-	-	-	-	6	-	-	-	33	27	11	4	-	-	-
6	HM 9	5	1	-	-	-	-	8	-	-	13	30	25	55	19	-	1	-
7	BIO 9637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE No. 2 (CONT.)

Sl No	PEDIGREE	DAYS TO 50% POLLEN SHED					ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	DAYS TO 50% DRY HUSK					
		KARI	COIM	VAGA	ARBH	AKOL						LUDH	KARN	ZN 2 Mean			
1	HKH-315	66.7	57.0	57.0	69.7	60.0	62.1	80.3	83.3	81.8	92.7	165.3	165.3	165.3			
2	HKH-312	63.3	56.3	55.3	66.7	58.3	60.0	79.7	79.3	79.5	90.7	164.7	162.3	163.5			
3	BIO 9637	65.3	54.3	51.3	67.0	59.7	59.5	78.0	78.0	78.0	90.6	162.0	165.3	163.7			
4	HKH-400	70.3	57.3	55.0	69.3	60.7	62.5	81.0	81.7	81.3	92.4	165.3	164.3	164.8			
5	HKH-311	63.7	55.7	53.0	67.3	58.3	59.6	78.3	79.7	79.0	90.2	164.7	164.7	164.7			
	CHECKS																
6	HM 8	68.3	57.7	56.0	67.3	60.0	61.9	84.0	82.0	83.0	92.9	163.3	165.0	164.2			
7	HM 9	65.0	56.3	52.7	67.0	59.3	60.1	79.0	80.0	79.5	91.2	162.0	163.7	162.8			
	Loc. Mean	66.1	56.4	54.3	67.8	59.5	60.8	80.0	80.6	80.3	91.5	163.9	164.4	164.1			
	C.D. (5%)	1.68	1.05	1.12	1.56	1.38	1.57	4.91	1.97	2.68	1.13	3.39	3.20	3.28			
	C.V. (%)	1.43	1.05	1.16	1.29	1.31	1.98	3.45	1.37	1.36	1.70	1.16	1.09	0.82			
	F (Prob.)	0.00	0.00	0.00	0.01	0.02	0.00	0.22	0.00	0.03	0.00	0.19	0.43	0.58			
Sl No	PEDIGREE	DAYS TO 50% DRY HUSK					ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean
		VARA	BAHR	DHOL	BHUV												
1	HKH-315	152.0	154.0	157.0	126.0	147.3	102.7	110.0	106.3	115.7	101.0	107.1	106.7	117.7	112.2	129.2	
2	HKH-312	149.7	150.7	158.7	126.3	146.3	102.7	108.0	104.0	115.7	99.3	105.9	107.3	114.7	111.0	128.0	
3	BIO 9637	151.3	151.3	155.7	127.3	146.4	103.0	106.0	105.7	115.3	100.7	106.1	105.0	112.0	108.5	127.7	
4	HKH-400	155.3	153.0	159.7	127.3	148.8	103.0	110.0	105.3	115.3	101.7	107.1	108.3	116.7	112.5	129.6	
5	HKH-311	154.7	150.0	160.3	127.0	148.0	106.3	108.0	104.7	115.3	99.3	106.7	105.3	115.7	110.5	128.9	
	CHECKS																
6	HM 8	152.7	153.7	157.3	91.7	138.8	102.3	110.0	107.0	115.7	101.0	107.2	112.7	118.3	115.5	127.0	
7	HM 9	150.0	149.7	157.3	127.3	146.1	102.3	108.0	107.3	116.0	100.3	106.8	106.7	114.3	110.5	128.1	
	Loc. Mean	152.2	151.8	158.0	121.9	146.0	103.2	108.6	105.8	115.6	100.5	106.7	107.4	115.6	111.5	128.4	
	C.D. (5%)	2.32	1.45	4.47	39.30	10.31	1.51	-	0.84	1.10	1.38	1.51	6.40	1.90	3.26	3.18	
	C.V. (%)	0.86	0.54	1.59	18.13	4.76	0.82	-	0.45	0.53	0.77	1.08	3.35	0.92	1.19	3.16	
	F (Prob.)	0.00	0.00	0.34	0.42	0.51	0.00	-	0.00	0.80	0.02	0.49	0.25	0.00	0.03	0.67	

TABLE No. 2 (CONT.)

Sl No	PEDIGREE	MOISTURE								ZN 3							
		LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH		
1	HKH-315	25.1	30.2	21.4	15.0	22.9	25.0	23.7	15.8	17.3	20.4	13.4	17.3	19.1	16.7		
2	HKH-312	23.5	29.9	19.4	15.0	21.9	22.5	24.1	16.0	17.3	20.0	13.0	18.2	18.3	16.0		
3	BIO 9637	20.5	34.0	21.6	15.0	22.8	24.4	25.5	16.2	16.8	20.7	13.6	14.8	16.1	15.0		
4	HKH-400	26.1	31.7	22.5	15.0	23.8	26.3	24.7	19.9	17.0	22.0	13.2	21.6	22.8	20.2		
5	HKH-311	24.9	31.6	23.4	15.0	23.7	25.8	24.0	16.7	16.9	20.9	14.1	23.6	23.4	19.1		
CHECKS																	
6	HM 8	24.5	30.7	27.2	15.0	24.3	26.7	23.6	16.7	17.8	21.2	13.1	21.0	19.8	18.1		
7	HM 9	23.3	32.9	23.0	15.0	23.5	23.2	24.0	16.3	17.5	20.2	13.3	18.5	20.7	19.2		
	Loc. Mean	24.0	31.6	22.6	15.0	23.3	24.8	24.2	16.8	17.2	20.8	13.4	19.3	20.0	17.8		
	C.D. (5%)	1.17	0.00	4.06	-	2.52	1.78	1.06	-	-	1.56	1.40	0.64	0.58	3.06		
	C.V. (%)	2.73	0.00	10.08	-	7.28	4.04	2.47	-	-	5.04	5.86	1.85	1.62	9.70		
	F (Prob.)	0.00	0.00	0.04	-	0.53	0.00	0.02	0.00	0.00	0.19	0.72	0.00	0.00	0.03		
Sl No	PEDIGREE	MOISTURE					PLANT HEIGHT CM										
		AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean
1	HKH-315	11.7	15.6	13.0	15.5	14.2	18.7	145	190	148	183	167	177	153	123	164	155
2	HKH-312	12.0	15.5	12.1	15.4	13.7	18.2	166	187	146	186	171	179	167	138	150	158
3	BIO 9637	11.1	14.1	9.6	16.0	12.8	18.0	137	207	151	169	166	211	160	141	173	171
4	HKH-400	12.4	18.0	14.2	16.1	15.1	20.2	166	220	161	197	186	178	170	140	172	165
5	HKH-311	10.8	18.2	11.0	15.5	13.3	19.7	152	197	162	184	174	220	167	142	166	173
CHECKS																	
6	HM 8	12.4	16.9	11.3	16.0	13.7	19.6	139	192	144	185	165	175	155	119	165	154
7	HM 9	11.7	16.7	11.5	15.8	13.6	19.0	155	208	155	173	173	195	163	138	153	162
	Loc. Mean	11.7	16.4	11.8	15.7	13.8	19.1	151	200	153	182	172	191	162	134	163	163
	C.D. (5%)	0.31	1.94	2.64	0.49	2.62	1.02	25.1	26.6	15.7	9.6	12.4	8.4	16.9	13.2	4.1	14.8
	C.V. (%)	1.47	9.05	12.56	1.75	7.77	7.38	9.3	7.5	5.8	3.0	4.9	2.5	5.9	5.5	1.4	6.1
	F (Prob.)	0.00	0.00	0.05	0.05	0.51	0.00	0.1	0.2	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.1

TABLE No. 2 (CONT.)

Sl No	PEDIGREE	PLANT HEIGHT CM					ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	EAR HEIGHT CM				ZN 2 Mean
		KARI	COIM	VAGA	ARBH	AKOL						LUDH	KARN	DELH	KANP	
1	HKH-315	210	171	156	173	175	177	172	166	169	167	75	80	70	81	76
2	HKH-312	187	180	365	170	183	217	166	163	165	182	85	70	57	77	72
3	BIO 9637	203	176	157	166	167	174	176	184	180	172	72	83	73	75	76
4	HKH-400	218	190	168	180	180	187	177	211	194	182	83	108	77	87	89
5	HKH-311	214	200	184	168	185	190	167	192	180	180	80	92	86	78	84
	CHECKS															
6	HM 8	207	163	148	179	163	172	166	179	172	165	65	90	71	78	76
7	HM 9	212	188	161	170	180	182	172	186	179	174	80	95	74	69	79
	Loc. Mean	207	181	191	172	176	186	171	183	177	175	77	88	73	78	79
	C.D. (5%)	11.2	7.6	229.7	4.3	18.2	46.9	20.8	11.9	25.1	16.1	17.1	26.8	10.3	12.7	11.3
	C.V. (%)	3.1	2.4	67.5	1.4	5.8	19.4	6.9	3.7	5.8	12.7	12.5	17.0	8.0	9.2	9.6
	F (Prob.)	0.0	0.0	0.4	0.0	0.2	0.5	0.8	0.0	0.3	0.2	0.2	0.2	0.0	0.2	0.1

Sl No	PEDIGREE	EAR HEIGHT CM				ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean
		VARA	BAHR	DHOL	BHUV											
1	HKH-315	105	58	63	62	72	75	90	82	74	97	83	61	66	63	76
2	HKH-312	97	52	70	56	69	67	85	85	78	98	83	61	59	60	73
3	BIO 9637	120	50	73	73	79	78	78	79	73	93	80	77	74	75	78
4	HKH-400	108	73	73	69	81	86	97	87	77	100	89	69	85	77	85
5	HKH-311	141	67	71	65	86	86	102	92	80	102	92	68	81	74	86
	CHECKS															
6	HM 8	111	64	68	70	78	84	93	80	82	88	85	65	77	71	79
7	HM 9	113	52	63	55	71	80	92	85	75	98	86	67	91	79	79
	Loc. Mean	113	59	68	64	76	79	91	84	77	97	86	67	76	71	79
	C.D. (5%)	6.7	14.1	12.0	5.3	11.6	5.2	4.4	9.8	3.9	18.8	5.7	19.0	20.1	16.5	4.8
	C.V. (%)	3.3	13.3	9.9	4.7	10.3	3.7	2.7	6.6	2.9	10.9	5.1	16.0	14.8	9.5	8.3
	F (Prob.)	0.0	0.0	0.3	0.0	0.1	0.0	0.0	0.2	0.0	0.8	0.0	0.6	0.1	0.2	0.0

TABLE No. 2 (CONT.)

Sl No	PEDIGREE	SHELLING %														OV'L Mean				
		LUDH	KARN	DELH	KANP	ZN 2				ZN 3				ZN 4				ZN 5		
						Mean	VARA	BAHR	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean	GODH	BANS	Mean	
1	HKH-315	74.0	75.0	78.5	71.0	74.6	77.5	75.9	79.1	77.5	80.0	79.4	81.5	83.9	85.7	82.1	81.0	71.8	76.4	78.2
2	HKH-312	73.9	78.0	82.5	74.0	77.1	78.5	75.4	79.8	77.9	75.9	78.4	79.3	85.1	83.8	80.5	85.5	70.8	78.1	78.6
3	BIO 9637	74.8	78.0	78.0	73.0	75.9	77.8	74.8	78.0	76.9	74.5	78.8	77.4	82.0	82.2	79.0	82.3	73.9	78.1	77.5
4	HKH-400	74.6	79.0	80.0	72.0	76.4	79.3	72.9	79.6	77.3	85.4	74.8	88.3	85.7	81.5	83.1	82.7	71.9	77.3	79.1
5	HKH-311	73.6	79.0	81.5	75.0	77.3	78.3	73.1	77.7	76.3	74.0	83.1	81.5	83.6	82.1	80.8	81.5	71.8	76.6	78.2
CHECKS																				
6	HM 8	82.9	77.0	76.0	76.0	78.0	78.0	77.0	78.5	77.8	79.9	75.5	83.2	82.5	85.1	81.2	84.2	72.3	78.2	79.1
7	HM 9	76.4	80.0	80.0	74.0	77.6	77.3	73.4	80.5	77.1	81.6	78.0	81.7	83.2	83.6	81.6	82.5	72.9	77.7	78.9
	Loc. Mean	75.7	78.0	79.5	73.6	76.7	78.1	74.6	79.0	77.2	78.8	78.3	81.8	83.7	83.4	81.2	82.8	72.2	77.5	78.5
	C.D. (5%)	7.53	0.00	2.80	-	3.44	1.23	2.42	-	2.17	5.29	0.91	8.02	1.38	0.74	3.70	1.56	2.52	3.64	1.67
	C.V. (%)	5.59	0.00	1.98	-	3.02	0.88	1.82	-	1.58	3.77	0.65	5.51	0.92	0.50	3.49	1.06	1.96	1.92	2.83
	F (Prob.)	0.18	0.00	0.00	0.00	0.47	0.06	0.02	-	0.72	0.00	0.00	0.20	0.00	0.00	0.41	0.00	0.29	0.79	0.44

Sl No	PEDIGREE	STAND ('000/ha)																		OV'L Mean	
		LUDH	KARN	DELH	KANP	ZN 2				ZN 3				ZN 4				ZN 5			
						Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean	GODH	BANS	Mean	
1	HKH-315	45.4	46.1	30.0	77.8	49.8	60.4	52.8	46.7	59.7	54.9	60.6	63.2	67.4	37.2	36.3	52.9	72.2	61.8	67.0	54.5
2	HKH-312	76.9	56.1	50.0	72.9	64.0	81.3	72.2	56.1	62.5	68.0	60.0	69.4	69.4	57.2	56.3	62.5	76.4	63.9	70.1	65.4
3	BIO 9637	74.1	51.1	60.6	74.3	65.0	81.9	79.9	56.7	68.8	71.8	58.9	70.1	68.8	51.7	64.4	62.8	71.5	60.4	66.0	66.2
4	HKH-400	58.3	58.9	38.3	75.7	57.8	65.3	56.3	52.2	68.1	60.5	62.8	65.3	67.4	39.4	39.3	54.8	75.0	56.3	65.6	58.6
5	HKH-311	53.7	48.3	49.4	76.4	57.0	71.5	52.1	52.8	59.7	59.0	56.7	70.1	66.7	48.9	56.3	59.7	62.5	60.4	61.5	59.0
CHECKS																					
6	HM 8	75.9	52.8	52.8	76.4	64.5	75.0	73.6	54.4	58.3	65.3	58.3	70.1	68.8	51.7	60.0	61.8	56.9	61.8	59.4	63.1
7	HM 9	69.4	50.6	50.0	72.9	60.7	82.6	75.0	57.2	60.4	68.8	61.7	68.8	66.0	54.4	65.9	63.4	71.5	63.2	67.4	64.6
	Loc. Mean	64.8	52.0	47.3	75.2	59.8	74.0	66.0	53.7	62.5	64.1	59.8	68.2	67.8	48.7	54.1	59.7	69.4	61.1	65.3	61.6
	C.D. (5%)	16.5	7.6	14.6	3.7	10.8	7.5	10.7	6.4	5.0	8.5	6.5	3.0	3.3	8.3	17.0	7.2	15.8	5.2	13.2	4.4
	C.V. (%)	14.3	8.2	17.3	2.8	12.1	5.7	9.1	6.7	4.5	8.9	6.1	2.5	2.7	9.6	17.7	9.2	12.8	4.8	8.3	9.7
	F (Prob.)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.0	0.2	0.1	0.5	0.0

TABLE No. 3

PERFORMANCE OF EARLY MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, DELHI, KANPUR, VARANASI, BAHRAICH, BHUVANESHWAR, KARIMNAGAR, BANSWARA, IN IET TRIAL No. TR03 DURING RABI(2009-10).

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE																									
		LUDH R				KARN R				DELH R				KANP R				ZN 2	VARA R	BAHR R	DHOL R	BHUV R	ZN 3	ZN 4	ZN 5	OV'L	
		MEAN R	VARA R	BAHR R	DHOL R	BHUV R	MEAN R	KARI R	BANS R	MEAN R	OV'L																
1	HKH-305	5746	2	6795	4	4473	2	7795	4	6202	2	10479	5	5449	5	4244	5	4993	3	6291	5	4712	5	5830	5	6051	5
2	HKH-301	4464	3	7114	1	4057	5	7962	2	5899	4	11142	4	7241	2	5449	2	5126	1	7240	3	5718	4	7733	2	6601	3
3	FILLER(TMC 89-1) CHECKS	6040	1	6831	2	4355	3	7894	3	6280	1	11232	3	6775	3	5149	3	4856	4	7003	4	6274	1	7162	4	6657	2
4	BULAND	4366	5	6811	3	4628	1	8003	1	5952	3	12247	1	6531	4	5864	1	4608	5	7313	1	6270	2	7792	1	6712	1
5	HM 11	4417	4	6377	5	4081	4	6976	5	5463	5	11232	2	7861	1	4946	4	5106	2	7286	2	5896	3	7263	3	6415	4
	Location Mean	5006		6786		4319		7726		5959		11266		6771		5130		4938		7027		5774		7156		6487	
	Mean Stand	23		34		29		36		31		37		33		30		31		33		35		29		32	
	C.D. (5%)	1517		1637		992		838		1246		1202		1018		1847		271		1085		867		870		1106	
	C.V. (%)	15.7		12.49		11.89		5.62		-		5.52		7.79		18.65		2.84		-		7.78		6.3		-	
	F (Prob)	0.095		0.784		0.061		0.029		-		0.011		0		0.279		0.002		-		0.015		0.001		-	
	Plot Size	3.6		6		6		4.8		-		4.8		4.8		6		4.8		-		6		4.8		-	
	AGRONOMY DATA																										
	Sowing Date	26-11		13-11		12-04		23-12		-		1-12		12-12		25-11		13-12		-		18-11		25-11		-	
	Harvest Date	20-05		5-04		-		16-05		-		7-05		24-05		-		11-05		-		16-03		20-04		-	
	Irrigation Nos	12		10		8		5		-		4		6		-		11		-		-		6		-	
	Fertilizer Applied	70		150		-		120		-		120		150		120		120		-		200		150		-	
	Fertilizer Applied	24		60		-		60		-		60		75		60		60		-		80		60		-	
	Fertilizer Applied	12		60		-		60		-		60		60		40		60		-		60		-		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : COIM 22.0 %: VAGA 41.8 %: ARBH 34.8 %: AKOL 20.3 %: GODH 32.9 %

Note: TMC 89-1 failed at mostly location due to poor germination.

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE BULAND																						
		LUDH				KARN				DELH				KANP				ZN 2	VARA	BAHR	DHOL	BHUV	ZN 3	ZN 4
		MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARI	BANS	MEAN	OV'L													
1	HKH-305	32	-	-	-	4	-	-	-	8	-	-	-	-										
2	HKH-301	2	4	-	-	-	-	11	-	11	-	-	-	-										
3	FILLER(TMC 89-1) CHECKS	38	0	-	-	6	-	4	-	5	-	0	-	-										
4	BULAND	-	-	-	-	-	-	-	-	-	-	-	-	-										
5	HM 11	1	-	-	-	-	-	20	-	11	-	-	-	-										

TABLE No. 3 (Cont..)

GRAIN YIELD % SUPERIORITY OVER THE HM 11																			
Sl		ZN 2														ZN 3	ZN 4	ZN 5	OV'L
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARI	BANS	MEAN					
1	HKH-305	30	7	10	12	14	-	-	-	-	-	-	-	-	-	-	-	-	-
2	HKH-301	1	12	-	14	8	-	-	10	0	-	-	6	3					
3	FILLER(TMC 89-1) CHECKS	37	7	7	13	15	-	-	4	-	-	6	-	4					
4	BULAND	-	7	13	15	9	9	-	19	-	0	6	7	5					
5	HM 11	-	-	-	-	-	-	-	-	-	-	-	-	-					
DAYS TO 50% SILKING																			
Sl		ZN 2														ZN 3	ZN 4	ZN 5	OV'L
No	PEDIGREE	LUDH	KARN	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	COIM	VAGA	ARBH	AKOL	Mean	GODH	BANS	Mean	Mean
1	HKH-305	139.3	134.3	96.0	123.2	113.3	120.3	120.3	76.3	107.6	58.0	57.3	68.7	59.3	60.8	78.0	77.0	77.5	92.2
2	HKH-301	138.0	133.0	100.0	123.7	112.3	119.3	119.3	76.7	106.9	57.0	58.0	69.0	60.3	61.1	80.7	78.7	79.7	92.5
3	FILLER(TMC 89-1) CHECKS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	BULAND	140.3	139.7	93.7	124.6	120.3	125.3	127.0	74.0	111.7	61.3	57.3	73.7	62.3	63.7	82.3	83.3	82.8	95.4
5	HM 11	140.3	133.3	102.3	125.3	115.0	125.7	122.7	76.7	110.0	58.7	56.7	72.7	61.0	62.3	80.3	80.0	80.2	94.3
	Loc. Mean	139.5	135.1	98.0	124.2	115.3	122.7	122.3	75.9	109.0	58.8	57.3	71.0	60.8	62.0	80.3	79.8	80.0	93.6
	C.D. (5%)	4.35	2.42	2.75	6.84	1.29	1.73	2.13	1.97	3.87	1.37	1.10	1.00	2.64	2.07	6.41	1.79	2.83	1.70
	C.V. (%)	1.56	0.90	1.40	2.75	0.56	0.71	0.87	1.30	2.22	1.17	0.96	0.70	2.18	2.09	4.00	1.13	1.11	2.28
	F (Prob.)	0.55	0.00	0.00	0.87	0.00	0.00	0.00	0.04	0.07	0.00	0.12	0.00	0.14	0.05	0.48	0.00	0.03	0.00

TABLE No. 3 (Cont..)

DAYS TO 50% POLLEN SHED																					
S1	ZN 2									ZN 3					ZN 4			ZN 5		OV'L	
No	PEDIGREE	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	COIM	VAGA	ARBH	AKOL	Mean	GODH	BANS	Mean	Mean	
1	HKH-305	137.7	134.3	117.0	89.0	119.5	110.0	118.3	119.0	73.7	105.3	56.3	54.0	67.7	58.3	59.1	76.0	74.0	75.0	91.8	
2	HKH-301	136.3	130.0	117.7	93.0	119.3	110.0	117.3	117.3	74.0	104.7	55.0	54.7	67.3	59.3	59.1	78.3	75.7	77.0	91.9	
3	FILLER(TMC 89-1)																				
	CHECKS																				
4	BULAND	138.7	136.7	125.3	87.0	121.9	115.3	123.3	124.3	71.0	108.5	59.3	54.7	72.0	61.3	61.8	80.3	80.0	80.2	95.0	
5	HM 11	138.0	130.3	119.7	94.7	120.7	111.0	123.7	120.0	73.3	107.0	56.7	54.0	71.0	60.0	60.4	77.7	76.7	77.2	93.3	
	Loc. Mean	137.7	132.8	119.9	90.9	120.3	111.6	120.7	120.2	73.0	106.4	56.8	54.3	69.5	59.8	60.1	78.1	76.6	77.3	93.0	
	C.D. (5%)	3.03	4.11	2.13	2.88	5.24	1.53	1.73	1.66	2.21	3.70	1.49	1.20	0.74	2.64	1.76	5.49	2.03	2.33	1.58	
	C.V. (%)	1.10	1.55	0.89	1.59	2.72	0.68	0.72	0.69	1.51	2.17	1.31	1.11	0.54	2.21	1.84	3.52	1.32	0.95	2.22	
	F (Prob.)	0.37	0.02	0.00	0.00	0.66	0.00	0.00	0.00	0.05	0.15	0.00	0.38	0.00	0.14	0.02	0.36	0.00	0.02	0.00	
DAYS TO 50% DRY HUSK																					
S1	ZN 2									ZN 3				ZN 4			OV'L				
No	PEDIGREE	LUDH	KARN	Mean	VARA	BAHR	DHOL	BHUV	Mean	COIM	VAGA	ARBH	AKOL	Mean	BANS	Mean					
1	HKH-305	164.7	165.7	165.2	151.0	146.3	145.7	118.0	140.3	98.0	95.0	117.3	91.3	100.4	107.3	127.3					
2	HKH-301	164.3	163.0	163.7	151.0	146.7	158.0	117.3	143.3	95.0	92.0	116.7	92.3	99.0	106.3	127.5					
3	FILLER(TMC 89-1)																				
	CHECKS																				
4	BULAND	167.0	170.3	168.7	152.3	148.7	158.0	115.0	143.5	100.0	97.3	116.3	94.0	101.9	114.7	130.3					
5	HM 11	168.0	163.7	165.8	153.0	147.0	160.3	120.0	145.1	100.0	96.3	116.7	93.0	101.5	110.0	129.8					
	Loc. Mean	166.0	165.7	165.8	151.8	147.2	155.5	117.6	143.0	98.3	95.2	116.8	92.7	100.7	109.6	128.7					
	C.D. (5%)	3.98	3.35	7.37	2.88	1.37	18.44	1.91	5.40	-	4.37	1.20	2.11	2.19	1.97	2.21					
	C.V. (%)	1.20	1.01	1.40	0.95	0.47	5.94	0.81	2.36	-	2.30	0.51	1.14	1.36	0.90	1.97					
	F (Prob.)	0.17	0.01	0.35	0.32	0.02	0.29	0.00	0.30	-	0.10	0.32	0.09	0.06	0.00	0.01					
MOISTURE																					
S1	ZN 2									ZN 3					ZN 4			ZN 5		OV'L	
No	PEDIGREE	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean	GODH	BANS	Mean	Mean
1	HKH-305	24.4	33.8	21.2	15.0	23.6	23.0	25.0	17.9	17.2	20.8	13.5	18.0	19.1	16.8	12.0	15.9	15.9	14.9	15.4	19.2
2	HKH-301	23.5	34.4	20.4	15.0	23.3	25.7	22.9	16.1	16.8	20.4	13.8	18.3	20.5	21.6	11.0	17.1	15.3	15.3	15.3	19.4
3	FILLER(TMC 89-1)	26.6	34.0	23.7	15.0	24.8	25.3	23.7	21.9	17.7	22.2	14.0	18.9	19.4	19.5	13.8	17.1	11.6	15.0	13.3	20.0
4	BULAND	26.3	34.9	28.8	15.0	26.3	25.3	23.1	21.0	17.0	21.6	13.0	19.9	18.1	19.8	12.7	16.7	13.0	15.3	14.1	20.2
	CHECKS																				
5	HM 11	25.8	33.5	24.4	15.0	24.7	27.4	23.9	18.6	17.6	21.9	13.2	19.3	19.9	19.8	11.6	16.7	14.6	15.0	14.8	20.0
	Loc. Mean	25.3	34.1	23.7	15.0	24.5	25.3	23.7	19.1	17.3	21.3	13.5	18.9	19.4	19.5	12.2	16.7	14.1	15.1	14.6	19.7
	C.D. (5%)	2.25	-	4.06	-	2.46	1.64	2.65	0.00	0.00	2.27	1.56	0.48	1.30	3.96	0.18	1.42	1.93	0.46	3.55	1.03
	C.V. (%)	4.72	-	9.11	-	6.50	3.44	5.94	0.00	0.00	6.91	6.12	1.36	3.57	10.77	0.79	6.33	7.28	1.63	8.79	7.13
	F (Prob.)	0.05	-	0.01	-	0.14	0.00	0.43	0.00	0.00	0.43	0.62	0.00	0.02	0.19	0.00	0.40	0.00	0.25	0.53	0.22

TABLE No. 3 (Cont..)

Sl No	PLANT HEIGHT CM				ZN 2					ZN 3					ZN 4	
PEDIGREE	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean
1 HKH-305	146.7	168.3	148.5	175.7	159.8	191.5	170.7	127.5	148.5	159.6	77.7	167.4	151.8	171.0	173.3	148.3
2 HKH-301	147.3	205.0	166.7	190.3	177.3	207.5	183.3	160.8	178.8	182.6	75.7	195.2	167.3	166.0	188.3	158.5
3 FILLER(TMC 89-1) CHECKS																
4 BULAND	145.0	191.7	164.3	176.7	169.4	182.5	182.3	159.2	169.0	173.3	78.3	197.3	181.4	188.0	188.3	166.7
5 HM 11	156.7	206.7	171.0	179.3	178.4	212.5	181.0	151.7	172.3	179.4	69.7	193.2	177.7	178.5	190.0	161.8
Loc. Mean	149	193	163	181	171	199	179	150	167	174	75.3	188	170	176	185	159
C.D. (5%)	20.0	23.7	13.2	15.2	12.6	5.25	16.4	19.7	4.55	13.7	4.79	8.04	38.4	20.5	46.6	10.6
C.V. (%)	6.73	6.15	4.07	4.22	4.59	1.32	4.56	6.58	1.36	4.93	3.18	2.14	11.34	5.84	12.60	4.83
F (Prob.)	0.53	0.02	0.02	0.17	0.03	0.00	0.30	0.02	0.00	0.02	0.02	0.00	0.33	0.15	0.80	0.02

EAR HEIGHT CM																
Sl No	ZN 5				OV'L	ZN 2					ZN 3					
PEDIGREE	GODH	BANS	Mean	Mean	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM
1 HKH-305	156.7	156.8	156.8	155.5	76.7	71.7	68.5	89.7	76.6	122.0	54.0	71.2	52.1	74.8	13.5	85.2
2 HKH-301	180.3	223.8	202.1	175.8	73.3	80.0	73.3	92.3	79.8	114.0	77.3	89.2	64.7	86.3	13.8	95.5
3 FILLER(TMC 89-1) CHECKS																
4 BULAND	161.7	252.0	206.8	174.5	82.0	103.3	99.0	68.3	88.2	111.0	77.3	84.2	68.3	85.2	13.0	107.1
5 HM 11	166.7	222.1	194.4	175.3	78.3	98.3	82.0	78.3	84.3	123.5	77.7	79.2	64.5	86.2	13.2	102.2
Loc. Mean	166	214	190	170	77.6	88.3	80.7	82.2	82.2	117.6	71.6	80.9	62.4	83.1	13.4	97.5
C.D. (5%)	36.3	12.2	83.7	8.64	18.0	36.4	16.3	7.13	19.29	3.77	8.13	20.9	5.92	11.7	1.83	3.50
C.V. (%)	10.93	2.86	13.85	6.89	11.6	20.7	10.1	4.35	14.67	1.60	5.68	13.0	4.75	8.78	6.84	1.80
F (Prob.)	0.48	0.00	0.37	0.00	0.71	0.21	0.02	0.00	0.57	0.00	0.00	0.28	0.00	0.14	0.76	0.00

EAR HEIGHT CM									
Sl No	ZN 4			ZN 5	OV'L				
PEDIGREE	VAGA	ARBH	AKOL	Mean	Mean				
1 HKH-305	94.3	77.0	101.7	74.3	73.0				
2 HKH-301	86.7	80.0	105.0	76.2	81.1				
3 FILLER(TMC 89-1) CHECKS	-	-	-	-	-				
4 BULAND	100.6	92.0	115.0	85.5	85.9				
5 HM 11	102.8	82.5	100.0	80.1	83.8				
Loc. Mean	96.1	82.9	105.4	79.1	80.9				
C.D. (5%)	10.1	7.84	22.2	7.10	6.72				
C.V. (%)	5.27	4.73	10.5	6.52	11.3				
F (Prob.)	0.03	0.02	0.42	0.02	0.00				

TABLE No. 3 (Cont..)

S1		SHELLING %				ZN 2				ZN 3				ZN 4		
No	PEDIGREE	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean
1	HKH-305	78.2	80.0	81.0	73.0	78.0	76.5	71.4	79.7	75.9	77.7	76.0	73.0	83.3	82.0	78.4
2	HKH-301	75.2	80.0	79.0	72.0	76.6	76.5	69.1	79.3	75.0	75.7	76.0	76.6	82.7	81.8	78.5
3	FILLER(TMC 89-1)	83.4	84.0	76.0	73.0	79.1	77.0	68.6	80.4	75.3	76.7	76.0	76.0	82.8	81.8	78.7
4	BULAND	71.3	81.0	71.0	74.0	74.3	78.3	66.1	79.0	74.4	78.3	79.4	76.7	83.0	82.7	80.0
CHECKS																
5	HM 11	76.0	80.0	75.5	72.0	75.9	76.5	67.8	80.3	74.9	69.7	73.4	78.4	82.4	81.7	77.1
	Loc. Mean	76.8	81.0	76.5	72.8	76.8	77.0	68.6	79.7	75.1	75.6	76.1	76.1	82.8	82.0	78.5
	C.D. (5%)	4.59	-	1.68	-	4.36	1.03	1.96	-	2.62	4.15	0.94	0.93	0.79	0.64	2.62
	C.V. (%)	3.17	-	1.17	-	3.69	0.71	1.51	-	1.85	2.92	0.66	0.65	0.51	0.42	2.49
	F (Prob.)	0.00	-	0.00	-	0.21	0.02	0.00	0.00	0.77	0.01	0.00	0.00	0.22	0.03	0.28

S1		SHELLING %				STAND ('000/ha)				ZN 2				ZN 3	
No	PEDIGREE	GODH	BANS	Mean	Mean	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean
1	HKH-305	80.5	69.8	75.1	77.3	51.9	48.9	29.2	73.6	50.9	69.4	61.1	39.4	63.2	58.3
2	HKH-301	80.3	75.0	77.7	77.1	75.9	57.8	58.9	76.4	67.2	77.8	71.5	50.6	59.7	64.9
3	FILLER(TMC 89-1)	75.8	71.7	73.8	77.4	53.7	5.0	48.1	79.2	46.5	77.1	68.8	11.1	64.6	55.4
4	BULAND	80.1	72.1	76.1	76.6	82.4	63.9	62.2	73.6	70.5	80.6	64.6	60.0	66.0	67.8
CHECKS															
5	HM 11	78.7	70.0	74.4	75.9	61.1	57.8	42.2	75.0	59.0	77.1	77.1	50.6	68.8	68.4
	Loc. Mean	79.1	71.7	75.4	76.8	65.0	46.7	48.1	75.6	58.8	76.4	68.6	42.3	64.4	62.9
	C.D. (5%)	4.40	1.33	5.18	1.71	11.68	18.20	20.85	4.27	20.19	8.44	8.73	11.57	3.12	15.12
	C.V. (%)	2.96	0.99	2.47	2.94	9.54	20.71	23.01	3.00	22.27	5.87	6.76	14.51	2.57	15.59
	F (Prob.)	0.17	0.00	0.39	0.40	0.00	0.00	0.04	0.08	0.10	0.12	0.02	0.00	0.00	0.29

S1		ZN 4				ZN 5				OV'L	
No	PEDIGREE	KARI	COIM	VAGA	ARBH	AKOL	Mean	GODH	BANS	Mean	Mean
1	HKH-305	56.7	21.5	17.4	30.0	39.8	33.1	60.4	56.3	58.3	47.9
2	HKH-301	59.4	69.4	68.8	61.7	75.0	66.9	75.0	62.5	68.8	66.7
3	FILLER(TMC 89-1)	59.4	58.3	56.3	50.0	2.8	45.4	70.1	60.4	65.3	51.0
4	BULAND	58.9	70.1	68.8	53.3	76.9	65.6	45.8	65.3	55.6	66.2
CHECKS											
5	HM 11	61.1	70.1	67.4	53.9	70.4	64.6	70.1	59.7	64.9	64.2
	Loc. Mean	59.1	57.9	55.7	49.8	53.0	55.1	64.3	60.8	62.6	59.2
	C.D. (5%)	7.34	4.27	8.13	8.80	19.42	20.48	41.17	8.10	25.87	9.53
	C.V. (%)	6.59	3.91	7.76	9.39	19.47	27.73	34.00	7.07	14.89	22.01
	F (Prob.)	0.73	0.00	0.00	0.00	0.00	0.01	0.53	0.22	0.64	0.00

TABLE No. 4

PERFORMANCE OF LATE MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, DELHI, KANPUR, VARANASI, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, AKOLA, BANSWARA IN AET 1st YEAR TRIAL No. TR04 DURING RABI(2009)

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE								ZN 2					
		LUDH	R	KARN	R	DELH	R	KANP	R	MEAN	R	VARA	R	DHOL	R
1	KMH-3669	6168	9	7810	5	3384	9	6400	6	5940	7	13249	1	7274	4
2	MON-31	10259	1	8149	2	3827	6	6619	2	7213	1	12994	3	7536	3
3	MON-30	7189	6	7989	3	4044	5	6285	9	6377	5	13009	2	7587	2
4	KMH-25K55	9894	2	7686	6	3650	7	6357	7	6897	2	11811	6	6658	5
CHECKS															
5	SEED TECH 2324	7387	5	7828	4	4509	2	6345	8	6517	4	12725	4	8097	1
6	BULAND	6196	8	5492	9	4050	4	6622	1	5590	8	11775	7	6360	6
7	HM 10	8282	3	8240	1	4178	3	6413	5	6778	3	11615	8	6074	8
8	HM 9	7403	4	5796	7	4658	1	6488	4	6086	6	11932	5	5646	9
9	HM 8	6714	7	5599	8	3516	8	6492	3	5580	9	11191	9	6227	7
	Location Mean	7721		7176		3980		6447		6331		12256		6829	
	Mean Stand	59		66		56		74		64		74		66	
	C.D. (5%)	2237		1175		1153		498		1266		887		1521	
	C.V. (%)	16.65		9.41		16.65		4.44		-		4.16		12.8	
	F (Prob)	0.001		0		0.05		0.068		-		0.001		0.006	
	Plot Size	7.2		12		12		9.6		-		9.6		12	
AGRONOMY DATA															
	Sowing Date	26-11		13-11		12-04		23-12		-		24-11		24-11	
	Harvest Date	20-05		5-04		-		16-05		-		10-05		-	
	Irrigation Nos	12		10		8		5		-		5		-	
	Fertilizer Applied N	70		150		-		120		-		150		120	
	Fertilizer Applied P	24		60		-		60		-		60		60	
	Fertilizer Applied K	12		60		-		60		-		60		40	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : ARBH 21.9 %: GODH 29.2 %

TABLE No. 4 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE																	
		BHUV		ZN 3				VAGA				AKOL		ZN 4		ZN 5		OV'L	
		R	MEAN	R	KARI	R	COIM	R	VAGA	R	AKOL	R	MEAN	R	BANS	R	MEAN	R	
1	KMH-3669	2	9042	1	9432	2	11951	2	6560	6	10991	2	9733	2	8515	2	8195	3	
2	MON-31	3	8956	2	7815	4	13193	1	7221	4	10298	3	9632	3	7529	5	8482	1	
3	MON-30	8	8624	4	7536	7	10894	3	9009	2	9859	4	9325	4	8662	1	8111	4	
4	KMH-25K55	6	7972	6	9985	1	10666	4	9430	1	11280	1	10341	1	7114	6	8332	2	
CHECKS																			
5	SEED TECH 2324	5	8812	3	7602	5	10258	5	7960	3	7521	5	8335	5	8272	3	7843	5	
6	BULAND	4	7971	7	6729	9	7110	9	7172	5	5965	9	6744	9	6934	7	6682	8	
7	HM 10	1	8133	5	7541	6	8559	8	5796	8	6129	7	7006	8	8222	4	7313	6	
8	HM 9	7	7641	8	8353	3	8827	7	6308	7	6699	6	7547	6	4709	9	6847	7	
9	HM 8	9	7547	9	7486	8	10240	6	5713	9	6046	8	7371	7	5686	8	6678	9	
Location Mean			8300		8053		10189		7241		8310		8448		7294		7609		
Mean Stand			68		75		65		64		57		65		61		65		
C.D. (5%)			833		662		706		864		1491		931		743		1002		
C.V. (%)			-		4.72		3.98		6.86		10.31		-		5.85		-		
F (Prob)			0		0		0		0		0		0		0		-		
Plot Size			-		12		9.6		9.6		9		-		9.6		-		
AGRONOMY DATA																			
Sowing Date			-		18-11		23-10		6-01		24-01		-		25-11		-		
Harvest Date			-		16-03		16-04		2-05		6-05		-		20-04		-		
Irrigation Nos			-		-		10		11		-		-		6		-		
Fertilizer Applied N			-		200		150		150		120		-		150		-		
Fertilizer Applied P			-		80		75		75		60		-		60		-		
Fertilizer Applied K			-		60		75		75		40		-		-		-		

TABLE No. 4 (Cont..)

		GRAIN YIELD % SUPERIORITY OVER THE SEED TECH 2324															
S1		ZN 2					ZN 3					ZN 4	ZN 5	OV'L			
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	VARA	DHOL	BHUV	MEAN	KARI	COIM	VAGA	AKOL	MEAN	BANS	MEAN
1	KMH-3669	-	-	-	1	-	4	-	18	3	24	17	-	46	17	3	4
2	MON-31	39	4	-	4	11	2	-	13	2	3	29	-	37	16	-	8
3	MON-30	-	2	-	-	-	2	-	-	-	-	6	13	31	12	5	3
4	KMH-25K55 CHECKS	34	-	-	0	6	-	-	-	-	31	4	18	50	24	-	6
5	SEED TECH 232	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	BULAND	-	-	-	4	-	-	-	3	-	-	-	-	-	-	-	-
7	HM 10	12	5	-	1	4	-	-	20	-	-	-	-	-	-	-	-
8	HM 9	0	-	3	2	-	-	-	-	-	10	-	-	-	-	-	-
9	HM 8	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-

		GRAIN YIELD % SUPERIORITY OVER THE BULAND															
S1		ZN 2					ZN 3					ZN 4	ZN 5	OV'L			
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	VARA	DHOL	BHUV	MEAN	KARI	COIM	VAGA	AKOL	MEAN	BANS	MEAN
1	KMH-3669	-	42	-	-	6	13	14	14	13	40	68	-	84	44	23	23
2	MON-31	66	48	-	-	29	10	18	10	12	16	86	1	73	43	9	27
3	MON-30	16	45	-	-	14	10	19	-	8	12	53	26	65	38	25	21
4	KMH-25K55 CHECKS	60	40	-	-	23	0	5	-	0	48	50	31	89	53	3	25
5	SEED TECH 2324	19	43	11	-	17	8	27	-	11	13	44	11	26	24	19	17
6	BULAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	HM 10	34	50	3	-	21	-	-	16	2	12	20	-	3	4	19	9
8	HM 9	19	6	15	-	9	1	-	-	-	24	24	-	12	12	-	2
9	HM 8	8	2	-	-	-	-	-	-	-	11	44	-	1	9	-	-

TABLE No. 4 (Cont..)

		GRAIN YIELD % SUPERIORITY OVER THE HM 10															
Sl No	PEDIGREE	LUDH	KARN	DELH	KANP	ZN 2				ZN 3			AKOL	ZN 4	ZN 5	OV'L	
						MEAN	VARA	DHOL	BHUV	MEAN	KARI	COIM	VAGA	MEAN	BANS	MEAN	
1	KMH-3669	-	-	-	-	-	14	20	-	11	25	40	13	79	39	4	12
2	MON-31	24	-	-	3	6	12	24	-	10	4	54	25	68	37	-	16
3	MON-30	-	-	-	-	-	12	25	-	6	-	27	55	61	33	5	11
4	KMH-25K55 CHECKS	19	-	-	-	2	2	10	-	-	32	25	63	84	48	-	14
5	SEED TECH 2324	-	-	8	-	-	10	33	-	8	1	20	37	23	19	1	7
6	BULAND	-	-	-	3	-	1	5	-	-	-	-	24	-	-	-	-
7	HM 10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	HM 9	-	-	11	1	-	3	-	-	-	11	3	9	9	8	-	-
9	HM 8	-	-	-	1	-	-	3	-	-	-	20	-	-	5	-	-

		GRAIN YIELD % SUPERIORITY OVER THE HM 9															
Sl No	PEDIGREE	LUDH	KARN	DELH	KANP	ZN 2				ZN 3			AKOL	ZN 4	ZN 5	OV'L	
						MEAN	VARA	DHOL	BHUV	MEAN	KARI	COIM	VAGA	MEAN	BANS	MEAN	
1	KMH-3669	-	35	-	-	-	11	29	24	18	13	35	4	64	29	81	20
2	MON-31	39	41	-	2	19	9	33	19	17	-	49	14	54	28	60	24
3	MON-30	-	38	-	-	5	9	34	-	13	-	23	43	47	24	84	18
4	KMH-25K55 CHECKS	34	33	-	-	13	-	18	2	4	20	21	49	68	37	51	22
5	SEED TECH 2324	-	35	-	-	7	7	43	5	15	-	16	26	12	10	76	15
6	BULAND	-	-	-	2	-	-	13	8	4	-	-	14	-	-	47	-
7	HM 10	12	42	-	-	11	-	8	26	6	-	-	-	-	-	75	7
8	HM 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	HM 8	-	-	-	0	-	-	10	-	-	-	16	-	-	-	21	-

TABLE No. 4 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % <i>SUPERIORITY OVER THE HM 8</i>															
		LUDH	KARN	DELH	KANP	ZN 2 MEAN VARA		DHOL	BHUV	ZN 3 MEAN KARI		COIM	VAGA	AKOL	ZN 4 MEAN	ZN 5 BANS	OV'L MEAN
1	KMH-3669	-	39	-	-	6	18	17	26	20	26	17	15	82	32	50	23
2	MON-31	53	46	9	2	29	16	21	21	19	4	29	26	70	31	32	27
3	MON-30	7	43	15	-	14	16	22	1	14	1	6	58	63	27	52	21
4	KMH-25K55 CHECKS	47	37	4	-	24	6	7	4	6	33	4	65	87	40	25	25
5	SEED TECH 2324	10	40	28	-	17	14	30	7	17	2	0	39	24	13	45	17
6	BULAND	-	-	15	2	0	5	2	11	6	-	-	26	-	-	22	0
7	HM 10	23	47	19	-	21	4	-	28	8	1	-	1	1	-	45	10
8	HM 9	10	4	32	-	9	7	-	2	1	12	-	10	11	2	-	3
9	HM 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sl No	PEDIGREE	DAYS TO 50% <i>SILKING</i>														
		LUDH	KARN	DELH	KANP	ZN 2 Mean VARA		BAHR	DHOL	BHUV	ZN 3 Mean KARI		COIM	VAGA	ARBH	
1	KMH-3669	137.3	135.0	121.0	99.3	123.2	119.0	126.7	124.0	84.7	113.6	74.7	59.3	62.7	72.0	
2	MON-31	136.3	134.3	122.7	99.7	123.3	120.7	126.3	125.3	85.3	114.4	70.7	60.3	62.3	72.7	
3	MON-30	138.0	134.3	125.0	99.3	124.2	120.0	124.0	125.0	84.3	113.3	70.3	58.3	64.3	71.7	
4	KMH-25K55 CHECKS	136.0	133.7	120.0	100.3	122.5	117.3	122.7	124.0	84.0	112.0	71.0	59.0	65.0	71.3	
5	SEED TECH 2324	136.3	135.0	121.3	103.7	124.1	119.0	125.0	122.0	83.0	112.3	72.7	59.3	63.0	71.0	
6	BULAND	139.3	141.7	124.0	100.7	126.4	122.3	129.3	127.3	84.3	115.8	75.3	60.7	65.3	74.0	
7	HM 10	134.0	133.0	118.0	102.0	121.8	116.3	120.7	119.0	86.0	110.5	68.0	58.7	63.3	70.3	
8	HM 9	134.7	132.7	120.0	100.0	121.8	117.3	124.0	122.7	83.0	111.8	69.0	56.7	62.7	69.0	
9	HM 8	137.0	136.0	121.7	97.3	123.0	121.7	124.3	124.7	83.7	113.6	70.7	58.3	63.3	71.7	
	Loc. Mean	136.6	135.1	121.5	100.3	123.4	119.3	124.8	123.8	84.3	113.0	71.4	59.0	63.6	71.5	
	C.D. (5%)	3.03	1.05	2.64	1.74	2.59	1.47	1.10	2.95	1.54	2.21	1.97	0.97	1.35	1.39	
	C.V. (%)	1.28	0.45	1.26	1.00	1.44	0.71	0.51	1.38	1.05	1.34	1.60	0.95	1.23	1.13	
	F (Prob.)	0.05	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	

TABLE No. 4 (Cont..)

Sl No	PEDIGREE	DAYS TO 50% <i>SILKING</i>					OV'L Mean	DAYS TO 50% <i>POLLEN SHED</i>							
		AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean		LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL
1	KMH-3669	62.0	66.1	81.3	92.0	86.7	96.7	135.3	132.0	120.0	94.0	120.3	115.3	124.3	122.3
2	MON-31	62.7	65.7	83.3	92.3	87.8	97.0	134.3	131.3	120.7	93.3	119.9	116.0	124.3	122.7
3	MON-30	62.0	65.3	82.3	88.0	85.2	96.5	135.7	131.3	124.3	93.7	121.3	116.0	121.7	123.0
4	KMH-25K55	63.0	65.9	81.3	88.0	84.7	95.8	134.3	130.7	121.7	95.0	120.4	113.3	120.7	122.0
	CHECKS														
5	SEED TECH 2324	62.0	65.6	81.0	89.3	85.2	96.2	134.7	132.0	120.3	98.3	121.3	114.7	123.0	120.7
6	BULAND	64.3	67.9	80.0	93.0	86.5	98.8	137.0	138.7	123.0	95.0	123.4	118.3	127.3	125.3
7	HM 10	62.0	64.5	82.0	89.3	85.7	94.8	132.3	130.0	118.3	96.0	119.2	112.7	118.7	119.7
8	HM 9	61.0	63.7	83.7	87.7	85.7	94.9	132.7	129.7	120.3	94.0	119.2	114.0	122.3	121.0
9	HM 8	62.0	65.2	82.0	92.0	87.0	96.4	135.0	133.0	122.0	91.0	120.3	118.7	122.3	123.0
	Loc. Mean	62.3	65.5	81.9	90.2	86.0	96.4	134.6	132.1	121.2	94.5	120.6	115.4	122.7	122.2
	C.D. (5%)	1.15	1.36	3.88	1.60	4.47	1.08	2.81	1.05	3.88	1.71	2.61	1.61	1.09	3.71
	C.V. (%)	1.07	1.61	2.74	1.03	2.25	1.55	1.21	0.46	1.85	1.05	1.48	0.80	0.51	1.75
	F (Prob.)	0.00	0.00	0.63	0.00	0.78	0.00	0.07	0.00	0.13	0.00	0.07	0.00	0.00	0.16
Sl No	PEDIGREE	DAYS TO 50% <i>POLLEN SHED</i>					OV'L Mean	ZN 4 Mean	GODH	BANS	ZN 5 Mean				
		DHOL	BHUV	ZN 3 Mean	KARI	COIM						VAGA	ARBH	AKOL	
1	KMH-3669	122.3	82.0	111.0	71.7	57.7	59.0	71.0	61.0	64.1	78.3	88.0	83.2	94.1	
2	MON-31	122.7	82.7	111.4	68.3	58.0	58.3	70.0	61.7	63.3	80.0	89.0	84.5	94.0	
3	MON-30	123.0	81.0	110.4	68.3	56.3	60.0	70.3	61.0	63.2	79.3	84.3	81.8	93.8	
4	KMH-25K55	122.0	81.0	109.3	68.3	57.0	61.7	68.7	62.0	63.5	78.3	85.0	81.7	93.3	
	CHECKS														
5	SEED TECH 2324	120.7	80.0	109.6	69.7	57.3	59.3	69.0	61.0	63.3	77.3	86.0	81.7	93.6	
6	BULAND	125.3	81.0	113.0	72.7	58.7	61.0	73.0	63.3	65.7	77.0	89.3	83.2	96.0	
7	HM 10	119.7	82.7	108.4	66.0	56.7	60.0	68.3	61.0	62.4	79.3	86.3	82.8	92.5	
8	HM 9	121.0	79.7	109.3	66.3	54.7	59.3	68.0	60.0	61.7	80.3	84.7	82.5	92.5	
9	HM 8	123.0	80.3	111.1	68.3	56.0	59.7	70.3	61.0	63.1	79.0	88.3	83.7	93.9	
	Loc. Mean	122.2	81.1	110.4	68.9	56.9	59.8	69.9	61.3	63.4	78.8	86.8	82.8	93.7	
	C.D. (5%)	3.71	1.30	2.12	1.76	0.81	1.49	1.71	1.15	1.33	3.60	1.53	4.08	1.05	
	C.V. (%)	1.75	0.93	1.31	1.48	0.82	1.44	1.42	1.09	1.63	2.64	1.02	2.14	1.55	
	F (Prob.)	0.16	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.55	0.00	0.76	0.00	

TABLE No. 4 (Cont..)

Sl No	PEDIGREE	DAYS TO 50% DRY HUSK													
		LUDH	KARN	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	
1	KMH-3669	166.7	165.3	137.3	156.4	155.0	161.0	158.3	136.0	152.6	103.0	110.0	110.7	115.0	
2	MON-31	168.7	166.0	138.7	157.8	162.7	159.7	161.0	136.0	154.8	103.3	112.0	111.0	114.3	
3	MON-30	167.7	165.3	138.0	157.0	159.7	159.3	162.0	135.3	154.1	104.3	109.3	110.3	113.7	
4	KMH-25K55	168.0	164.3	137.7	156.7	159.7	158.7	163.0	136.0	154.3	104.7	110.0	111.0	114.7	
	CHECKS														
5	SEED TECH 2324	163.3	165.0	141.3	156.6	156.3	159.3	162.0	136.0	153.4	103.3	110.0	111.0	115.7	
6	BULAND	168.3	171.0	138.3	159.2	159.0	159.3	161.3	135.0	153.7	103.3	112.0	109.3	114.0	
7	HM 10	164.3	163.3	139.7	155.8	162.0	157.7	159.0	137.0	153.9	103.3	110.0	107.3	114.7	
8	HM 9	161.7	163.7	139.0	154.8	155.7	158.3	157.0	134.7	151.4	103.7	108.0	109.3	115.0	
9	HM 8	165.3	166.3	138.0	156.6	159.0	158.3	159.0	135.3	152.9	103.3	108.0	108.0	114.0	
	Loc. Mean	166.0	165.6	138.7	156.8	158.8	159.1	160.3	135.7	153.5	103.6	109.9	109.8	114.6	
	C.D. (5%)	2.91	2.44	2.44	3.49	2.56	1.13	2.50	1.63	2.44	1.48	0.67	2.68	1.90	
	C.V. (%)	1.01	0.85	1.02	1.29	0.93	0.41	0.90	0.69	1.09	0.83	0.35	1.41	0.96	
	F (Prob.)	0.00	0.00	0.08	0.40	0.00	0.00	0.00	0.19	0.20	0.34	0.00	0.07	0.49	
Sl No	PEDIGREE	MOISTURE													
		AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL
1	KMH-3669	108.0	109.3	107.7	135.0	121.3	133.5	25.7	34.6	26.2	15.0	25.4	27.6	27.0	17.2
2	MON-31	108.7	109.9	110.7	134.3	122.5	134.8	25.6	32.0	26.9	15.0	24.9	26.8	27.2	23.3
3	MON-30	108.0	109.1	112.0	131.0	121.5	134.0	25.7	33.3	30.2	15.0	26.1	28.7	26.1	23.3
4	KMH-25K55	109.0	109.9	109.0	131.0	120.0	134.0	25.7	34.4	20.9	15.0	24.0	27.7	25.6	23.4
	CHECKS														
5	SEED TECH 2324	108.0	109.6	108.3	131.7	120.0	133.7	25.8	31.4	21.6	15.0	23.4	28.7	27.0	23.1
6	BULAND	110.3	109.8	107.3	136.0	121.7	134.6	25.8	34.0	24.3	15.0	24.8	26.6	24.9	21.1
7	HM 10	108.0	108.7	109.7	132.3	121.0	133.5	22.8	32.0	25.1	15.0	23.7	26.1	24.9	16.2
8	HM 9	107.3	108.7	110.3	129.3	119.8	132.4	22.6	34.3	24.7	15.0	24.2	25.7	141.3	18.2
9	HM 8	108.0	108.3	110.7	134.7	122.7	133.4	25.3	34.5	22.4	15.0	24.3	27.3	24.6	17.7
	Loc. Mean	108.4	109.2	109.5	132.8	121.2	133.8	25.0	33.4	24.7	15.0	24.5	27.2	38.7	20.4
	C.D. (5%)	1.07	1.22	3.47	2.53	5.31	1.16	0.83	-	6.63	-	2.52	1.14	67.4	-
	C.V. (%)	0.57	0.87	1.83	1.10	1.90	1.15	1.93	-	15.5	-	7.04	2.42	100.6	-
	F (Prob.)	0.00	0.08	0.15	0.00	0.88	0.00	0.00	0.00	0.17	-	0.51	0.00	0.03	-

TABLE No. 4 (Cont..)

Sl No	PEDIGREE	MOISTURE											PLANT HEIGHT CM					
		BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean
1	KMH-3669	18.9	22.7	12.8	20.9	23.1	15.9	11.4	16.8	11.3	16.5	13.9	20.3	169	200	175	175	180
2	MON-31	18.2	23.9	12.3	24.5	24.9	16.7	12.8	18.2	15.4	16.8	16.1	21.2	174	205	176	180	184
3	MON-30	18.1	24.1	12.9	24.2	23.0	18.9	14.1	18.6	15.2	16.5	15.9	21.7	156	205	166	156	171
4	KMH-25K55 CHECKS	18.4	23.8	13.0	24.2	22.9	24.6	13.3	19.6	15.2	16.4	15.8	21.4	167	183	172	163	171
5	SEED TECH 2324	18.5	24.3	13.0	23.3	24.7	16.6	12.6	18.0	12.2	16.7	14.5	20.7	145	213	154	171	171
6	BULAND	18.0	22.6	13.0	19.0	20.1	14.7	11.0	15.5	12.1	16.4	14.2	19.7	142	190	178	170	170
7	HM 10	19.3	21.6	12.6	19.4	21.7	19.0	11.7	16.9	11.9	16.9	14.4	19.6	177	208	173	172	183
8	HM 9	19.0	51.0	13.3	18.5	22.6	15.6	11.9	16.4	12.8	16.1	14.4	27.4	169	210	170	175	181
9	HM 8	17.6	21.8	13.3	20.4	21.9	19.6	12.4	17.5	9.8	16.3	13.1	19.9	144	177	151	185	164
	Loc. Mean	18.4	26.2	12.9	21.6	22.8	18.0	12.3	17.5	12.9	16.5	14.7	21.3	160	199	168	172	175
	C.D. (5%)	-	28.5	1.10	0.49	1.49	3.17	0.97	2.09	3.86	0.23	3.18	7.33	27.5	22.6	15.9	10.3	15.3
	C.V. (%)	-	74.4	4.93	1.31	3.79	10.18	4.55	9.29	17.36	0.81	9.39	47.56	9.9	6.5	5.5	3.5	6.0
	F (Prob.)	0.00	0.51	0.70	0.00	0.00	0.00	0.00	0.01	0.07	0.00	0.45	0.56	0.1	0.0	0.0	0.0	0.1
Sl No	PEDIGREE	PLANT HEIGHT CM																
		VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean		
1	KMH-3669	220	176	148	195	185	224	199	181	206	198	202	204	241	222	194		
2	MON-31	210	178	153	206	187	203	206	179	195	178	192	232	217	225	193		
3	MON-30	208	179	147	176	177	196	197	187	187	172	188	207	211	209	183		
4	KMH-25K55 CHECKS	190	185	143	168	171	228	202	166	203	208	202	209	217	213	187		
5	SEED TECH 2324	202	171	159	150	171	188	181	182	187	177	183	210	195	203	179		
6	BULAND	205	181	168	153	176	214	190	170	199	177	190	202	239	221	185		
7	HM 10	211	174	162	184	183	229	185	164	191	173	188	215	219	217	189		
8	HM 9	210	167	148	145	167	207	180	176	165	177	181	222	189	205	181		
9	HM 8	188	159	133	138	154	173	154	146	161	172	161	192	190	191	164		
	Loc. Mean	205	174	151	168	175	207	188	172	188	181	187	210	213	212	184		
	C.D. (5%)	7.7	19.2	22.9	5.4	17.5	9.7	4.7	7.0	4.1	18.7	13.6	37.1	9.8	37.8	8.3		
	C.V. (%)	2.2	6.4	8.8	1.9	6.9	2.7	1.4	2.4	1.3	6.0	5.6	10.2	2.7	7.8	6.2		
	F (Prob.)	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.6	0.0		

TABLE No. 4 (Cont..)

Sl No	PEDIGREE	EAR HEIGHT CM				ZN 2		ZN 3			ZN 4						
		LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean
1	KMH-3669	77.3	83.3	96.0	66.7	80.8	113.5	57.7	81.7	82.8	83.9	79.3	101.7	94.7	96.0	106.7	95.7
2	MON-31	91.3	95.0	97.3	75.3	89.8	107.5	66.3	80.8	85.9	85.2	68.7	105.6	89.9	84.0	106.7	91.0
3	MON-30	90.0	110.0	99.7	56.3	89.0	118.5	72.3	77.5	77.8	86.5	68.3	99.6	99.8	86.0	105.0	91.7
4	KMH-25K55 CHECKS	88.3	66.7	93.7	65.3	78.5	100.5	74.7	70.3	72.1	79.4	84.3	105.5	97.6	96.5	130.0	102.8
5	SEED TECH 2324	82.7	113.3	102.3	66.0	91.1	110.5	65.7	102.5	64.0	85.7	79.3	99.8	96.8	96.0	103.3	95.0
6	BULAND	72.7	96.7	113.3	70.0	88.2	123.0	82.7	90.0	62.3	89.5	86.0	112.5	101.9	101.5	106.7	101.7
7	HM 10	92.3	70.0	96.7	70.3	82.3	112.5	62.3	82.5	75.1	83.1	77.0	102.8	89.9	84.0	113.3	93.4
8	HM 9	96.7	100.0	99.3	70.3	91.6	106.5	60.7	80.0	60.5	76.9	71.0	93.4	91.1	75.5	106.7	87.5
9	HM 8	84.0	76.7	92.3	80.0	83.3	101.0	58.7	70.7	54.3	71.2	72.0	96.1	81.0	77.0	111.7	87.5
	Loc. Mean	86.1	90.2	99.0	68.9	86.1	110	66.8	81.8	70.5	82.4	76.2	101.9	93.6	88.5	110	94.0
	C.D. (5%)	27.2	21.0	15.7	6.3	15.4	5.5	22.3	12.8	5.8	12.3	6.0	3.3	8.1	4.2	20.9	7.1
	C.V. (%)	18.3	13.5	9.2	5.3	12.2	2.9	19.3	9.0	4.8	10.2	4.5	1.9	5.0	2.8	11.0	5.8
	F (Prob.)	0.68	0.00	0.27	0.00	0.57	0.00	0.33	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.28	0.00
Sl No	PEDIGREE	EAR HEIGHT CM				SHELLING %				ZN 2		ZN 3					
		GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	BHUV	Mean	KARI	COIM	VAGA
1	KMH-3669	111.0	96.5	103.7	89.7	73.4	79.0	77.5	73.5	75.8	77.8	70.8	80.0	76.2	83.3	80.0	76.0
2	MON-31	121.0	91.6	106.3	91.1	86.7	84.0	79.5	75.5	81.4	79.3	69.4	79.8	76.1	79.4	80.3	76.2
3	MON-30	105.3	95.5	100.4	90.8	74.0	84.0	80.0	73.0	77.8	78.5	81.4	79.4	79.8	85.1	81.6	82.7
4	KMH-25K55 CHECKS	105.3	88.9	97.1	89.3	82.5	80.0	82.5	73.5	79.6	77.8	73.8	78.5	76.7	87.4	80.5	81.4
5	SEED TECH 2324	114.7	97.3	106.0	92.9	88.4	82.0	78.0	73.5	80.5	78.5	75.8	79.7	78.0	82.9	80.0	79.6
6	BULAND	106.7	106.5	106.6	95.5	73.7	81.0	75.5	74.0	76.1	77.8	63.8	79.1	73.6	79.8	71.9	75.0
7	HM 10	116.0	83.7	99.9	88.6	84.1	85.0	82.0	73.0	81.0	77.3	70.0	81.3	76.2	78.2	75.0	78.0
8	HM 9	113.7	93.3	103.5	87.9	80.8	84.0	83.5	73.5	80.5	77.3	71.3	80.2	76.2	76.2	82.1	79.5
9	HM 8	106.7	92.9	99.8	83.7	80.3	82.0	78.0	74.5	78.7	76.5	72.9	79.1	76.2	80.7	80.5	75.0
	Loc. Mean	111.1	94.0	102.6	89.9	80.4	82.3	79.6	73.8	79.0	77.8	72.1	79.7	76.5	81.4	79.1	78.2
	C.D. (5%)	16.9	3.2	15.8	5.9	12.61	-	3.24	1.42	4.33	0.90	1.47	-	4.94	3.94	0.64	2.41
	C.V. (%)	8.8	1.9	6.7	9.1	9.06	-	2.35	1.11	3.76	0.67	1.17	-	3.73	2.79	0.47	1.78
	F (Prob.)	0.49	0.00	0.83	0.02	0.15	-	0.00	0.04	0.09	0.00	0.00	-	0.46	0.00	0.00	0.00

TABLE No. 4 (Cont..)

Sl No	PEDIGREE	SHELLING %					STAND ('000/ha)								
		ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR
1	KMH-3669	84.6	83.8	81.5	80.2	75.8	78.0	78.3	83.3	51.9	81.7	77.4	73.6	70.8	67.4
2	MON-31	85.7	86.7	81.6	84.3	72.7	78.5	79.9	82.9	55.3	100.0	78.1	79.1	77.8	75.3
3	MON-30	85.2	84.1	83.8	80.2	74.9	77.5	80.3	85.2	54.2	73.3	76.4	72.3	76.7	76.7
4	KMH-25K55 CHECKS	88.6	84.2	84.4	84.0	75.2	79.6	80.7	80.1	55.0	74.4	76.4	71.5	83.3	76.0
5	SEED TECH 2324	86.0	86.3	82.9	83.0	73.3	78.1	80.5	84.3	58.3	105.0	76.0	80.9	80.6	81.6
6	BULAND	83.3	84.7	78.9	81.9	73.5	77.7	76.8	84.7	53.1	96.7	77.4	78.0	78.1	65.6
7	HM 10	84.5	83.0	79.7	82.2	75.4	78.8	79.2	84.7	55.0	125.0	75.3	85.0	74.7	74.0
8	HM 9	82.8	83.0	80.7	82.7	71.1	76.9	79.1	87.0	61.9	109.4	75.7	83.5	76.7	66.0
9	HM 8	84.8	82.0	80.6	82.5	70.4	76.4	78.5	60.6	47.5	80.0	79.9	67.0	70.8	66.0
	Loc. Mean	85.0	84.2	81.6	82.3	73.6	77.9	79.3	81.4	54.7	94.0	77.0	76.8	76.6	72.1
	C.D. (5%)	1.89	2.66	2.91	3.61	2.49	4.59	1.96	9.21	8.01	40.85	2.04	13.37	7.25	3.85
	C.V. (%)	1.29	1.83	2.77	2.53	1.96	2.55	3.30	6.53	8.46	25.12	1.53	11.94	5.46	3.09
	F (Prob.)	0.00	0.03	0.01	0.26	0.00	0.86	0.00	0.00	0.08	0.17	0.01	0.14	0.03	0.00
Sl No	PEDIGREE	STAND ('000/ha)			KARI	COIM	VAGA	ARBH	ZN 4 AKOL	Mean	GODH	ZN 5 BANS	OV'L Mean	Mean	
		DHOL	ZN 3 BHUV	Mean											
1	KMH-3669	51.9	66.7	64.2	61.7	68.1	66.7	53.9	58.5	61.8	58.7	61.1	59.9	65.3	
2	MON-31	59.2	67.7	70.0	62.2	68.4	67.0	56.1	65.6	63.9	62.5	63.9	63.2	69.5	
3	MON-30	56.4	68.1	69.5	61.1	68.1	67.0	54.7	63.0	62.8	76.4	63.5	70.0	68.1	
4	KMH-25K55 CHECKS	55.8	64.6	69.9	62.2	68.1	67.0	63.9	59.3	64.1	69.1	59.7	64.4	67.7	
5	SEED TECH 2324	57.2	65.6	71.3	61.7	67.0	66.7	62.2	66.7	64.8	59.7	68.1	63.9	70.7	
6	BULAND	51.7	66.7	65.5	61.4	67.0	66.0	52.2	64.1	62.1	75.0	68.1	71.5	68.5	
7	HM 10	56.9	68.8	68.6	61.9	68.1	67.4	62.2	65.2	65.0	81.3	66.3	73.8	72.4	
8	HM 9	53.9	66.0	65.6	63.9	68.4	66.3	53.9	66.3	63.8	71.2	58.7	64.9	69.7	
9	HM 8	50.6	69.1	64.1	63.3	67.7	66.0	47.2	61.5	61.1	74.3	61.5	67.9	64.4	
	Loc. Mean	54.8	67.0	67.6	62.2	67.9	66.7	56.3	63.3	63.3	69.8	63.4	66.6	68.5	
	C.D. (5%)	5.31	2.67	4.80	4.55	1.86	1.50	9.12	8.07	3.60	22.00	3.51	13.62	4.24	
	C.V. (%)	5.60	2.30	4.87	4.23	1.58	1.30	9.37	7.36	4.41	18.21	3.20	8.87	8.56	
	F (Prob.)	0.04	0.04	0.02	0.93	0.68	0.50	0.02	0.34	0.33	0.38	0.00	0.42	0.01	

TABLE No. 5

PERFORMANCE OF MEDIUM MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, DELHI, KANPUR, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, ARHAVI, AKOLA, BANSWARA IN AET 1st YEAR TRIAL No. TR05 DURING RABI(2009).

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE															
		LUDH	R	KARN	R	DELH	R	KANP	R	ZN 2 MEAN	R	DHOL	R	BHUV	R	ZN 3 MEAN	R
1	KMH-Super 244	5823	3	7158	1	3012	4	5865	5	5465	4	6415	4	5886	2	6151	2
2	HKH-307	4975	6	6592	5	1487	6	6114	4	4792	6	6283	5	5692	3	5988	5
CHECKS																	
3	BULAND	7464	1	7000	2	4865	3	6681	1	6502	1	6539	2	5551	4	6045	3
4	HM 9	5589	4	6674	4	5602	2	5695	6	5890	3	6452	3	6021	1	6237	1
5	HM 8	5225	5	6811	3	2544	5	6451	3	5257	5	6205	6	5480	5	5843	6
6	BIO 9637	6431	2	6488	6	6402	1	6667	2	6497	2	6602	1	5400	6	6001	4
	Location Mean	5918		6787		3985		6246		5734		6416		5672		6044	
	Mean Stand	50		66		50		74		60		62		65		63	
	C.D. (5%)	1960		1538		1404		509		1353		2156		80		1118	
	C.V. (%)	17.93		12.27		19.07		4.41		-		18.19		0.77		-	
	F (Prob)	0.002		0.075		0		0		-		0.234		0		-	
	Plot Size	7.2		12		12		9.6		-		12		9.6		-	
AGRONOMY DATA																	
	Sowing Date	26-11		13-11		12-04		23-12		-		25-11		12-12		-	
	Harvest Date	20-05		5-04		-		16-05		-		-		12-05		-	
	Irrigation Nos	12		10		8		5		-		-		12		-	
	Fertilizer Applied N	70		150		-		120		-		120		120		-	
	Fertilizer Applied P	24		60		-		60		-		60		60		-	
	Fertilizer Applied K	12		60		-		60		-		40		60		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : VARA 35.7 %: BAHAR 35.9 %: GODH 21.4 %

TABLE No. 5 (Cont..)

GRAIN YIELD (kg/ha) AT 15% MOISTURE																	
S1												ZN 4	ZN 5	OV'L			
No	PEDIGREE	KARI	R	COIM	R	VAGA	R	ARBH	R	AKOL	R	MEAN	R	BANS	R	MEAN	R
1	KMH-Super 244	8327	3	12070	1	5412	6	8438	1	12936	1	9437	1	7243	2	7382	1
2	HKH-307	6287	6	10369	3	6110	5	4723	6	3111	6	6120	6	4724	6	5539	6
CHECKS																	
3	BULAND	7329	5	9284	6	7824	2	6034	2	6313	2	7357	4	6962	3	6820	2
4	HM 9	8057	4	10153	4	6958	4	5697	3	6188	3	7410	3	6340	4	6619	4
5	HM 8	8473	2	10043	5	8069	1	5405	4	6147	4	7627	2	5650	5	6375	5
6	BIO 9637	8638	1	10555	2	7496	3	4926	5	4294	5	7182	5	7863	1	6813	3
	Location Mean	7852		10412		6978		5870		6498		7522		6464		6591	
	Mean Stand	75		65		64		60		55		64		66		63	
	C.D. (5%)	918		868		2234		1303		1404		1345		1613		1332	
	C.V. (%)	6.33		4.51		17.33		12.02		11.7		-		13.51		-	
	F (Prob)	0.001		0		0.113		0		0		-		0		-	
	Plot Size	12		9.6		9.6		12		9		-		9.6		-	
AGRONOMY DATA																	
	Sowing Date	18-11		23-12		6-01		4-12		24-01		-		25-11		-	
	Harvest Date	16-03		16-04		2-05		24-04		6-06		-		20-04		-	
	Irrigation Nos	-		10		10		9		-		-		6		-	
	Fertilizer Applied N	200		150		150		150		120		-		150		-	
	Fertilizer Applied P	80		75		75		75		60		-		60		-	
	Fertilizer Applied K	60		75		75		37.5		40		-		-		-	
GRAIN YIELD % SUPERIORITY OVER THE BULAND																	
S1												ZN 4	ZN 5	OV'L			
No	PEDIGREE	LUDH	KARN	DELH	KANP	ZN 2	DHOL	BHUV	ZN 3	KARI	COIM	VAGA	ARBH	AKOL	MEAN	BANS	MEAN
1	KMH-Super 244	-	2	-	-	-	-	6	2	14	30	-	40	105	28	4	8
2	HKH-307	-	-	-	-	-	-	3	-	-	12	-	-	-	-	-	-
CHECKS																	
3	BULAND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	HM 9	-	-	15	-	-	-	8	3	10	9	-	-	-	1	-	-
5	HM 8	-	-	-	-	-	-	-	-	16	8	3	-	-	4	-	-
6	BIO 9637	-	-	32	-	-	1	-	-	18	14	-	-	-	-	14	-

TABLE No. 5 (Cont..)

		GRAIN YIELD % SUPERIORITY OVER THE HM 9															
S1		ZN 2					ZN 3					ZN 4		ZN 5	OV'L		
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	DHOL	BHUV	MEAN	KARI	COIM	VAGA	ARBH	AKOL	MEAN	BANS	MEAN
1	KMH-Super 244	4	7	-	3	-	-	-	-	3	19	-	48	109	27	14	12
2	HKH-307 CHECKS	-	-	-	7	-	-	-	-	-	2	-	-	-	-	-	-
3	BULAND	34	5	-	17	10	1	-	-	-	-	12	6	2	-	10	3
4	HM 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	HM 8	-	2	-	13	-	-	-	-	5	-	16	-	-	3	-	-
6	BIO 9637	15	-	14	17	10	2	-	-	7	4	8	-	-	-	24	3
		GRAIN YIELD % SUPERIORITY OVER THE HM 8															
S1		ZN 2					ZN 3					ZN 4		ZN 5	OV'L		
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	DHOL	BHUV	MEAN	KARI	COIM	VAGA	ARBH	AKOL	MEAN	BANS	MEAN
1	KMH-Super 244	11	5	18	-	4	3	7	5	-	20	-	56	110	24	28	16
2	HKH-307 CHECKS	-	-	-	-	-	1	4	2	-	3	-	-	-	-	-	-
3	BULAND	43	3	91	4	24	5	1	3	-	-	-	12	3	-	23	7
4	HM 9	7	-	120	-	12	4	10	7	-	1	-	5	1	-	12	4
5	HM 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	BIO 9637	23	-	152	3	24	6	-	3	2	5	-	-	-	-	39	7
		GRAIN YIELD % SUPERIORITY OVER THE BIO 9637															
S1		ZN 2					ZN 3					ZN 4		ZN 5	OV'L		
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	DHOL	BHUV	MEAN	KARI	COIM	VAGA	ARBH	AKOL	MEAN	BANS	MEAN
1	KMH-Super 244	-	10	-	-	-	-	9	2	-	14	-	71	201	31	-	8
2	HKH-307 CHECKS	-	2	-	-	-	-	5	-	-	-	-	-	-	-	-	-
3	BULAND	16	8	-	0	0	-	3	1	-	-	4	22	47	2	-	0
4	HM 9	-	3	-	-	-	-	12	4	-	-	-	16	44	3	-	-
5	HM 8	-	5	-	-	-	-	1	-	-	-	8	10	43	6	-	-
6	BIO 9637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE No. 5 (Cont..)

		DAYS TO 50% <i>SILKING</i>															
S1 No	PEDIGREE	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH		
1	KMH-Super 244	134.3	135.7	127.0	100.3	124.3	121.0	123.3	122.0	80.3	111.7	69.7	58.7	59.3	70.0		
2	HKH-307	135.7	134.7	122.0	99.0	122.8	-	121.3	123.3	78.3	107.7	64.7	57.7	60.3	68.0		
CHECKS																	
3	BULAND	135.0	137.0	127.7	101.0	125.2	123.3	124.3	126.0	78.3	113.0	71.0	61.0	63.0	72.7		
4	HM 9	132.0	135.3	119.0	100.0	121.6	120.0	118.3	121.3	80.3	110.0	65.0	56.7	60.3	67.0		
5	HM 8	134.3	135.3	126.7	101.7	124.5	122.3	122.7	123.3	80.7	112.3	69.0	59.0	59.7	69.3		
6	BIO 9637	131.7	134.7	122.3	104.0	123.2	119.7	119.3	122.0	79.3	110.1	66.0	56.0	59.3	68.7		
	Loc. Mean	133.8	135.4	124.1	101.0	123.6	121.3	121.6	123.0	79.6	110.8	67.6	58.2	60.3	69.3		
	C.D. (5%)	3.27	3.35	4.34	1.91	2.98	2.22	1.23	2.80	1.03	4.54	2.81	1.73	6.21	1.27		
	C.V. (%)	1.34	1.36	1.92	1.04	1.60	1.21	0.56	1.25	0.71	2.72	2.29	1.63	5.65	1.01		
	F (Prob.)	0.11	0.66	0.01	0.00	0.18	0.00	0.00	0.04	0.00	0.21	0.00	0.00	0.77	0.00		
		DAYS TO 50% <i>POLLEN SHED</i>															
S1 No	PEDIGREE	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean
1	KMH-Super 244	61.7	63.9	78.7	86.7	82.7	95.2	132.7	132.7	124.0	94.3	120.9	117.3	121.3	120.7	77.3	109.2
2	HKH-307	61.7	62.5	79.7	85.3	82.5	92.3	133.7	131.7	121.0	93.3	119.9	-	119.0	121.0	75.3	105.1
CHECKS																	
3	BULAND	64.0	66.3	78.7	89.3	84.0	96.8	133.3	134.0	125.0	96.0	122.1	119.0	122.3	123.3	75.7	110.1
4	HM 9	60.3	61.9	79.0	88.3	83.7	93.5	131.0	132.3	118.0	94.3	118.9	116.3	116.3	120.7	78.0	107.8
5	HM 8	62.0	63.8	80.0	87.7	83.8	95.6	132.3	132.3	124.0	96.3	121.3	118.3	120.7	121.0	78.3	109.6
6	BIO 9637	59.3	61.9	77.3	86.0	81.7	93.7	130.0	131.7	118.7	98.7	119.8	115.0	117.3	120.0	76.3	107.2
	Loc. Mean	61.5	63.4	78.9	87.2	83.1	94.5	132.2	132.4	121.8	95.5	120.5	117.2	119.5	121.1	76.8	108.2
	C.D. (5%)	2.13	1.34	4.73	1.44	3.07	2.39	2.18	3.35	5.51	1.00	2.76	2.07	1.15	2.04	1.15	4.00
	C.V. (%)	1.90	1.60	3.29	0.90	1.44	3.47	0.91	1.39	2.49	0.57	1.52	1.17	0.53	0.93	0.82	2.45
	F (Prob.)	0.01	0.00	0.85	0.00	0.42	0.00	0.03	0.66	0.07	0.00	0.22	0.00	0.00	0.06	0.00	0.15

TABLE No. 5 (Cont..)

Sl No	PEDIGREE	DAYS TO 50% POLLEN SHED							DAYS TO 50% DRY HUSK								
		KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	ZN 2 Mean	VARA	BAHR	DHOL
1	KMH-Super 244	67.0	56.7	57.0	70.3	60.7	62.3	75.7	80.0	77.8	92.5	162.0	166.7	164.3	158.0	152.7	160.3
2	HKH-307 CHECKS	62.7	55.7	54.3	67.0	60.7	60.1	76.7	81.3	79.0	89.5	164.0	166.7	165.3	-	152.3	162.3
3	BULAND	68.0	59.0	60.0	71.0	63.0	64.2	75.0	86.0	80.5	94.0	166.0	167.3	166.7	154.3	153.7	161.0
4	HM 9	63.0	54.7	57.0	67.0	59.3	60.2	76.0	85.3	80.7	91.3	161.3	166.0	163.7	155.7	150.3	158.7
5	HM 8	66.3	57.0	57.0	70.0	61.0	62.3	76.3	84.3	80.3	93.0	162.3	166.3	164.3	157.0	153.7	160.7
6	BIO 9637	64.0	53.7	56.3	66.7	58.3	59.8	73.7	82.7	78.2	90.9	161.3	165.7	163.5	155.3	151.0	159.7
	Loc. Mean	65.2	56.1	56.9	68.7	60.5	61.5	75.6	83.3	79.4	91.9	162.8	166.4	164.6	154.3	152.3	160.4
	C.D. (5%)	2.07	1.68	3.74	0.58	2.13	1.16	4.76	4.14	4.87	2.29	3.24	4.28	2.44	1.40	1.75	2.17
	C.V. (%)	1.75	1.65	3.61	0.46	1.93	1.43	3.47	2.74	2.38	3.42	1.09	1.41	0.58	0.59	0.63	0.74
	F (Prob.)	0.00	0.00	0.12	0.00	0.01	0.00	0.76	0.06	0.56	0.00	0.06	0.96	0.12	0.00	0.01	0.05
Sl No	PEDIGREE	DAYS TO 50% DRY HUSK										MOISTURE					
		BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	
1	KMH-Super 244	128.0	149.8	103.7	105.0	102.0	94.3	100.7	101.1	108.0	118.3	113.2	127.7	23.0	32.9	33.0	
2	HKH-307 CHECKS	126.7	147.1	101.7	105.0	101.0	94.3	100.7	100.5	110.0	117.0	113.5	125.1	23.6	33.7	21.0	
3	BULAND	127.0	149.0	103.0	110.0	104.0	95.0	103.0	103.0	107.7	121.7	114.7	128.7	23.8	33.9	29.9	
4	HM 9	128.0	148.2	101.3	105.0	103.3	94.0	99.3	100.6	108.3	121.3	114.8	127.1	21.6	34.6	19.4	
5	HM 8	127.0	149.6	102.7	107.0	102.0	94.0	101.0	101.3	109.0	118.3	113.7	127.8	22.5	34.4	22.8	
6	BIO 9637	127.0	148.3	101.7	105.0	101.7	93.7	98.3	100.1	107.0	117.3	112.2	126.5	22.6	34.9	18.0	
	Loc. Mean	127.3	148.6	102.3	106.2	102.3	94.2	100.5	101.1	108.3	119.0	113.7	127.2	22.8	34.1	24.0	
	C.D. (5%)	1.40	3.35	1.66	1.29	4.11	1.68	2.13	1.27	5.02	1.82	4.60	2.89	3.32	0.00	5.56	
	C.V. (%)	0.60	1.49	0.89	0.67	2.21	0.98	1.16	0.95	2.54	0.84	1.57	2.90	7.98	0.00	12.72	
	F (Prob.)	0.23	0.56	0.06	0.00	0.62	0.62	0.01	0.00	0.81	0.00	0.70	0.22	0.72	0.00	0.00	

TABLE No. 5 (Cont..)

		MOISTURE															
Sl No	PEDIGREE	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	OV'L Mean	
1	KMH-Super 244	15.0	26.0	28.1	25.9	20.1	17.5	22.9	14.2	21.1	22.7	33.3	12.6	20.8	17.8	22.7	
2	HKH-307	15.0	23.3	-	24.1	19.7	17.6	20.5	14.0	22.3	23.4	23.0	12.2	19.0	12.7	20.2	
CHECKS																	
3	BULAND	15.0	25.6	27.7	26.0	22.4	17.4	23.4	13.6	20.3	21.4	23.6	13.9	18.6	13.2	21.6	
4	HM 9	15.0	22.7	25.4	24.0	16.3	18.2	21.0	13.3	19.4	19.3	19.1	12.6	16.7	14.4	19.5	
5	HM 8	15.0	23.7	27.6	24.5	22.9	18.1	23.3	14.0	20.8	20.3	29.8	12.2	19.4	14.6	21.4	
6	BIO 9637	15.0	22.6	26.7	25.2	18.1	18.0	22.0	14.3	21.6	21.6	22.3	11.4	18.2	12.5	20.1	
	Loc. Mean	15.0	24.0	27.1	24.9	19.9	17.8	22.2	13.9	20.9	21.4	25.2	12.4	18.8	14.2	20.9	
	C.D. (5%)	-	4.70	0.99	0.76	0.00	0.00	2.67	1.35	0.24	1.13	4.09	1.05	3.18	4.29	1.76	
	C.V. (%)	-	13.00	2.41	1.68	0.00	0.00	7.99	5.34	0.62	2.91	8.93	4.63	12.84	16.65	11.16	
	F (Prob.)	-	0.51	0.00	0.00	0.00	0.00	0.15	0.63	0.00	0.00	0.00	0.01	0.22	0.15	0.01	
		PLANT HEIGHT CM															
Sl No	PEDIGREE	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean
1	KMH-Super 244	134.0	200.0	140.3	172.7	161.8	155.5	155.3	135.8	176.1	155.7	224.3	205.1	183.1	194.5	176.7	196.7
2	HKH-307	168.0	211.7	141.5	180.7	175.5	-	166.0	145.0	167.8	159.6	222.0	185.3	182.6	170.5	156.7	183.4
CHECKS																	
3	BULAND	176.0	226.7	175.7	171.5	187.5	190.0	172.7	162.5	184.3	177.4	252.0	226.0	194.2	216.5	178.3	213.4
4	HM 9	147.3	213.3	162.0	165.3	172.0	179.5	169.3	159.2	166.8	168.7	207.7	200.5	190.7	171.5	161.7	186.4
5	HM 8	142.3	206.7	130.7	185.3	166.3	160.0	158.3	139.2	173.7	157.8	227.3	189.9	184.7	177.0	165.0	188.8
6	BIO 9637	160.0	215.0	169.0	181.7	181.4	197.5	175.7	148.3	165.9	171.9	208.3	196.5	177.1	169.5	163.3	183.0
	Loc. Mean	154.6	212.2	153.2	176.2	174.1	176.5	166.2	148.3	172.4	165.2	223.6	200.6	185.4	183.3	166.9	192.0
	C.D. (5%)	31.67	25.22	17.66	1.44	16.56	7.92	21.13	17.71	7.72	13.49	9.06	7.37	7.01	4.45	31.76	10.54
	C.V. (%)	11.26	6.53	6.34	0.45	6.31	2.96	6.99	6.56	2.46	5.42	2.23	2.02	2.08	1.33	10.46	4.16
	F (Prob.)	0.10	0.36	0.00	0.00	0.05	0.00	0.29	0.04	0.00	0.02	0.00	0.00	0.00	0.00	0.61	0.00

TABLE No. 5 (Cont..)

Sl No	PEDIGREE	PLANT HEIGHT CM				EAR HEIGHT CM												
		GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	
1	KMH-Super 244	169.3	195.8	182.6	174.6	69.0	96.7	77.3	65.0	77.0	80.0	69.0	71.7	75.5	74.1	81.3	114.6	
2	HKH-307	160.7	188.8	174.7	174.8	96.0	113.3	77.0	70.7	89.2	-	64.0	80.8	72.7	72.5	89.3	111.6	
	CHECKS																	
3	BULAND	152.7	236.7	194.7	194.4	105.0	120.0	111.7	81.5	104.5	101.5	68.3	90.8	73.2	83.5	123.0	144.0	
4	HM 9	172.0	213.5	192.7	178.7	83.0	106.7	90.0	61.3	85.3	96.5	64.3	88.0	68.7	79.4	78.0	92.5	
5	HM 8	175.0	186.0	180.5	173.4	74.7	123.3	75.0	79.3	88.1	89.0	64.0	78.3	72.4	75.9	76.3	110.3	
6	BIO 9637	149.7	214.7	182.2	179.5	72.0	91.7	86.0	74.7	81.1	102.0	66.7	75.3	68.3	78.1	70.3	95.5	
	Loc. Mean	163.2	205.9	184.6	179.2	83.3	109	86.2	72.1	87.5	93.8	66.1	80.8	71.8	77.2	86.4	111	
	C.D. (5%)	32.45	3.25	49.38	8.08	25.4	26.8	21.4	1.3	14.1	6.0	15.4	19.1	6.0	10.6	5.9	2.2	
	C.V. (%)	10.93	0.87	10.41	6.19	16.8	13.5	13.7	1.0	10.7	4.2	12.8	13.0	4.6	9.1	3.8	1.1	
	F (Prob.)	0.44	0.00	0.88	0.00	0.06	0.13	0.03	0.00	0.01	0.00	0.95	0.28	0.14	0.33	0.00	0.00	
Sl No	PEDIGREE	EAR HEIGHT CM				SHELLING %												
		VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	BHUV	ZN 3 Mean
1	KMH-Super 244	106.7	103.5	108.3	102.9	81.0	93.1	87.0	86.2	79.4	81.0	74.0	72.0	76.6	79.3	74.8	79.3	77.8
2	HKH-307	104.4	97.5	111.7	102.9	77.3	87.2	82.3	89.5	73.6	80.0	74.0	73.0	75.1	-	73.0	80.3	76.7
	CHECKS																	
3	BULAND	116.2	117.5	101.7	120.5	70.7	129.7	100.2	103.6	74.2	84.0	78.5	75.0	77.9	77.5	65.2	79.0	73.9
4	HM 9	95.7	91.5	105.0	92.6	74.7	108.7	91.7	87.0	75.7	81.0	84.5	72.0	78.3	77.3	66.6	80.5	74.8
5	HM 8	97.6	90.5	98.3	94.6	87.0	111.0	99.0	88.5	82.0	79.0	70.5	73.5	76.2	77.0	69.9	79.8	75.6
6	BIO 9637	79.3	83.5	100.0	85.7	75.3	115.2	95.3	83.7	79.0	78.0	80.0	74.0	77.7	77.8	76.9	80.7	78.4
	Loc. Mean	100	97.3	104	99.9	77.7	108	92.6	89.8	77.3	80.5	76.9	73.3	77.0	77.8	71.1	79.9	76.2
	C.D. (5%)	6.0	7.4	31.4	11.4	19.7	4.9	33.7	7.0	7.54	-	5.42	0.37	5.25	0.25	1.57	-	4.70
	C.V. (%)	3.3	4.2	16.6	8.7	13.9	2.5	14.2	10.7	5.36	-	3.87	0.28	4.52	0.21	1.21	-	3.39
	F (Prob.)	0.00	0.00	0.92	0.00	0.56	0.00	0.73	0.00	0.18	-	0.00	0.00	0.79	0.00	0.00	0.00	0.31

TABLE No. 5 (Cont..)

Sl No	PEDIGREE	SHELLING %					ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	STAND ('000/ha)				ZN 2 Mean
		KARI	COIM	VAGA	ARBH	AKOL						LUDH	KARN	DELH	KANP	
1	KMH-Super 244	77.0	78.0	51.7	83.4	87.9	75.6	79.6	75.1	77.4	76.6	75.9	56.9	33.9	76.0	60.7
2	HKH-307 CHECKS	82.9	76.5	78.9	83.0	84.5	81.2	79.8	74.1	76.9	78.0	57.9	47.5	25.3	76.7	51.8
3	BULAND	73.8	76.7	79.9	82.9	81.8	79.0	82.0	74.3	78.2	77.5	79.2	58.9	56.9	79.7	68.7
4	HM 9	77.8	78.1	74.5	83.4	83.5	79.5	81.7	71.3	76.5	77.7	74.5	52.2	48.3	75.7	62.7
5	HM 8	76.5	82.3	81.6	84.8	85.6	82.2	81.0	70.7	75.8	78.1	56.5	56.4	24.4	77.8	53.8
6	BIO 9637	76.7	81.4	80.2	81.4	81.6	80.2	85.4	75.7	80.6	79.2	75.9	56.9	63.3	78.5	68.7
	Loc. Mean	77.4	78.8	74.5	83.1	84.1	79.6	81.6	73.5	77.6	77.8	70.0	54.8	42.0	77.4	61.1
	C.D. (5%)	4.61	1.21	18.87	0.60	0.67	7.43	3.59	2.49	4.56	3.08	9.09	4.89	28.8	1.03	12.0
	C.V. (%)	3.27	0.84	13.93	0.40	0.44	7.07	2.42	1.86	2.29	5.23	7.14	4.91	37.7	0.73	13.0
	F (Prob.)	0.03	0.00	0.04	0.00	0.00	0.55	0.05	0.00	0.27	0.70	0.00	0.00	0.05	0.00	0.04
Sl No	PEDIGREE	STAND ('000/ha)				ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean
		VARA	BAHR	DHOL	BHUV											
1	KMH-Super 244	83.3	76.7	61.7	67.7	72.4	60.6	68.8	67.0	64.2	66.7	65.4	76.4	70.5	73.4	67.1
2	HKH-307 CHECKS	-	30.9	33.9	64.6	43.1	61.9	66.7	66.0	33.1	44.1	54.3	66.3	67.7	67.0	53.0
3	BULAND	80.6	75.7	53.6	66.3	69.0	63.1	68.1	66.7	56.1	66.7	64.1	58.3	71.2	64.8	66.7
4	HM 9	78.5	80.2	55.6	69.4	70.9	61.4	68.1	66.3	51.7	65.6	62.6	63.5	71.9	67.7	65.5
5	HM 8	75.7	76.0	49.4	68.4	67.4	63.9	67.4	67.0	46.1	60.4	60.9	72.9	58.3	65.6	61.4
6	BIO 9637	78.1	77.4	56.9	67.4	70.0	63.1	68.1	66.7	48.1	64.4	62.1	49.0	69.8	59.4	65.6
	Loc. Mean	79.2	69.5	51.9	67.3	65.5	62.3	67.8	66.6	49.9	61.3	61.6	64.4	68.2	66.3	63.2
	C.D. (5%)	5.17	4.13	12.6	1.65	12.0	5.19	1.45	1.61	16.3	8.21	7.01	25.8	2.87	23.4	5.68
	C.V. (%)	4.31	3.27	13.3	1.35	12.2	4.58	1.18	1.33	17.9	7.36	8.63	22.0	2.32	13.7	12.3
	F (Prob.)	0.00	0.00	0.01	0.00	0.00	0.73	0.11	0.68	0.03	0.00	0.05	0.28	0.00	0.77	0.00

TABLE No.6

PERFORMANCE OF EARLY MATURING EXPERIMENTAL HYBRIDS AT LUDHIANA, KARNAL, DELHI, KANPUR, VARANASI, DHOLI, BHUVNESHWAR, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, GODHRA, BANSWARA IN AET 1st YEAR TRIAL No. TR06 DURING RABI (2009-10).

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% <i>MOISTURE</i>																			
		LUDH		KARN		DELH		KANP		ZN 2 MEAN		VARA		DHOL		BHUV		ZN 3 MEAN		COIM	
1	HKH-405 CHECKS	5055	2	3694	3	6063	1	6827	1	5410	2	10770	2	6444	2	6624	2	7946	2	10038	2
2	HM 11	4275	3	4179	2	6011	2	6650	2	5279	3	10265	3	5667	3	6399	3	7444	3	7897	3
3	BIO 9637	5681	1	4300	1	5928	3	6504	3	5603	1	12558	1	6553	1	6651	1	8588	1	10744	1
	Location Mean	5004		4057		6001		6660		5430		11198		6222		6558		7993		9559	
	Mean Stand	48		58		64		75		61		75		60		66		67		65	
	C.D. (5%)	1752		1751		1209		428		1285		2305		787		153		1082		622	
	C.V. (%)	13.48		16.6		7.75		4.29		-		13.76		8.46		1.56		-		4.35	
	F (Prob)	0.152		0.476		0.559		0.051		-		0.028		0.038		0.027		-		0	
	Plot Size	7.2		12		12		9.6		-		9.6		12		9.6		-		9.6	
	AGRONOMY DATA																				
	Sowing Date	26-11		13-11		12-04		23-12		-		1-12		25-11		12-12		-		23-12	
	Harvest Date	20-05		5-04		-		17-05		-		7-05		-		11-05		-		16-04	
	Irrigation Nos	12		10		8		5		-		4		-		11		-		10	
	Fertilizer Applied N	70		150		-		120		-		120		120		120		-		150	
	Fertilizer Applied P	24		60		-		60		-		60		60		60		-		75	
	Fertilizer Applied K	12		60		-		60		-		60		40		60		-		75	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : BAGR 21.1 %: KARI 25.2 %

TABLE No.6 (Cont...)

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE											GRAIN YIELD % SUPERIORITY OVER THE HM 11							
		VAGA	R	ARBH	R	AKOL	R	ZN 4 MEAN	R	GODH	R	BANS	R	ZN 5 MEAN	R	OV'L MEAN	R	LUDH	KARN	DELH
1	HKH-405 CHECKS	5025	3	7124	1	5091	3	6820	2	6836	1	7562	2	7199	1	6704	2	18	-	1
2	HM 11	5506	2	7111	2	5528	1	6510	3	6528	2	7421	3	6974	2	6418	3	-	-	-
3	BIO 9637	6151	1	6026	3	5410	2	7083	1	5772	3	7786	1	6779	3	6928	1	33	3	-
	Location Mean	5561		6754		5343		6804		6378		7590		6984		6683				
	Mean Stand	64		59		52		60		71		64		68		63				
	C.D. (5%)	1037		1156		806		905		1363		863		1113		1095				
	C.V. (%)	12.48		11.45		10.08		-		14.29		7.6		-		-				
	F (Prob)	0.02		0.127		0.245		-		0.193		0.252		-		-				
	Plot Size	9.6		12		7.2		-		9.6		9.2		-		-				
	AGRONOMY DATA																			
	Sowing Date	6-01		4-12		25-01		-		18-11		25-11		-		-				
	Harvest Date	27-04		24-04		6-07		-		21-04		20-04		-		-				
	Irrigation Nos	11		9		-		-		8		6		-		-				
	Fertilizer Applied N	150		150		100		-		150		150		-		-				
	Fertilizer Applied P	75		75		50		-		50		60		-		-				
	Fertilizer Applied K	75		37.5		30		-		-		-		-		-				
	GRAIN YIELD % SUPERIORITY OVER THE HM 11																			
Sl No	PEDIGREE	KANP	ZN 2 MEAN	VARA	DHOL	BHUV	ZN 3 MEAN	COIM	VAGA	ARBH	AKOL	ZN 4 MEAN	GODH	BANS	ZN 5 MEAN	OV'L MEAN				
1	HKH-405 CHECKS	3	2	5	14	4	7	27	-	0	-	5	5	2	3	4				
2	HM 11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
3	BIO 9637	-	6	22	16	4	15	36	12	-	-	9	-	5	-	8				

TABLE No.6 (Cont...)

GRAIN YIELD % SUPERIORITY OVER THE BIO 9637																			
S1						ZN 2				ZN 3				ZN 4				ZN 5	OV'L
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	VARA	DHOL	BHUV	MEAN	COIM	VAGA	ARBH	AKOL	MEAN	GODH	BANS	MEAN	MEAN
1	HKH-405 CHECKS	-	-	2	5	-	-	-	-	-	-	-	18	-	-	18	-	6	-
2	HM 11	-	-	1	2	-	-	-	-	-	-	-	18	2	-	13	-	3	-
3	BIO 9637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAYS TO 50% SILKING																			
S1						ZN 2				ZN 3				ZN 4					
No	PEDIGREE	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean		
1	HKH-405 CHECKS	132.0	132.7	120.7	103.2	122.1	112.2	120.7	120.8	75.6	107.3	65.2	55.0	56.8	68.2	59.2	60.9		
2	HM 11	136.3	133.0	121.7	104.6	123.9	114.6	123.3	122.8	75.0	108.9	68.4	58.3	57.0	73.2	61.0	63.6		
3	BIO 9637	133.0	139.0	119.7	103.4	123.8	115.0	119.7	121.2	76.6	108.1	67.6	55.6	57.0	69.2	58.8	61.6		
	Loc. Mean	133.8	134.9	120.7	103.7	123.3	113.9	121.2	121.6	75.7	108.1	67.1	56.3	56.9	70.2	59.7	62.0		
	C.D. (5%)	5.29	7.61	1.31	1.81	3.94	1.91	1.19	1.21	0.96	2.24	2.74	0.75	1.01	1.19	1.29	1.56		
	C.V. (%)	1.74	2.49	0.48	1.19	1.85	1.15	0.43	0.68	0.87	1.20	2.80	0.92	1.22	1.16	1.48	1.72		
	F (Prob.)	0.17	0.14	0.03	0.22	0.51	0.02	0.00	0.01	0.01	0.29	0.06	0.00	0.87	0.00	0.01	0.01		
DAYS TO 50% SILKING DAYS TO 50% POLLEN SHED																			
S1		DAYS TO 50% SILKING				DAYS TO 50% POLLEN SHED				ZN 2				ZN 3					
No	PEDIGREE	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	
1	HKH-405 CHECKS	71.2	80.0	75.6	91.6	130.3	129.7	118.3	97.8	119.0	109.6	118.7	119.4	72.2	105.0	63.2	53.4	53.6	
2	HM 11	71.6	82.4	77.0	93.6	134.3	130.0	120.0	98.2	120.6	110.2	121.7	120.8	71.4	106.0	66.2	56.3	53.7	
3	BIO 9637	72.8	79.4	76.1	92.5	129.7	136.0	118.7	97.8	120.5	111.2	117.7	119.8	73.4	105.5	65.6	53.8	54.4	
	Loc. Mean	71.9	80.6	76.2	92.5	131.4	131.9	119.0	97.9	120.1	110.3	119.3	120.0	72.3	105.5	65.0	54.5	53.9	
	C.D. (5%)	2.17	1.47	6.39	1.09	2.20	7.61	1.85	1.41	4.08	1.64	1.31	0.86	1.32	2.32	2.98	0.59	0.68	
	C.V. (%)	2.07	1.25	1.95	1.57	0.74	2.55	0.69	0.99	1.96	1.02	0.48	0.49	1.25	1.27	3.15	0.74	0.86	
	F (Prob.)	0.27	0.00	0.69	0.00	0.01	0.14	0.13	0.76	0.59	0.14	0.00	0.02	0.02	0.57	0.11	0.00	0.05	

TABLE No.6 (Cont..)

Sl No	PEDIGREE	DAYS TO 50% POLLEN SHED							DAYS TO 50% DRY HUSK										
		ARBH	AKOL	ZN 4		ZN 5		OV'L	LUDH	KARN	ZN 2		ZN 3			KARI	COIM	VAGA	
1	CHKH-405	66.8	58.2	59.0	68.0	77.0	72.5	89.1	164.0	164.7	164.3	150.8	146.3	159.4	118.2	143.7	103.8	98.0	93.2
2	HM 11	71.6	60.0	61.6	68.2	79.2	73.7	90.8	167.3	164.0	165.7	149.6	149.7	161.4	118.0	144.7	104.4	100.0	94.7
3	BIO 9637	67.2	57.8	59.8	69.2	76.0	72.6	89.9	161.3	169.3	165.3	152.8	148.7	158.0	119.2	144.7	102.4	98.0	92.8
	Loc. Mean	68.5	58.7	60.1	68.5	77.4	72.9	89.9	164.2	166.0	165.1	151.1	148.2	159.6	118.5	144.3	103.5	98.7	93.5
	C.D. (5%)	0.80	1.29	1.68	2.10	1.51	6.39	1.14	4.69	6.54	17.49	3.44	1.19	4.63	1.45	2.75	1.89	-	0.91
	C.V. (%)	0.80	1.51	1.91	2.10	1.33	2.04	1.69	1.26	1.74	2.46	1.56	0.36	1.99	0.84	1.10	1.25	-	0.66
	F (Prob.)	0.00	0.01	0.02	0.41	0.00	0.71	0.02	0.06	0.16	0.94	0.16	0.00	0.29	0.18	0.62	0.10	-	0.00

Sl No	PEDIGREE	DAYS TO 50% DRY HUSK							MOISTURE									
		ARBH	AKOL	ZN 4		ZN 5		OV'L	LUDH	KARN	DELH	KANP	ZN 2			BAHR	DHOL	BHUV
1	CHKH-405	117.0	91.2	100.6	103.8	108.4	106.1	124.5	20.7	33.6	15.3	15.0	21.1	24.7	23.8	16.1	17.0	20.4
2	HM 11	118.0	93.0	102.0	101.6	113.2	107.4	125.8	24.6	34.3	20.5	15.0	23.6	27.8	24.2	19.2	16.8	22.0
3	BIO 9637	116.8	90.8	100.2	102.0	107.4	104.7	124.6	21.6	32.7	18.5	15.0	21.9	27.7	25.2	16.5	17.5	21.7
	Loc. Mean	117.3	91.7	100.9	102.5	109.7	106.1	125.0	22.3	33.5	18.1	15.0	22.2	26.7	24.4	17.3	17.1	21.4
	C.D. (5%)	1.25	1.29	0.52	3.22	2.05	11.66	1.41	3.91	-	3.63	-	2.33	0.57	0.43	-	0.34	1.90
	C.V. (%)	0.73	0.97	0.35	2.15	1.28	2.55	1.39	7.75	-	8.86	-	6.06	1.48	0.78	-	1.35	5.15
	F (Prob.)	0.12	0.01	0.00	0.30	0.00	0.67	0.14	0.11	0.00	0.04	-	0.10	0.00	0.00	-	0.01	0.17

Sl No	PEDIGREE	MOISTURE					PLANT HEIGHT CM										
		KARI	COIM	ARBH	AKOL	Mean	ZN 4	GODH	BANS	Mean	OV'L	LUDH	KARN	DELH	KANP	Mean	VARA
1	CHKH-405	13.8	18.7	17.0	11.2	15.2	8.5	15.6	12.1	17.9	156.7	165.0	149.0	181.0	162.9	207.5	168.7
2	HM 11	13.2	22.6	16.1	13.0	16.2	10.0	15.9	12.9	19.5	173.3	174.7	178.7	179.4	176.5	217.5	188.0
3	BIO 9637	13.7	18.7	17.1	12.5	15.5	11.2	15.1	13.2	18.8	150.0	180.0	167.0	180.0	169.3	195.0	185.7
	Loc. Mean	13.6	20.0	16.7	12.2	15.6	9.9	15.5	12.7	18.7	160	173	165	180	170	207	181
	C.D. (5%)	1.00	0.28	5.00	0.16	2.27	1.53	0.26	4.88	0.91	30.7	37.7	11.2	5.36	15.5	2.84	18.82
	C.V. (%)	5.05	0.98	20.49	0.89	8.39	10.57	1.15	8.92	6.23	8.46	9.59	3.00	2.04	5.29	0.94	4.59
	F (Prob.)	0.40	0.00	0.88	0.00	0.55	0.01	0.00	0.66	0.01	0.21	0.58	0.00	0.79	0.18	0.00	0.09

TABLE No.6 (Cont..)

Sl No	PLANT HEIGHT CM													EAR HEIGHT CM																
	DHOL		BHUV		ZN 3		KARI		COIM		VAGA		ARBH		AKOL		ZN 4		GODH		BANS		ZN 5		OV'L		LUDH	KARN	DELH	
1	HKH-405	159.5	164.3	175.0	218.2	198.6	165.1	159.3	172.0	182.7	168.2	211.9	190.1	176.3	90.0	63.3	76.0													
2	HM 11	161.9	170.1	184.4	251.2	204.0	163.6	176.3	179.0	194.8	177.6	208.4	193.0	186.9	88.3	61.7	96.3													
3	BIO 9637	165.0	172.3	179.5	228.8	185.6	164.4	164.3	166.0	181.8	187.8	177.2	182.5	177.9	71.0	85.0	88.7													
	Loc. Mean	162	169	180	233	196	164	167	172	186	178	199	189	180	83.1	70.0	87.0													
	C.D. (5%)	24.67	7.16	13.2	31.1	6.06	9.28	7.60	17.7	11.0	31.7	10.1	86.3	6.79	14.7	51.5	9.25													
	C.V. (%)	10.43	2.91	4.25	9.16	2.12	3.87	3.13	7.04	4.05	12.21	3.49	10.63	5.03	7.81	32.47	4.69													
	F (Prob.)	0.88	0.08	0.29	0.10	0.00	0.93	0.00	0.29	0.05	0.40	0.00	0.87	0.01	0.04	0.45	0.01													

Sl No	EAR HEIGHT CM																															
	KANP		ZN 2		VARA		BAHR		DHOL		BHUV		ZN 3		KARI		COIM		VAGA		ARBH		AKOL		ZN 4		BANS		ZN 5		OV'L	
1	HKH-405	71.2	75.1	110.0	66.3	83.5	62.0	80.5	81.2	99.9	69.9	68.3	97.0	83.3	81.2	87.5	84.3	80.5														
2	HM 11	72.4	79.7	139.0	84.0	84.5	67.4	93.7	98.8	99.2	94.8	82.7	103.0	95.7	94.4	88.4	91.4	90.3														
3	BIO 9637	70.8	78.9	108.5	62.3	81.5	69.8	80.5	84.6	95.5	81.9	72.7	89.0	84.7	95.4	64.7	80.1	81.4														
	Loc. Mean	71.5	77.9	119.2	70.9	83.2	66.4	84.9	88.2	98.2	82.2	74.6	96.3	87.9	90.3	80.2	85.3	84.1														
	C.D. (5%)	8.12	19.0	4.58	16.7	23.5	2.64	14.6	11.3	1.79	20.8	3.28	19.2	8.02	24.8	3.97	57.2	6.27														
	C.V. (%)	7.79	14.1	2.64	10.4	19.4	2.73	9.95	8.80	1.25	17.3	3.02	13.7	6.25	18.8	3.39	15.6	9.98														
	F (Prob.)	0.90	0.83	0.00	0.05	0.96	0.00	0.11	0.02	0.00	0.07	0.00	0.30	0.01	0.38	0.00	0.73	0.01														

Sl No	SHELLING %																															
	LUDH		KARN		DELH		KANP		ZN 2		VARA		BAHR		BHUV		ZN 3		KARI		COIM		VAGA		ARBH		AKOL		ZN 4			
1	HKH-405	76.6	81.0	82.5	75.0	78.8	77.8	74.9	80.4	77.7	76.7	82.4	74.6	82.9	80.0	79.3																
2	HM 11	74.8	82.0	85.0	74.2	79.0	78.0	69.2	79.4	75.5	73.4	73.2	70.6	83.2	77.9	75.7																
3	BIO 9637	71.0	82.0	76.5	73.4	75.7	78.8	75.8	80.9	78.5	79.6	81.9	72.4	81.2	81.8	79.4																
	Loc. Mean	74.1	81.7	81.3	74.2	77.8	78.2	73.3	80.2	77.2	76.6	79.2	72.5	82.5	79.9	78.1																
	C.D. (5%)	2.24-		3.98	1.42	3.85	0.39	2.21	0.21	4.16	4.33	0.66	0.09	1.21	0.84	3.48																
	C.V. (%)	1.33-		2.16	1.31	2.86	0.35	1.33	0.18	2.38	3.88	0.57	0.08	1.01	0.72	3.05																
	F (Prob.)	0.01-		0.01	0.09	0.15	0.00	0.00	0.00	0.24	0.03	0.00	0.00	0.01	0.00	0.06																

TABLE No.6 (Cont..)

Sl No	PEDIGREE	SHELLING %		ZN 5 Mean	OV'L Mean	STAND ('000/ha)				ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean
		GODH	BANS			LUDH	KARN	DELH	KANP						
1	HKH-405 CHECKS	82.0	70.7	76.3	78.4	67.1	48.1	54.7	79.0	62.2	74.8	66.7	51.0	68.8	65.3
2	HM 11	82.5	72.2	77.3	76.8	64.8	50.6	47.8	78.1	60.3	78.5	67.7	48.2	67.7	65.5
3	BIO 9637	80.5	74.1	77.3	77.8	69.0	45.8	56.4	77.1	62.1	82.1	77.8	51.2	68.3	69.8
	Loc. Mean	81.7	72.3	77.0	77.7	67.0	48.1	53.0	78.1	61.5	78.5	70.7	50.1	68.3	66.9
	C.D. (5%)	3.20	1.12	7.81	1.96	31.3	14.2	14.3	2.00	5.21	7.48	7.93	12.0	2.11	5.28
	C.V. (%)	2.69	1.06	2.36	3.24	20.6	13.0	11.9	1.76	4.89	6.54	4.95	16.5	2.12	4.56
	F (Prob.)	0.37	0.00	0.84	0.27	0.93	0.68	0.31	0.16	0.63	0.14	0.03	0.82	0.55	0.14

Sl No	PEDIGREE	STAND ('000/ha)					ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean
		KARI	COIM	VAGA	ARBH	AKOL					
1	HKH-405 CHECKS	60.7	68.1	65.8	52.2	69.7	63.3	74.6	68.9	71.7	64.7
2	HM 11	61.7	67.7	66.7	42.8	65.3	60.8	72.9	68.9	70.9	63.3
3	BIO 9637	61.2	68.1	67.7	51.5	81.4	66.0	74.6	71.1	72.8	66.9
	Loc. Mean	61.2	68.0	66.7	48.8	72.1	63.4	74.0	69.6	71.8	64.9
	C.D. (5%)	2.57	1.09	0.73	9.55	14.9	5.85	6.95	2.24	3.46	2.34
	C.V. (%)	2.88	1.10	0.75	13.4	14.2	6.33	6.44	2.21	1.12	4.81
	F (Prob.)	0.68	0.62	0.00	0.10	0.09	0.19	0.82	0.09	0.26	0.01

TABLE No. 7

PERFORMANCE OF LATE MATURING EXPERIMENTAL HYBRIDS & COMPOSITE AT LUDHIANA, KARNAL, DELHI, KANPUR, VARANASI, BAHRAICH, DHOLI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, ARBHAVI, AKOLA, BANSWARA IN AET 2nd YEAR TRIAL No. TR07 DURING RABI(2009-10).

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE																					
		LUDH		KARN		DELH		KANP		ZN 2		VARA		BAHR		DHOL		BHUV		ZN 3			
		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R		
1	MON-29	6096	3	9976	1	8050	2	7355	2	7869	1	14680	1	11621	1	8312	2	6836	1	10362	1	7977	6
2	X6B302 CHECKS	6083	4	9307	2	7798	4	6677	5	7466	2	14355	3	10648	3	8134	3	6433	7	9892	3	8075	5
3	BULAND	7051	1	7983	7	5815	6	7300	3	7037	6	13310	4	10210	4	6572	5	6626	6	9180	4	10234	1
4	HM 8	5175	5	8853	4	5703	7	6453	6	6546	7	11605	7	8742	6	7087	4	6696	4	8532	6	10044	2
5	HM 9	3572	6	8739	5	8889	1	7103	4	7076	4	12645	5	8678	7	6382	6	6695	5	8600	5	7321	7
6	SEEDTECH 2324	6493	2	8181	6	7527	5	6191	7	7098	3	14408	2	10719	2	8669	1	6763	2	10140	2	8904	3
7	HM 10	3561	7	9128	3	7991	3	7537	1	7054	5	12302	6	8747	5	6178	7	6736	3	8491	7	8106	4
	Location Mean	5433		8881		7396		6945		7164		13329		9909		7333		6684		9314		8666	
	Mean Stand	58		103		99		114		94		113		98		99		97		102		113	
	C.D. (5%)	1639		816		2548		486		1372		881		1899		2046		112		1234		1723	
	C.V. (%)	16.79		5.11		19.17		3.9		-		3.68		10.66		15.53		0.94		-		11.06	
	F (Prob)	0.002		0.094		0.007		0		-		0.001		0		0.032		0.001		-		0.491	
	Plot Size	7.2		18		18		14.4		-		14.4		14.4		18		14.4		-		18	
	AGRONOMY DATA																						
	Sowing Date	26-11		13-11		12-04		23-12		-		25-11		12-12		25-11		11-12		-		18-11	
	Harvest Date	20-05		5-04		-		17-05		-		9-05		26-05		-		14-05		-		16-03	
	Irrigation Nos	12		10		8		5		-		5		6		-		12		-		-	
	Fertilizer Applied N	70		150		-		120		-		150		150		120		120		-		200	
	Fertilizer Applied P	24		60		-		60		-		60		75		60		60		-		80	
	Fertilizer Applied K	12		60		-		60		-		60		60		40		60		-		60	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : GODH 25.7 %

TABLE No. 7(Cont..)

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE										GRAIN YIELD % SUPERIORITY OVER THE BULAND								
		COIM	R	VAGA	R	ARBH	R	AKOL	R	MEAN	R	ZN 4	ZN 5	OV'L	LUDH	KARN	DELH	KANP	ZN 2	
1	MON-29	1143	1	8410	2	8313	2	6685	3	6506	2	7407	5	8062	2	-	25	38	1	12
2	X6B302 CHECKS	923	3	8474	1	9442	1	9940	1	7371	1	8795	2	8220	1	-	17	34	-	6
3	BULAND	674	5	8070	3	7122	5	5946	6	6409	4	8580	3	7535	4	-	-	-	-	-
4	HM 8	538	7	7621	4	6652	7	6316	4	6234	5	5859	7	6953	7	-	11	-	-	-
5	HM 9	665	6	7208	5	7039	6	6274	5	5701	7	7371	6	7041	5	-	9	53	-	1
6	SEEDTECH 2324	925	2	6992	6	8310	3	7231	2	6472	3	9105	1	7887	3	-	2	29	-	1
7	HM 10	691	4	6744	7	8058	4	5111	7	5742	6	7654	4	7039	6	-	14	37	3	0
	Location Mean	794		7646		7848		6786		6348		7824		7534						
	Mean Stand	72		96		93		88		92		110		97						
	C.D. (5%)	224		784		1487		862		1016		1188		1192						
	C.V. (%)	15.71		5.71		10.54		7.06		-		8.45		-						
	F (Prob)	0		0.001		0.002		0		-		0		-						
	Plot Size	14.4		14.4		18		13.5		-		14.4		-						
	AGRONOMY DATA																			
	Sowing Date	23-12		6-01		4-12		24-01		-		25-11		-						
	Harvest Date	19-04		2-05		22-04		6-05		-		20-04		-						
	Irrigation Nos	10		11		9		-		-		6		-						
	Fertilizer Applied N	150		150		150		120		-		150		-						
	Fertilizer Applied P	75		75		75		60		-		60		-						
	Fertilizer Applied K	75		75		37.5		40		-		-		-						

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE BULAND										ZN 4 MEAN	ZN 5 BANS	OV'L MEAN
		VARA	BAHR	DHOL	BHUV	MEAN	KARI	COIM	VAGA	ARBH	AKOL			
1	MON-29	10	14	26	3	13	-	70	4	17	12	2	-	7
2	X6B302 CHECKS	8	4	24	-	8	-	37	5	33	67	15	2	9
3	BULAND	-	-	8	1	-	-	-	-	-	6	-	-	-
4	HM 8	-	-	-	1	-	-	-	-	-	6	-	-	-
5	HM 9	8	5	32	2	10	-	37	-	17	22	1	6	5
6	SEEDTECH 2324	-	-	-	2	-	-	3	-	13	-	-	-	-
7	HM 10													

TABLE No. 7(Cont..)

GRAIN YIELD % SUPERIORITY OVER THE HM 8																			
S1		ZN 2					ZN 3					ZN 4	ZN 5	OV'L					
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARI	COIM	VAGA	ARBH	AKOL	MEAN	BANS	MEAN
1	MON-29	18	13	41	14	20	26	33	17	2	21	-	112	10	25	6	4	26	16
2	X6B302	18	5	37	3	14	24	22	15	-	16	-	72	11	42	57	18	50	18
CHECKS																			
3	BULAND	36	-	2	13	8	15	17	-	-	8	2	25	6	7	-	3	46	8
4	HM 8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	HM 9	-	-	56	10	8	9	-	-	-	1	-	24	-	6	-	-	26	1
6	SEEDTECH 2324	25	-	32	-	8	24	23	22	1	19	-	72	-	25	14	4	55	13
7	HM 10	-	3	40	17	8	6	0	-	1	-	-	29	-	21	-	-	31	1

GRAIN YIELD % SUPERIORITY OVER THE HM 9																			
S1		ZN 2					ZN 3					ZN 4	ZN 5	OV'L					
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARI	COIM	VAGA	ARBH	AKOL	MEAN	BANS	MEAN
1	MON-29	71	14	-	4	11	16	34	30	2	20	9	72	17	18	7	14	0	14
2	X6B302	70	7	-	-	6	14	23	27	-	15	10	39	18	34	58	29	19	17
CHECKS																			
3	BULAND	97	-	-	3	-	5	18	3	-	7	40	1	12	1	-	12	16	7
4	HM 8	45	1	-	-	-	-	1	11	0	-	37	-	6	-	1	9	-	-
5	HM 9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	SEEDTECH 2324	82	-	-	-	0	14	24	36	1	18	22	39	-	18	15	14	24	12
7	HM 10	-	4	-	6	-	-	1	-	1	-	11	4	-	14	-	1	4	-

GRAIN YIELD % SUPERIORITY OVER THE SEEDTECH 2324																			
S1		ZN 2					ZN 3					ZN 4	ZN 5	OV'L					
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARI	COIM	VAGA	ARBH	AKOL	MEAN	BANS	MEAN
1	MON-29	-	22	7	19	11	2	8	-	1	2	-	23	20	0	-	1	-	2
2	X6B302	-	14	4	8	5	-	-	-	-	-	-	-	21	14	37	14	-	4
CHECKS																			
3	BULAND	9	-	-	18	-	-	-	-	-	-	15	-	15	-	-	-	-	-
4	HM 8	-	8	-	4	-	-	-	-	-	-	13	-	9	-	-	-	-	-
5	HM 9	-	7	18	15	-	-	-	-	-	-	-	-	3	-	-	-	-	-
6	SEEDTECH 2324	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	HM 10	-	12	6	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-

TABLE No. 7(Cont...)

GRAIN YIELD % SUPERIORITY OVER THE HM 10																			
S1		ZN 2				ZN 3				ZN 4	ZN 5	OV'L							
No	PEDIGREE	LUDH	KARN	DELH	KANP	MEAN	VARA	BAHR	DHOL	BHUV	MEAN	KARI	COIM	VAGA	ARBH	AKOL	MEAN	BANS	MEAN
1	MON-29	71	9	1	-	12	19	33	35	1	22	-	65	25	3	31	13	-	15
2	X6B302	71	2	-	-	6	17	22	32	-	17	-	34	26	17	94	28	15	17
	CHECKS																		
3	BULAND	98	-	-	-	-	8	17	6	-	8	26	-	20	-	16	12	12	7
4	HM 8	45	-	-	-	-	-	-	15	-	0	24	-	13	-	24	9	-	-
5	HM 9	0	-	11	-	0	3	-	3	-	1	-	-	7	-	23	-	-	0
6	SEEDTECH 2324	82	-	-	-	1	17	23	40	0	19	10	34	4	3	41	13	19	12
7	HM 10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DAYS TO 50% SILKING																			
S1		LUDH	KARN	DELH	KANP	ZN 2	VARA	BAHR	DHOL	BHUV	ZN 3	KARI	COIM	VAGA	ARBH	AKOL	ZN 4		
No	PEDIGREE					Mean					Mean						Mean		
1	MON-29	137.0	135.3	121.0	99.7	123.3	119.0	124.7	125.0	83.7	113.1	68.7	60.3	62.0	71.7	63.0	65.1		
2	X6B302	138.7	139.0	125.0	102.0	126.2	121.7	126.7	126.7	84.3	114.8	69.3	60.3	61.3	73.7	65.0	65.9		
	CHECKS																		
3	BULAND	139.0	139.3	124.3	98.7	125.3	121.7	127.7	126.0	83.7	114.8	72.0	59.7	60.7	74.7	64.7	66.3		
4	HM 8	135.7	136.0	121.0	98.7	122.8	122.3	125.3	124.7	84.3	114.2	67.3	59.3	61.3	71.0	61.3	64.1		
5	HM 9	135.0	133.0	118.0	98.7	121.2	116.3	119.3	119.7	83.7	109.8	66.7	57.0	61.0	71.0	61.0	63.3		
6	SEEDTECH 2324	136.3	135.7	121.3	97.7	122.8	117.3	122.7	121.3	83.0	111.1	72.0	58.7	60.7	71.3	62.7	65.1		
7	HM 10	135.0	132.7	119.7	99.7	121.8	115.3	118.3	118.3	84.3	109.1	72.7	58.0	225.7	70.7	62.7	97.9		
	Loc. Mean	136.7	135.9	121.5	99.3	123.3	119.1	123.5	123.1	83.9	112.4	69.8	59.0	84.7	72.0	62.9	69.7		
	C.D. (5%)	3.67	2.41	1.75	0.99	1.76	1.19	1.10	1.83	1.03	2.54	4.49	1.72	194.21	1.42	1.60	36.32		
	C.V. (%)	1.51	1.00	0.81	0.56	0.96	0.56	0.50	0.83	0.69	1.52	3.61	1.64	128.94	1.11	1.43	39.93		
	F (Prob.)	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.06	0.01	0.48	0.00	0.00	0.44		

TABLE No. 7(Cont..)

Sl No	PEDIGREE	DAYS TO 50% <i>SILKING</i>				DAYS TO 50% <i>POLLEN SHED</i>					DAYS TO 50% <i>DRY HUSK</i>						
		GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM
1	MON-29	83.0	92.3	87.7	96.4	135.0	132.3	119.7	93.3	120.1	114.3	122.3	122.3	80.7	109.9	66.7	57.7
2	X6B302 CHECKS	85.7	95.3	90.5	98.3	134.7	136.0	124.7	95.3	122.7	118.3	124.7	125.7	81.0	112.4	67.3	59.3
3	BULAND	85.3	93.0	89.2	98.0	136.0	136.3	123.7	92.7	122.2	117.3	125.7	124.0	80.3	111.8	70.0	58.0
4	HM 8	85.0	92.3	88.7	96.4	134.0	133.0	119.7	93.7	120.1	118.7	123.7	122.7	81.0	111.5	65.3	57.3
5	HM 9	83.3	90.3	86.8	94.3	133.7	130.0	117.7	92.3	118.4	112.3	117.3	120.0	80.3	107.5	64.7	55.3
6	SEEDTECH 2324	85.3	90.0	87.7	95.7	134.7	132.7	121.7	91.7	120.2	112.7	120.7	120.3	80.3	108.5	69.3	56.7
7	HM 10	83.7	90.7	87.2	105.8	133.0	130.0	115.3	93.3	117.9	111.7	116.3	117.3	81.7	106.8	70.0	56.0
	Loc. Mean	84.5	92.0	88.2	97.9	134.4	132.9	120.3	93.2	120.2	115.0	121.5	121.8	80.8	109.8	67.6	57.2
	C.D. (5%)	5.76	1.99	2.88	11.83	2.52	2.21	1.26	1.23	2.31	0.91	1.10	1.99	1.21	2.68	4.51	1.38
	C.V. (%)	3.83	1.22	1.33	16.66	1.05	0.93	0.59	0.74	1.30	0.44	0.51	0.92	0.84	1.64	3.75	1.36
	F (Prob.)	0.90	0.00	0.16	0.57	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.11	0.00
Sl No	PEDIGREE	DAYS TO 50% <i>POLLEN SHED</i>				DAYS TO 50% <i>DRY HUSK</i>											
		VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean
1	MON-29	59.0	71.3	62.0	63.3	79.7	88.3	84.0	93.6	167.0	166.3	166.7	162.7	150.0	160.3	137.7	152.7
2	X6B302 CHECKS	59.0	73.0	63.7	64.5	82.3	91.3	86.8	95.8	168.7	169.0	168.8	159.0	149.3	159.3	137.0	151.2
3	BULAND	58.0	72.3	63.7	64.4	82.0	89.0	85.5	95.3	168.7	169.7	169.2	158.7	148.3	159.3	135.0	150.3
4	HM 8	58.0	71.7	60.3	62.5	81.3	88.3	84.8	93.9	164.0	166.7	165.3	159.0	146.7	158.3	136.3	150.1
5	HM 9	58.7	71.3	60.0	62.0	80.3	87.0	83.7	92.1	164.0	164.3	164.2	156.0	145.3	156.0	137.3	148.7
6	SEEDTECH 2324	58.0	71.7	61.7	63.5	81.7	86.3	84.0	93.3	166.0	166.7	166.3	158.0	147.3	159.7	135.3	150.1
7	HM 10	56.3	71.3	61.7	63.1	80.3	87.0	83.7	92.1	164.0	164.7	164.3	159.0	145.7	158.3	137.0	150.0
	Loc. Mean	58.1	71.8	61.9	63.3	81.1	88.2	84.6	93.7	166.0	166.8	166.4	158.9	147.5	158.8	136.5	150.4
	C.D. (5%)	1.57	0.94	1.57	1.58	4.24	1.67	2.49	1.11	2.59	2.43	1.74	1.68	4.17	3.45	1.26	1.73
	C.V. (%)	1.52	0.73	1.43	1.91	2.94	1.06	1.20	1.63	0.88	0.82	0.43	0.59	1.59	1.22	0.52	0.77
	F (Prob.)	0.04	0.01	0.00	0.03	0.78	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.20	0.23	0.00	0.01

TABLE No. 7(Cont..)

Sl No	PEDIGREE	DAYS TO 50% DRY HUSK					ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	MOISTURE					ZN 2 Mean
		KARI	COIM	VAGA	ARBH	AKOL						LUDH	KARN	DELH	KANP		
1	MON-29	103.3	111.3	111.0	115.0	110.3	110.2	104.7	132.7	118.7	133.3	25.5	32.9	26.4	15.0	24.9	
2	X6B302 CHECKS	107.0	111.3	110.7	115.0	112.7	111.3	109.0	136.0	122.5	134.2	25.4	35.0	26.4	15.0	25.5	
3	BULAND	103.3	110.7	111.0	113.7	112.3	110.2	107.7	133.7	120.7	133.2	25.4	34.7	28.4	15.0	25.9	
4	HM 8	105.3	110.7	111.0	112.7	108.3	109.6	106.0	133.7	119.8	132.2	24.4	33.9	29.4	15.0	25.7	
5	HM 9	103.7	108.0	110.3	112.3	108.0	108.5	105.7	132.0	118.8	131.0	22.5	33.8	14.7	15.0	21.5	
6	SEEDTECH 2324	106.3	109.3	110.7	113.7	110.0	110.0	107.0	131.0	119.0	132.4	25.5	34.5	30.2	15.0	26.3	
7	HM 10	104.3	108.0	110.3	114.3	110.0	109.4	106.3	133.3	119.8	131.9	22.3	31.7	17.6	15.0	21.6	
	Loc. Mean	104.8	109.9	110.7	113.8	110.2	109.9	106.6	133.2	119.9	132.6	24.4	33.8	24.7	15.0	24.5	
	C.D. (5%)	6.18	1.85	2.32	2.04	1.92	1.44	4.80	2.63	2.30	0.96	1.37	-	2.77	-	4.20	
	C.V. (%)	3.32	0.95	1.18	1.01	0.98	1.00	2.53	1.11	0.78	0.92	3.16	-	6.30	-	11.57	
	F (Prob.)	0.76	0.00	0.98	0.08	0.00	0.02	0.57	0.03	0.06	0.00	0.00	-	0.00	-	0.11	

Sl No	PEDIGREE	MOISTURE					ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean
		VARA	BAHR	DHOL	BHUV												
1	MON-29	25.4	26.8	24.7	17.5	23.6	12.2	23.3	21.6	17.3	11.7	17.2	19.6	17.1	18.3	21.1	
2	X6B302 CHECKS	26.4	27.1	23.4	18.4	23.8	12.4	23.6	22.8	18.6	12.1	17.9	16.8	17.3	17.0	21.4	
3	BULAND	23.7	26.1	19.2	18.1	21.8	12.3	19.6	21.1	14.9	10.1	15.6	18.2	17.5	17.9	20.3	
4	HM 8	25.2	23.4	18.3	18.5	21.3	12.5	22.5	20.8	19.0	11.6	17.3	16.4	16.5	16.5	20.5	
5	HM 9	24.4	24.9	18.5	18.0	21.4	12.9	21.4	18.7	15.6	12.0	16.1	15.0	16.7	15.9	18.9	
6	SEEDTECH 2324	25.1	26.0	22.6	18.6	23.1	12.0	20.4	19.3	18.0	11.3	16.2	21.7	17.5	19.6	21.2	
7	HM 10	23.7	24.8	18.1	17.6	21.0	12.2	20.7	23.1	18.9	10.9	17.1	16.1	16.9	16.5	19.3	
	Loc. Mean	24.8	25.6	20.7	18.1	22.3	12.4	21.6	21.0	17.5	11.4	16.8	17.7	17.1	17.4	20.4	
	C.D. (5%)	0.80	0.79	-	0.00	1.95	0.69	0.84	1.01	1.65	0.78	1.45	4.23	0.31	3.59	1.39	
	C.V. (%)	1.83	1.74	-	0.00	5.90	3.12	2.18	2.70	5.30	3.87	6.64	13.47	1.02	8.46	9.39	
	F (Prob.)	0.00	0.00	-	0.00	0.03	0.19	0.00	0.00	0.00	0.00	0.04	0.06	0.00	0.30	0.00	

TABLE No. 7(Cont..)

Sl No	PEDIGREE	PLANT HEIGHT CM				ZN 2				ZN 3				ZN 4			
		LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean
1	MON-29	154.0	225.0	182.0	192.3	188.3	219.0	195.3	164.2	183.7	190.5	201.0	232.0	212.5	203.5	185.0	206.8
2	X6B302	144.0	230.0	188.0	187.7	187.4	227.0	187.3	185.8	180.6	195.2	202.0	195.2	199.7	215.5	198.3	202.2
	CHECKS																
3	BULAND	159.7	235.0	183.0	199.0	194.2	216.0	169.0	176.7	196.3	189.5	201.0	201.5	191.3	206.5	175.0	195.1
4	HM 8	146.0	211.7	143.7	190.3	172.9	181.0	165.3	145.8	155.4	161.9	200.3	174.0	183.3	176.0	151.7	177.1
5	HM 9	131.7	220.0	172.7	181.7	176.5	188.5	180.0	166.7	174.3	177.4	196.3	177.1	200.0	182.5	176.7	186.5
6	SEEDTECH 2324	140.7	221.7	158.7	185.7	176.7	201.0	177.3	161.7	185.8	181.5	195.3	206.1	187.9	183.0	181.7	190.8
7	HM 10	138.3	223.3	177.7	180.3	179.9	204.0	194.3	184.2	192.1	193.7	197.0	205.4	214.7	194.0	178.3	197.9
	Loc. Mean	145	224	172	188	182	205	181	169	181	184	199	199	199	194	178	194
	C.D. (5%)	24.8	18.8	16.2	12.6	11.9	2.40	17.0	15.9	4.61	13.3	19.4	7.84	18.3	5.22	38.1	13.8
	C.V. (%)	9.63	4.72	5.30	3.76	4.40	0.66	5.27	5.27	1.43	4.87	5.48	2.22	5.18	1.51	12.0	5.45
	F (Prob.)	0.30	0.26	0.00	0.08	0.01	0.00	0.01	0.00	0.00	0.00	0.98	0.00	0.02	0.00	0.33	0.00
Sl No	PEDIGREE	PLANT HEIGHT CM				EAR HEIGHT CM				ZN 2				ZN 3			
		GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM
1	MON-29	167.0	222.6	194.8	195.9	70.3	103.3	94.3	94.7	90.7	100.0	92.0	82.5	73.3	87.0	82.7	112.7
2	X6B302	153.3	232.4	192.9	195.1	76.7	118.3	104.7	89.7	97.3	126.0	84.3	95.8	75.6	95.4	74.3	108.9
	CHECKS																
3	BULAND	182.0	210.2	196.1	193.5	98.3	140.0	110.7	101.3	112.6	123.5	80.3	95.0	69.5	92.1	83.7	131.9
4	HM 8	181.0	180.1	180.5	172.4	83.7	118.3	84.0	80.3	91.6	103.0	68.0	80.8	61.8	78.4	80.3	101.5
5	HM 9	147.3	171.6	159.5	177.8	71.3	105.0	103.7	93.3	93.3	106.0	74.3	91.7	69.3	85.3	79.7	95.1
6	SEEDTECH 2324	178.3	220.7	199.5	185.7	85.3	125.0	111.3	91.7	103.3	119.5	91.0	104.2	84.9	99.9	80.0	113.0
7	HM 10	172.0	204.7	188.4	190.7	55.0	98.3	99.0	75.7	82.0	106.0	77.0	95.8	91.1	92.5	77.0	105.3
	Loc. Mean	169	206	187	187	77.2	116	101	89.5	95.8	112	81.0	92.3	75.1	90.1	79.7	110
	C.D. (5%)	32.2	6.20	43.8	7.81	26.6	28.1	14.1	1.10	11.5	3.20	11.9	13.7	6.67	10.7	18.7	3.90
	C.V. (%)	10.7	1.69	9.55	5.74	19.4	13.7	7.86	0.69	8.09	1.60	8.29	8.32	4.99	7.98	13.2	2.00
	F (Prob.)	0.20	0.00	0.42	0.00	0.08	0.08	0.01	0.00	0.00	0.00	0.01	0.03	0.00	0.01	0.94	0.00

TABLE No. 7(Cont..)

Sl No	PEDIGREE	EAR HEIGHT CM			ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	SHELLING %				ZN 2 Mean	VARA
		VAGA	ARBH	AKOL						LUDH	KARN	DELH	KANP		
1	MON-29	106.8	85.5	111.7	99.9	83.7	88.7	86.2	92.1	69.7	85.0	86.0	73.5	78.6	77.5
2	X6B302	109.3	104.0	115.0	102.3	70.0	103.1	86.6	97.1	84.4	85.0	86.8	72.0	82.0	80.8
	CHECKS														
3	BULAND	110.7	109.0	100.0	107.1	90.0	98.1	94.1	102.8	83.0	84.0	82.0	73.5	80.6	77.0
4	HM 8	98.1	89.0	118.3	97.4	87.0	79.9	83.4	88.9	75.0	80.0	76.5	71.5	75.8	76.8
5	HM 9	95.4	84.0	103.3	91.5	71.0	70.6	70.8	87.6	74.2	80.0	87.0	72.5	78.4	76.3
6	SEEDTECH 2324	114.5	101.0	116.7	105.0	86.7	97.2	91.9	101.5	73.9	78.0	83.8	71.5	76.8	77.8
7	HM 10	110.2	90.5	106.7	97.9	77.0	75.1	76.0	89.3	68.2	81.0	83.3	74.5	76.7	77.0
	Loc. Mean	106	94.7	110	100	80.8	87.5	84.1	94.2	75.5	81.9	83.6	72.7	78.4	77.6
	C.D. (5%)	7.71	6.09	24.6	9.36	27.9	3.11	22.7	5.84	12.29	-	6.79	0.80	5.42	0.76
	C.V. (%)	4.07	3.61	12.5	7.16	19.4	2.00	11.0	8.54	9.15	-	4.57	0.62	4.65	0.55
	F (Prob.)	0.00	0.00	0.60	0.04	0.59	0.00	0.29	0.00	0.10	-	0.06	0.00	0.22	0.00
Sl No	PEDIGREE	SHELLING %		ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4	GODH	BANS	ZN 5	OV'L	
		BAHR	BHUV							Mean			Mean	Mean	
1	MON-29	76.8	80.2	78.2	79.3	78.0	75.6	86.2	85.2	80.9	84.4	74.1	79.3	79.4	
2	X6B302	72.7	79.8	77.7	75.7	81.9	80.8	86.4	86.5	82.2	83.9	76.9	80.4	80.9	
	CHECKS														
3	BULAND	67.0	80.0	74.7	79.7	76.8	78.7	82.4	84.5	80.4	82.8	79.0	80.9	79.3	
4	HM 8	68.6	80.1	75.2	75.3	74.3	76.1	84.0	81.7	78.3	83.1	74.7	78.9	77.0	
5	HM 9	68.5	79.4	74.7	76.3	77.0	76.3	83.5	83.9	79.4	82.4	75.0	78.7	78.0	
6	SEEDTECH 2324	71.3	81.6	76.9	76.0	77.0	73.4	86.1	80.9	78.7	85.1	78.6	81.8	78.2	
7	HM 10	70.7	79.1	75.6	78.3	74.8	74.6	82.5	82.4	78.5	81.0	74.9	78.0	77.3	
	Loc. Mean	70.8	80.0	76.1	77.2	77.1	76.5	84.4	83.6	79.8	83.2	76.2	79.7	78.6	
	C.D. (5%)	1.00	-	3.38	4.61	0.85	2.21	1.00	0.65	2.28	3.01	2.22	3.51	1.82	
	C.V. (%)	0.80	-	2.50	3.35	0.62	1.62	0.67	0.44	2.19	2.03	1.64	1.80	3.07	
	F (Prob.)	0.00	0.00	0.19	0.26	0.00	0.00	0.00	0.00	0.01	0.16	0.00	0.24	0.00	

TABLE No. 7(Cont..)

		STAND ('000/ha)									
Sl No	PEDIGREE	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean
1	MON-29	81.0	57.6	54.4	79.9	68.2	77.3	76.9	58.5	67.6	70.1
2	X6B302 CHECKS	83.3	56.7	59.3	78.2	69.4	81.7	77.5	54.6	68.1	70.5
3	BULAND	81.0	61.5	58.0	81.0	70.4	80.6	61.6	57.0	67.6	66.7
4	HM 8	69.9	55.4	42.6	78.7	61.6	74.5	51.6	47.2	66.7	60.0
5	HM 9	78.2	56.3	50.4	79.9	66.2	79.2	65.5	53.9	65.3	66.0
6	SEEDTECH 2324	85.2	58.5	62.8	77.5	71.0	77.8	69.4	56.7	68.8	68.2
7	HM 10	80.6	55.4	58.7	80.6	68.8	78.5	72.9	58.1	69.7	69.8
	Loc. Mean	79.9	57.3	55.2	79.4	67.9	78.5	67.9	55.2	67.7	67.3
	C.D. (5%)	10.7	5.77	6.90	0.93	5.14	6.17	3.12	7.17	1.73	6.33
	C.V. (%)	7.55	5.66	7.04	0.66	5.10	4.42	2.58	7.31	1.43	6.33
	F (Prob.)	0.14	0.32	0.00	0.00	0.02	0.31	0.00	0.06	0.00	0.04
Sl No	PEDIGREE	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean
1	MON-29	61.9	52.5	67.1	48.3	64.9	59.0	80.6	75.0	77.8	66.9
2	X6B302 CHECKS	61.7	49.1	66.9	57.6	65.7	60.2	72.9	77.5	75.2	67.4
3	BULAND	63.5	51.2	66.7	50.2	66.7	59.6	75.9	75.7	75.8	66.5
4	HM 8	64.6	38.0	66.2	43.9	64.7	55.5	72.7	75.2	74.0	60.8
5	HM 9	62.0	47.0	66.0	47.6	65.4	57.6	61.3	75.7	68.5	63.6
6	SEEDTECH 2324	63.3	57.4	66.9	58.1	62.5	61.7	83.3	76.6	80.0	68.3
7	HM 10	61.9	54.4	66.4	55.0	66.2	60.8	78.0	77.1	77.5	67.6
	Loc. Mean	62.7	49.9	66.6	51.5	65.1	59.2	75.0	76.1	75.5	65.9
	C.D. (5%)	3.77	7.71	1.28	7.62	2.51	4.65	10.58	3.22	12.26	2.74
	C.V. (%)	3.38	8.68	1.08	8.31	2.17	6.02	7.93	2.37	6.63	5.73
	F (Prob.)	0.55	0.00	0.47	0.01	0.06	0.16	0.01	0.55	0.47	0.00

TABLE No.8

PERFORMANCE OF QPM EXPERIMENTAL HYBRIDS AT KANPUR, VARANASI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI ,AKOLA, BANSWARA, IN TRQPM1 DURING RABI(2009-10).

Sl No	GRAIN YIELD (kg/ha) AT 15% MOISTURE																					
	ZN 2					ZN 3					ZN 4					ZN 5					OV'L	
PEDIGREE	KANP	R	VARA	R	BHUV	R	MEAN	R	KARI	R	COIM	R	VAGA	R	AKOL	R	MEAN	R	BANS	R	MEAN	R
1 HQPM-20	3301	3	10096	2	6341	2	8218	2	4380	4	11388	1	6623	4	4688	3	6770	3	7623	2	6805	3
2 HQPM-22	3427	2	8519	4	6069	4	7294	4	5204	2	7920	5	8720	2	4623	4	6617	4	7159	4	6455	4
CHECKS																						
3 HQPM-1	3282	4	9750	3	6481	1	8116	3	6252	1	10449	2	8934	1	5710	2	7836	1	7575	3	7304	1
4 FILLER(HQPM-5)	2989	5	7122	5	5909	5	6515	5	4190	5	10421	3	3233	5	1685	5	4882	5	4217	5	4971	5
5 HQPM-7	3450	1	10333	1	6313	3	8323	1	4643	3	10231	4	6685	3	6209	1	6942	2	8439	1	7038	2
Location Mean	3290		9164		6223		7693		4934		10082		6839		4583		6609		7003		6515	
Mean Stand	36		30		30		30		34		33		31		22		30		29		31	
C.D. (5%)	403		1612		227		919		789		703		2544		1519		1388		1131		1116	
C.V. (%)	6.35		9.11		1.89		-		8.28		3.61		19.26		17.16		-		8.36		-	
F (Prob)	0		0		0.034		-		0		0		0		0		-		0		-	
Plot Size	9.6		4.8		4.8		-		6		4.8		4.8		4.5		-		4.8		-	
AGRONOMY DATA																						
Sowing Date	23-12		24-11		12-12		-		18-11		23-12		6-01		25-01		-		25-11		-	
Harvest Date	16-05		10-05		13-05		-		16-03		19-04		27-04		6-07		-		20-04		-	
Irrigation Nos	5		5		12		-		-		10		10		-		-		6		-	
Fertilizer Applied N	120		150		120		-		200		150		150		120		-		150		-	
Fertilizer Applied P	60		60		60		-		80		75		75		60		-		60		-	
Fertilizer Applied K	60		60		60		-		60		75		75		40		-		-		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : LUDH 39.9 %: KARN 23.4 %: DELH 28.1 %: DHOL 49.3 %: ARBH 26.7 %: GODH 20.6 %

Sl No	GRAIN YIELD % SUPERIORITY OVER THE HQPM-1										
	ZN 2	VARA	BHUV	MEAN	KARI	COIM	VAGA	AKOL	ZN 4	ZN 5	OV'L
PEDIGREE	KANP								MEAN	BANS	MEAN
1 HQPM-20	1	3	-	1	-	9	-	-	-	1	-
2 HQPM-22	4	-	-	-	-	-	-	-	-	-	-
CHECKS											
3 HQPM-1	-	-	-	-	-	-	-	-	-	-	-
4 FILLER(HQPM-5)	-	-	-	-	-	-	-	-	-	-	-
5 HQPM-7	5	6	-	3	-	-	-	9	-	11	-

TABLE No.8 (Cont..)

GRAIN YIELD % SUPERIORITY OVER THE HQPM-7																
S1	ZN 2		ZN 3				ZN 4	ZN 5	OV'L							
No PEDIGREE	KANP	VARA	BHUV	MEAN	KARI	COIM	VAGA	AKOL	MEAN	BANS	MEAN					
1 HQPM-20	-	-	0	-	-	11	-	-	-	-	-	-				
2 HQPM-22	-	-	-	-	12	-	33	-	-	-	-	-				
CHECKS																
3 HQPM-1	-	-	3	-	35	2	36	-	13	-	4					
4 FILLER(HQPM-5)	-	-	-	-	-	2	16	-	-	-	-					
5 HQPM-7	-	-	-	-	-	-	-	-	-	-	-					
DAYS TO 50% SILKING																
S1	LUDH				ZN 2				ZN 3				ZN 4			
No PEDIGREE	LUDH	KARN	DELH	KANP	Mean	VARA	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean	
1 HQPM-20	136.0	134.3	119.0	103.0	123.1	116.7	122.0	85.3	108.0	69.7	59.0	59.0	69.3	60.3	63.5	
2 HQPM-22	134.3	135.3	120.7	104.3	123.7	122.0	122.0	84.3	109.4	68.0	57.0	59.0	70.0	60.0	62.8	
CHECKS																
3 HQPM-1	134.7	135.0	122.7	104.0	124.1	120.0	123.0	84.3	109.1	69.7	59.7	60.3	71.7	60.3	64.3	
4 FILLER(HQPM-5)	-	136.0	122.5	103.0	120.5	-	125.7	83.3	104.5	70.7	62.0	-	73.0	65.0	67.7	
5 HQPM-7	134.7	134.0	122.3	102.0	123.3	121.0	123.7	83.7	109.4	71.3	61.0	59.0	69.7	62.0	64.6	
Loc. Mean	134.9	134.9	121.4	103.3	122.9	119.9	123.3	84.2	108.1	69.9	59.7	59.3	70.7	61.5	64.6	
C.D. (5%)	3.49	2.38	3.67	1.85	5.49	1.35	2.76	1.22	8.55	2.90	0.97	1.99	1.82	1.79	1.99	
C.V. (%)	1.72	0.94	1.61	0.95	2.90	0.75	1.19	0.77	4.20	2.20	0.86	2.23	1.37	1.54	2.29	
F (Prob.)	0.00	0.39	0.19	0.11	0.65	0.00	0.08	0.04	0.65	0.19	0.00	0.00	0.01	0.00	0.00	
DAYS TO 50% SILKING																
S1	GODH				ZN 5				OV'L				DAYS TO 50% POLLEN SHED			
No PEDIGREE	GODH	BANS	Mean	Mean	LUDH	KARN	DELH	KANP	Mean	VARA	DHOL	BHUV	Mean	KARI	COIM	
1 HQPM-20	84.3	79.0	81.7	92.6	134.0	131.3	117.3	96.3	119.8	113.7	119.7	82.7	105.3	67.3	57.0	
2 HQPM-22	84.0	81.0	82.5	93.0	133.0	132.3	117.7	98.3	120.3	117.7	119.7	80.7	106.0	66.0	54.7	
CHECKS																
3 HQPM-1	82.3	82.7	82.5	93.6	133.3	132.0	121.0	98.3	121.2	115.7	121.3	81.7	106.2	67.7	57.3	
4 FILLER(HQPM-5)	87.7	87.7	87.7	92.4	-	133.0	121.5	97.3	117.3	-	123.7	80.7	102.2	68.7	60.0	
5 HQPM-7	83.7	88.0	85.8	94.0	133.0	131.0	120.3	95.7	120.0	118.0	122.3	56.0	98.8	69.3	58.3	
Loc. Mean	84.4	83.7	84.0	93.1	106.7	131.9	119.6	97.2	119.7	93.0	121.3	76.3	103.7	67.8	57.5	
C.D. (5%)	4.66	3.67	7.19	5.83	2.96	2.38	3.42	1.14	6.23	1.11	2.92	34.71	16.03	2.62	0.69	
C.V. (%)	2.93	2.33	3.08	8.26	1.47	0.96	1.52	0.62	3.38	0.64	1.28	24.15	8.21	2.05	0.64	
F (Prob.)	0.20	0.00	0.26	0.98	0.00	0.39	0.07	0.00	0.72	0.00	0.05	0.40	0.79	0.12	0.00	

TABLE No.8 (Cont...)

Sl No	PEDIGREE	DAYS TO 50% POLLEN SHED							DAYS TO 50% DRY HUSK							
		VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	ZN 2 Mean	VARA	DHOL	BHUV	ZN 3 Mean
1	HQPM-20	55.7	69.7	59.3	61.8	81.3	75.7	78.5	90.1	165.0	164.3	164.7	160.0	162.3	136.7	153.0
2	HQPM-22	56.0	69.3	59.0	61.0	82.7	77.0	79.8	90.3	163.3	166.0	164.7	157.3	160.3	135.3	151.0
	CHECKS															
3	HQPM-1	57.3	70.0	59.3	62.3	82.0	79.3	80.7	91.2	164.7	164.7	164.7	160.7	163.3	136.3	153.4
4	FILLER(HQPM-5)	-	71.0	64.0	65.9	85.7	84.3	85.0	90.0	-	166.3	166.3	-	163.3	136.7	150.0
5	HQPM-7	56.3	69.7	61.0	62.9	82.0	85.0	83.5	89.9	163.0	164.7	163.8	162.0	163.0	138.0	154.3
	Loc. Mean	45.1	69.9	60.5	62.8	82.7	80.3	81.5	90.3	164.0	165.2	164.8	160.0	162.5	136.6	152.4
	C.D. (5%)	1.56	1.56	1.79	2.25	5.06	3.54	7.06	6.34	2.67	2.81	2.71	3.10	1.85	2.05	5.28
	C.V. (%)	1.83	1.18	1.57	2.67	3.25	2.34	3.12	9.27	1.08	0.90	0.59	1.29	0.61	0.80	1.84
	F (Prob.)	0.00	0.22	0.00	0.00	0.38	0.00	0.23	0.99	0.00	0.42	0.30	0.00	0.03	0.15	0.37
Sl No	PEDIGREE	DAYS TO 50% DRY HUSK							MOISTURE							
		KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean
1	HQPM-20	104.7	108.0	108.0	114.7	105.0	108.1	117.0	111.0	114.0	129.7	21.8	29.0	22.6	15.0	22.1
2	HQPM-22	103.3	105.0	104.3	115.0	104.7	106.5	117.3	115.0	116.2	128.9	19.7	34.5	24.4	15.0	23.4
	CHECKS															
3	HQPM-1	108.0	108.0	105.3	115.7	104.7	108.3	114.7	115.7	115.2	130.1	24.7	32.2	29.4	15.0	25.3
4	FILLER(HQPM-5)	106.3	110.0	-	115.3	108.0	109.9	119.7	117.0	118.3	127.0	22.2	31.4	23.3	15.0	23.0
5	HQPM-7	104.7	110.0	108.3	115.0	106.3	108.9	117.3	120.3	118.8	131.1	22.8	31.9	24.8	15.0	23.6
	Loc. Mean	105.4	108.2	106.5	115.1	105.7	108.3	117.2	115.8	116.5	129.4	22.2	31.8	24.9	15.0	23.5
	C.D. (5%)	1.17	0.00	0.84	2.00	2.09	1.77	4.05	4.50	6.85	5.98	2.50	0.00	2.49	-	2.60
	C.V. (%)	0.59	0.00	0.52	0.92	1.05	1.22	1.84	2.06	2.12	5.62	5.98	0.00	5.31	-	7.18
	F (Prob.)	0.00	0.00	0.00	0.82	0.02	0.01	0.18	0.02	0.38	0.71	0.02	0.00	0.00	-	0.17

TABLE No.8 (Cont...)

Sl No	PEDIGREE	MOISTURE									PLANT HEIGHT CM							
		VARA	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean
1	HQPM-20	24.5	16.8	18.2	19.8	13.9	21.8	20.1	22.7	11.5	18.0	13.7	19.3	141.7	178.3	157.3	179.7	164.3
2	HQPM-22	28.4	17.0	18.6	21.3	12.7	20.4	20.8	16.3	12.2	16.5	16.0	19.7	156.3	185.0	145.0	181.7	167.0
	CHECKS																	
3	HQPM-1	29.6	16.9	19.0	21.8	13.1	21.3	22.1	19.0	12.1	17.5	14.6	20.7	166.7	190.0	153.3	160.3	167.6
4	FILLER(HQPM-5)	27.8	16.6	18.1	20.8	13.1	22.2	21.3	23.0	13.1	18.5	11.7	19.9	-	183.3	163.5	175.7	174.2
5	HQPM-7	28.8	17.7	18.4	21.6	13.2	20.6	22.5	20.3	12.6	17.8	13.6	20.2	153.3	195.0	148.3	164.7	165.3
	Loc. Mean	27.8	17.0	18.5	21.1	13.2	21.2	21.3	20.3	12.3	17.7	13.9	20.0	155	186	154	172	168
	C.D. (5%)	1.57	0.00	-	2.01	1.67	0.45	0.81	1.83	1.71	1.76	1.54	1.19	24.0	12.8	20.4	1.14	14.9
	C.V. (%)	3.00	0.00	-	5.07	6.70	1.13	2.02	4.79	7.40	7.43	5.88	7.55	10.3	3.65	7.06	0.35	5.76
	F (Prob.)	0.00	0.00	0.00	0.25	0.59	0.00	0.00	0.00	0.34	0.20	0.00	0.23	0.00	0.11	0.33	0.00	0.64
Sl No	PEDIGREE	PLANT HEIGHT CM																
		VARA	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean			
1	HQPM-20	194.5	150.8	184.3	176.5	220.0	198.6	173.9	190.0	188.3	194.2	138.7	187.7	163.2	177.4			
2	HQPM-22	186.5	145.0	162.0	164.5	208.7	181.5	164.3	167.5	163.3	177.1	130.7	183.7	157.2	168.7			
	CHECKS																	
3	HQPM-1	202.5	155.8	165.1	174.5	218.7	198.5	161.1	179.5	183.3	188.2	143.3	198.1	170.7	176.9			
4	FILLER(HQPM-5)	-	150.8	172.1	161.5	229.3	184.9	-	182.0	175.0	192.8	136.3	185.0	160.7	176.2			
5	HQPM-7	190.5	145.0	167.3	167.6	215.3	199.4	176.2	187.0	203.3	196.3	147.7	178.2	162.9	176.5			
	Loc. Mean	194	150	170	169	218	193	169	181	183	190	139	187	163	175			
	C.D. (5%)	6.92	24.4	5.51	19.4	8.72	3.72	3.61	10.4	15.8	11.5	15.7	10.4	19.0	6.45			
	C.V. (%)	2.37	8.68	1.72	6.11	2.12	1.03	1.42	3.04	4.59	4.50	5.98	2.95	4.21	4.85			
	F (Prob.)	0.00	0.82	0.00	0.39	0.01	0.00	0.00	0.01	0.00	0.02	0.22	0.02	0.48	0.05			

TABLE No.8 (Cont..)

Sl No	PEDIGREE	EAR HEIGHT CM				ZN 2				ZN 3				ZN 4		
		LUDH	KARN	DELH	KANP	Mean	VARA	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean
1	HQPM-20	70.7	65.0	88.7	81.0	76.3	98.0	75.0	77.3	83.4	76.0	90.7	78.5	75.0	110.0	86.0
2	HQPM-22	85.3	96.7	95.3	71.0	87.1	108.0	81.7	60.0	83.2	73.0	98.0	92.9	82.0	100.0	89.2
	CHECKS															
3	HQPM-1	85.0	83.3	86.3	55.3	77.5	107.5	79.2	66.2	84.3	86.0	95.3	78.9	80.0	105.0	89.0
4	FILLER(HQPM-5)	-	76.7	97.5	72.0	82.1	-	80.0	73.0	76.5	94.3	93.9	-	84.0	106.7	94.7
5	HQPM-7	88.3	81.7	87.7	61.3	79.8	101.0	77.5	68.9	82.5	75.7	101.7	93.3	87.5	118.3	95.3
	Loc. Mean	82.3	80.7	91.1	68.1	80.5	104	78.7	69.1	82.0	81.0	95.9	85.9	81.7	108	90.9
	C.D. (5%)	19.6	13.9	11.3	5.63	13.50	4.19	21.4	7.93	18.2	5.51	1.82	3.86	5.66	10.6	8.30
	C.V. (%)	15.8	9.12	6.57	4.39	10.88	2.68	14.4	6.10	11.8	3.61	1.01	2.98	3.68	5.21	6.81
	F (Prob.)	0.00	0.01	0.18	0.00	0.47	0.00	0.96	0.01	0.86	0.00	0.00	0.00	0.01	0.04	0.13
Sl No	PEDIGREE	EAR HEIGHT CM				SHELLING %				ZN 2		ZN 3				
		GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	Mean	VARA	BHUV	Mean	KARI	COIM	VAGA
1	HQPM-20	56.3	71.2	63.8	79.5	75.6	84.0	81.0	73.0	78.4	76.5	79.0	77.8	74.0	79.7	74.5
2	HQPM-22	55.3	73.8	64.6	83.8	73.2	87.0	75.5	73.0	77.2	76.5	79.2	77.9	81.6	76.7	80.3
	CHECKS															
3	HQPM-1	60.3	74.8	67.6	81.7	76.6	82.0	82.5	73.5	78.6	77.8	81.3	79.5	83.0	80.8	80.6
4	FILLER(HQPM-5)	55.3	75.1	65.2	82.6	75.8	84.0	79.0	70.0	77.2	77.0	78.5	77.8	75.1	74.6	77.5
5	HQPM-7	60.7	72.0	66.4	84.0	78.1	85.0	79.0	73.0	78.8	77.5	80.4	79.0	79.7	76.8	74.8
	Loc. Mean	57.6	73.4	65.5	82.3	75.8	84.4	79.4	72.5	78.0	77.1	79.7	78.4	78.7	77.7	77.5
	C.D. (5%)	9.69	7.36	6.58	5.34	7.19	-	2.17	1.93	3.19	1.07	-	1.46	4.75	0.61	2.99
	C.V. (%)	8.93	5.33	3.62	8.55	5.03	-	1.45	1.41	2.65	0.74	-	0.67	3.21	0.42	2.05
	F (Prob.)	0.55	0.70	0.59	0.45	0.65	0.00	0.00	0.02	0.69	0.09	-	0.08	0.01	0.00	0.00

TABLE No.8 (Cont..)

Sl No	PEDIGREE	SHELLING %		STAND ('000/ha)											
		ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	DHOL
1	HQPM-20	83.2	80.1	78.3	83.0	72.6	77.8	78.2	42.6	36.1	42.8	39.2	40.2	66.7	56.1
2	HQPM-22	80.9	82.7	80.4	82.0	71.3	76.6	78.4	75.9	51.7	41.7	36.1	51.3	68.8	55.0
	CHECKS														
3	HQPM-1	84.9	83.6	82.6	84.7	71.9	78.3	80.2	74.1	51.7	55.0	37.8	54.6	70.8	56.1
4	FILLER(HQPM-5)	82.3	81.8	78.2	82.9	73.1	78.0	77.8	66.7	23.9	23.3	34.4	37.1	66.7	36.1
5	HQPM-7	81.7	80.7	78.7	83.6	76.1	79.8	78.9	71.3	49.4	47.2	37.5	51.4	60.4	55.6
	Loc. Mean	82.6	81.8	79.6	83.2	73.0	78.1	78.7	66.1	42.6	42.0	37.0	46.9	66.7	51.8
	C.D. (5%)	1.43	4.66	2.82	3.33	2.04	3.74	1.52	14.5	12.4	29.9	1.43	13.61	8.27	4.78
	C.V. (%)	0.92	3.02	2.64	2.12	1.48	1.73	2.46	11.7	15.4	37.7	2.06	18.83	6.59	4.90
	F (Prob.)	0.00	0.46	0.02	0.49	0.00	0.36	0.02	0.00	0.00	0.26	0.00	0.06	0.14	0.00
Sl No	PEDIGREE	STAND ('000/ha)													
		BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean	GODH	BANS	ZN 5 Mean	OV'L Mean		
1	HQPM-20	62.5	61.8	55.6	68.1	70.1	48.3	39.3	56.3	73.6	58.3	66.0	54.2		
2	HQPM-22	61.8	61.9	60.6	69.4	68.1	56.1	61.5	63.1	58.3	65.3	61.8	59.3		
	CHECKS														
3	HQPM-1	66.7	64.5	53.9	68.8	69.4	57.2	59.3	61.7	76.4	61.8	69.1	61.4		
4	FILLER(HQPM-5)	60.4	54.4	58.3	68.8	68.8	15.6	33.3	48.9	47.9	56.3	52.1	47.2		
5	HQPM-7	58.3	58.1	58.3	68.1	68.8	46.7	53.3	59.0	78.5	65.3	71.9	58.5		
	Loc. Mean	61.9	60.1	57.3	68.6	69.0	44.8	49.3	57.8	66.9	61.4	64.2	56.1		
	C.D. (5%)	7.41	9.88	5.70	3.36	3.12	7.90	13.72	11.5	40.4	7.00	23.7	5.9		
	C.V. (%)	6.35	8.73	5.28	2.60	2.40	9.37	14.77	14.8	32.1	6.05	13.3	13.8		
	F (Prob.)	0.21	0.24	0.15	0.86	0.62	0.00	0.01	0.12	0.40	0.06	0.32	0.00		

TABLE No. 9 (Cont..)

PERFORMANCE OF QPM EXPERIMENTAL HYBRIDS AT LUDHIANA, KANPUR, VARANASI, BHUVANESHWAR, KARIMNAGAR, COIMBATORE, VAGARAI, BANSWARA IN TRIAL QPM2 DURING RABI(2009-10).

Sl No	GRAIN YIELD (kg/ha) AT 15% MOISTURE																			
	LUDH		KANP		MEAN		VARA		BHUV		MEAN		KARI		COIM		VAGA		MEAN	
PEDIGREE	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1 VEHQPM-3027	3104	5	6627	3	4866	5	12301	1	6825	2	9563	1	4971	3	10465	4	5502	4	6979	3
2 VEHQPM-3018	3912	4	6786	2	5349	4	11454	3	6497	4	8976	3	6635	1	11265	1	7031	1	8310	1
CHECKS																				
3 HQPM-1	5929	1	5854	5	5892	2	11966	2	7143	1	9555	2	5700	2	8388	5	5041	5	6377	5
4 FILLER(HQPM-5)	4664	3	6321	4	5493	3	7509	5	6464	5	6987	5	2663	5	10810	2	5823	3	6432	4
5 HQPM-7	5819	2	7192	1	6505	1	10920	4	6671	3	8795	4	4320	4	10550	3	6377	2	7082	2
Location Mean	4686		6556		5621		10830		6720		8775		4858		10296		5955		7036	
Mean Stand	48		76		62		70		66		68		74		65		63		67	
C.D. (5%)	1630		515		1072		1446		103		775		524		414		552		497	
C.V. (%)	18.02		4.07		-		6.92		0.8		-		5.59		2.08		4.8		-	
F (Prob)	0.003		0				0		0.018				0		0		0			
Plot Size	7.2		9.6		-		9.6		9.6		-		12		9.6		9.6		-	
AGRONOMY DATA																				
Sowing Date	26-11		23-12		-		24-11		12-12		-		18-11		23-12		6-01		-	
Harvest Date	20-05		17-05		-		8-05		13-05		-		16-03		19-04		27-04		-	
Irrigation Nos	12		5		-		5		12		-		-		10		10		-	
Fertilizer Applied N	70		120		-		150		120		-		200		150		150		-	
Fertilizer Applied P	24		60		-		60		60		-		80		75		75		-	
Fertilizer Applied K	12		60		-		60		60		-		60		75		75		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 20%) : KARN 32.4 %: DELH 50.9 %: BAHR 56.3 %: DHOL 67.1 %: ARBH 20.7 %: AKOL 84.3 %: GODH 38.1 %

TABLE No. 9 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HQPM-1															
		ZN 5		OV'L		LUDH		KANP		ZN 2		ZN 3		ZN 4		ZN 5	
		BANS	R	MEAN	R			MEAN	VARA	BHUV	MEAN	KARI	COIM	VAGA	MEAN	BANS	MEAN
1	VEHQPM-3027	13783	2	7947	4	-	13	-	3	-	0	-	25	9	9	-	-
2	VEHQPM-3018	13297	4	8360	1	-	16	-	-	-	-	16	34	39	30	-	4
3	HQPM-1	14392	1	8052	3	-	-	-	-	-	-	-	-	-	-	-	-
4	FILLER(HQPM-5)	10493	5	6843	5	-	8	-	-	-	-	-	29	16	1	-	-
5	HQPM-7	13741	3	8199	2	-	23	10	-	-	-	-	26	26	11	-	2
	Location Mean	13141		7880													
	Mean Stand	64		66													
	C.D. (5%)	2013		900													
	C.V. (%)	7.93		-													
	F (Prob)	0.001															
	Plot Size	4.8		-													
	AGRONOMY DATA																
	Sowing Date	25-11		-													
	Harvest Date	20-04		-													
	Irrigation Nos	6		-													
	Ferilizer Applied N	150		-													
	Ferilizer Applied P	60		-													
	Ferilizer Applied K	-		-													

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HQPM-7												
		LUDH	KANP	ZN 2		VARA	BHUV	ZN 3		KARI	COIM	VAGA	ZN 4	ZN 5
				MEAN			MEAN					MEAN	BANS	MEAN
1	VEHQPM-3027	-	-	-	13	2	9	15	-	-	-	-	0	-
2	VEHQPM-3018	-	-	-	5	-	2	54	7	10	17	-	-	2
3	HQPM-1	2	-	-	10	7	9	32	-	-	-	5	-	
4	FILLER(HQPM-5)	-	-	-	-	-	-	-	2	-	-	-	-	
5	HQPM-7	-	-	-	-	-	-	-	-	-	-	-	-	

TABLE No. 9 (Cont...)

Sl No	PEDIGREE	DAYS TO 50% <i>SILKING</i>															
		LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean
1	VEHQPM-3027	139.3	137.3	124.3	103.0	126.0	124.0	126.7	127.0	84.3	115.5	74.0	59.7	62.7	73.3	63.7	66.7
2	VEHQPM-3018	136.7	136.3	125.3	104.0	125.6	123.0	127.7	126.0	83.3	115.0	73.3	62.0	62.0	73.0	63.7	66.8
	CHECKS																
3	HQPM-1	136.3	137.3	124.7	103.3	125.4	118.7	127.3	123.7	85.0	113.7	72.7	59.7	62.3	71.3	60.7	65.3
4	FILLER(HQPM-5)	-	137.7	124.0	104.7	122.1	122.0	129.0	125.7	83.3	115.0	73.3	61.7	60.3	72.3	64.0	66.3
5	HQPM-7	135.7	135.7	121.7	104.3	124.3	120.3	125.0	125.0	84.3	113.7	72.7	61.3	62.0	70.3	60.7	65.4
	Loc. Mean	136.0	136.9	124.0	103.9	124.7	121.6	127.1	125.5	84.1	114.6	73.2	60.9	61.9	72.1	62.5	66.1
	C.D. (5%)	3.14	2.15	1.50	2.00	5.60	2.47	1.61	1.26	1.29	2.15	1.56	0.88	2.94	1.29	0.88	1.41
	C.V. (%)	1.52	0.83	0.64	1.02	2.91	1.08	0.67	0.53	0.81	1.22	1.13	0.76	2.52	0.95	0.74	1.59
	F (Prob.)	0.00	0.26	0.00	0.36	0.58	0.01	0.01	0.00	0.07	0.27	0.33	0.00	0.46	0.00	0.00	0.11
Sl No	PEDIGREE	DAYS TO 50% <i>SILKING</i>				DAYS TO 50% <i>POLLEN SHED</i>											
		GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean		
1	VEHQPM-3027	90.0	89.0	89.5	98.6	136.0	134.3	123.0	97.3	122.7	119.0	124.3	125.0	81.0	112.3		
2	VEHQPM-3018	88.3	90.7	89.5	98.4	135.7	134.0	122.3	98.3	122.6	119.0	125.7	124.0	80.3	112.3		
	CHECKS																
3	HQPM-1	88.0	89.3	88.7	97.4	134.7	134.3	123.0	97.7	122.4	114.3	125.3	121.0	81.7	110.6		
4	FILLER(HQPM-5)	91.3	89.0	90.2	95.6	-	134.7	122.0	98.7	118.4	118.0	127.0	123.3	80.0	112.1		
5	HQPM-7	87.0	88.7	87.8	97.0	134.0	133.3	119.7	98.3	121.3	116.3	123.0	122.3	80.7	110.6		
	Loc. Mean	88.9	89.3	89.1	97.4	135.1	134.1	122.0	98.1	121.5	117.3	125.1	123.1	80.7	111.6		
	C.D. (5%)	8.80	2.25	3.88	3.64	1.03	2.71	1.65	1.52	6.01	2.06	1.61	1.03	1.17	2.14		
	C.V. (%)	5.26	1.34	1.57	5.10	0.51	1.07	0.72	0.82	3.21	0.93	0.68	0.44	0.77	1.24		
	F (Prob.)	0.80	0.35	0.57	0.49	0.00	0.82	0.01	0.32	0.53	0.00	0.00	0.00	0.07	0.22		

TABLE No. 9 (Cont..)

Sl No	PEDIGREE	DAYS TO 50% POLLEN SHED							ZN 4 Mean	ZN 5 Mean	OV'L Mean	DAYS TO 50% DRY HUSK		
		KARI	COIM	VAGA	ARBH	AKOL	GODH	BANS				LUDH	KARN	ZN 2 Mean
1	VEHQPM-3027	72.0	57.7	58.7	70.7	62.7	64.3	86.3	85.3	85.8	95.6	170.3	165.3	167.8
2	VEHQPM-3018 CHECKS	71.3	59.3	58.3	71.0	62.7	64.5	86.0	87.0	86.5	95.7	172.7	166.0	169.3
3	HQPM-1	70.7	57.7	58.0	70.3	59.7	63.3	84.7	85.7	85.2	94.6	173.7	166.3	170.0
4	FILLER(HQPM-5)	71.3	59.3	56.7	71.0	63.0	64.3	88.0	85.0	86.5	92.7	-	168.3	168.3
5	HQPM-7	70.3	59.0	57.7	70.0	59.7	63.3	82.0	85.0	83.5	94.1	171.3	166.3	168.8
	Loc. Mean	71.1	58.6	57.9	70.6	61.5	63.9	85.4	85.6	85.5	94.5	172.0	166.5	168.9
	C.D. (5%)	1.85	0.81	3.02	0.97	0.88	1.18	7.00	1.70	4.48	3.71	3.94	2.54	5.64
	C.V. (%)	1.38	0.73	2.77	0.73	0.76	1.37	4.35	1.06	1.89	5.36	1.52	0.81	1.20
	F (Prob.)	0.34	0.00	0.62	0.17	0.00	0.10	0.42	0.12	0.43	0.50	0.00	0.18	0.84

Sl No	PEDIGREE	DAYS TO 50% DRY HUSK					ZN 3 Mean	ZN 4 Mean	ZN 5 Mean	OV'L Mean						
		VARA	BAHR	DHOL	BHUV	KARI					COIM	VAGA	ARBH	AKOL	GODH	BANS
1	VEHQPM-3027	162.3	155.7	161.7	137.3	154.3	111.0	108.0	108.7	113.7	111.7	110.6	121.0	125.0	123.0	134.7
2	VEHQPM-3018 CHECKS	161.3	156.3	162.7	135.0	153.8	108.3	110.0	107.3	112.0	111.7	109.9	118.7	126.0	122.3	134.5
3	HQPM-1	159.3	155.3	162.3	136.3	153.3	112.7	108.0	109.0	117.0	107.3	110.8	121.0	123.3	122.2	134.7
4	FILLER(HQPM-5)	163.7	157.0	162.3	137.0	155.0	107.7	110.0	109.0	116.0	112.0	110.9	118.0	124.7	121.3	132.1
5	HQPM-7	160.7	155.0	157.0	137.0	152.4	105.0	110.0	108.3	112.7	107.3	108.7	118.7	122.3	120.5	133.2
	Loc. Mean	161.5	155.9	161.2	136.5	153.8	108.9	109.2	108.5	114.3	110.0	110.2	119.5	124.3	121.9	133.9
	C.D. (5%)	2.66	1.67	2.91	1.58	2.19	8.05	0.00	2.05	3.93	1.00	2.75	6.54	3.46	4.15	4.19
	C.V. (%)	0.88	0.57	0.96	0.61	0.93	3.93	0.00	1.00	1.83	0.48	1.86	2.91	1.48	1.23	3.97
	F (Prob.)	0.04	0.13	0.01	0.05	0.18	0.30	0.00	0.38	0.08	0.00	0.41	0.73	0.21	0.57	0.66

TABLE No. 9 (Cont..)

Sl No	PEDIGREE	MOISTURE															
		LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean	KARI	COIM	VAGA	ARBH	AKOL	ZN 4 Mean
1	VEHQPM-3027	24.8	34.5	27.1	15.0	25.3	27.0	25.9	20.4	18.6	23.0	14.0	24.2	20.9	24.8	12.6	19.3
2	VEHQPM-3018	24.4	34.7	24.4	15.0	24.6	27.1	25.0	17.5	18.7	22.1	14.1	23.3	23.4	22.0	12.6	19.1
	CHECKS																
3	HQPM-1	24.7	34.9	23.6	15.0	24.5	26.3	25.7	17.5	17.9	21.9	13.4	22.6	22.2	21.5	11.4	18.2
4	FILLER(HQPM-5)	24.5	33.6	26.1	15.0	24.8	28.4	25.7	17.4	18.8	22.6	14.2	22.9	21.8	19.5	13.3	18.3
5	HQPM-7	24.4	33.3	21.8	15.0	23.6	25.6	25.1	17.8	18.5	21.7	14.3	20.7	21.1	17.6	13.1	17.3
	Loc. Mean	24.5	34.2	24.6	15.0	24.6	26.9	25.5	18.1	18.5	22.2	14.0	22.7	21.9	21.0	12.6	18.4
	C.D. (5%)	0.44	-	0.37	-	1.64	0.71	0.52	-	-	1.26	1.53	0.58	0.85	1.76	0.85	1.87
	C.V. (%)	0.96	-	0.81	-	4.32	1.41	1.09	-	-	3.67	5.79	1.35	2.06	4.45	3.61	7.55
	F (Prob.)	0.35	0.00	0.00	-	0.30	0.00	0.01	-	0.00	0.23	0.66	0.00	0.00	0.00	0.01	0.24
Sl No	PEDIGREE	MOISTURE				PLANT HEIGHT CM											
		GODH	BANS	ZN 5 Mean	OV'L Mean	LUDH	KARN	DELH	KANP	ZN 2 Mean	VARA	BAHR	DHOL	BHUV	ZN 3 Mean		
1	VEHQPM-3027	15.1	16.7	15.9	21.4	126.7	205.0	138.0	174.3	161.0	206.5	162.3	161.7	181.8	178.1		
2	VEHQPM-3018	15.9	16.6	16.2	21.0	139.3	213.3	141.3	181.0	168.8	203.0	180.7	160.0	191.9	183.9		
	CHECKS																
3	HQPM-1	11.7	16.2	13.9	20.3	150.7	200.0	145.0	167.7	165.8	200.0	176.3	165.8	185.2	181.8		
4	FILLER(HQPM-5)	13.5	16.2	14.8	20.7	-	201.7	138.0	161.7	167.1	182.5	172.3	151.7	175.0	170.4		
5	HQPM-7	12.0	15.8	13.9	19.7	164.3	206.7	138.3	191.0	175.1	197.5	170.3	131.8	175.3	168.7		
	Loc. Mean	13.6	16.3	14.9	20.6	145	205	140	175	168	198	172	154	182	177		
	C.D. (5%)	2.91	0.38	3.09	0.78	16.6	12.4	29.7	14.9	16.7	4.74	25.1	20.31	5.92	12.0		
	C.V. (%)	11.34	1.26	7.46	5.18	7.59	3.21	11.25	4.52	6.47	1.27	7.74	6.99	1.73	4.42		
	F (Prob.)	0.04	0.00	0.27	0.00	0.00	0.21	0.97	0.01	0.50	0.00	0.56	0.03	0.00	0.06		

TABLE No. 9 (Cont..)

Sl No	PEDIGREE	PLANT HEIGHT CM					ZN 4					EAR HEIGHT CM					ZN 2 Mean
		KARI	COIM	VAGA	ARBH	AKOL	Mean	GODH	BANS	Mean	OV'L Mean	LUDH	KARN	DELH	KANP		
1	VEHQPM-3027	236.0	200.2	180.7	190.0	170.0	195.4	152.7	235.4	194.0	181.4	60.0	115.0	88.7	76.3	85.0	
2	VEHQPM-3018	226.3	200.7	183.7	185.0	181.7	195.5	141.7	219.7	180.7	183.3	64.3	123.3	88.7	83.3	89.9	
	CHECKS																
3	HQPM-1	228.3	194.4	186.3	176.5	165.0	190.1	144.7	212.4	178.6	179.9	72.7	96.7	82.7	67.0	79.7	
4	FILLER(HQPM-5)	226.3	189.8	186.0	177.5	168.3	189.6	143.0	213.3	178.1	177.7	-	108.3	81.0	59.3	82.9	
5	HQPM-7	226.0	201.1	191.3	183.5	176.7	195.7	155.3	212.3	183.8	181.4	87.3	106.7	87.3	85.3	91.7	
	Loc. Mean	229	197	186	183	172	193	148	219	183	181	71.1	110.0	85.7	74.3	85.8	
	C.D. (5%)	14.4	6.88	4.87	9.04	22.3	6.22	22.4	7.90	19.50	6.60	10.5	15.7	21.1	18.3	14.7	
	C.V. (%)	3.34	1.85	1.39	2.63	6.89	2.40	8.07	1.92	3.84	4.99	9.79	7.58	13.1	13.10	11.10	
	F (Prob.)	0.50	0.02	0.01	0.04	0.48	0.11	0.56	0.00	0.30	0.52	0.00	0.04	0.87	0.05	0.41	

Sl No	PEDIGREE	EAR HEIGHT CM				ZN 3				ZN 4				ZN 5		OV'L Mean
		VARA	BAHR	DHOL	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean	GODH	BANS	Mean	
1	VEHQPM-3027	118.0	64.3	86.7	75.8	86.2	105.3	109.3	103.6	87.5	103.3	101.8	73.0	123.8	98.4	92.7
2	VEHQPM-3018	117.5	81.7	88.3	75.3	90.7	100.0	103.9	97.3	85.0	103.3	97.9	64.7	108.5	86.6	92.3
	CHECKS															
3	HQPM-1	101.0	68.0	84.2	86.9	85.0	103.7	99.5	110.8	71.0	101.7	97.3	63.3	96.4	79.9	87.0
4	FILLER(HQPM-5)	111.0	61.3	82.5	76.3	82.8	94.3	94.7	105.5	74.5	88.3	91.5	68.0	97.9	83.0	85.9
5	HQPM-7	101.0	71.7	63.3	75.1	77.8	89.3	112.1	104.4	83.0	96.7	97.1	71.7	103.1	87.4	89.2
	Loc. Mean	109.7	69.4	81.0	77.9	84.5	98.5	103.9	104.3	80.2	98.7	97.1	68.1	105.9	87.0	89.4
	C.D. (5%)	5.94	15.3	17.1	6.61	11.63	4.22	3.81	2.52	10.26	13.6	7.95	15.4	4.44	17.8	5.72
	C.V. (%)	2.88	11.7	11.2	4.51	8.94	2.27	1.95	1.28	6.79	7.34	6.11	12.0	2.22	7.38	8.74
	F (Prob.)	0.00	0.10	0.05	0.01	0.24	0.00	0.00	0.00	0.02	0.14	0.15	0.56	0.00	0.21	0.07

TABLE No. 9 (Cont..)

S1	SHELLING %			ZN 2				ZN 3				ZN 4		
No PEDIGREE	KARN	DELH	KANP	Mean	VARA	BAHR	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean
1 VEHQPM-3027	84.0	80.5	73.5	79.3	79.3	81.2	81.2	80.5	71.2	78.7	77.5	83.8	85.3	79.3
2 VEHQPM-3018	84.0	78.0	73.5	78.5	77.5	75.3	80.3	77.7	75.9	79.1	79.6	85.0	83.6	80.6
CHECKS														
3 HQPM-1	81.0	84.5	72.0	79.2	78.8	79.1	79.8	79.2	77.2	78.7	79.8	84.9	82.3	80.6
4 FILLER(HQPM-5)	82.0	80.0	72.0	78.0	76.5	70.0	80.7	75.7	71.8	79.1	80.0	81.1	82.9	79.0
5 HQPM-7	79.0	83.0	75.0	79.0	77.5	72.4	81.4	77.1	77.6	78.2	78.6	82.9	81.8	79.8
Loc. Mean	82.0	81.2	73.2	78.8	77.9	75.6	80.7	78.1	74.7	78.7	79.1	83.5	83.2	79.9
C.D. (5%)	-	3.61	1.81	4.57	1.08	0.84	-	4.71	3.89	0.76	0.54	2.36	0.77	2.32
C.V. (%)	-	2.36	1.31	3.08	0.74	0.59	-	3.21	2.77	0.51	0.36	1.50	0.49	2.17
F (Prob.)	-	0.02	0.02	0.96	0.00	0.00	-	0.25	0.01	0.16	0.00	0.03	0.00	0.49

S1	SHELLING %			STAND ('000/ha)										
No PEDIGREE	GODH	BANS	ZN 5	OV'L	Mean	Mean	LUDH	KARN	DELH	KANP	Mean	VARA	BAHR	DHOL
1 VEHQPM-3027	79.4	76.2	77.8	79.4	63.4	55.0	105.0	78.5	75.5	75.7	65.6	55.3	59.2	59.2
2 VEHQPM-3018	80.4	75.1	77.7	79.0	74.5	58.1	77.8	78.8	72.3	77.8	77.8	77.8	77.8	59.2
CHECKS														
3 HQPM-1	82.0	77.0	79.5	79.8	79.6	65.6	108.3	77.1	82.7	77.1	71.9	57.5	57.5	57.5
4 FILLER(HQPM-5)	80.6	72.7	76.6	77.6	66.7	34.7	33.3	78.5	53.3	59.4	8.3	27.5	27.5	27.5
5 HQPM-7	81.5	74.3	77.9	78.7	47.2	54.4	101.1	80.6	70.8	74.0	77.4	56.1	56.1	56.1
Loc. Mean	80.8	75.0	77.9	78.9	66.3	53.6	85.1	78.7	70.9	72.8	60.2	51.1	51.1	51.1
C.D. (5%)	2.19	0.69	3.61	1.54	14.68	10.22	48.25	1.48	25.11	8.17	4.48	2.41	2.41	2.41
C.V. (%)	1.44	0.49	1.67	2.48	11.76	10.14	30.11	1.00	22.99	5.96	3.95	2.50	2.50	2.50
F (Prob.)	0.15	0.00	0.41	0.08	0.01	0.00	0.03	0.01	0.20	0.00	0.00	0.00	0.00	0.00

S1	ZN 3		ZN 4				ZN 5		OV'L
No PEDIGREE	BHUV	Mean	KARI	COIM	VAGA	ARBH	AKOL	Mean	Mean
1 VEHQPM-3027	68.4	66.3	62.8	67.7	66.3	60.8	65.6	64.6	71.5
2 VEHQPM-3018	68.8	70.9	61.4	68.1	67.0	66.1	66.7	65.8	75.0
CHECKS									
3 HQPM-1	68.1	68.6	61.4	67.4	65.6	60.6	66.7	64.3	76.0
4 FILLER(HQPM-5)	69.1	41.1	61.4	67.4	65.6	11.1	17.4	44.6	44.4
5 HQPM-7	67.4	68.7	60.3	66.7	65.6	46.9	61.9	60.3	50.7
Loc. Mean	68.3	63.1	61.4	67.4	66.0	49.1	55.6	59.9	63.5
C.D. (5%)	3.79	19.55	4.77	1.21	1.19	11.21	4.75	16.05	39.31
C.V. (%)	2.95	20.11	4.12	0.96	0.96	12.13	4.53	19.97	32.86
F (Prob.)	0.85	0.03	0.83	0.20	0.09	0.00	0.00	0.07	0.29

AGRONOMY

RABI 2009-10

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Agronomy

Test entry Mon-29 and X6B303 were significantly superior to best check (Seed Tech-2324) at Banswara and Ludhiana. However, X6B302 produced significantly higher yield at Baharaich and Kolhapur, while Mon-29 produced significantly higher yield at Udaipur.

Response of maize hybrids to fertilizer levels (200:80:80) was significant over to 100:50:50 at all locations and at par with 150:65:65 at Banswara, Delhi, Ludhiana.

A - 1

Table 1: Relative performance of pre-released germ plasm (Full maturity) at different levels of nitrogen during Rabi-2009-2010 at different zone.

Main Plot	Sub Plot	Grain Yield (Kg/ha)					
		Baharaich	Banswara	Delhi	Ludhiana	Udaipur	Kolhapur
N levels	Genotypes						
100:50:50 kgN/ha	HM 8 (C)	5556	6826	5333	5867	1320	4244
	HM 9 (C)	5243	6563	5111	6488	2507	3908
	SEED TECH 2324 (C)	5375	7556	5778	7794	4813	5558
	MON-29	5444	9153	5074	8017	5223	5097
	X6B302	5500	8132	5000	8691	3930	6311
	BULAND (C)	5611	6736	5778	6660	3847	4236
150:65:65 kgN/ha	HM 8 (C)	7278	7563	5815	6348	1460	5150
	HM 9 (C)	6722	7444	5889	7294	2933	4331
	SEED TECH 2324 (C)	7667	8319	6111	8109	5220	7106
	MON-29	6278	9986	5815	8599	5803	6742
	X6B302	7833	9576	5778	9315	4137	9572
	BULAND (C)	7278	8007	6111	7294	4100	5264
200:80:80 kgN/ha	HM 8 (C)	8667	7872	5889	6413	1513	5272
	HM 9 (C)	8389	7750	6222	7496	3007	4536
	SEED TECH 2324 (C)	8889	8938	6481	8308	5217	8600
	MON-29	7778	10597	6074	8614	5937	7625
	X6B302	9444	9757	6000	9398	4250	10442
	BULAND (C)	8889	8313	6333	7572	4140	5928
Location mean		7102.2	8282.6	5810.7	7682.0	3853.1	6106.8
C.D.(5%) AiBj-AiBk		595.8	852.1	259.3	1166.7	644.1	953.8
C.D.(5%) AiBk-AjBk		551.8	1050.0	280.9	1109.9	590.1	997.9
F(5%)		s	n.s.	s	n.s.	n.s.	s
100:50:50		5455	7494	5346	7253	3607	4893
150:65:65		7176	8483	5920	7826	3942	6361
200:80:80		8676	8871	6167	7967	4011	7067
C.D.(5%) Ai-Aj		96.4	722.7	155.8	323.4	51.0	502.7
C.V.(%) Error A		1.5	9.4	2.9	4.5	1.4	8.9
F(5%)		s	s	s	s	s	s
HM 8 (C)		7167	7420	5679	6209	1431	4889
HM 9 (C)		6785	7252	5741	7092	2816	4258
SEED TECH 2324 (C)		7310	8271	6123	8070	5083	7088
MON-29		6500	9912	5654	8410	5654	6488
X6B302		7593	9155	5593	9134	4106	8775
BULAND (C)		7259	7685	6074	7176	4029	5143
C.D.(5%)Bi-Bj		344.0	491.9	149.7	673.6	371.9	550.7
C.V.(%)ErrorB		5.0	6.2	2.7	9.1	10.0	9.4
F(5%)		s	s	s	s	s	s

A - 2

Main Plot	Sub Plot	No. of Plant (000/ha)					
		Baharaich	Banswara	Delhi	Ludhiana	Udaipur	Kolhapur
N levels	Genotypes						
100:50:50 kgN/ha	HM 8 (C)	79.2	74.3	66.7	73.6	56.3	54.4
	HM 9 (C)	76.4	70.1	66.7	74.3	52.1	53.9
	SEED TECH 2324 (C)	76.4	79.9	66.7	79.9	64.6	66.1
	MON-29	75.0	80.9	65.9	78.5	64.6	64.4
	X6B302	75.0	81.6	66.3	79.9	62.5	66.7
	BULAND (C)	77.1	80.2	66.3	75.7	63.9	56.1
150:65:65 kgN/ha	HM 8 (C)	80.6	78.8	66.3	72.9	56.3	54.4
	HM 9 (C)	77.1	76.4	66.7	75.7	52.1	54.4
	SEED TECH 2324 (C)	79.9	77.4	66.7	79.2	64.6	66.7
	MON-29	79.2	82.6	66.3	77.1	64.6	65.8
	X6B302	75.7	79.2	66.7	79.9	62.5	66.4
	BULAND (C)	79.9	81.6	66.7	77.1	64.6	54.2
200:80:80 kgN/ha	HM 8 (C)	75.0	79.9	66.7	75.7	54.2	53.9
	HM 9 (C)	78.5	80.9	66.3	79.2	50.0	54.7
	SEED TECH 2324 (C)	77.1	78.5	66.7	78.5	64.6	54.7
	MON-29	79.2	81.3	66.7	75.7	64.6	64.7
	X6B302	75.7	78.8	66.3	79.9	62.5	66.7
	BULAND (C)	75.7	80.2	66.7	79.2	64.6	64.4

Location mean	77.4	79.0	66.5	77.3	60.5	60.2
C.D.(5%) AiBj-AiBk	4.6	5.9	0.7	10.2	5.9	2.0
C.D.(5%) AiBk-AjBk	4.6	6.3	0.7	9.9	5.5	2.0
F(5%)	n.s.	n.s.	n.s.	n.s.	n.s.	s

100:50:50	76.5	77.8	66.4	77.0	60.6	60.3
150:65:65	78.7	79.3	66.5	77.0	60.8	60.3
200:80:80	76.9	79.9	66.5	78.0	60.1	59.9

C.D.(5%) Ai-Aj	2.0	3.3	0.4	3.3	0.5	0.8
C.V.(%) Error A	2.8	4.4	0.7	4.6	0.9	1.5
F(5%)	n.s.	n.s.	n.s.	n.s.	s	n.s.

HM 8 (C)	78.2	77.7	66.5	74.1	55.6	54.3
HM 9 (C)	77.3	75.8	66.5	76.4	51.4	54.4
SEED TECH 2324 (C)	77.8	78.6	66.7	79.2	64.6	62.5
MON-29	77.8	81.6	66.3	77.1	64.6	65.0
X6B302	75.5	79.9	66.4	79.9	62.5	66.6
BULAND (C)	77.5	80.7	66.5	77.3	64.4	58.2

C.D.(5%)Bi-Bj	2.6	3.4	0.4	5.9	3.4	1.1
C.V.(%)ErrorB	3.5	4.5	0.6	7.9	5.9	2.0
F(5%)	n.s.	s	n.s.	n.s.	s	s

A - 3

Main Plot	Sub Plot	No. of Cobs (000/ha)				
		Baharaich	Banswara	Delhi	Ludhiana	Udaipur
N levels	Genotypes					
100:50:50 kgN/ha	HM 8 (C)	78.5	61.5	66.7	70.8	62.0
	HM 9 (C)	76.4	44.1	66.7	74.3	57.3
	SEED TECH 2324 (C)	76.4	60.8	66.7	76.4	112.2
	MON-29	77.1	79.9	65.9	76.4	97.0
	X6B302	76.4	56.6	66.3	76.4	75.3
	BULAND (C)	79.2	57.3	66.7	74.3	109.0
150:65:65 kgN/ha	HM 8 (C)	78.5	61.5	66.3	74.3	67.8
	HM 9 (C)	78.5	59.4	66.7	77.1	62.8
	SEED TECH 2324 (C)	79.2	71.9	66.7	79.9	102.8
	MON-29	79.9	87.8	66.3	78.5	109.7
	X6B302	75.7	79.5	66.7	80.6	81.3
	BULAND (C)	79.2	69.8	66.7	79.2	122.8
200:80:80 kgN/ha	HM 8 (C)	74.3	66.7	66.7	76.4	65.3
	HM 9 (C)	78.5	70.1	66.3	81.3	63.8
	SEED TECH 2324 (C)	75.7	87.8	66.7	79.9	120.6
	MON-29	77.8	95.5	66.7	79.2	114.0
	X6B302	75.0	81.6	66.3	82.6	87.8
	BULAND (C)	76.4	92.0	66.7	77.8	120.6

Location mean	77.4	71.3	66.5	77.5	90.7
C.D.(5%) AiBj-AiBk	3.1	10.9	0.6	12.0	20.3
C.D.(5%) AiBk-AjBk	3.4	13.5	0.7	11.6	20.5
F(5%)	n.s.	s	n.s.	n.s.	n.s.

100:50:50	77.3	60.0	66.5	74.8	85.5
150:65:65	78.5	71.6	66.5	78.2	91.2
200:80:80	76.3	82.3	66.5	79.5	95.3

C.D.(5%) Ai-Aj	1.9	9.4	0.4	3.8	9.1
C.V.(%) Error A	2.7	14.3	0.6	5.3	10.9
F(5%)	n.s.	s	n.s.	n.s.	n.s.

HM 8 (C)	77.1	63.2	66.5	73.8	65.0
HM 9 (C)	77.8	57.9	66.5	77.5	61.3
SEED TECH 2324 (C)	77.1	73.5	66.7	78.7	111.9
MON-29	78.2	87.7	66.3	78.0	106.9
X6B302	75.7	72.6	66.4	79.9	81.4
BULAND (C)	78.2	73.0	66.7	77.1	117.5

C.D.(5%)Bi-Bj	1.8	6.3	0.4	6.9	11.7
C.V.(%)ErrorB	2.4	9.2	0.6	9.3	13.4
F(5%)	n.s.	s	n.s.	n.s.	s

A - 4

Main Plot	Sub Plot	Plant Height (cm)					
		Baharaich	Banswara	Delhi	Ludhiana	Udaipur	Kolhapur
N levels	Genotypes						
100:50:50 kgN/ha	HM 8 (C)	147.3	225.0	152.3	156.5	183.3	151.7
	HM 9 (C)	147.3	246.7	161.7	169.0	203.0	156.3
	SEED TECH 2324 (C)	160.0	223.3	163.0	136.0	218.3	164.0
	MON-29	155.0	240.0	173.0	171.0	197.7	170.0
	X6B302	150.0	236.7	175.0	174.0	206.0	185.3
	BULAND (C)	153.3	215.0	166.3	170.0	194.3	171.7
150:65:65 kgN/ha	HM 8 (C)	170.0	223.3	165.0	168.3	183.3	148.7
	HM 9 (C)	172.3	250.0	172.3	170.0	209.0	156.3
	SEED TECH 2324 (C)	170.7	231.7	173.0	161.5	223.7	164.7
	MON-29	170.3	285.0	183.3	173.7	202.7	183.7
	X6B302	172.7	285.0	186.0	176.0	209.0	190.7
	BULAND (C)	172.7	259.3	175.3	172.5	198.7	160.0
200:80:80 kgN/ha	HM 8 (C)	195.0	221.7	175.7	177.5	181.0	150.0
	HM 9 (C)	194.0	260.0	179.0	176.0	213.7	156.3
	SEED TECH 2324 (C)	199.0	241.7	179.3	178.0	224.0	169.3
	MON-29	197.7	276.7	189.7	189.0	203.0	182.7
	X6B302	197.0	295.0	192.7	181.0	210.3	205.0
	BULAND (C)	197.7	288.3	182.0	181.5	201.0	177.0

Location mean	173.4	250.2	174.7	171.2	203.4	169.1
C.D.(5%) AiBj-AiBk	3.1	18.8	5.1	19.1	17.1	10.4
C.D.(5%) AiBk-AjBk	2.9	24.1	4.8	18.3	16.8	12.0
F(5%)	s	s	n.s.	n.s.	n.s.	s

100:50:50	152.2	231.1	165.2	162.8	200.4	166.5
150:65:65	171.4	255.7	175.8	170.3	204.4	167.3
200:80:80	196.7	263.9	183.1	180.5	205.5	173.4

C.D.(5%) Ai-Aj	0.5	17.3	1.2	5.6	6.4	7.6
C.V.(%) Error A	0.3	7.5	0.7	3.5	3.4	4.8
F(5%)	s	s	s	s	n.s.	n.s.

HM 8 (C)	170.8	223.3	164.3	167.4	182.6	150.1
HM 9 (C)	171.2	252.2	171.0	171.7	208.6	156.3
SEED TECH 2324 (C)	176.6	232.2	171.8	158.5	222.0	166.0
MON-29	174.3	267.2	182.0	177.9	201.1	178.8
X6B302	173.2	272.2	184.6	177.0	208.4	193.7
BULAND (C)	174.6	254.2	174.6	174.7	198.0	169.6

C.D.(5%)Bi-Bj	1.8	10.9	2.9	11.0	9.9	6.0
C.V.(%)ErrorB	1.1	4.5	1.7	6.7	5.0	3.7
F(5%)	s	s	s	s	s	s

A - 5

Main Plot	Sub Plot	Days to 50% Silking				Days to 50% Tasseling	Days to 75% Husk Brown
		Baharaich	Banswara	Ludhiana	Kolhapur	Ludhiana	Ludhiana
N levels	Genotypes						
100:50:50 kgN/ha	HM 8 (C)	96.0	91.0	140.0	63.3	137.0	173.7
	HM 9 (C)	94.7	93.3	136.0	61.3	133.7	169.3
	SEED TECH 2324 (C)	96.0	92.3	139.0	63.0	136.0	173.0
	MON-29	97.0	95.3	139.0	65.0	136.0	176.0
	X6B302	98.0	96.3	141.3	65.0	138.7	177.7
	BULAND (C)	97.3	94.3	141.3	66.0	138.7	176.0
150:65:65 kgN/ha	HM 8 (C)	94.0	94.0	139.7	63.3	136.7	174.0
	HM 9 (C)	92.3	95.3	135.3	60.7	133.3	170.3
	SEED TECH 2324 (C)	91.3	94.7	138.0	62.3	135.3	173.3
	MON-29	94.0	97.3	138.3	65.0	135.3	176.7
	X6B302	94.0	96.0	139.7	63.7	137.3	178.0
	BULAND (C)	94.3	95.3	140.3	65.7	137.7	176.7
200:80:80 kgN/ha	HM 8 (C)	92.0	94.7	138.7	62.7	136.0	174.3
	HM 9 (C)	90.0	96.0	134.7	60.7	132.3	171.3
	SEED TECH 2324 (C)	91.0	97.0	137.3	61.7	134.7	174.0
	MON-29	92.0	97.3	137.7	63.0	135.0	178.7
	X6B302	93.0	97.7	139.3	63.3	137.0	178.0
	BULAND (C)	92.0	97.3	139.7	65.3	136.7	177.0

Location mean	93.8	95.3	138.6	63.4	136.0	174.9
C.D.(5%) AiBj-AiBk	0.9	1.9	4.2	1.0	3.7	5.1
C.D.(5%) AiBk-AjBk	1.1	2.2	5.0	1.0	4.3	5.6
F(5%)	s	n.s.	n.s.	n.s.	n.s.	n.s.

100:50:50	96.5	93.8	139.4	63.9	136.7	174.3
150:65:65	93.3	95.4	138.6	63.4	135.9	174.8
200:80:80	91.7	96.7	137.9	62.8	135.3	175.6

C.D.(5%) Ai-Aj	0.7	1.3	3.4	0.4	2.7	3.2
C.V.(%) Error A	0.8	1.5	2.6	0.7	2.2	2.0
F(5%)	s	s	n.s.	s	n.s.	n.s.

HM 8 (C)	94.0	93.2	139.4	63.1	136.6	174.0
HM 9 (C)	92.3	94.9	135.3	60.9	133.1	170.3
SEED TECH 2324 (C)	92.8	94.7	138.1	62.3	135.3	173.4
MON-29	94.3	96.7	138.3	64.3	135.4	177.1
X6B302	95.0	96.7	140.1	64.0	137.7	177.9
BULAND (C)	94.6	95.7	140.4	65.7	137.7	176.6

C.D.(5%)Bi-Bj	0.5	1.1	2.4	0.6	2.1	3.0
C.V.(%)ErrorB	0.6	1.2	1.8	1.0	1.6	1.8
F(5%)	s	s	s	s	s	s

A - 6

Main Plot	Sub Plot	Cob Yield (kg/ha)			Stover Yield (Kg/ha)	Ear height (cm)	No. of Cob/Plant		Shelling (%)
		Banswara	Udaipur	Kolhapur			Delhi	Ludhiana	
N levels	Genotypes								
100:50:50 kgN/ha	HM 8 (C)	11604	1770	5136	8037	79.0	1.1	74.5	
	HM 9 (C)	8688	2970	4692	7259	80.8	1.1	84.3	
	SEED TECH 2324 (C)	11722	6450	6847	7222	74.3	1.7	74.7	
	MON-29	13646	6559	6311	8370	77.5	1.5	79.6	
	X6B302	10247	4951	7769	9148	82.5	1.2	79.3	
	BULAND (C)	10528	5253	5192	8148	77.5	1.7	73.5	
150:65:65 kgN/ha	HM 8 (C)	10743	1935	6269	9185	81.0	1.2	75.4	
	HM 9 (C)	9986	3429	5236	9926	81.3	1.2	85.4	
	SEED TECH 2324 (C)	13069	6939	8653	10037	75.7	1.6	75.5	
	MON-29	15403	7222	8217	9296	82.0	1.7	80.3	
	X6B302	13125	5145	11822	9963	83.3	1.3	80.3	
	BULAND (C)	12556	5432	6469	9037	83.3	1.9	75.4	
200:80:80 kgN/ha	HM 8 (C)	11924	1985	6469	9481	85.0	1.2	76.2	
	HM 9 (C)	12382	3515	5458	10222	84.0	1.3	85.4	
	SEED TECH 2324 (C)	14292	6823	10461	10556	81.7	1.9	76.4	
	MON-29	17139	7297	9158	9963	88.0	1.8	81.3	
	X6B302	14688	5278	12867	10630	86.3	1.4	80.4	
	BULAND (C)	15104	5414	7172	9667	84.0	1.9	76.3	
Location mean		12602.4	4909.3	7455.6	9230.5	81.5	1.5	78.6	
C.D.(5%) AiBj-AiBk		1979.1	637.4	1152.3	1659.1	7.7	0.3	5.7	
C.D.(5%) AiBk-AjBk		2385.3	598.2	1175.7	1994.5	8.2	0.3	5.8	
F(5%)		n.s.	n.s.	s	n.s.	n.s.	n.s.	n.s.	
100:50:50		11072	4659	5991	8031	78.6	1.4	77.6	
150:65:65		12480	5017	7778	9574	81.1	1.5	78.7	
200:80:80		14255	5052	8598	10086	84.8	1.6	79.3	
C.D.(5%) Ai-Aj		1597.2	143.8	542.0	1331.1	4.3	0.1	2.6	
C.V.(%) Error A		13.7	3.2	7.9	15.6	5.7	10.0	3.6	
F(5%)		s	s	s	s	s	n.s.	n.s.	
HM 8 (C)		11424	1897	5958	8901	81.7	1.2	75.3	
HM 9 (C)		10352	3305	5129	9136	82.1	1.2	85.0	
SEED TECH 2324 (C)		13028	6737	8654	9272	77.2	1.7	75.5	
MON-29		15396	7026	7895	9210	82.5	1.7	80.4	
X6B302		12686	5125	10819	9914	84.1	1.3	80.0	
BULAND (C)		12729	5366	6278	8951	81.6	1.8	75.1	
C.D.(5%)Bi-Bj		1142.6	368.0	665.3	957.9	4.4	0.1	3.3	
C.V.(%)ErrorB		9.4	7.8	9.3	10.8	5.7	10.3	4.3	
F(5%)		s	s	s	n.s.	n.s.	s	s	

A - 7

Table 2: Nutrient management through SSNM in maize wheat cropping system at Arbhavi during Rabi-2009-10 .

Treatment	Grain yield (kg/ha)	Straw yield (kg/ha)	Plant height (cm)	Ear length (cm)	No. of shoots/50 cm row	No. of ears/50 cm row	100 Grain wt. (gm)
T ₁ : Control	914	2766	48.0	5.8	42.0	29.3	32.7
T ₂ : State RDF	1813	3729	60.9	6.6	49.0	38.7	62.0
T ₃ : DMR RDF	1516	3826	66.5	6.7	42.3	34.3	50.7
T ₄ : SSNM-FOR NPK	1762	3451	60.1	6.6	47.3	42.0	44.0
T ₅ : SSNM-N	994	3127	64.1	6.4	38.3	35.7	33.3
T ₆ : SSNM-P	1132	3226	51.5	5.6	38.7	29.7	38.3
T ₇ : SSNM-K	1476	3710	59.3	6.5	39.7	31.3	46.7
Mean	1372.4	3405.0	58.6	6.3	42.5	34.4	44.0
CD	136.5	484.1	7.0	0.6	8.7	5.2	7.3
CV (%)	5.6	8.0	6.7	5.4	11.5	8.6	9.4
Significance	S	S	S	S	N.S.	S	S

Table 3: Site-specific nutrient management at Banswara during Rabi-2009-10.

Treatment	Grain Yield (kg/ha)	
	Rice-Maize	Maize-Wheat
T ₁ : Control	3116	2289
T ₂ : State rec. of nutrient maize (120:60:40 kg/ha)	7169	4800
T ₃ : N+P ₂ O ₅ +K ₂ O+ZnSO ₄ (120+60+40+25 kg/ha)	7742	5076
T ₄ : N+P ₂ O ₅ +K ₂ O+ZnSO ₄ 273+61+0+25 kg/ha)	7258	4298
T ₅ : P ₂ O ₅ +K ₂ O+ZnSO ₄ (61+0+25 kg/ha)	5129	2831
T ₆ : N+ K ₂ O+ZnSO ₄ (273+0+25 kg/ha)	6324	3520
T ₇ : N+ P ₂ O ₅ +ZnSO ₄ (273+61+25 kg/ha)	7271	4400
Mean	6287.0	3887.6
CD	1050.1	464.5
CV (%)	9.4	6.7
Significance	S	S

A – 8

Table 4: Site specific nutrient management in rice-maize cropping system at Godhra during Rabi 2009-2010.

Treatment	Cob Yield (Kg/ha)	Plant Stand (000/ha)	Days to 50% Pollen Shed	Days to 50% Silking	Days to 50% Dry husk	Plant Height (cm)	Ear Height (cm)
T ₁	8889	72.7	53.0	57.0	85.0	191.7	105.0
T ₂	11778	83.3	52.7	56.7	84.7	208.3	116.7
T ₃	12333	80.7	53.0	57.0	85.0	220.0	130.0
T ₄	11556	83.1	52.7	56.0	85.0	225.0	135.0
T ₅	8889	74.2	53.0	56.7	84.7	196.7	106.7
T ₆	12667	83.3	53.0	57.0	85.0	230.0	138.3
T ₇	11778	74.0	53.0	56.7	84.7	206.7	116.7
Mean	11127.0	78.8	52.9	56.7	84.9	211.2	121.2
CD	2168.1	7.9	1.8	1.6	1.6	16.3	16.6
CV (%)	11.0	5.6	1.9	1.5	1.0	4.3	7.7
Significance	S	S	N.S.	N.S.	N.S.	S	S
Treatment	As per treatment (kg/ha) as under						
	N	P	K	Zn			
T ₁	0	0	0	0			
T ₂	100	25	0	25			
T ₃	150	60	40	25			
T ₄	277.5	120.4	0	25			
T ₅	0	120.4	0	25			
T ₆	277.5	0	0	25			
T ₇	226	120.4	0	25			

A – 9

Table 5: Site specific nutrient management in maize based cropping system (Rice-Maize system) at Hyderabad during Rabi 2009-2010.

Treatment	Grain Yield (kg/ha)	Cob Yield (kg/ha)	Plant Stand (000/ha)	No. of Cobs (000/ha)	Plant Height (cm)
T ₁	3196	4080	49.6	40.6	213.0
T ₂	5763	7435	58.3	51.7	227.7
T ₃	6311	8326	59.6	54.8	230.3
T ₄	7346	9574	60.4	58.1	248.0
T ₅	3730	4483	49.8	42.0	216.3
T ₆	6122	8041	59.3	55.4	231.7
T ₇	5685	7726	58.9	54.8	222.3
Mean	5450.5	7095.0	56.6	51.1	227.0
CD	997.5	1261.5	2.3	3.1	7.4
CV (%)	10.3	10.0	2.3	3.4	1.8
Significance	S	S	S	S	S

Treatments	Rabi (Maize)
T ₁	Control (no fertilizers)
T ₂	State recommendation of nutrients for each crop (Please add as per the state recommendation)
T ₃	N + P ₂ O ₅ + K ₂ O+ZnSO ₄ , 150 + 60 + 40 + 25 + kg/ha
T ₄	N + P ₂ O ₅ + K ₂ O+ZnSO ₄ , 272 + 0 + 0 + 25 + kg/ha
T ₅	P ₂ O ₅ + K ₂ O+ZnSO ₄ , 0 + 0 + 25 + kg/ha
T ₆	N + K ₂ O+ZnSO ₄ , 272 + 0 + 25 + kg/ha
T ₇	N + P ₂ O ₅ + ZnSO ₄ , 272 + 0 + 25 + kg/ha

A – 10

Table 6: Site Specific Nutrient Management in maize-wheat cropping system at Ludhiana during Rabi-2009-10.

Treatment	Grain Yield (kg/ha)	Straw Yield (kg/ha)	Biological Yield (kg/ha)	No. of tiller/mrl	Effective tiller/mrl	Spike length (cm)	No. of Grains/spike	1000 grain wt. (gm)	Plant height (cm)
T ₁	1907.4	2963.0	4870.4	66.8	61.2	6.0	37.4	29.7	71.0
T ₂	3888.9	7407.4	11296.3	120.8	108.8	8.4	44.6	32.1	95.3
T ₃	4240.7	7518.5	11759.3	140.2	125.2	9.5	45.9	35.0	95.7
T ₄	4000.0	8129.6	12129.6	144.3	119.0	8.4	45.1	37.6	97.0
T ₅	3370.4	5888.9	9259.3	109.2	93.8	7.5	42.1	28.3	90.4
T ₆	3722.2	6833.3	10555.6	112.7	102.7	8.1	43.4	28.3	90.8
T ₇	3870.4	6814.8	10685.2	119.3	102.8	8.4	44.5	32.2	95.4
Mean	3571.4	6507.9	10079.4	116.2	101.9	8.0	43.3	31.9	90.8
CD	415.8	839.5	1063.6	8.3	8.7	0.3	2.9	0.7	2.9
CV (%)	6.5	7.3	5.9	4.0	4.8	1.8	3.8	1.3	1.8
Significance	S	S	S	S	S	S	S	S	S

Treatments Details	
T ₁	Control
T ₂	(N+P ₂ O ₅ +K ₂ O, 125+62+30 Kg/ha)
T ₃	(N+P ₂ O ₅ +K ₂ O, 150+60+40 Kg/ha)
T ₄	(N+P ₂ O ₅ +K ₂ O, 270+150+47 Kg/ha)
T ₅	(N+P ₂ O ₅ +K ₂ O, 0+150+47 Kg/ha)
T ₆	(N+P ₂ O ₅ +K ₂ O, 270+0+47Kg/ha)
T ₇	(N+P ₂ O ₅ +K ₂ O, 270+150+0 Kg/ha)

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Table 7: Studies as N Scheduling in Rabi season maize at Banswara during Rabi-2009-10 .

Treatment	Grain Yield (Kg/ha)	No. of Plant (000/ha)	No. of Cobs (000/ha)	Days to 50% Silking	Plant Height (cm)
T ₁	7690	80.4	80.2	93.5	193.0
T ₂	8404	79.2	78.3	91.5	199.0
T ₃	7204	78.8	78.3	94.5	188.3
T ₄	7440	78.3	78.1	94.0	185.8
Mean	7684.4	79.2	78.8	93.4	191.5
CD	199.8	2.2	2.1	1.0	4.1
CV (%)	1.6	1.8	1.7	0.7	1.3
Significance	S	N.S.	N.S.	S	S

Treatment	Split Application of Nitrogen Stage				
	Basal	Four Leaf	Eight Leaf	Tassel Stage	Early Grain Filling
T ₁	30%	10%	30%	30%	Nil
T ₂	10%	20%	30%	30%	10%
T ₃	5%	30%	40%	15%	10%
T ₄	20%	25%	30%	20%	5%

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Table 8: Tillage management in rice-maize cropping system at Banswara during Rabi-2009-10 .

Treatment	Grain Yield (kg/ha)
T ₁ : Zero till in both crops	7822
T ₂ : Conv. till in both crops	7182
T ₃ : Conv. till in rice –beds in maize	8267
T ₄ : Conv. till in rice-zero till in maize	8102
Mean	7843.3
CD	834.8
CV (%)	5.3
Significance	N.S.

Table 9: Tillage based management In maize based cropping system (Rice Maize system) at Hyderabad during Rabi 2009-2010.

Treatment	Grain Yield (kg/ha)	Cob Yield (kg/ha)	Plant Stand (000/ha)	No. of Cobs (000/ha)	Plant Height (cm)
T ₁	6626	8480	60.6	51.9	252.6
T ₂	5418	7039	58.6	48.2	244.2
T ₃	4044	5982	47.6	41.7	215.4
T ₄	6116	7187	59.6	52.1	250.4
Mean	5550.8	7171.9	56.6	48.5	240.7
CD	582.8	795.2	1.0	1.8	7.7
CV (%)	7.6	8.0	1.3	2.8	2.3
Significance	S	S	S	S	S

Treatments

	Kharif (Rice)	Rabi (Maize)
T ₁	Conventional tillage	Conventional tillage
T ₂	Conventional tillage	Zero tillage
T ₃	Zero tillage	Zero tillage
T ₄	Conventional tillage	Raised bed

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Table 10: Yield potential through nutrient management in maize at Hyderabad during Rabi 2009-10

Main Plot N Levels	Sub Plot Spacing (cm)	Grain Yield (kg/ha)	Cob Yield (kg/ha)	Plant Stand (000/ha)	No. of Cobs (000/ha)	Plant Height (cm)	Days to 50% Silking
150:60:60	55x20	6037	8481	39.0	56.3	229.0	57.7
	60x20	6500	11093	45.9	64.6	234.7	59.0
	65x20	9278	13148	46.1	73.7	248.3	61.0
	70x20	10370	12852	44.0	76.9	250.0	62.3
	75x20	6815	7648	39.2	60.4	222.0	59.0
200:75:75	55x20	9148	13426	45.1	67.0	228.3	62.0
	60x20	11907	14407	46.5	73.3	246.3	64.3
	65x20	11130	11704	43.1	76.3	252.0	64.7
	70x20	6685	7370	36.1	46.9	222.3	59.3
	75x20	9148	7630	36.9	59.6	240.3	61.0
250:90:90	55x20	10093	12000	41.9	72.6	251.0	64.0
	60x20	11556	11815	38.6	72.6	247.0	64.7
	65x20	8000	7926	33.6	55.6	218.0	59.3
	70x20	9148	10056	40.3	64.6	233.7	61.0
	75x20	11852	13185	41.0	66.7	240.7	64.0
300:105:105	55x20	11593	12222	39.1	67.6	251.3	65.0
	60x20	5889	8889	32.4	49.4	217.0	60.7
	65x20	6648	9426	31.5	54.1	228.7	62.7
	70x20	8167	10241	33.9	56.5	236.3	66.3
	75x20	7815	11259	33.4	61.9	239.7	67.0
Location mean		8888.9	10738.9	39.4	63.8	236.8	62.3
C.D.(5%) AiBj-AiBk		1341.8	1504.8	3.5	4.5	7.4	1.3
C.D.(5%) AiBk-AjBk		1344.6	1766.5	3.8	5.7	8.4	1.3
F(5%)		s	s	s	s	s	s
N ₁ - 150-60-60		7800	10644	42.9	66.4	236.8	59.8
N ₂ - 200-75-75		9604	10907	41.5	64.6	237.9	62.3
N ₃ - 250-90-90		10130	10996	39.1	66.4	238.1	62.6
N ₄ - 300-105-105		8022	10407	34.1	57.9	234.6	64.3
C.D.(5%) Ai-Aj		613.6	1155.0	2.2	4.1	5.2	0.5
C.V.(%) Error A		7.7	12.0	6.3	7.2	2.5	0.9
F(5%)		s	n.s.	s	s	n.s.	s
S ₁ . 55x20 cm		9218	11532	41.3	65.9	239.9	62.2
S ₂ . 60x20 cm		8963	11551	40.9	65.0	236.3	62.2
S ₃ . 65x20 cm		8764	10551	38.6	64.9	236.8	61.9
S ₄ . 70x20 cm		8593	10130	38.6	61.2	235.6	62.3
S ₅ . 75x20 cm		8907	9931	37.6	62.1	235.7	62.8
C.D.(5%)Bi-Bj		670.9	752.4	1.8	2.3	3.7	0.7
C.V.(%)ErrorB		9.1	8.4	5.3	4.3	1.9	1.3
F(5%)		n.s.	s	s	s	n.s.	n.s.

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Table 11: Nag Station trials at Ludhiana during Rabi-2009-10.

Main Plot	Sub Plot	Grain Yield (kg/ha)	Plant Stand (000/ha)	No. of ears (000/ha)	Days to 50% Tassel	Days to 50% Silking	Days to 75% Husk Brown	Length /cob (cm)	Girth/cob (cm)	Plant height (cm)	Ear height (cm)
Ridge sowing	PMH 1	6810	79.3	78.0	79.7	82.3	121.0	16.8	4.2	180.7	99.3
	PMH 2	6773	79.3	77.7	73.0	75.7	115.3	16.3	3.9	162.3	82.3
	Parkash	5403	80.0	78.0	71.0	73.0	111.7	15.5	3.7	154.3	85.3
	JH 3956	7710	79.0	82.7	75.0	76.3	116.3	15.8	3.9	167.3	91.0
Trench sowing	PMH 1	6747	80.0	76.7	82.7	85.3	123.0	16.6	4.1	175.0	95.0
	PMH 2	6777	78.3	81.3	77.7	80.0	118.3	16.0	4.0	149.7	80.3
	Parkash	6307	78.3	77.0	73.3	75.3	117.3	15.1	3.7	148.7	83.0
	JH 3956	6313	77.7	80.0	79.7	83.0	119.7	15.6	3.8	158.0	88.3
Flat sowing	PMH 1	6873	79.0	77.0	82.3	85.3	122.0	16.2	4.0	177.0	97.7
	PMH 2	5883	80.0	81.0	75.0	77.7	117.7	15.7	3.9	155.0	80.3
	Parkash	5347	78.7	77.7	71.7	73.7	115.0	14.8	3.7	149.0	84.0
	JH 3956	6113	79.0	81.3	76.7	79.0	119.0	15.5	3.6	162.3	89.0
Location mean		6421.4	79.1	79.0	76.5	78.9	118.0	15.8	3.9	161.6	88.0
C.D.(5%) AiBj-AiBk		537.5	3.4	6.3	2.2	2.3	3.7	1.1	0.3	9.8	7.4
C.D.(5%) AiBk-AjBk		639.1	4.7	6.0	1.9	2.1	4.7	1.4	0.3	9.6	7.1
F(5%)		s	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Ridge sowing		6674	79.4	79.1	74.7	76.8	116.1	16.1	3.9	166.2	89.5
Trench sowing		6536	78.6	78.8	78.3	80.9	119.6	15.8	3.9	157.8	86.7
Flat sowing		6054	79.2	79.3	76.4	78.9	118.4	15.6	3.8	160.8	87.8
C.D.(5%) Ai-Aj		446.7	3.7	2.4	0.5	0.8	3.5	1.0	0.2	4.5	3.1
C.V.(%) Error A		6.1	4.1	2.6	0.6	0.9	2.6	5.4	4.4	2.5	3.1
F(5%)		s	n.s.	n.s.	s	s	n.s.	n.s.	n.s.	s	n.s.
PMH 1		6810	79.4	77.2	81.6	84.3	122.0	16.5	4.1	177.6	97.3
PMH 2		6478	79.2	80.0	75.2	77.8	117.1	16.0	3.9	155.7	81.0
Parkash		5686	79.0	77.6	72.0	74.0	114.7	15.1	3.7	150.7	84.1
JH 3956		6712	78.6	81.3	77.1	79.4	118.3	15.6	3.8	162.6	89.4
C.D.(5%)Bi-Bj		310.3	2.0	3.7	1.3	1.3	2.1	0.6	0.2	5.7	4.3
C.V.(%)ErrorB		4.9	2.5	4.7	1.7	1.7	1.8	4.1	4.5	3.5	4.9
F(5%)		s	n.s.	n.s.	s	s	s	s	s	s	s

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Table 12: Nag Station trials at Ludhiana during Rabi-2009-10.

Main Plot	Sub Plot	Grain Yield (kg/ha)	Plant Stand (000/ha)	No. of ears (000/ha)	Days to 50% Tassel	Days to 50% Silking	Days to 75% Husk Brown	Length/cob (cm)	Girth/cob (cm)	Plant height (cm)	Ear height (cm)
90kgN/ha	PMH 2	5163	82.3	84.0	71.3	73.7	105.0	15.1	3.8	138.7	71.0
	JH 3459	5101	82.6	84.0	68.7	71.3	104.0	14.1	3.4	141.7	72.0
	JH 3956	5889	82.3	84.0	72.0	76.0	105.7	14.9	3.5	152.0	83.3
	JH 31244	6306	82.3	87.5	73.7	76.7	105.7	14.4	3.7	156.0	85.0
120kgN/ha	PMH 2	6000	83.0	86.5	71.0	73.3	106.0	16.1	3.9	154.3	84.3
	JH 3459	5625	82.6	81.9	68.3	71.0	104.0	15.0	3.5	144.3	74.3
	JH 3956	7326	83.0	89.2	71.3	74.0	106.0	15.4	3.6	154.7	83.3
	JH 31244	7611	82.6	83.0	71.3	74.7	107.0	15.5	3.7	164.3	87.3
150kgN/ha	PMH 2	6521	83.3	84.4	70.3	72.7	106.7	16.2	4.0	152.7	84.0
	JH 3459	5795	83.0	86.5	67.7	70.3	104.7	15.9	3.6	148.7	83.3
	JH 3956	7535	81.6	89.9	70.7	73.3	107.0	15.9	3.7	156.0	85.7
	JH 31244	7618	83.0	88.2	71.3	73.7	107.3	16.3	3.8	166.7	94.0

Location mean	6374.1	82.6	85.8	70.6	73.4	105.8	15.4	3.7	152.5	82.3
C.D.(5%) AiBj-AiBk	733.6	3.7	5.8	3.2	3.6	2.2	1.0	0.3	9.2	8.7
C.D.(5%) AiBk-AjBk	706.6	3.5	5.9	4.5	5.3	3.0	1.1	0.3	11.5	11.0
F(5%)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

90kgN/ha	5615	82.4	84.9	71.4	74.4	105.1	14.6	3.6	147.1	77.8
120kgN/ha	6641	82.8	85.2	70.5	73.3	105.8	15.5	3.7	154.4	82.3
150kgN/ha	6867	82.7	87.2	70.0	72.5	106.4	16.1	3.8	156.0	86.8

C.D.(5%) Ai-Aj	317.7	1.4	3.1	3.6	4.3	2.3	0.7	0.2	8.4	8.2
C.V.(%) Error A	4.4	1.5	3.2	4.5	5.1	1.9	3.8	3.9	4.9	8.8
F(5%)	s	n.s.	n.s.	n.s.	n.s.	n.s.	s	n.s.	n.s.	n.s.

PMH 2	5895	82.9	85.0	70.9	73.2	105.9	15.8	3.9	148.6	79.8
JH 3459	5507	82.8	84.1	68.2	70.9	104.2	15.0	3.5	144.9	76.6
JH 3956	6917	82.3	87.7	71.3	74.4	106.2	15.4	3.6	154.2	84.1
JH 31244	7178	82.6	86.2	72.1	75.0	106.7	15.4	3.7	162.3	88.8

C.D.(5%)Bi-Bj	423.5	2.1	3.4	1.8	2.1	1.3	0.6	0.1	5.3	5.0
C.V.(%)ErrorB	6.7	2.6	4.0	2.6	2.9	1.2	3.6	4.1	3.5	6.1
F(5%)	s	n.s.	n.s.	s	s	s	n.s.	s	s	s

ENTOMOLOGY

RABI 2009-10

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Introduction

Out of 21 maize germplasms screened under artificial infestation of stem borer, *C. partellus*, at Kolhapur, 6 (six) entries viz.: DMR-228 (2.90), DMR -234 (3.00), DMR – 237 (2.70), DMR -241 (2.25), DMR – 243 (2.42) and DMR – 244 (2.90) were found to be the least susceptible. The remaining 12 (twelve) entries were found to be moderately susceptible to the stem borer infestation. At Hyderabad these germplasm were screened for *Sesamia inferens*, all of them were found to be highly susceptible to *S. inferens*.

For the management of pests maize crop was grown with Napier Millet as trap crop and compared with chemical treatment in sole maize. The incidence of *Sesamia* was considerably higher in trap crop. Like was cauliflower was used as trap crop for *Spodoptera* which again was found to attract this pest thus reducing in maize crop.

Out of 190 maize inbreds screened under artificial infestation of *S. inferens* 42, 110 and 37 entries were found to be least, moderately and highly susceptible respectively to pink borer infestation.

Table 1: Trial No. 11

Comparative tolerance of maize germplasms to *Chilo partellus* at Kolhapur centre and *Sesamia inferens* at Hyderabad (Tr.11 Medium maturity) under artificial infestation during rabi 2009-2010.

S.No.	Pedigree	Mean leaf injury score per plant	
		Kolhapur	Hyderabad
1	HM 10 (C)	3.40	8.0
2	MON-30	4.95	7.4
3	MON-31	3.13	8.4
4	HQPM-7 (C)	6.60	7.8
5	KMH-3669	3.90	7.4
6	MON-29	2.90	9.0
7	HQPM-1 (C)	5.00	7.2
8	HKH-405	6.40	8.0
9	MON-31	4.30	7.6
10	VEHQPM -3018	6.30	7.6
11	MON-31	3.30	7.8
12	MON-29	3.00	9.0
13	KMH-Super 244	4.10	9.0
14	HM 8 (C)	4.90	8.2
15	SEED TECH 2324 (C)	2.70	7.8
16	HQPM-5 (C)	Not germinated	7.6
17	HKH-307	3.17	8.4
18	KMH-25K55	2.25	7.6
19	BIO 9637 (C)	4.67	8.4
20	X6B302	2.42	7.2
21	MON-29	2.90	9.0

Table 2: Maize ecosystem manipulation using trap crops

S.No.	Treatment	<i>Sesamia inferens</i> in maize		<i>Sesamia inferens</i> in trap crop	
		Plants with leaf injury (%)	Dead hearts(%)	Plants with leaf injury(%)	Dead hearts(%)
1	Maize + Napier Millet	3.95	0.42	4.50	13.0
2	Maize + Ragi	3.33	0.44	0.75	20.5
3	Sole Maize with endosulfan spray at 12 DAG	2.07	0.86	-	-
4	Control	7.75	1.43	-	-

S. No.	Treatment	% Plants infested with <i>Spodoptera litura</i> in maize	% Plants infested with <i>Spodoptera litura</i> in trap
1.	Maize + cauliflower	0.44	2.86
2.	Control	1.22	-

S.No.	Treatment	% Plants infested with <i>Helicoverpa armigera</i> in maize	% plants infested with hairy caterpillar in maize	% Plants infested with <i>Helicoverpa armigera</i> in trap
1.	Maize + Marigold	1.31	1.68	1.67
2.	Control	0.41	2.44	-

Table 3: Screening of inbred lines supplied by WNC, R' nagar during rabi 2009-2010

S.no	Plot no.	LIR	Category
1	2270	5.0	MS
2	2271	4.0	MS
3	2272	3.0	LS
4	2273	5.2	MS
5	2278	2.7	LS
6	2280	7.8	HS
7	2281	2.0	LS
8	2282	4.6	MS
9	2286	2.0	LS
10	2287	4.1	MS
11	2289	5.0	MS
12	2291	5.8	MS
13	2292	6.0	MS
14	2293	3.8	MS
15	2294	7.8	HS
16	2296	5.0	MS
17	2297	3.4	MS
18	2298	5.4	MS
19	2299	4.8	MS
20	2301	6.0	MS
21	2303	4.8	MS
22	2304	7.0	HS
23	2306	5.3	MS
24	2307	5.6	MS
25	2308	7.3	HS
26	2309	5.1	MS
27	2312	3.8	MS
28	2314	6.6	HS
29	2315	4.1	MS
30	2316	2.0	LS
31	2317	4.6	MS
32	2318	3.4	MS
33	2320	4.6	MS
34	2321	3.8	MS
35	2323	2.0	LS
36	2325	2.8	LS
37	2326	7.8	HS
38	2327	3.0	LS
39	2329	3.7	MS
40	2330	4.3	MS
41	2331	2.0	LS
42	2332	2.0	LS
43	2333	3.8	MS

44	2334	3.8	MS
45	2335	6.6	HS
46	2336	5.2	MS
47	2337	3.8	MS
48	2338	4.2	MS
49	2339	2.0	LS
50	2340	3.0	LS
51	2342	2.0	LS
52	2345	2.0	LS
53	2349	2.0	LS
54	2353	3.3	MS
55	2354	2.0	LS
56	2357	4.2	MS
57	2359	2.0	LS
58	2360	2.0	LS
59	2362	3.5	MS
60	2363	3.3	MS
61	2368	4.3	MS
62	2369	4.5	MS
63	2370	4.7	MS
64	2371	2.0	LS
65	2372	3.7	MS
66	2374	3.0	LS
67	2376	5.8	MS
68	2378	5.2	MS
69	2379	5.0	MS
70	2384	6.0	MS
71	2391	5.5	MS
72	2392	4.3	MS
73	2398	3.6	MS
74	2399	3.6	MS
75	2404	4.0	MS
76	2405	2.4	LS
77	2406	2.0	LS
78	2409	2.0	LS
79	2411	2.0	LS
80	2412	4.7	MS
81	2413	4.8	MS
82	2415	6.1	HS
83	2416	5.2	MS
84	2417	4.3	MS
85	2421	5.3	MS
86	2429	6.9	HS
87	2430	6.3	HS
88	2435	6.8	HS
89	2436	5.0	MS

90	2437	4.9	MS
91	2440	4.8	MS
92	2441	5.2	MS
93	2442	7.9	HS
94	2445	5.3	MS
95	2447	6.7	HS
96	2449	6.2	HS
97	2450	5.9	MS
98	2456	4.3	MS
99	2459	2.4	LS
100	2461	3.5	MS
101	2462	4.7	MS
102	2467	3.5	MS
103	2468	5.4	MS
104	2469	5.2	MS
105	2471	5.6	MS
106	2473	5.9	MS
107	2474	5.9	MS
108	2478	5.3	MS
109	2483	5.3	MS
110	2484	5.8	MS
111	2485	5.9	MS
112	2486	3.0	LS
113	2490	3.8	MS
114	2492	4.2	MS
115	2493	3.4	MS
116	2495	2.2	LS
117	2498	3.2	MS
118	2513	3.3	MS
119	2516	8.3	HS
120	2518	9.0	HS
121	2521	5.2	MS
122	2524	2.3	LS
123	2526	2.0	LS
124	2527	3.0	LS
125	2528	3.8	MS
126	2529	2.0	LS
127	2532	3.4	MS
128	2534	2.0	LS
129	2538	3.0	LS
130	2539	5.8	MS
131	2540	2.0	LS
132	2541	2.0	LS
133	2542	3.4	MS
134	2543	5.5	MS
135	2545	3.0	LS

136	2546	3.8	MS
137	2548	5.0	MS
138	2550	2.0	LS
139	2551	5.8	MS
140	2553	6.8	HS
141	2554	6.4	HS
142	2555	5.1	MS
143	2556	5.4	MS
144	2558	2.0	LS
145	2560	4.3	MS
146	2561		
147	2562	6.0	MS
148	2564	7.0	HS
149	2566	6.9	HS
150	2567	6.6	HS
151	2568	5.7	MS
152	2570	3.8	MS
153	2571	3.3	MS
154	2572	5.2	MS
155	2575	6.5	HS
156	2579	4.2	MS
157	2580	3.0	LS
158	2583	2.7	LS
159	2584	2.7	LS
160	2586	5.0	MS
161	2587	5.3	MS
162	2589	3.6	MS
163	2590	3.4	MS
164	2596	5.8	MS
165	2597	4.3	MS
166	2599	5.0	MS
167	2600	3.0	LS
168	2601	9.0	HS
169	2603	5.3	MS
170	2605	7.5	HS
171	2606	7.0	HS
172	2607	4.0	MS
173	2609	5.0	MS
174	2610	5.0	MS
175	2612	6.8	HS
176	2613	5.7	MS
177	2615	7.3	HS
178	2618	3.8	MS
179	2619	7.8	HS
180	2620	3.3	MS
181	2621	5.6	MS

182	2622	7.5	HS
183	2623	8.5	HS
184	2624	9.0	HS
185	2625	9.0	HS
186	2626	8.5	HS
187	2627	8.6	HS
188	2630	7.6	HS
189	2631	7.4	HS
190	2632	6.8	HS
Checks			
1	Basi local	7.5	HS
2	Winsynthetic	6.3	HS
3	E62	9.0	HS
4	Diallel C2	9.0	HS

PATHOLOGY

RABI 2009-10

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Pathology Rabi 2009-10

INTRODUCTION

During Rabi 2009 -10, various maize genotypes were screened and evaluated against various diseases viz Turcicum Leaf Blight (TLB), Sorghum Downy Mildew, (SDM), and Post Flowering Stalk Rots (PFSR) in one coordinated trial no. (11) in different centers of maize under artificial epiphytotic conditions.

In maize genotypes evaluation program, some genotypes were identified with multiple disease resistant were PAC-746, HKH-315, X35A035, MON-30, KMH-25K55 found resistance against TLB, C. Rust and PFSR, DMRH-2, JH-8277, JH-9078, HKH-311, HQPM-1 (C), X6B302 found resistant against TLB and C. Rust, X35A019, HKH-406 were resistant against C. Rust and PFSR, BIO-265 against TLB and PFSR. Whereas genotypes found resistant against single diseases were HKH-312, JH-9072, JH-9124, MAIZE X440, PRO-378, HKH-405, VEHQPM -3018, MON-29, KMH-Super 244, SEED TECH 2324 (C), HQPM-5 (C), VEHQPM -3027 for TLB, DMRH-1, HKH-301, HKH-400, HM 10 (C), MON-31 (Filler), HQPM-7 (C), MON-29, MON-31, MON-31 (Filler), HM 8 (C), HKH-307 found resistant for C. Rust whereas VEH-3019, MAIZE 115-08-01 were found resistant against PFSR.

In Inbred line evaluation programme, 18 High oil lines of maize were evaluated against TLB at Mandya. Out of them two lines viz, DMHOC – 14 – X – NA – 2008 K and DMHOC – 15 – X – NA – 2008 K were found resistant against TLB. In another programme 358 inbred lines were screened against TLB at Mandya out of them 127 lines were found resistant.

Table :1 Evaluation of maize genotypes against various diseases during Rabi 2009-10

S.No	Padigree	TLB	SDM	C.Rust	PFSR	HYD	LUD #
		(1-5) MND	(%) MND	(1-5) DHAU	(1-9) ARB		
1	PAC-746	2.0	92.5	2.5	3.9	4.5	4.2
2	X35A019	2.0	93.7	2.0	4.9	5.1	4.1
3	PRO-379	3.3	96.0	3.0	6.2	2.8	5.2
4	HKH-312	2.0	100.0	3.0	4.8	4.5	7.4
5	TMC 89-1	NG	100.0	3.0	*	4.3	-
6	DMRH-1	3.3	100.0	2.5	4.0	3.2	5.5
7	DMRH-2	2.0	100.0	2.0	6.4	2.3	5.4
8	HKH-406	3.3	100.0	2.0	4.8	4.9	4.0
9	JH-8277	2.0	100.0	1.0	5.1	3.4	4.9
10	HKH-301	4.3	100.0	2.5	5.0	3.3	5.7
11	JH-9078	2.0	97.2	2.0	6.1	5.0	4.9
12	JH-9072	2.0	100.0	3.0	6.1	3.5	5.1
13	HKH-400	4.0	100.0	2.0	4.6	4.3	4.5
14	JH-9124	2.0	100.0	2.5	5.2	5.8	5.6
15	MAIZE X440	2.0	100.0	3.0	6.5	4.1	5.2
16	VEH-3019	3.5	100.0	3.0	4.0	4.7	5.2
17	HKH-311	2.0	100.0	2.0	3.2	3.6	5.2
18	MAIZE 115-08-01	3.3	95.2	2.5	4.5	3.3	5.4
19	HKH-315	2.0	100.0	2.0	4.0	4.6	5.8
20	X35A035	4.0	95.1	2.5	5.2	5.6	5.1
21	BIO-265	2.0	98.0	3.0	3.5	5.2	4.8
22	PRO-378	2.0	94.5	3.0	6.1	3.1	6.0
23	HM 10 (C)	3.5	97.7	1.0	4.3	5.1	5.7
24	MON-30	2.0	68.9	1.0	4.0	4.2	4.3
25	MON-31 (Filler)	2.8	100.0	2.0	4.0	4.2	4.3
26	HQPM-7 (C)	2.0	100.0	2.5	4.7	3.1	4.2
27	KMH-3669	3.3	75.0	3.0	5.0	2.6	4.9
28	MON-29	3.0	100.0	2.0	4.9	3.9	4.8
29	HQPM-1 (C)	2.0	100.0	2.0	4.8	2.3	4.3
30	HKH-405	2.0	100.0	2.5	5.8	4.1	4.4
31	MON-31	4.3	100.0	2.0	5.0	3.4	4.5
32	VEHQPM -3018	2.0	100.0	3.0	6.5	3.5	5.2
33	MON-31 (Filler)	3.0	100.0	1.0	4.0	4.6	4.7
34	MON-29	2.0	100.0	2.5	4.3	3.1	4.5
35	KMH-Super 244	2.0	97.9	2.5	5.8	2.9	4.3
36	HM 8 (C)	3.5	82.0	2.0	4.8	3.8	6.2

Traces of Rust pustules are observed

NG - Not Germinated

* Seed were not germinated

S.No	Padigree	TLB	SDM	C.Rust	PFSR	HYD	LUD #
		(1-5) MND	(%) MND	(1-5) DHAU	(1-9) ARB		
37	SEED TECH 2324 (C)	2.0	95.0	2.5	4.6	4.7	4.9
38	HQPM-5 (C)	2.0	100.0	1.0	6.0	4.1	-
39	HKH-307	4.3	100.0	1.0	5.4	5.3	-
40	KMH-25K55	2.0	100.0	1.0	4.4	3.8	5.0
41	BIO 9637 (C)	4.3	95.6	2.0	5.9	4.4	5.4
42	X6B302	2.0	78.3	1.0	5.8	4.8	4.4
43	MON-29 (Filler)	2.0	100.0	1.0	5.5	2.7	4.6
44	HKH-305	3.8	100.0	3.0	5.7	5.1	5.1
45	VEHQPM -3027	2.0	100.0	1.0	5.8	5.0	5.0
46	MON-29 (Filler)	2.0	100.0	3.0	4.0	5.6	4.9
47	Susceptible check	4.8	100.0	-	7.5	-	-
48	Resistant check	1.5	12.5	-	-	-	-
49	Check	-	-	-	-	5.9	-
50	F632 - H100	-	-	-	-	-	4.7

Traces of Rust pustules are observed

Evaluation of Maize High Oil Lines against TLB at Mandya R 2009-10

Sl. No.	Pedigree	Turcicum Leaf Blight (1 – 5 Scale)
1	HKI – Taller – X – NA – 2008K	3.5
2	DMHOC – 1 – X – NA – 2008K	4.5
3	HKI – Tall – 8 – 1 – 1 – X – NA – 2008K	3.0
4	DMHOC – 4 – X – NA – 2008K	4.5
5	HOPII – X – NA – 2008K	3.0
6	DMHOC – 14 – X – NA – 2008K	2.5
7	DMHOC – 15 – X – NA – 2008K	2.5
8	Ae – 40 – X – NA – 2008K	3.5
9	Ent – 1 – X – NA – 2008K	3.5
10	Ent – 2 – X – NA – 2008K	3.5
11	Win Pink L5 – X – NA – 2008K	3.0
12	Win Pink L63 – X – NA – 2008K	3.0
13	NAB – 1 (W) – 2008K	3.5
14	NAB – 2 (Y) – 2008K	4.0
15	Mysore Sweet Corn – 2008K	4.5
16	JC-1 Sweet Corn – 2008K	3.0
17	Resistant check (Nithya Shree)	1.5
18	Susceptible check (219 J)	5.0

Evaluation of Maize Inbred Lines against TLB at Mandya R 2009-10

Sl. No.	Pedigree	Turcicum Leaf Blight (1 – 5 Scale)
1	NAI – 104 – # – 2009K	2.5
2	NAI – 125 – X – 2008K	2.5
3	Mysore Sweet – # – 2008K	4.0
4	NAI – 142 – # – 2008K	3.0
5	NAI – 170 (L) – # – 2008K	2.5
6	NAI – 173 – # – 2008K	3.0
7	NAI – 175 – X – 2008K	2.0
8	NAI – 178 – X – 2008K	2.0
9	HI – 55 – X – 2008K	2.5
10	CML – 247 – # – 2009K	2.0
11	NAI – 102 – # – 2008K	3.5
12	NAI – 113 – # – 2008K	3.5
13	NAI – 117 – # – 2008K	4.5
14	NAI – 123 – # – 2008K	2.5
15	NAI – 137 – # – 2008K	2.5
16	NAI – 149 – # – 2009K	3.0
17	NAI – 151 – X – 2008K	2.5
18	NAI – 152 – X – 2008K	3.0
19	NAI – 154 – X – 2008K	3.0
20	NAI – 155 – X – 2008K	2.0
219J		5.0
21	NAI – 161 – X – 2008K	3.0
22	NAI – 162 – # – 2009K	3.0
23	NAI – 163 – X – NA – 2008K	4.5
24	NAI – 165 – # – NA – 2008K	3.0
25	NAI – 167 – # – NA – 2008K	2.0
26	NAI – 171 – X – NA – 2008K	3.5
27	NAI – 176 – # – NA – 2008K	3.5
28	NAI – 177 – # – NA – 2008K	4.5
29	NAI – 181 – # – NA – 2008K	3.5
30	NAI – 185 – # – NA – 2008K	2.5
31	NAI – 194 – # – NA – 2008K	2.0
32	MAI – 112 – # – NA – 2008K	3.0
33	KUI– 1411 – # – NA – 2008K	3.0
34	KUI– 1411A – X – NA – 2008K	2.5
35	Plot – 61171 – # – NA – 2008K	1.5
36	NAI – 116 – # – NA – 2008K	3.0
37	NAI – 109 – # – 2008K	3.0
38	NAI – 127 – X – 2008K	3.5

39	NAI – 128 – # – 2008K	3.0
40	NAI – 132 – # – 2008K	2.0
219J		4.5
41	NAI – 138 – X – 2008K	3.5
42	NAI – 139 – X – 2008K	2.0
43	NAI – 143 – X – 2008K	3.0
44	NAI – 147 – X – 2008K	2.5
45	NAI – 156 – X – 2008K	3.5
46	NAI – 158 – # – 2008K	3.0
47	NAI – 160 – # – 2008K	3.5
48	NAI – 169 – # – NA – 2008K	2.5
49	NAI – 174 – # – NA – 2008K	3.5
50	NAI – 179 – # – NA – 2008K	3.5
51	NAI – 180 – # – NA – 2008K	3.0
52	NAI – 188 – X – NA – 2008K	3.5
53	NAI – 190 – # – NA – 2008K	3.0
54	NAI – 192 – # – NA – 2008K	4.0
55	NAI – 193 – # – NA – 2008K	3.5
56	NAI – 197 – # – NA – 2008K	2.0
57	NAI – 199 – # – NA – 2008K	2.5
58	NAI – 200 – X – NA – 2008K	3.5
59	NAI – 201 – # – NA – 2008K	2.5
60	NAI – 203 – # – NA – 2008K	3.0
219J		5.0
61	NAI – 204 – # – NA – 2008K	2.0
62	NAI – 206 – X – NA – 2008K	2.0
63	NAI – 207 – # – NA – 2008K	2.5
64	NAI – 208 – # – NA – 2008K	3.0
65	NAI – 209 – # – NA – 2008K	4.0
66	NAI – 212 – X – NA – 2008K	3.5
67	U – 139 – X – NA – 2008K	2.0
68	U – 170 – # – NA – 2008K	2.0
69	U – 209 – # – NA – 2008K	3.5
70	U – 295 – # – NA – 2008K	4.0
71	U – 488 – # – NA – 2008K	4.5
72	U – 536 – # – NA – 2008K	3.5
73	U – 586 – # – NA – 2008K	3.5
74	U – 298 – # – NA – 2008K	3.0
75	MAI – 105 – # – NA – 2008K	2.0
76	MAI – 110 – # – NA – 2008K	3.0
77	MAI – 112 – X – NA – 2008K	3.5
78	MAI – 114 – # – NA – 2008K	3.0

79	MAI - 121 - # - NA - 2008K	3.5
80	CM - 114 - # - NA - 2008K	3.5
219J		4.5
81	CM - 115 - # - NA - 2008K	3.0
82	CM - 117 - # - NA - 2008K	2.5
83	CM - 118 - # - NA - 2008K	2.5
84	CM - 119 - X - NA - 2008K	3.5
85	CM - 122 - # - NA - 2008K	3.0
86	CM - 123 - # - NA - 2008K	3.5
87	CM - 131 - # - NA - 2008K	3.0
88	CM - 132 - # - NA - 2008K	4.5
89	CM - 135 - # - NA - 2008K	3.0
90	CM - 137 - # - NA - 2008K	3.5
91	CM - 138 - # - NA - 2008K	3.0
92	CM - 139 - # - NA - 2008K	4.5
93	CM - 142 - X - NA - 2008K	3.0
94	CM - 145 - # - NA - 2008K	4.0
95	CM - 205 - X - NA - 2008K	3.5
96	CM - 212 - # - NA - 2008K	3.5
97	MO - 17 - # - NA - 2008K	3.0
98	CML - 27 - # - NA - 2008K	2.5
99	CML - 206 - # - NA - 2008K	2.5
100	CML - 208 - # - NA - 2008K	2.5
219J		4.0
101	CML - 247 - # - NA - 2008K	3.5
102	CML - 248 - # - NA - 2008K	2.0
103	CML - 356 - # - NA - 2008K	2.0
104	CML - 404 - # - NA - 2008K	3.5
105	CML - 407 - X - NA - 2008K	2.5
106	CML - 410 - X - NA - 2008K	2.0
107	CML - 433 - X - NA - 2008K	2.0
108	CML - 434 - X - NA - 2008K	2.5
109	CML - 438 - # - NA - 2008K	2.5
110	Plot - 61173 - # - NA - 2008K	4.5
111	Plot - 61177 - # - NA - 2008K	3.0
112	Plot - 61182 - # - NA - 2008K	2.5
113	Plot - 61185 - # - NA - 2008K	3.5
114	Plot - 61186 - # - NA - 2008K	3.0
115	HKI - 209 - X - NA - 2008K	3.0
116	V - 351 - # - NA - 2008K	4.5
117	Gen - 6014 - X - NA - 2008K	4.0
118	HKI - 287 - # - NA - 2008K	3.5
119	HKI - 488 - # - NA - 2008K	3.5
120	HKI - 577 - # - NA - 2008K	3.0
219J		4.0

121	HKI – 586 – # – NA – 2008K	3.0
122	HKI – 1040 – 4 – # – NA – 2008K	2.5
123	HKI – 1040 – 5 – # – NA – 2008K	3.5
124	HKI – 1040 – 11 – # – NA – 2008K	2.5
125	HKI – 1324 – 4 – # – NA – 2008K	2.5
126	HKI – 1532 – # – NA – 2008K	3.5
127	LM – 13 – # – NA – 2008K	2.5
128	LMP – 3 – X – NA – 2008K	2.5
129	CML – 140 – X – NA – 2008K	3.0
130	DMSC – 1 – # – NA – 2008K	3.5
131	DMSC – 3 – X – 2008K	4.0
132	DMSC – 4 – X – 2008K	4.5
133	DMSC – 6 – X – 2008K	4.5
134	DMSC – 7 – X – 2008K	4.5
135	DMSC – 8 – X – 2008K	4.5
136	DMSC – 9 – X – 2008K	4.5
137	DMSC – 14 – # – 2008K	4.5
138	DMSC – 15 – X – 2008K	4.0
139	DMSC – 16 – X – 2008K	4.5
140	DMSC – 18 – # – 2008K	4.5
219J		4.5
141	DMSC – 19 – X – 2008K	4.5
142	DMSC – 20 – # – 2008K	4.5
143	DMSC – 22 – # – 2008K	4.5
144	DMSC – 24 – X – 2008K	4.0
145	DMSC – 28 – # – 2008K	4.0
146	DMSC – 29 – # – 2008K	4.5
147	DMSC – 30 – # – 2008K	4.5
148	DMSC – 36 – # – 2008K	4.5
149	DMSC – 37 – # – 2008K	4.5
150	WINPOP – 21 – # – 2008K	4.5
151	WINPOP – 47 – # – 2008K	5.0
152	HKI – PC – 4B – # – 2008K	4.0
153	HKI – PC – 5 – # – 2008K	4.5
154	HKI – PC – 7 – # – 2008K	3.5
155	WINPOP – 26 – X – 2008K	4.0
156	WINPOP – 45 – X – 2008K	4.0
157	JCY ₃ – 7 – # – 2008K	3.0
158	JCY ₃ – 4 – 4 – 2 – 1 – b – 1 – 1 – PC – # – 2008K	3.5
159	HKI – 34 – # – 2008K	4.5
160	HKI – 164 – TLB – 4 – 7 – X – 2008K	3.0
219J		4.5
161	CML – 164 – # – 2008K	3.0
162	CML – 165 – G – 26 SE – 9C3 – X – 2008K	2.5
163	CML – 172 – X – 2008K	2.0

164	CML – 175 – X – 2008K	4.0
165	CML – 157 – X – 2008K	2.0
166	WCP – 1 – X – 2008K	4.0
167	WCP – 4 – X – 2008K	4.0
168	WCP – 5 – X – 2008K	2.5
169	WCP – 6 – # – 2008K	2.5
170	WCP – 7 – # – 2008K	3.5
171	WCP – 10 – # – 2008K	3.0
172	WCP – 15 – X – 2008K	3.5
173	HP – 35 – # – 2008K	4.0
174	HP – 34 – 6 – X – 2008K	4.5
175	HP – 34 – 11 – X – 2008K	4.5
176	CML – 430 – # – 2008K	4.5
177	CML – 431 – # – 2008K	4.0
178	CML – 59 – # – 2008K	5.0
179	CML – 73 – # – 2008K	3.5
180	CML – 424 – # – 2008K	3.5
219J		4.0
181	CML – 284 – # – 2008K	4.5
182	CML – 161 – # – 2008K	3.5
183	CML – 162 – # – 2008K	2.5
184	CML – 167 – # – 2008K	2.5
185	CML – 171 – # – 2008K	3.0
186	CML – 172 – # – 2008K	2.5
187	CML – 58 – # – 2008K	2.5
188	CML – 163 – # – 2008K	3.5
189	CML – 168 – # – 2008K	3.0
190	CML – 170 – # – 2008K	3.5
191	CML – 187 – # – 2008K	4.0
192	CML – 286 – # – 2008K	2.0
193	CML – 288 – # – 2008K	3.0
194	CML – 408 – # – 2008K	3.5
195	CML – 409 – # – 2008K	2.5
196	CML – 479 – # – 2008K	2.5
197	CML – 25 – # – 2008K	3.5
198	219 J – # – 2008K	4.5
199	NAI – 124 – # – 2008K	4.0
200	CML – 28 – # – 2008K	2.5
219J		4.5
201	CML – 30 – # – 2008K	3.0
202	CML – 31 – # – 2008K	4.5
203	CML – 410 – # – 2008K	3.0
204	CML – 27 – # – 2008K	3.5
205	CML – 291 – # – 2008K	3.5
206	CML – 293 – # – 2008K	2.5

207	CML – 411 – # – 2008K	3.5
208	CML – 452 – # – 2008K	3.0
209	CML – 32 – # – 2008K	3.5
210	CML – 217 – # – 2008K	3.5
211	CML – 425 – # – 2008K	2.5
212	CML – 426 – # – 2008K	4.0
213	CML – 113 – # – 2008K	3.0
214	CML – 130 – # – 2008K	4.5
215	CML – 323 – # – 2008K	3.0
216	CML – 324 – # – 2008K	3.0
217	CML – 112 – # – 2008K	4.0
218	CML – 41 – # – 2008K	2.5
219	CML – 412 – # – 2008K	3.5
220	CML – 496 – # – 2008K	2.0
219J		4.0
221	CML – 69 – # – 2008K	2.5
222	CML – 114 – # – 2008K	3.5
223	CML – 134 – # – 2008K	2.5
224	CML – 325 – # – 2008K	5.0
225	CML – 326 – # – 2008K	2.5
226	CML – 486 – # – 2008K	3.0
227	CML – 116 – # – 2008K	4.0
228	CML – 124 – # – 2008K	2.5
229	CML – 338 – # – 2008K	4.5
230	219 J – # – 2008K	3.5
231	CML – 164 – # – 2008K	2.5
232	CML – 165 – # – 2008K	2.0
233	CML – 50 – # – 2008K	2.5
234	CML – 52 – # – 2008K	NS
235	CML – 329 – # – 2008K	2.5
236	CML – 335 – # – 2008K	2.5
237	CML – 336 – # – 2008K	2.5
238	CML – 337 – # – 2008K	2.5
239	CML – 451 – # – 2008K	2.5
240	CML – 487 – # – 2008K	4.5
219J		4.5
241	CML – 357 – # – 2008K	3.0
242	CML – 358 – # – 2008K	2.5
243	CML – 359 – # – 2008K	3.5
244	CML – 434 – # – 2008K	4.0
245	CML – 435 – # – 2008K	4.5
246	CML – 436 – # – 2008K	5.0
247	CML – 360 – # – 2008K	2.5
248	CML – 361 – # – 2008K	2.5
249	CML – 437 – # – 2008K	2.5

250	CML – 438 – # – 2008K	2.0
251	CML – 362 – # – 2008K	2.5
252	CML – 363 – # – 2008K	3.0
253	CML – 364 – # – 2008K	3.0
254	CML – 439 – # – 2008K	4.0
255	CML – 294 – # – 2008K	3.5
256	CML – 295 – # – 2008K	3.0
257	CML – 296 – # – 2008K	3.0
258	CML – 297 – # – 2008K	3.5
259	CML – 298 – # – 2008K	2.5
260	CML – 299 – # – 2008K	3.0
219J		4.0
261	CML – 300 – # – 2008K	3.5
262	CML – 301 – # – 2008K	4.5
263	CML – 302 – # – 2008K	3.0
264	CML – 303 – # – 2008K	2.5
265	CML – 304 – # – 2008K	3.5
266	CML – 305 – # – 2008K	2.0
267	CML – 307 – # – 2008K	2.0
268	CML – 308 – # – 2008K	2.5
269	CML – 413 – # – 2008K	4.5
270	CML – 414 – # – 2008K	2.5
271	CML – 480 – # – 2008K	2.5
272	CML – 118 – # – 2008K	2.5
273	CML – 224 – # – 2008K	2.5
274	CML – 226 – # – 2008K	2.0
275	CML – 227 – # – 2008K	3.0
276	CML – 228 – # – 2008K	2.5
277	CML – 229 – # – 2008K	2.0
278	CML – 481 – # – 2008K	4.0
279	CML – 122 – # – 2008K	4.0
280	CML – 139 – # – 2008K	2.0
219J		4.5
281	(CML 165xP390Am/CML c4) – X – 2008K	3.0
282	(CLQ-RCYQ28xP390Am/CML c4) – X – 2008K	3.5
283	(CML150xCL-03618)-B-16-1-2-B-1-B-B-B – # – 2008K	3.0
284	(CLQ-RCYQ46=(CML 150xCL-03618)-B-17-2-2-BxCL-02450)-B-6-3-B-B – # – 2008K	3.5
285	(CML 161xCLQ-RCYQ31)-B-4-1-B-B – # – 2008K	3.5
286	(P79RH-133-1-2-#-#x CML-45-451)-1-7-1-B-B – # – 2008K	2.5
287	CML 433-B-6-B-B – # – 2008K	3.0
288	(CLQ-RCYQ46=(CML 150xCL-03618)-B-17-2-2-BxCL-02450)-B-6-1-B-B – # – 2008K	3.0
289	(CML 150xCLG 2501)-B-31-1-B-1-B-B-B – # – 2008K	4.0
290	219J (TLB Sus. Check) – # – 2008K	2.5

291	P31C4S5B-6-#-#-B-B-B-B-B-B-B-B - # - 2008K	4.0
292	(CML161xCML451)-B-23-1-B-B-B - # - 2008K	2.5
293	(CL-G2501xCML) - X - 2008K	3.0
294	(CML161xCML481)-Bx(CML172xCML451)-B11-2-B-B - # - 2008K	2.5
295	(CL-RCY003xP79RH-129-1-1-#-#)-1-22-1-B-B - X - 2008K	2.5
296	Pop. 446 c1 F2-346-2-B-3-6-B-B - # - 2008K	4.5
297	(CML 162 x P79RH-133-1-2-#-#)-1-4-1 x CL-RCYQ49-1-B - # - 2008K	2.5
298	(CL-RCY003 x P79RH-129-1-1-#-#)-1-34-1-B-B - # - 2008K	3.0
299	(CLQ-RCYQ44=(CML 150xCL-03618)-B-16-1-2-BxCLQ-RCYQ14=(CML 164*CML 161)-B-1-1-1-B-B-B)-B-20-1-B-B - # - 2008K	3.0
300	(P79RH-133-1-2-#-# x CL-02450)-1-48-1-B-B - # - 2008K	3.0
219J		4.5
301	(CL-RCY004/CML 161)-B-6-2-B-B - # - 2008K	3.0
302	P31C4S5B-33-#-#-11-B-B-B-B-B-B-B-B - # - 2008K	4.5
303	(CLQ-RCYQ28xP390Am/CML c4 F218-B-1-B)-B-3-3-B-B - X - 2008K	4.0
304	(CL-RCT016x(CML 165xCLQ-6203)-B-54-1-1-BB)-B-20-2-B-B - # - 2008K	3.0
305	(CML 161xCLQ-RCYQ31)-B-10-3-B-B - # - 2008K	3.0
306	CA14509-B-B-B - # - 2008K	3.5
307	(P79RH-133-1-2-#-#xCML-451)-1-23-1-B-B - # - 2008K	3.0
308	Pop.31c4S58-6-#-#-1-2-B-B-B-B-B-B1-B-B - # - 2008K	3.5
309	(CML150xCL-03618)-B-16-1-1-1-B-B-B-B-B-B - # - 2008K	3.0
310	(CML 161 x CML451)-B-18-1-B-B-B-B - # - 2008K	2.5
311	(CLQ-RCYQ31xCLQ-RCYQ35)-B-5-5-B-B - X - 2008K	2.0
312	CLQ-RCYQ40=(CML165xCLQ-6203)-B-9-1-1-B-2-B-B-B - # - 2008K	2.0
313	(CL-G2501xCL-RCW29)-B-14-1-B-2-B x CML161) -B-2-2-B-B - # - 2008K	2.5
314	CML474-B - # - 2008K	3.5
315	(P79RH-133-1-2-#-# x CL-02450)-1-34-1-B-B - # - 2008K	3.0
316	(CML 150xCLG 2501)-B-31-1-B-1-B-B-B-B - # - 2008K	2.5
317	(CML 161 x CML451)-B-18-1-B-B-B-B - # - 2008K	3.0
318	(P79RH-133-1-2-#-# x CL-02450)-1-6-1-B-B - # - 2008K	3.5
319	CMI470-B-B - # - 2008K	3.5
320	CA003134-B-B-B - # - 2008K	4.0
219J		4.0
321	(CML 161xCML451)-B-12-1-B-B - # - 2008K	2.5
322	CA00106-B-B-B - # - 2008K	3.5
323	(CL-RCY031xCLQ-S89YQ04)-B-17-1-B-B - # - 2008K	2.5
324	CML 433-B-7-B-B - # - 2008K	2.5
325	(CML161xCLQ-RCYQ31)-B-23-2-B-B - # - 2008K	3.0
326	(CL-RCY003 x P79RH-59-3-4-1-1-#-#)-1-41-1-B-B - # - 2008K	3.0
327	CML 433-B-8-B-B - # - 2008K	3.0
328	(P79RH-133-1-2-#-#xCML-451)-1-19-2-B-B - # - 2008K	2.5
329	CML426-B-B-B - # - 2008K	4.5
330	(CML 162 x P79RH-133-1-2-#-#)-2-1 x CL-RCYQ51-1-B - # - 2008K	4.5
331	CML 163-B - # - 2008K	2.5
332	(CLQ6203xP73TLC3#-74-2-6-1-5-#-#-B)-1-11-3-1-B-B - # - 2008K	3.0

333	(P73TLC3#-74-2-6-1-5-#-#BxCML 449)-1-1-2-B-B - # - 2008K	3.0
334	(P79RH-133-1-2-#-# x CML-451)-1-56-1-B-B - # - 2008K	2.5
335	(CL-RCY003 x P79RH-59-3-4-1-1-#-#)-1-46-1-B-B - # - 2008K	3.0
336	(CL-RCY003xP79RH-129-1-1-#-#)-1-35-1-B-B - # - 2008K	3.0
337	(CL G2309xP73TLC3#-74-2-6-1-5-#-#-B)-1-1-2- x RCW44-1-B - # - 2008K	3.5
338	(P390bcoC3 F191-1-1-1-4-B-B-B-B) x (P73TLC3#-115-1-4-#)-1-2-8) x RCW01)-1-66-B-B - # - 2008K	3.5
339	CA14502-B-B-B - # - 2008K	3.5
340	(CL-RCY003xP79RH-129-1-1-#-#)-1-48-1-B-B - # - 2008K	3.5
219J		4.5
341	(CML 150xCL-03618)-B-8-1-1-B-B-B-B - # - 2008K	3.0
342	CLQ-RCYQ40=(CML 165 x CLQ-6203)-B-9-1-1-B-2-B-B-B-B - # - 2008K	3.0
343	P31C4S58-41-#-#-3-B-B-B-B-B-B-B-B - # - 2008K	4.0
344	(CML 161 x CML 451)B-18-1-B-B-B - # - 2008K	4.0
345	(CLQ-RCYQ=(CML 164*CML 161)-B-1-1-1-B-B-B-BxP390Am/CML c4 F218-B-1-B)-B-1-2-B-B - # - 2008K	3.0
346	Pop.445 c1 F2-219-2-B-B-B-B - # - 2008K	3.5
347	CML 165-B-B-B-B - # - 2008K	3.0
348	(CLQ-RCYQ28xP390Am/CML c4 F218-B-1-B)-B-44-1-B-B - # - 2008K	3.0
349	P31C4S58-38-#-#-3-B-B-B-B-B-B - # - 2008K	4.5
350	(CML 161xCML451)-B-26-1-B-B-B-B - # - 2008K	3.5
351	CA03139-B-B-B - # - 2008K	3.0
352	SW92145-2EV-7-3-B-B-B-B-B-B-B-B - # - 2008K	2.5
353	(CML-162xP769RH-133-1-2-##)-2-3xCL-RCYQ51-1-B - # - 2008K	3.0
354	(CML161 x CML451)-B-26-1-B-B-B-B - # - 2008K	3.0
355	(CLQ-RCYQ28xP390Am/CML c4 F218-B-1-B)-B-6-2-B-B - # - 2008K	2.5
356	(CL-G2501xCML170)-B-24-1-1-2-B-B-B - # - 2008K	2.5
357	(P79RH-133-1-2-#-# x CL-02450)-1-45-1-B-B - # - 2008K	3.0
358	P31C4S58-23-#-#-4-B-B-B-B-B-B - # - 2008K	3.0
359	(CLQ-RCYQ46=(CML 150xCL-03618)-B-17-2-2-B x CL-RCY017)-B-23-2-B-B - # - 2008K	3.0
360	(CL-RCY003 x P79RH-129-1-1-#-#)-1-6-1-B-B - X - 2008K	3.5
219J		4.5
361	(CML 161xCLQ-RCYQ31)-B-12-2-B-B - # - 2008K	2.5
362	(CML 165 x K145)-B-14-1-B-B-B-B - # - 2008K	2.5
363	P31C4S5B-99-JMM-B-B-B-B-B-B-B-B - # - 2008K	4.0
364	P31C4S5B-33-#-#-8-B-B-B-B-B-B-B-B - # - 2008K	3.5
365	(CML 161 x CML 451)-B-26-1-B-B-B - # - 2008K	3.5
366	CML 433-B-3-B-B - # - 2008K	2.5
367	(CLQ-RCYQ31xCLQ49=(CML176xCL-G2501)-B-55-2-1-B)-B-34-1-B-B - # - 2008K	2.5
368	Pop. 446 c1 F2-323-1-B-1-B-B-B - # - 2008K	3.5
369	(CML 165 x K145)-B-14-1-B-B-B - # - 2008K	2.5
370	(CL-RCY003xP79RH-129-1-1-#-#)-1-9-1-B-B - # - 2008K	3.0
371	(P79RH-133-1-2-##xCL-02450)-1-15-1-B-B - # - 2008K	2.5

372	CML 161-B-3-B-B – # – 2008K	NG
373	(CLQ-RCY14=(CML 164*CML161)-B-1-1-1-B-B-BxP390Am/CML c4 F218-B-1-B)-B-4-2-B-B – # – 2008K	2.5
374	CML 433-B-2-B-B – # – 2008K	4.0
375	(CML 161xCLQ-RCYQ31)-B-3-6-B-B – # – 2008K	3.5
376	(P79RH-133-1-2-## x CL-02450)-1-9-2-B-B – # – 2008K	2.5
377	(CML 150x CLG 2501)-B-31-1-B-1-B-B-B-B – # – 2008K	2.5
378	CML472-B-B – # – 2008K	3.0
379	219J – # – 2008K	3.5
380	NAI-124 – # – 2008K	3.5
219J		4.0
381	(CML 150xCL-03618)-B-16-1-1-1-B-B-B-B-B – # – 2008K	2.5
382	(P79RH-133-1-2-#-#xCL-02450)-1-15-2-B-B – # – 2008K	2.5
383	(CML 161xCML 451)-B-18-2-B-B-B – # – 2008K	3.0
384	(CML 162 x P79RH-133-1-2-#-#)-1-4-1xCL-RCYQ49-2-B – # – 2008K	3.0
385	Pop.31C4S5B-85-#-#-1-2-B-B-B-B-B-B2-B-B – # – 2008K	2.5
386	(CML 150xCL-03618)-B-11-1-1-1-B-B-B – # – 2008K	3.0
387	(CLQ-RCYQ28xP390Am/CML c4 F218-B-1-B)-B-43-1-B-B – # – 2008K	2.5
388	(CML 150xCL-03618)-B-16-1-1-1-B-B-B-B-B – # – 2008K	3.0
219J		4.0

Table 4 Meteorological data (Monthly average) Rabi 2009-10

S.N	Station Name	Month	Temperature		Rainfall of month (mm)	R.H % Min	R.H % Max	Sunshine Hrs.
			Min (°C)	Max (°C)				
1.	Mandya	September	20.5	30.0	131.2	52.0	91.0	5.9
		October	18.8	31.0	47.6	49.0	91.0	7.3
		November	19.2	30.9	62.0	50.0	91.0	5.6
		December	17.7	29.5	26.8	48.0	91.0	4.7
		January	15.9	30.3	-	42.0	90.0	7.7
		February	16.8	32.9	-	35.0	90.5	8.6
		March	19.5	35.7	7.8	34.0	91.0	8.4
2.	Coimbatore	December	18.0	40.0		28.0	93.0	-
		January	18.0	42.0	0.0	22.0	94.0	-
		February	20.0	42.0	0.0	25.0	83.0	-
		March	17.8	37.3	0.0	09.3	91.0	