Annual Progress Report

Rabi Maize

2013-14

All India Coordinated Research Project on Maize

ICAR-Indian Institute of Maize Research

Pusa Campus, New Delhi-110 012, India

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Director : Dr. O.P. Yadav

Compilation : Dr. Bhupender Kumar
Dr. Chikkappa G.K.
Dr. A.K. Singh
Dr. C.M. Parihar
Dr. S.L. Jat
Dr. P. Kumar
Dr. Meena Shekhar
Dr. K.S. Hooda
Dr. K.P. Singh

Contribution : IIMR and AICRP on Maize

Printed and published by Director, Indian Institute of Maize Research, Pusa Campus, New Delhi-110 012 (India)
Ph: +91-11-25841805, 25842372, 25849725 Fax: 91-11-25848195 Email: pdmaize@gmail.com

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Research Staff of AICRP on Maize

Maize Researchers(ICAR & SAUs)

S. No.	Name	Designation	Discipline	Email	Mobile
Indian Institute of Maize Research, Pusa Campus, New Delhi-110012 Ph. +91-11-25841805, 25842372, 25849725 Fax.+91-11-25848195 Website: www.iimr.res.in E-mail: pdmaize@gmail.com					
1.	Dr. O.P. Yadav	Director	Plant Breeding	pdmaize@gmail.com	+91-9868231805
2.	Dr. Pradyumn Kumar	Pr. Investigator	Entomology	pradyumn.kumar@gmail.com	+91-9868112000
3.	Dr. Aditya K. Singh	Pr. Investigator	Agronomy	adityajadon1409@gmail.com	+91-8447292164
4.	Dr. K.S. Hooda	Pr. Investigator	Plant Pathology	hoodaks@gmail.com	+91-9958520601
5.	Dr. Ashok Kumar	Pr. Scientist	Agronomy	ashok_agro@iari.res.in	+91-9868141488
6.	Dr. Jyoti Kaul	Pr. Scientist	Plant Breeding	kauljyoti1@yahoo.co.in	+91-9350588827
7.	Dr. Ishwar Singh	Pr. Scientist	Plant Physiology	isingh.dmr@gmail.com	+91-9968449332
8.	Dr. Meena Shekhar	Pr. Scientist	Plant Pathology	shekhar.meena@gmail.com	+91-9968010340
9.	Dr. M.L. Jat	Sr. Scientist	Agronomy		On deputation
10.	Dr. K.P. Singh	Sr. Scientist	Computer Application	kpskhokhar@hotmail.com	+91-9868028572
11.	Dr. Nirupma Singh	Scientist	Plant Breeding	nirupmasingh@rediffmail.com	+91-9868822174
12.	Dr. C.M. Parihar	Scientist	Agronomy	pariharcm@gmail.com	+91-9013172214
13.	Ms. Suby S.B.	Scientist	Entomology	subysb@gmail.com	+91-9873729337
14.	Mr. Manivannan A.	Scientist	Genetics	mani_gene@rediffmail.com	+91-8826233329
15.	Dr. Chikkappa G. K.	Scientist	Plant Breeding	chikkappagk@gmail.com	+91-9868065524
16.	Dr. R. Ambika Rajendran	Scientist	Plant Breeding	rambikarajendran@gmail.com	+91-9958682271
17.	Dr. Shankar Lal Jat	Scientist	Agronomy	sliari@gmail.com	+91-9953009711
18.	Ms. Sapna	Scientist	Biochemistry	singh.sapna06@gmail.com	On study leave
19.	Dr. Bhupender Kumar	Scientist	Plant Breeding	bhupender.iari@gmail.com	+91-9555195169
20.	Dr. Pranjal Yadava	Scientist	Agri Biotechnology	pranjal.yadava@gmail.com	+91-9899426498
21.	Ms. Avni	Scientist	Agri Biotechnology	avni18earth@gmail.com	+91-9466280190
Maize Winter Nursery, Rajendra Nagar, Hyderabad-500030. Tel. 040-24018457, Fax. 040-24016810					
1.	Dr. J.C. Sekhar	Pr. Scientist & I/c	Entomology	jcswnc@rediffmail.com	+91-9908600340
2.	Dr. Sunil Neelam	Sr. Scientist	Plant Breeding	sunilneelam9@gmail.com	-91-9848283645
3.	Dr. Laxmi Saujanya	Scientist	Entomology	soujanyak.scientist@gmail.com	+91-8008607373
Regional Maize Research & Seed Production Centre Kushmahout Farm, Begusarai (Bihar) Tel. 06243-215254					
1.	Dr. S.B. Singh	Pr. Scientist & I/c	Plant Breeding	sbsingh@dmr.res.in singhsb1971@rediffmail.com	+91-9419289916 +91-9534660594
DMR Unit, PAU Ludhiana					
1.	Dr. Vinay Mahajan	Pr. Scientist	Plant Breeding	vinmaha9@gmail.com	+91-9999237696
2.	Dr. Dharam Paul	Sr. Scientist	Biochemistry	chaudharydp@gmail.com	+91-8728900427

S. No.	Name	Designation	Discipline	Email	Mobile
3.	Dr. Ramesh Kumar	Sr. Scientist	Plant Breeding	rk_phagna@rediffmail.com	+91-8447352547
4.	Dr. Avinash Singode	Scientist	Plant Breeding	avinash.singode@gmail.com	+91-9968817793
5.	Mr. Vishal Singh	Scientist	Plant Breeding	vishaliari.singh@gmail.com	+91-9953303479
6.	Mr. Yathish K.R.	Scientist	Genetics	yathi.chinni@gmail.com	+91-8130447123
7.	Dr. Ganapati Mukri	Scientist	Plant Breeding	ganapati4121@gmail.com	+91-9582461538
8.	Mr. Abhijit Kumar Das	Scientist	Genetics	das.myself@gmail.com	On study leave

AICRP on Maize Centre

AICRP on Maize centres

S.No.	Name	Designation	Discipline	Email	Mobile
	1. Almora (Uttarakhand) Crop Improvement Division, VPKAS Almora, Uttrakhand –263601 Phone(O): 05962-231679 Fax (O): 05962-231539				
1	Dr. RK Khulbe	Sr. Scientist & I/c	Plant Breeding	rkkhulbe@gmail.com	+91-9411324346
2	Dr. Dibakar Mahanta	Scientist	Agronomy	dibakar_mahanta@yahoo.com	+91-9456108508
3	Dr. Chandrashekara C.	Scientist	Plant Pathology	chandrupath@gmail.com	+91-9557935569
	2. Ambikapur (Chattisgarh) RMD College of Agriculture and Research Station, Ajirma, Ambikapur, Dis. Surguja-497001 (Chattisgarh) Phone(O): 07774232815 Fax(O):07774232986				
1	Dr. S.K. Sinha	Asst. Breeder & I/c	Plant Breeding	santoksinha@yahoo.co.in	+91-9424250671
2	Dr. A.K. Sinha	Asst. Agronomist	Agronomy	amitsinhaagri@yahoo.co.in	+91-9425581765
	3. Arabhavi (Karnataka) Agriculture Research Station, Arbhavi-591306, Belgaum (Karnataka) Phone(O): 08332293189 Fax (O):08332284408 Email: ars_arabhavi@rediffmail.com				
1	Dr. Mruthunjaya C. Wali	Sr. Breeder & I/c	Plant Breeding	mcwa_61@rediffmail.com	+91-9480432624
2	Dr. R.M. Kachapur	Asst. Breeder	Plant Breeding	rajashekhar.kachapur@gmail.com	+91-9481854442
3	Dr. S.S. Hallikeri	Asst. Agronomist	Agronomy	hallsuasd@rediffmail.com	+91-9449801645
4	Dr. I.K. Kalappanavar	Asst. Pathologist	Plant Pathology	ikkyashu@gmail.com	+91-9449642935
	4. Bajaura (H.P.) CSKHPKV, HAREC, Bajaura, Distt. Kullu – 175 125 (Himachal Pradesh) Phone (O): 01905287235 Fax (O): 01905287236				
1	Dr. S.K. Guleria	Professor	Plant Breeding	skg0612@rediffmail.com	+91-9418118538
2	Dr. Vinod Sharma	Pr. Scientist	Agronomy	vinodpatadhi@gmail.com	+91-9418139639
3	Dr. R. Devlash	Asst. Pathologist	Plant Pathology	rdevlash@yahoo.in	+91-9418482888
	5. Bahraich (U.P.) Crop Research Station, NDUA&T, Bahraich-271801(UP) Email: rk_brh@rediffmail.com				
1	Dr. M.V. Singh	Agronomist	Agronomy	mvsingh.brh2013@gmail.com	+91-9452760902
	6. Barapani (Meghalaya)				

S.No.	Name	Designation	Discipline	Email	Mobile
	ICAR Research Complex for NEH Region, Umaim Meghalaya Fax (O): 03642570355				
1	Dr. A. Pattanayak	Pr. Scientist	Plant Breeding	apat.icarneh@gmail.com	+91- 9436118903
2	Dr. J. P. Tyagi	Sr. Scientist	Plant Breeding	jppusa@yahoo.com	+91-8974609163
3.	Dr. Pankaj Baiswar	Scientist	Plant Pathology	pbaiswar@yahoo.com	+919436107733
	7. Banswara (Rajasthan) Agricultural Research Station, Borwat Farm, Dahot Road, Banswara (Rajasthan), Pin -327001 Phone (O): 02962260070 Fax (O): 02962260013				
1	Dr. Promod Rokadia	Assoc. Prof. & I/c	Plant Breeding	rokadiap@gmail.com	+91- 9413626183
2	Dr. Hargilas	Asst. Agronomist	Agronomy	hargilasm73@gmail.com	+91-9413044271
	8. Bhubaneswar (Odisha) Department of Plant Breeding & Genetic , College of Agriculture, OUAT, Bhubaneswar-751003,Odisha Phone (O): 0674-2397818, 2397919 & 2397669 Ext-140 Fax (O): 0674-2397780				
1	Mr. Digbijaya Swain	Breeder & I/c	Plant Breeding	oicmaizeouat@gmail.com	+91-9437628154
2	Ms. Pramila Naik	Jr. Agronomist	Agronomy	pnayak660@gmail.com	+91-9437326993
	9. Chhindwara (M.P.) JNKVV, Zonal Agriculture Research Station, Chhindwara-480001 (M.P.) Phone (O): 07162-225560/225089				
1	Dr. R.K. Reddy	Station I/c	Plant Breeding	-	+91-9425831964
2	Dr. V.K. Paradkar	Sr. Agronomist	Agronomy	paradkarvkp@yahoo.co.in	+91-9425461748
	10. Coimbatore (Tamil Nadu) Department of Millets, Centre for Plant Breeding & Genetics, TNAU, Coimbatore-641003. Phone(O):04222450507 Fax(O): 04222450507				
1	Dr. G.Nallathambi	Breeder & I/c	Plant Breeding	nthambi2002@yahoo.co.in	+91-9486913279
2	Dr. P. RenukaDevi	Asst. Pathologist	Plant Pathology	renucbe88@yahoo.com	+919442007218
	11. Delhi (IARI) Indian Agriculture Research Institute Pusa, New Delhi -12 Phone (O): 011-25841077				
1	Dr. R.N. Gadag	Pr. Scientist	Plant Breeding	rn_gadag@yahoo.com	+91-9810702212
2	Dr. T. Nepolean	Sr. Scientist	Plant Breeding	tnepolean@gmail.com	+91-8800707249
3	Dr. Firoz Hossain	Sr.Scientist	Plant Breeding	fh_gpb@yahoo.com	+91-9811727896
4	Dr. Vijay Pooniya	Scientist	Agronomy	vpooniya@gmail.com	+91-7838205149
5	Dr. Robin Gogoi	Pr. Scientist	Plant Pathology	r.gogoi@rediffmail.com	+91-9868148903
6	Dr. Priyaranjan K	Sr. Scientist	Seed Sci Technology	ourprK@gmail.com	+91-9472311711
8	Dr. Shailendra Kumar Jha	Scientist	Plant Breeding	Jhashail78@gmail.com	+91-9868574102
7	Dr. M. Vignesh	Scientist	Genetics	pmvignesh@yahoo.co.in	+91-8802713269
	12. Dholi (Bihar) Tirhut College of Agriculture, Dholi, Bihar - 843105 Phone (O): 0621-2293227				
1	Dr. Mritunjay Kumar	Agronomist & I/c	Agronomy		+91-9430891658
2	Dr. Ajay Kumar	Asst. Breeder	Plant Breeding	drajaymuz@rediffmail.com	+91-9430459955

S.No.	Name	Designation	Discipline	Email	Mobile
3	Dr. Ashish Narayan	Asst. Breeder	Plant Breeding	narayanashish@rediffmail.com	+91-9430259391
4	Dr.(Ms.) Kavita Kumari	Asst. Physiologist	Plant Physiology	kavita_physiology@yahoo.com	+91-9430658636
5	Mr. Ashok Kumar	Entomologist	Entomology		
6	Dr. Phoolchand	Pathologist	Plant Pathology	Phoolchand1964@gmail.com	+919661450698
7	Dr. (Ms.) Usha Singh	Nutritionist	Nutrition	usha_pusa@yahoo.co.in	+91-9431897515
	13. Godhra (Gujarat) Main Maize Research Station, Anand Agricultural University, Godhra, Panchmahals - 389 001 (Gujarat) Phone (O): 02672265852 Fax (O): 02672265237 Email: rsmaize@gmail.com				
1	Dr. S.M. Khanorkar	Sr. Breeder & I/c	Plant Breeding	subhkhanorkar@yahoo.com	+91-9904238359
2	Dr. P. Parmar	Asst. Breeder	Plant Breeding	pkparmar7907@gmail.com	+91-7698475002
3	Mr. K.H. Patel	Asst. Agronomist	Agronomy	khpatel1562@gmail.com	+91-9428132188
4	Dr. S.K. Singh	Asstt. Pathologist	Pathology	singh.sk30@gmail.com	+91-9427313141
	14. Gossaigaon (Asom) Regional Agricultural Research Station, AAU, Gossaigaon, Telipara Dist. Kokrajhar – 783360 (Asom) Phone(O):03669-292707 Email: rsrgossaigaon@gmail.com				
1	Dr Prabalee Sharma	Jr Scientist	Breeder	prabalee@rediffmail.com	+91-9954451020
2	Dr Binod Kalita	Jr Scientist	Agronomy	binod_kalita05@rediff.com	+91-9435169659
	15. Hyderabad (A.P.) Maize Research Centre, ARI, ANGRAU, Rajendra Nagar, Hyderabad - 500 030 Phone (O): 040-24018447 Fax (O):040-24016810				
1	Dr. R. Ranga Reddy	Pr. Scientist & I/c	Plant Pathology	reddy_3r@yahoo.com	+91-8008123671
2	Dr. T. Pradeep	Pr. Scientist	Plant Breeding	tekalepradeep@yahoo.co.in	+91-9441374391
3	Dr. V. Narsimha Reddy	Sr. Scientist	Plant Breeding	narsimhareddy_vanga@yahoo.com	+91-9440302931
4	Ms. V. Swarna Latha	Scientist	Plant Breeding	vswarnalatha1980@rediffmail.com	+91-9885042831
5	Dr. (Ms.) D. Sreelatha	Scientist	Agronomy	lathadogga@gmail.com	+91-9849379930
6	Dr. M. Lavakumar Reddy	Pr. Scientist	Entomology	mlkreddy2003@yahoo.co.in	+91-7675896677
7	Dr.Y.Bharathi	Scientist	Plant Breeding	bharathi_yerasi@yahoo.co.in	+91-9948467144
	16. Jhabua (M.P.) Zonal Agricultural Research Station, RVSKVV, Jhabua 457661 (M.P.) Phone (O):07392-244367 Fax (O): 07392-244367				
1	Dr. Mahender Singh	Subject Matter Specialist	Agronomy	msjadon2000@rediffmail.com	+91-9993970987
2	Dr. R.K. Yadav	Subject Matter Specialist	Plant Pathology	rkyadavrca@rediffmail.com	+91-9425711222
	17. Kangra (H.P.) Shivalik Agricultural Research and Extension Centre, Kangra-176001, CSKHPKV (HP) Phone (O):01892-265685 Fax (O):01892-265685				
1	Dr. Anil Kumar	Agronomist & I/c	Agronomy	anil.an69@rediffmail.com	+91-9418111915
2	Dr. Uttam Chandel	Asst. Breeder	Plant Breeding	uttam_chandel@yahoo.co.in	+91-9459200240
3	Dr. Ashwani Kumar (Dhaulakuan)	Pr. Scientist	Plant Pathology	bunchy@rediffmail.com	+91-9816179192

S.No.	Name	Designation	Discipline	Email	Mobile
	18. Kanpur (U.P.) Department of genetics and Plant Breeding, C. S. Azad University of Ag. & Tech. , Kanpur-208002 (U.P.) Fax(O): 0512-2535808 Phone (O): 0512-2534165 Director Res.-0512-2534055				
1	Dr. K.C. Arya	Agronomist & I/c	Agronomy	dr.keshav_arya@rediffmail.com	+91-9415161749
2	Dr. H.C. Singh	Maize Breeder	Plant Breeding	harishmaize@gmail.com	+91-9450131209
3	Dr. Lalta Prasad	Asst. Maize Breeder	Plant Breeding	-	+91-9839018544
	19. Karimnagar (A.P.) Agricultural Research Station, Karimnagar, ANGRAU (AP) - 505 001 Phone(O)08782000605 Fax (O) 08782265512 Email: ars.karimnagar@yahoo.com				
1	Dr. (Ms.) G. Manju Latha	Sr. Scientist	Agronomy	drgmanjulata@gmail.com	+91-9440415134
2	Smt. D. Sravani	Scientist & I/C	Plant Breeding	dsravanireddy@gmail.com	+91-8464943732
3	Smt.K.Sumalini	Scientist	Plant Breeding	sumalinikatragadda@gmail.com	+91-8121001405
4	Dr.E.Rajanikanth	Scientist	Agronomy	eligetiraj@yahoo.com	+91-9908698043
	20. Karnal (Haryana) CCS HAU RRS Uchani, Karnal- 132001 Phone (O): 01842667857 Fax(O): 01842267499 Email: karnalmaize@gmail.com				
1	Dr. M.C. Kamboj	Asst. Breeder	Plant Breeding	kambojmehar@gmail.com	+91-9813173105
2	Dr. Vinod Kumar	Pathologist	Plant Pathology	vmexcel@rediffmail.com	+91-8295100390
3	Dr. Jitender Kumar	Agronomist	Agronomy	Jitender005@gmail.com	+91-9717136360
4	Dr. Maha Singh	Entomologist	Entomology	jaglanms@gmail.com	+91-9416218761
	21. Kolhapur (Maharashtra) Maharashtra Shahu Agricultural School Campus, Line Bazar Kasba-Bawada, Kolhapur-4166003 (Maharashtra) Phone (O): 02312601115 Fax (O):02312601115 Email: mipkop@yahoo.com				
1	Prof. S.R. Kulkarni	Breeder & I/c	Plant Breeding	kulkarnisanjay1956@gmail.com	+91-9850042543
2	Dr. U.M. Borle	Asst. Breeder	Plant Breeding	ulhasborle@yahoo.com	+91-8275450066
3	I/c. Maize Agronomist	Asst. Agronomist	Agronomy (Vacant)		
4	Mr. S.S. Mahadik	Asst. Entomologist	Entomology	sushants.mahadik@gmail.com	+91-7588577121
	22. Ludhiana (Punjab) Maize Section, Deptt. of Plant Breeding, Genetics & Biotech, P.A. U. Ludhiana-141004 (Punjab) 0161-2401960 (Ext 437) Fax (O) 01612409891 Email: maizepau@hotmail.com				
1.	Dr. Maninder Singh Grewal	Senior Maize Breeder	Plant Breeding	manindermaize@yahoo.in	+91-9914766096
2.	Dr. Jasbir Singh Chawla	Senior Maize Breeder & Incharge	Plant Breeding	chawlamaize@yahoo.co.in	+91-9872660990
3.	Dr. Gurjit Kaur Gill	Maize Breeder	Plant Breeding	gillmaize@yahoo.co.in	+91-8146902244
4.	Dr. Mahesh Kumar	Asst. Agronomist	Agronomy	maheshkumarvats@yahoo.co.in	+91-9478627910

S.No.	Name	Designation	Discipline	Email	Mobile
5.	Dr. Harleen Kaur	Asst. Pathologist	Plant Pathology	harleenkaur@pau.edu	+91-9501080050
6.	Dr. Ravinder Kumar	Asst. Entomologist	Entomology	ravi1064@gmail.com	+91-9872887311
7.	Dr. Jawala Jindal	Asst. Entomologist	Entomology	jindal_ento@pau.edu	+91-9988401521
8.	Dr. Tosh Garg	Asstt. Plant Breeder	Plant Breeding	gargtosh@gmail.com	+91-9041504496
	23. Mandya (Karnataka) Zonal Agricultural Research Station, V.C. Farm, Mandya 571405 (Karnataka) Phone (O): 08232-277960 & 277955 Fax (O): 08232-277954				
1	Dr. T.A. Sreerama Setty	Professor & I/c	Plant Pathology	tas.setty@gmail.com	+91-9449177138
2	Dr. Puttaramanaik	Breeder	Plant Breeding	putnic_vcf@rediffmail.com	+91-9449081431
3	Dr. N. Mallikarjuna	Maize Pathologist	Plant Pathology	malliksmsf@gmail.com	+91-9986600221
4	Ms. D. Shobha	Asst. Nutritionist	Food Sci. and Nutrition	shobhagd@rediffmail.com	+91-9880223241
	24. Pantnagar (Uttarakhand) Department of Plant Pathology, College of Agriculture, G. B. Pant University of Agriculture & Technology, Pantnagar- 263145 (Uttrakhand) Phone (O): 05944235473 Fax (O): 05944235473/233473				
1	Dr. Pradeep Kumar	Station I/c	Plant Pathology	pradeepguptaachieve@gmail.com	+91-9412121099
2	Dr. S.S. Verma	Sr. Maize Breeder	Plant Breeding	sitarverma@yahoo.com	+91-9412120691
3	Dr. N.K. Singh	Sr. Maize Breeder	Plant Breeding	narendraksingh2@gmail.com	+91-9412909645
4	Dr. R.P. Singh	Pathologist	Plant Pathology		
5	Dr. Amit Bhatnagar	Asst. Agronomist	Agronomy	bhatnagaramit75@gmail.com	+91-9411159845
6	Dr. Veer Singh	Asst. Soil Scientist	Soil Science	veer1969_singh@yahoo.co.in	+91-9837649644
	25. Ranchi (Jharkhand) Dept. of Plant Breeding & Genetics, BAU, Kanke, Ranchi- 834 006 (Jharkhand)				
1	Dr. (Ms.) M. Chakraborty	Asst. Breeder	Plant Breeding	manigopa291061@yahoo.com	+91-9431594011
2	Dr. C.S. Singh	Asst. Agronomist	Agronomy	cssingh15@gmail.com	+91-9431314755
3	Dr. H.C. Lal	Jr. Pathologist	Plant Pathology	hclal_bau@rediffmail.com	+91-9431901395
	26. Srinagar (J&K) KD Research Station, S.K.U.A.&T., Post Box.905, Srinagar-190001 (J&K) Phone (O):0194-2305084 Fax (O):0194-2305084				
1	Dr. Zahoor Ahmed Dar	Sr. Scientist	Plant Breeding	zahoorpbg@gmail.com	+91-9419048821
2	Dr. Ajaz Ahmad Lone	Jr. Scientist	Plant Breeding	ajaz999@gmail.com	+91-9419783406
3	Dr. Bashir Ahmad Alaie	Sr. Scientist	Agronomy	baelahi@gmail.com	+91-9419461009
	27. Udhampur (J&K) Maize Research Centre (AICRP), SKUAST-JAMMU, Sansoo Rakh, Behind 71 Sub Area Officers Mess, V.P.O. Garhi, Udhampur, J&K - 182121				
1	Dr. R.S. Sudan	Sr. Scientist & I/c	Plant Breeding	rssudanudh@gmail.com	+91-9419159975
2	Dr. Akhil Verma	Agronomist	Agronomy	akhilverma1974@gmail.com	On study leave

S.No.	Name	Designation	Discipline	Email	Mobile
	28. Udaipur (Rajasthan) MPUA&T, RCA, Udaipur-313001, Rajasthan Phone (O): 0294-2423119 Fax (O): 0294-2420447				
1	Dr. R.B. Dubey	Sr. Breeder & I/c	Plant Breeding	dubey_rb2006@yahoo.co.in	+91-9694383617
2	Dr. Amit Dadheech	Asst. Breeder	Plant Breeding	amitrca2004@yahoo.com	+91-9530374282
3	Dr. Dilip Singh	Sr. Agronomist	Agronomy	dilipagron@gmail.com	+91-9414736598
4	Dr. B.L. Baheti	Sr. Nematologist	Nematology	blbaheti@gmail.com	+91-9413024863
5	Dr. S.S. Sharma	Sr. Pathologist	Plant Pathology	sharmass112@gmail.com	+91-9414168590
6	Dr. N.L. Meena	Asst. Pathologist	Plant Pathology	nlmeena79@yahoo.in	+91- 8875391853
7	Dr. Manoj Mehla	Entomologist	Entomology	mkmahla@yahoo.co.in	+91-9829219205
	29. Vagarai (Tamil Nadu) Maize Research Station, Tamil Nadu Agricultural University, Vagarai – 624613 Phone (O):04545 – 292900/ 267373 Email: arsvagarai@tnau.ac.in				
1	Dr. K.N. Ganesan	Prof.	Plant Breeding	knganesan71@gmail.com	
2	Dr. R. Karthikeyan	Asst. Prof.	Agronomy	agrikarthi@yahoo.co.in	+91-9488491939
	30. Varanasi (U.P.) Institute of Agricultural Sciences, Banaras Hindu University, Varanasi-221 005 UP Phone (O): 0542-6702393 ,0542-6702559 Fax (O): 0542-2369971, 0542-2368993				
1	Dr. J.P. Shahi	Prof. cum Sr. Breeder	Plant Breeding	jpshahi1@gmail.com; jpshahi@bhu.ac.in	+91-9415644490
2	Dr. K. Srivastava	Assoc. Prof.	Plant Breeding	karstav@yahoo.com	+91-9450388636
3	Dr. R.N. Singh	Prof. -Sr. Agronomist	Agronomy	rnsingh.agro@rediffmail.com	+91-9792795906
31. IARI Regional Centre,Dharwad-580 005, Karnataka					
1	Dr. Jayant S. Bhat	Senior Scientist	Genetics	jsbhat73@gmail.com	+919483765647
32. Bhiloda Maize Research Station, S.D.Agricultural University, Bhiloda-383 245 District : Aravalli (Guj) Phone(O): 02771 232720					
1.	Dr. J.M. Patel	Asst Breeder	Breeding	dr.jmpatel.63@gmail.com	+91- 9726482455

ENTRIES TESTED IN RABI 2013-14

TRIAL NO. 1 : IVT - LATE
MATURITY : LATE
YEAR : 2013-2014
SEASON : RABI
NO. OF ROWS : 2
ROW LENGTH (METRE) : 4
NO. OF REPLICATIONS : 3
NO. OF LOCATIONS : 18
LOCATIONS: LUDHIANA, KARNAL, PANTNAGAR, KANPUR, BAHRAICH
DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR
MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA, MIDNAPUR

				REPLICATIONS		
E.No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**R III**
1	CP-808	DMR 101	CP Seeds Pvt Ltd.	1029	1044	1066
2	CP-838	DMR 102	CP Seeds Pvt Ltd.	1011	1049	1079
3	CP-999	DMR 103	CP Seeds Pvt Ltd.	1019	1056	1060
4	CP-111	DMR 104	CP Seeds Pvt Ltd.	1008	1034	1071
5	CP-333	DMR 105	CP Seeds Pvt Ltd.	1009	1039	1061
6	GK 3118	DMR 106	Ganga Kveri Seeds Pvt. Ltd.	1015	1030	1072
7	GK 3155	DMR 107	Ganga Kveri Seeds Pvt. Ltd.	1003	1050	1062
8	HTMH 5108	DMR 108	Hytech Seeds Pvt. Ltd.	1010	1040	1087
9	HTMH 5202	DMR 109	Hytech Seeds Pvt. Ltd.	1005	1058	1078
10	KH-2192	DMR 110	Kanchan Ganga Seed Pvt.Ltd.	1021	1046	1086
11	KH-3021	DMR 111	Kanchan Ganga Seed Pvt.Ltd.	1017	1045	1083
12	KMH-1411	DMR 112	Kaveri Seed Compny Ltd.	1001	1041	1074
13	IM 8222	DMR 113	Monsanto India Ltd	1007	1053	1084
14	IM 8226	DMR 114	Monsanto India Ltd	1024	1043	1059
15	X35F880	DMR 115	Pioneer Oversease Corporation	1002	1042	1064
16	Rasi 864	DMR 116	Rasi Seeds Pvt.Ltd.	1016	1054	1063
17	Rasi 393	DMR 117	Rasi Seeds Pvt.Ltd.	1028	1036	1076
18	Rasi 950	DMR 118	Rasi Seeds Pvt.Ltd.	1020	1038	1069
19	VEH 13-1	DMR 119	BHU Varanasi	1025	1055	1082
20	CSM1	DMR 120	Division of Genetics,IARI,New Delhi	1022	1047	1065
21	DMRH1302	DMR 121	DMR, New Delhi-12	1018	1051	1085
22	DMRH1306	DMR 122	DMR, New Delhi-12	1014	1057	1077
23	DMRH 1308	DMR 123	DMR, New Delhi-12	1004	1033	1067
24	JH 248	DMR 124	PAU,Ludhiana	1006	1032	1068
25	JH358	DMR 125	PAU,Ludhiana	1012	1052	1080
26	JH412	DMR 126	PAU,Ludhiana	1013	1031	1075
27	Buland (C)	DMR 127	PAU, Ludhiana	1026	1035	1081
28	Seed Tech2324 (C)	DMR 128	Bisco Bioscience Crop Pvt Ltd.	1027	1037	1073
29	Bio 9681 (C)	DMR 129	Bio Seed India Pvt.Ltd.	1023	1048	1070

TRIAL NO. 2 : IVT - MEDIUM
MATURITY : MEDIUM
YEAR : 2013-2014
SEASON : RABI
NO. OF ROWS : 2
ROW LENGTH (METRE) : 4
NO. OF REPLICATIONS : 3
NO. OF LOCATIONS : 17
LOCATIONS: LUDHIANA, KARNAL, PANTNAGAR, KANPUR, BAHRAICH
DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR
MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

				REPLICATIONS		
E.No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**R III**
1	Bio 9662	DMR 201	Bio Seed India Pvt.Ltd.	2012	2040	2069
2	BL 798	DMR 202	Bisco Bioscience Crop Pvt Ltd.	2021	2050	2059
3	BL 900	DMR 203	Bisco Bioscience Crop Pvt Ltd.	2007	2029	2074
4	BL 147	DMR 204	Bisco Bioscience Crop Pvt Ltd.	2001	2036	2052
5	KH-517	DMR 205	Kanchan Ganga Seed Pvt.Ltd.	2025	2033	2065
6	IM 8303	DMR 206	Monsanto India Ltd	2013	2035	2051
7	IM 8189	DMR 207	Monsanto India Ltd	2006	2034	2073
8	MMH11-12-13	DMR 208	TCA Dholi	2015	2042	2070
9	MMH12-12-13	DMR 209	TCA Dholi	2018	2043	2060
10	MMH-13-12-13	DMR 210	TCA Dholi	2017	2048	2071
11	MMH-14-12-13	DMR 211	TCA Dholi	2023	2031	2053
12	MMH-15-12-13	DMR 212	TCA Dholi	2019	2037	2054
13	GPS Sarayu	DMR 213	GPS Biotech Pvt.Ltd.	2011	2041	2057
14	GPS Maina	DMR 214	GPS Biotech Pvt.Ltd.	2003	2038	2063
15	DMRH 1302	DMR 215	DMR, New Delhi-12	2020	2028	2075
16	CSM2	DMR 216	Division of Genetics,IARI,New Delhi	2008	2039	2058
17	DMRH1301	DMR 217	DMR, New Delhi-12	2010	2049	2066
18	VaMH 08015	DMR 218	TNAU,Vagarai	2009	2027	2061
19	DMRH1303	DMR 219	DMR, New Delhi-12	2004	2030	2072
20	DMRH1305	DMR 220	DMR, New Delhi-12	2024	2047	2062
21	DMRH1306	DMR 221	DMR, New Delhi-12	2005	2045	2064
22	DMRH1307	DMR 222	DMR, New Delhi-12	2002	2044	2055
23	AH1314	DMR 223	IARI, DR GADAG	2022	2026	2068
24	AH1315	DMR 224	IARI, DR GADAG	2016	2032	2056
25	Bio9637 (C)	DMR 225	Bio Seed India Pvt.Ltd.	2014	2046	2067

TRIAL NO. 3 : IVT - Early
MATURITY : EARLY
YEAR : 2013-2014
SEASON : RABI
NO. OF ROWS : 2
ROW LENGTH (METRE) : 4
NO. OF REPLICATIONS : 3
NO. OF LOCATIONS : 17
LOCATIONS: LUDHIANA, KARNAL, PANTNAGAR, KANPUR, BAHRAICH
DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR
MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

				REPLICATIONS		
E.No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**R III**
1	B-52	DMR301	Kanchan Ganga Seeds Pvt. Ltd.	3002	3028	3033
2	NMH-51	DMR302	Nirmal Seeds Pvt. Ltd.	3009	3024	3041
3	IM 8013	DMR303	Monsanto India Ltd.	3004	3022	3038
4	IL 8033	DMR304	Monsanto India Ltd.	3007	3016	3032
5	IL 8235	DMR305	Monsanto India Ltd.	3005	3025	3037
6	IH-072	DMR306	MRC Godhra	3012	3018	3035
7	IH-061	DMR307	MRC Godhra	3013	3020	3040
8	IHQ-091	DMR308	MRC Godhra	3010	3026	3042
9	DMRH1303	DMR309	DMR, New Delhi-12	3014	3019	3036
10	DMRH1304	DMR310	DMR, New Delhi-13	3001	3027	3031
11	DMRH1305	DMR311	DMR, New Delhi-14	3006	3023	3039
12	AH1312	DMR312	IARI, DR GADAG	3011	3017	3029
13	AH1313	DMR313	IARI, DR GADAG	3008	3015	3030
14	Prakash (C)	DMR314	PAU, Ludhiana	3003	3021	3034

TRIAL NO. 4	:	AVT I - Late
MATURITY	:	LATE
YEAR	:	2013-2014
SEASON	:	RABI
NO. OF ROWS	:	4
ROW LENGTH (METRE)	:	4
NO. OF REPLICATIONS	:	3
NO. OF LOCATIONS	:	18

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

				REPLICATIONS		
E.No.	**Entry Name**	**DMR Code**	**INSTITUTE NAME**	**R I**	**R II**	**R III**
1	Bisco X 6573	DMR401	Bisco Bio Sciences Pvt. Ltd.	4014	4042	4058
2	GK 3149	DMR402	Ganga Kveri Seeds Pvt. Ltd.	4023	4031	4050
3	GK 3150	DMR403	Ganga Kveri Seeds Pvt. Ltd.	4015	4027	4052
4	X-1228	DMR404	Kanchan Ganga Seed Pvt.Ltd.	4021	4030	4060
5	KH-K25 Gold	DMR405	Kanchan Ganga Seed Pvt.Ltd.	4017	4033	4057
6	KMH-2589	DMR406	Kaveri Seed Compny Ltd.	4004	4024	4055
7	II 8212	DMR407	Monsanto India Ltd.	4005	4026	4048
8	DKC 9120	DMR408	Monsanto India Ltd.	4011	4032	4061
9	IL 8534	DMR409	Monsanto India Ltd.	4009	4036	4063
10	Venus	DMR410	Prabhat Agri Biotech Ltd.	4006	4043	4066
11	PMH-2277	DMR411	Prabhat Agri Biotech Ltd.	4013	4034	4059
12	Ivory	DMR412	Pravardhan Seeds Pvt. Ltd.	4012	4037	4065
13	Megan-G	DMR413	Pravardhan Seeds Pvt. Ltd.	4007	4028	4047
14	PMH-189	DMR414	Pravardhan Seeds Pvt. Ltd.	4022	4039	4049
15	Rasi-750	DMR415	Rasi Seeds Pvt. Ltd.	4001	4029	4068
16	X35C537	DMR416	Pioneer Overseas Corporation	4019	4045	4067
17	P3533	DMR417	Pioneer Overseas Corporation	4002	4038	4056
18	DADA	DMR418	Yaaganti Seeds Pvt. Ltd.	4003	4040	4054
19	TH2	DMR419	Yaaganti Seeds Pvt. Ltd.	4016	4035	4069
20	TH22	DMR420	Yaaganti Seeds Pvt. Ltd.	4018	4044	4051
21	Buland (C)	DMR421	PAU, Ludhiana	4020	4041	4053
22	Seed Tech2324 (C)	DMR422	Bisco Bioscience Crop Pvt Ltd.	4010	4046	4064
23	Bio 9681 (C)	DMR423	Bio Seed India Pvt.Ltd.	4008	4025	4062

TRIAL NO. 5 & 6 : AVT I - Meidum- Early
MATURITY : Medium - Early
YEAR & SEASON : 2013-2014 RABI
NO. OF ROWS : 4
ROW LENGTH (METRE) : 4
NO. OF REPLICATIONS : 3
NO. OF LOCATIONS : 17
LOCATIONS: LUDHIANA, KARNAL, PANTNAGAR, KANPUR, BAHRAICH
DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR
MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

E.No.	Entry Name	DMR Code	INSTITUTE NAME	R I	R II	R III
1	KH-K26	DMR501	Kanchan Ganga Seed Pvt.Ltd.	5004	5011	5028
2	KMH-4210	DMR502	Kaveri Seed Compny Ltd.	5007	5017	5029
3	IJ 8521	DMR503	Monsanto India Ltd.	5009	5014	5022
4	IL 8536	DMR504	Monsanto India Ltd.	5005	5012	5024
5	IL 8537	DMR505	Monsanto India Ltd.	5002	5019	5026
6	IJ8214	DMR506	Monsanto India Ltd.	5008	5020	5023
7	PMH-2246	DMR507	Prabhat Agri Biotech Ltd.	5010	5013	5027
8	BIO9637 (C)	DMR508	Bio Seed India Pvt.Ltd.	5006	5015	5021
	Early					
9	KH-K25	DMR509	Kanchan Ganga Seed Pvt.Ltd.	5001	5018	5025
10	Prakash (C)	DMR510	PAU, LAUDHIANA	5003	5016	5030

TRIAL NO. 7&8 : AVT II - LATE&MEDIUM
MATURITY : LATE&MEDIUM
YEAR & SEASON : 2013-2014 RABI
NO. OF ROWS : 6
ROW LENGTH (METRE) : 4
NO. OF REPLICATIONS : 3
NO. OF LOCATIONS : 18
LOCATIONS: LUDHIANA, KARNAL, PANTNAGAR, KANPUR, BAHRAICH, DHOLI, VARANASI, RANCHI,
BHUBANESHWAR, KARIMNAGAR, KOLHAPUR, MANDYA, COIMBATORE, ARBHAVI, VAGARAI,
BANSWARA, GODHRA, MIDNAPUR

E.No.	Entry Name	DMR Code	INSTITUTE NAME	R I	R II	R III
1	A 7501	DMR701	Advanta India Ltd.	7012	7018	7036
2	Bio 237	DMR702	Bio Seed India Pvt.Ltd.	7011	7021	7026
3	Bisco X 5141	DMR703	Bisco Bio Sciences Pvt. Ltd.	7007	7019	7032
4	KMH-7148	DMR704	Kaveri Seed Compny Ltd.	7010	7022	7031
5	NMH-1247	DMR705	Nuziveedu Seeds Ltd.	7003	7016	7034
6	PRO-385	DMR706	Rasi Seeds Pvt. Ltd.	7002	7015	7033
7	X35B349	DMR707	Pioneer Overseas Corporation	7004	7017	7025
8	Buland (C)	DMR708	PAU, Ludhiana	7009	7014	7029
9	Seed Tech2324 (C)	DMR709	Bisco Bioscience Crop Pvt Ltd.	7001	7023	7027
10	Bio 9681 (C)	DMR710	Bio Seed India Pvt.Ltd.	7008	7013	7030
	Medium					
11	VEH 11-1	DMR711	BHU Varanasi	7005	7024	7035
12	BIO 9637 (C)	DMR712	Bio Seed India Pvt.Ltd.	7006	7020	7028

TR. QPM 1 & 2 : QPM1 &2
MATURITY : LATE/MEDIUM/EARLY
YEAR : 2013-2014
SEASON : RABI
NO. OF ROWS : 4
ROW LENGTH (METRE) : 4
NO. OF REPLICATIONS : 3
NO. OF LOCATIONS : 19
LOCATIONS: GOSSAIGAON, LUDHIANA, KARNAL, DELHI, PANTNAGAR, KANPUR, BAHRAICH DHOLI, VARANASI, RANCHI, BHUBANESHWAR, KARIMNAGAR, KOLHAPUR MANDYA, COIMBATORE, ARBHAVI, VAGARAI, BANSWARA, GODHRA

E.NO.	ENTRY NAME	DMR CODE		R I	R II	R III	R IV
1	VEHQ-11-1	DMR 801	BHU	7041	7047	7053	7059
2	MMHQPM-6-12-13	DMR 802	Dholi	7042	7049	7050	7055
3	HQPM 1(C)	DMR 803	HAU	7044	7045	7054	7058
4	HQPM7 (C)	DMR 804	HAU	7040	7048	7051	7057
5	BIO 9681 (F)	DMR 805	Bioseed-Filler	7043	7046	7052	7056

TRIAL NO.11	:	PATHOLOGY. AVTII, AVT I, IVT, QPM
MATURITY	:	LATE, MEDIUM, EARLY, QPM
YEAR	:	2013-2014
SEASON	:	RABI
NO. OF ROWS	:	2
ROW LENGTH (METRE)	:	4
NO. OF REPLICATIONS	:	2
PATHOLOGY LOCATIONS	:	10
		LUDHIANA, DHAULAKUAN, DHOLI, HYDERABAD, ARBHAVI
		COIMBATORE, MANDYA, MANDYA, KARNAL, MIDNAPUR

E. No.	Entry Name	DMR CODE	Institute	RI	RII
			AVTII-LATE		
1	A 7501	DMR520	Advanta India Ltd.	8053	8107
2	Bio 237	DMR521	Bio Seed India Pvt.Ltd.	8030	8131
3	Bisco X 5141	DMR522	Bisco Bio Sciences Pvt. Ltd.	8054	8105
4	KMH-7148	DMR523	Kaveri Seed Compny Ltd.	8039	8139
5	NMH-1247	DMR524	Nuziveedu Seeds Ltd.	8024	8147
6	PRO-385	DMR525	Rasi Seeds Pvt. Ltd.	8006	8146
7	X35B349	DMR526	Pioneer Overseas Corporation	8011	8144
			AVTI-LATE		
8	Bisco X 6573	DMR527	Bisco Bio Sciences Pvt. Ltd.	8052	8154
9	GK 3149	DMR528	Ganga Kveri Seeds Pvt. Ltd.	8040	8158
10	GK 3150	DMR529	Ganga Kveri Seeds Pvt. Ltd.	8013	8140
11	X-1228	DMR530	Kanchan Ganga Seed Pvt.Ltd.	8004	8151
12	KH-K25 Gold	DMR531	Kanchan Ganga Seed Pvt.Ltd.	8050	8149
13	KMH-2589	DMR532	Kaveri Seed Compny Ltd.	8001	8156
14	II 8212	DMR533	Monsanto India Ltd.	8049	8138
15	DKC 9120	DMR534	Monsanto India Ltd.	8032	8152
16	IL 8534	DMR535	Monsanto India Ltd.	8048	8136
17	Venus	DMR536	Prabhat Agri Biotech Ltd.	8033	8117
18	PMH-2277	DMR537	Prabhat Agri Biotech Ltd.	8025	8157
19	Ivory	DMR538	Pravardhan Seeds Pvt. Ltd.	8019	8148
20	Megan-G	DMR539	Pravardhan Seeds Pvt. Ltd.	8017	8114
21	PMH-189	DMR540	Pravardhan Seeds Pvt. Ltd.	8020	8155
22	Rasi-750	DMR541	Rasi Seeds Pvt. Ltd.	8021	8111
23	X35C537	DMR542	Pioneer Overseas Corporation	8037	8132
24	P3533	DMR543	Pioneer Overseas Corporation	8042	8108
25	DADA	DMR544	Yaaganti Seeds Pvt. Ltd.	8010	8145
26	TH2	DMR545	Yaaganti Seeds Pvt. Ltd.	8023	8110
27	TH22	DMR546	Yaaganti Seeds Pvt. Ltd.	8016	8142
			IVT-LATE		
28	CP-808	DMR547	CP Seeds Pvt Ltd.	8027	8119
29	CP-838	DMR548	CP Seeds Pvt Ltd.	8026	8120
30	CP-999	DMR549	CP Seeds Pvt Ltd.	8018	8124
31	CP-111	DMR550	CP Seeds Pvt Ltd.	8047	8130
32	CP-333	DMR551	CP Seeds Pvt Ltd.	8009	8115
33	GK 3118	DMR552	Ganga Kveri Seeds Pvt. Ltd.	8005	8123
34	GK 3155	DMR553	Ganga Kveri Seeds Pvt. Ltd.	8034	8153
35	HTMH 5108	DMR554	Hytech Seeds Pvt. Ltd.	8028	8135
36	HTMH 5202	DMR555	Hytech Seeds Pvt. Ltd.	8046	8133
37	KH-2192	DMR556	Kanchan Ganga Seed Pvt.Ltd.	8035	8141
38	KH-3021	DMR557	Kanchan Ganga Seed Pvt.Ltd.	8038	8112
39	KMH-1411	DMR558	Kaveri Seed Compny Ltd.	8022	8126
40	IM 8222	DMR559	Monsanto India Ltd	8015	8128
41	IM 8226	DMR560	Monsanto India Ltd	8012	8106

E. No.	Entry Name	DMR CODE	Institute	RI	RII
42	X35F880	DMR561	Pioneer Oversease Corporation	8002	8129
43	Rasi 864	DMR562	Rasi Seeds Pvt.Ltd.	8045	8121
44	Rasi 393	DMR563	Rasi Seeds Pvt.Ltd.	8014	8127
45	Rasi 950	DMR564	Rasi Seeds Pvt.Ltd.	8003	8109
46	VEH 13-1	DMR565	BHU Varanasi	8036	8143
47	CSM1	DMR566	Division of Genetics,IARI,New Delhi	8007	8134
48	JH 248	DMR567	PAU,Ludhiana	8029	8125
49	JH 358	DMR568	PAU,Ludhiana	8041	8122
50	JH 412	DMR569	PAU,Ludhiana	8051	8137
51	DMRH1308	DMR570	DMR, New Delhi-12	8043	8150
			CHECK VARIETIES -LATE		
52	Buland (C)	DMR 571	PAU, Ludhiana	8008	8116
53	Seed Tech2324 (C)	DMR 572	Bisco Bioscience Crop Pvt Ltd.	8031	8113
54	Bio 9681 (C)	DMR 573	Bio Seed India Pvt.Ltd.	8044	8118
			AVTII-MEDIUM		
55	VEH 11-1	DMR574	BHU Varanasi	8055	8182
			AVTI-MEDIUM		
56	KH-K26	DMR575	Kanchan Ganga Seed Pvt.Ltd.	8076	8159
57	KMH-4210	DMR576	Kaveri Seed Compny Ltd.	8070	8164
58	IJ 8521	DMR577	Monsanto India Ltd.	8059	8166
59	IL 8536	DMR578	Monsanto India Ltd.	8085	8163
60	IL 8537	DMR579	Monsanto India Ltd.	8084	8179
61	IJ8214	DMR580	Monsanto India Ltd.	8082	8187
62	PMH-2246	DMR581	Prabhat Agri Biotech Ltd.	8066	8175
			IVT-MEDIUM		
63	Bio 9662	DMR582	Bio Seed India Pvt.Ltd.	8062	8186
64	BL 798	DMR583	Bisco Bioscience Crop Pvt Ltd.	8079	8188
65	BL 900	DMR584	Bisco Bioscience Crop Pvt Ltd.	8060	8174
66	BL 147	DMR585	Bisco Bioscience Crop Pvt Ltd.	8075	8173
67	KH-517	DMR586	Kanchan Ganga Seed Pvt.Ltd.	8080	8180
68	IM 8303	DMR587	Monsanto India Ltd	8065	8169
69	IM 8189	DMR588	Monsanto India Ltd	8068	8183
70	MMH11-12-13	DMR589	TCA Dholi	8072	8178
71	MMH12-12-13	DMR590	TCA Dholi	8057	8181
72	MMH-13-12-13	DMR591	TCA Dholi	8077	8170
73	MMH-14-12-13	DMR592	TCA Dholi	8081	8184
74	MMH-15-12-13	DMR593	TCA Dholi	8061	8189
75	VaMH 08015	DMR594	TNAU,Vagarai	8056	8161
76	GPS Maina	DMR595	GPS Biotech Pvt.Ltd.	8071	8162
77	GPS Sarayu	DMR596	GPS Biotech Pvt.Ltd.	8069	8176
78	CSM2	DMR597	Division of Genetics,IARI,New Delhi	8064	8168
79	DMRH1301	DMR598	DMR, New Delhi-12	8058	8167
80	DMRH1302	DMR599	DMR, New Delhi-13	8063	8177
81	DMRH1306	DMR600	DMR, New Delhi-16	8067	8172
82	DMRH1307	DMR601	DMR, New Delhi-17	8074	8171
83	AH1314	DMR602	IARI, DR GADAG	8073	8185
84	AH1315	DMR603	IARI, DR GADAG	8078	8160
			CHECK VARIETIES -MEDIUM		
85	Bio9637 (C)	DMR604	Bio Seed India Pvt.Ltd.	8083	8165
			AVT I-EARLY		
86	KH-K25	DMR605	Kanchan Ganga Seed Pvt.Ltd.	8100	8199
			IVT -EARLY		
87	B-52	DMR606	Kanchan Ganga Seeds Pvt. Ltd.	8087	8190
88	NMH-51	DMR607	Nirmal Seeds Pvt. Ltd.	8094	8197

E. No.	Entry Name	DMR CODE	Institute	RI	RII
89	IM 8013	DMR608	Monsanto India Ltd.	8093	8198
90	IL 8033	DMR609	Monsanto India Ltd.	8091	8200
91	IL 8235	DMR610	Monsanto India Ltd.	8090	8202
92	IH-072	DMR611	MRC Godhra	8092	8203
93	IH-061	DMR612	MRC Godhra	8095	8196
94	IHQ-091	DMR613	MRC Godhra	8089	8192
95	DMRH1303	DMR614	DMR, New Delhi-12	8096	8194
96	DMRH1304	DMR615	DMR, New Delhi-13	8098	8201
97	DMRH1305	DMR616	DMR, New Delhi-14	8088	8195
98	AH1312	DMR617	IARI, DR GADAG	8097	8193
99	AH1313	DMR618	IARI, DR GADAG	8086	8204
			CHECK VARIETIES -EARLY		
100	Prakash (C)	DMR619	PAU, Ludhiana	8099	8191
			QPM ENTRIES		
101	VEHQ-11-1	DMR620	BHU, Varanasi	8101	8206
102	MMHQPM-6-12-13	DMR621	TCA Dholi	8104	8208
			CHECK VARIETIES QPM		
103	HQPM 1(C)	DMR622	HAU, Karnal	8103	8207
104	HQPM7 (C)	DMR623	HAU, Karnal	8102	8205

TRIAL No. 11	:	ENTOMOLOGY AVT I&II Year
MATURITY	:	LATE, MADIUM, EARLY
YEAR	:	2013-2014
SEASON	:	RABI
NO. OF ROWS	:	2
ROW LENGTH (METRE)	:	4
NO. OF REPLICATION	:	2
ENTOMOLOGY LOCATIONS	:	2
		HYDERABAD, KOLHAPUR

E.No.	Entry Name	DMR CODE		RI	RII
		AETII-LATE			
1	A 7501	DMR901	Advanta India Ltd.	9014	9074
2	Bio 237	DMR902	Bio Seed India Pvt.Ltd.	9001	9050
3	Bisco X 5141	DMR903	Bisco Bio Sciences Pvt. Ltd.	9021	9062
4	KMH-7148	DMR904	Kaveri Seed Compny Ltd.	9007	9056
5	NMH-1247	DMR905	Nuziveedu Seeds Ltd.	9009	9071
6	PRO-385	DMR906	Rasi Seeds Pvt. Ltd.	9022	9061
7	X35B349	DMR907	Pioneer Overseas Corporation	9015	9053
		AVT I- LATE			
8	Bisco X 6573	DMR908	Bisco Bio Sciences Pvt. Ltd.	9028	9072
9	GK 3149	DMR909	Ganga Kveri Seeds Pvt. Ltd.	9025	9057
10	GK 3150	DMR910	Ganga Kveri Seeds Pvt. Ltd.	9019	9054
11	X-1228	DMR911	Kanchan Ganga Seed Pvt.Ltd.	9018	9066
12	KH-K25 Gold	DMR912	Kanchan Ganga Seed Pvt.Ltd.	9029	9065
13	KMH-2589	DMR913	Kaveri Seed Compny Ltd.	9027	9067
14	II 8212	DMR914	Monsanto India Ltd.	9026	9063
15	DKC 9120	DMR915	Monsanto India Ltd.	9006	9049
16	IL 8534	DMR916	Monsanto India Ltd.	9016	9048
17	Venus	DMR917	Prabhat Agri Biotech Ltd.	9003	9059
18	PMH-2277	DMR918	Prabhat Agri Biotech Ltd.	9023	9064
19	Ivory	DMR919	Pravardhan Seeds Pvt. Ltd.	9002	9073
20	Megan-G	DMR920	Pravardhan Seeds Pvt. Ltd.	9012	9045
21	PMH-189	DMR921	Pravardhan Seeds Pvt. Ltd.	9004	9055
22	Rasi-750	DMR922	Rasi Seeds Pvt. Ltd.	9013	9069
23	X35C537	DMR923	Pioneer Overseas Corporation	9011	9046
24	P3533	DMR924	Pioneer Overseas Corporation	9005	9058
25	DADA	DMR925	Yaaganti Seeds Pvt. Ltd.	9008	9060
26	TH2	DMR926	Yaaganti Seeds Pvt. Ltd.	9030	9047
27	TH22	DMR927	Yaaganti Seeds Pvt. Ltd.	9010	9051

E.No.	Entry Name	DMR CODE		RI	RII
		Checks Late			
28	Buland (C)	DMR 928	PAU, Ludhiana	9020	9068
29	Seed Tech2324 (C)	DMR 929	Bisco Bioscience Crop Pvt Ltd.	9017	9070
30	Bio 9681 (C)	DMR 930	Bio Seed India Pvt.Ltd.	9024	9052
		AVT II- MEDIUM			
31	VEH 11-1	DMR931	BHU Varanasi	9037	9083
		AVT I- MEDIUM			
32	KH-K26	DMR932	Kanchan Ganga Seed Pvt.Ltd.	9033	9078
33	KMH-4210	DMR933	Kaveri Seed Compny Ltd.	9039	9079
34	IJ 8521	DMR934	Monsanto India Ltd.	9035	9076
35	IL 8536	DMR935	Monsanto India Ltd.	9031	9075
36	IL 8537	DMR936	Monsanto India Ltd.	9034	9081
37	IJ8214	DMR937	Monsanto India Ltd.	9038	9080
38	PMH-2246	DMR938	Prabhat Agri Biotech Ltd.	9036	9077
		Checks Varieties-Medium			
39	Bio9637 (C)	DMR939	Bio Seed India Pvt.Ltd.	9032	9082
		AVT I-Early			
40	KH-K25	DMR940	Kanchan Ganga Seed Pvt.Ltd.	9040	9085
		Check-Early			
41	Prakash (C)	DMR941	PAU, Ludhiana	9041	9084
		QPM-2			
42	VEHQ-11-1	DMR942	BHU, Varanasi	9043	9087
		Checks-QPM			
43	HQPM 1(C)	DMR943	HAU, Karnal	9044	9088
44	HQPM7 (C)	DMR944	HAU, Karnal	9042	9086

TRIAL NO. N X G : AVT II - N X G - LATE,
MATURITY : LATE ,
YEAR : 2013-2014
SEASON : RABI
NO. OF LOCATIONS : 11
LOCATIONS: LUDHIANA, KARNAL, DELHI, PANTNAGAR, BAHRAICH, DHOLI, KARIMNAGAR, KOLHAPUR, ARBHAVI, VAGARAI, BANSWARA

E.No.	Entry Name	DMR Code
1	A 7501	DMR701
2	Bio 237	DMR702
3	Bisco X 5141	DMR703
4	KMH-7148	DMR704
5	NMH-1247	DMR705
6	PRO-385	DMR706
7	X35B349	DMR707
8	Buland (C)	DMR708
9	Seed Tech2324 (C)	DMR709
10	Bio 9681 (C)	DMR710

Note: Kindly ignore the DMR Code No. DMR701 and DMR Code 706 at all locations except KARIMNAGAR, KOLHAPUR, ARBHAVI, VAGARAI

TRIAL NO. N X G : MEDIUM
MATURITY : MEDIUM
YEAR : 2013-2014
SEASON : RABI
NO. OF LOCATIONS : 11
LOCATIONS: LUDHIANA, KARNAL, DELHI, PANTNAGAR, BAHRAICH, DHOLI, KARIMNAGAR, KOLHAPUR, ARBHAVI, VAGARAI, BANSWARA

E.N.	Entry Name	DMR CODE
1	VEH 11-1	DMR711
2	BIO 9637 (C)	DMR712

Note: There will no medium trials of agronomy except at locations Banswara, Vagarai, Arbhavi and Karimnagar

Trial NXG : QPM
YEAR : 2013-2014
SEASON : RABI
NO. OF LOCATIONS : 11
LOCATIONS: LUDHIANA, KARNAL, DELHI, PANTNAGAR, BAHRAICH, DHOLI, KARIMNAGAR, KOLHAPUR, ARBHAVI, VAGARAI, BANSWARA

E.N.	Entry Name	DMR CODE
1	VEHQ-11-1	DMR 801
2	HQPM 1(C)	DMR 802
3	HQPM7 (C)	DMR 803

Most Important: You all are requested to add local filler where ever required to maintaine the right degree of freedome of experiment

BREEDING

Table No.	Contents	Page No.
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1.	Performance of late maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 01 (IVT1- L) during rabi 2013-14.	B11-B25
2.	Performance of medium maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 02 (IVT1- M) during rabi 2013-14.	B26-B35
3.	Performance of early maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 03 (IVT1- E) during rabi 2013-14.	B36-B45
4.	Performance of late maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 04 (AVT1- L) during rabi 2013-14.	B46-B57
5.	Performance of medium & early maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 05 & 6 (AVT1- M and AVT1-E) during rabi 2013-14.	B58-B63
6.	Performance of late & medium maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 7 & 8 (AVT2- L and AVT2- M during rabi 2013-14.	B64-B70
7.	Performance of QPM experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. QPM1 &2 during rabi 2013-14.	B71-B76

Breeding Summary: Rabi AICRP 2013-14 Trials

During *rabi* 2013-14, total of 101 test entries were received for evaluation in coordinated trials. Of total 101 entries, 34 were from public and 67 were from private sector. All the entries were evaluated in 9 different breeding trials *viz.*, 3 each of initial varietal trial (IVT) and advance varietal trial-I (AVT-I), and 2 and 1 of advance varietal trial-II (AVT-II) and quality protein maize (QPM), respectively. All 9 breeding trials, consisting of 101 test entries were evaluated at 18 locations across the country using randomized block design (RBD) with three replications. No any trials were constituted for sweet corns, baby corn, popcorn and extra early maturity group. Beside it, there were no trials in zone-I which included Northern and Northern eastern hill part of the country. Data was recorded, reviewed and analyzed for yield and its related traits. Details number of entries in various maturity group and trials are given in table A. Based on the test entry performance at various locations, total 56 hybrids were promoted from their current to advance stage of testing during *rabi* 2014-15 AICRP trials. Out of 56 entries, 34 were promoted from IVT to AVT-I, 21 from AVT-I to AVT-II and 1 from quality protein maize trial I (QPM-I) to quality protein maize trial II (QPM-II). Details list of promoted entries have been given in table B.

Table A: Number of public/private maize hybrids received for testing under various AICRP trials of *Rabi*-2013-14.

Initial Varietal Trial (IVT)			
	Late Maturity	**Medium Maturity**	**Early Maturity**
Public	8	15	5
Private	18	9	8
Total	26	24	13
Advance Varietal Trial-I (AVT-I)			
	Late Maturity	**Medium Maturity**	**Early Maturity**
Public	0	0	0
Private	20	7	1
Total	20	7	1
Advance Varietal Trial-II (AVT-II)			
	Late Maturity	**Medium Maturity**	**Early Maturity**
Public	0	1	0
Private	7	0	0
Total	7	1	0
	QPM1-2	**SC 1-2-3/PC 1-2-3/BC 1-2-3/Extra early maturity**	
Public	2	No trials are conducted for Extra early, sweet corn, popcorn and baby corn during Rabi season	
Private	0		
Total	2		

Promotion of test entry

The following are the criterions used for promotion of entries in various breeding trials:

1. Late maturity trials:

a) Entry found minimum of 5% superiority over the best check for average grain yield in respective zone

2. Medium and Early maturity trials:

a) Entry found minimum of 10% superiority over the best check for average grain yield in respective zone

b) The tested entry must not exceed for its number of days required to 50% silking over the best check after adding of 1.5 days in the relevant best check for days to 50% silking

3. Specialty corns (QPM trials)

a) Entry found minimum of 5% superiority over the best check for average grain yield in respective zone

Table B: List of promoted entries from Rabi 2013-14 to Rabi 2014-15 in various maturity groups under different stages of testing

Promoted from IVT Late (Trial No. 1) to AVT-I late (Trial No. 4)								
Zone -II								
S.N.	**Hybrids Name**	**Yield (kg/ha)**	**Rank**	**%SUP**	**Days to brown husking**	**Days to silk**	**Days to pollen**	**Final remark**
1	IM 8222	12940	1	14.4	181.7	132.3	130.3	**Promoted**
2	CP-838	12264	2	8.4	183.5	134.1	132.3	**Promoted**
3	X35F880	11949	3	5.6	179.3	132.9	130.7	**Promoted**
4	**Buland (C) Best Check**	**11315**	**9**	**-**	**182.0**	**137.9**	**136.0**	**Check**
Zone-III								
1	X35F880	10995	1	23.6	151.0	114.1	110.6	**Promoted**
2	KMH-1411	10839	2	21.8	149.9	112.1	108.7	**Promoted**
3	GK 3155	10602	3	19.1	151.8	112.7	109.6	**Promoted**
4	HTMH 5202	10474	4	17.7	151.7	112.0	108.8	**Promoted**
5	CP-838	10460	5	17.5	150.7	113.2	110.4	**Promoted**
6	Rasi 864	10338	6	16.2	151.5	113.4	110.5	**Promoted**
7	CP-111	10310	7	15.9	150.7	113.2	110.4	**Promoted**
8	Rasi 393	10204	8	14.7	151.2	114.6	111.7	**Promoted**
9	GK 3118	10186	9	14.5	152.4	112.2	109.3	**Promoted**
10	IM 8222	10146	10	14	150.5	112.4	109.4	**Promoted**
11	HTMH 5108	10040	11	12.8	151.2	113.7	110.7	**Promoted**
12	KH-3021	10031	12	12.7	149.4	111.8	108.4	**Promoted**
13	CSM1	10020	13	12.6	151.5	113.0	109.8	**Promoted**

14	JH412	9756	14	9.6	149.9	112.9	109.8	**Promoted**
15	JH358	9693	15	8.9	150.4	112.3	109.6	**Promoted**
16	IM 8226	9661	16	8.6	152.1	115.6	112.7	**Promoted**
17	DMRH 1308	9611	17	8	147.1	110.5	107.8	**Promoted**
18	KH-2192	9501	18	6.8	152.5	112.2	108.8	**Promoted**
19	**SeedTech2324(C)Best Check**	**8899**	**24**	**-**	**150.5**	**111.7**	**108.8**	**Check**
Zone -IV								
1	X35F880	9538	1	24.8	108.4	72.3	70.5	**Promoted**
2	IM 8226	8773	2	14.8	107.9	72.0	70.6	**Promoted**
3	HTMH 5108	8705	3	13.9	107.7	69.5	68.3	**Promoted**
4	GK 3155	8669	4	13.4	108.0	73.3	71.6	**Promoted**
5	Rasi 864	8460	5	10.7	105.3	69.7	68.4	**Promoted**
6	CP-838	8443	6	10.4	105.9	68.5	66.7	**Promoted**
7	KMH-1411	8350	7	9.2	107.5	70.7	69.7	**Promoted**
8	HTMH 5202	8309	8	8.7	108.3	68.6	67.4	**Promoted**
9	Rasi 393	8090	9	5.8	107.5	70.7	69.0	**Promoted**
10	**SeedTech2324(C)Best Check**	**7645**	**13**	**-**	**106.5**	**68.9**	**67.4**	
Zone -V								
1	Rasi 393	12035	1	33.3	121.7	85.8	83.7	**Promoted**
2	X35F880	11179	2	23.8	123.0	86.2	83.8	**Promoted**
3	CP-838	10492	3	16.2	123.5	87.5	83.7	**Promoted**
4	CP-999	10219	4	13.2	120.7	86.3	83.5	**Promoted**
5	HTMH 5202	10143	5	12.3	116.5	85.5	83.0	**Promoted**
6	CP-333	10133	6	12.2	121.7	86.8	84.7	**Promoted**
7	JH358	10063	7	11.4	123.3	86.5	84.5	**Promoted**
8	KMH-1411	9951	8	10.2	124.2	85.5	83.3	**Promoted**
9	HTMH 5108	9879	9	9.4	122.5	87.0	85.3	**Promoted**
10	JH 248	9672	10	7.1	120.5	84.7	82.5	**Promoted**
11	DMRH 1308	9656	11	6.9	116.5	81.2	79.0	**Promoted**
12	KH-3021	9606	12	6.4	119.5	86.0	84.2	**Promoted**
13	Rasi 950	9591	13	6.2	121.0	89.8	87.5	**Promoted**
14	**SeedTech2324(C)Best Check**	**9031**	**18**	**-**	**122.2**	**84.3**	**82.2**	**Check**
	IVT Medium (Tr 2) to AVT-I Medium (Tr. 5)							
Zone -II -IVT Medium (Tr 2) to AVT-I Medium (Tr. 5)								
1	IM 8303	12190	2	13.6	175.7	132.3	130.0	**Promoted**
2	**Bio9637(C)Best Check**	**10735**	**8**	**-**	**176.5**	**133.0**	**130.3**	**Check**
	Final Consideration					**134.5**		
Zone -III -IVT Medium (Tr 2) to AVT-I Medium (Tr. 5)								
1	DMRH1301	10565	2	33.1	146.3	109.7	107.2	**Promoted**
2	BL 900	9829	4	23.8	147.9	111.4	108.1	**Promoted**
3	IM 8303	9628	5	21.3	148.2	111.5	108.4	**Promoted**

4	BL 798	9580	6	20.7	147.6	110.1	107.1	**Promoted**
5	GPS Maina	9263	7	16.7	148.0	108.6	105.5	**Promoted**
6	CSM2	9001	8	13.4	147.7	112.3	109.3	**Promoted**
7	DMRH1306	8955	9	12.8	146.4	110.8	107.7	**Promoted**
8	DMRH1307	8911	10	12.3	146.5	111.1	107.9	**Promoted**
9	DMRH 1302	8823	11	11.1	147.3	109.3	105.7	**Promoted**
10	KH-517	8787	13	10.7	147.2	108.9	105.8	**Promoted**
11	**Bio9637(C)Best Check**	**7938**	**18**	**-**	**146.9**	**111.1**	**107.9**	**Check**
	Final Consideration					**112.6**		
Zone -IV-IVT Medium (Tr 2) to AVT-I Medium (Tr. 5)								
1	IM 8303	10223	1	43.8	105.3	68.7	67.3	**Promoted**
2	BL 900	9535	2	34.1	105.6	67.8	66.2	**Promoted**
3	BL 798	8611	4	21.1	103.3	66.6	65.4	**Promoted**
4	DMRH1301	8557	5	20.4	104.9	68.9	67.3	**Promoted**
5	CSM2	8254	6	16.1	105.2	69.1	67.8	**Promoted**
6	DMRH1307	8114	7	14.1	105.9	68.9	67.8	**Promoted**
7	BL 147	8066	8	13.5	102.7	67.7	66.3	**Promoted**
8	DMRH 1302	8047	9	13.2	105.2	66.1	64.3	**Promoted**
9	**Bio9637(C)Best Check**	**7109**	**18**	**0.0**	**103.7**	**67.7**	**66.7**	**Check**
	Final Consideration					**69.2**		
Zone -V-IVT Medium (Tr. 2) to AVT-I Medium (Tr. 5)								
S.N.	**Hybrids Name**	**Yield (kg/ha)**	**Rank**	**%SUP**	**Days to brown husking**	**Days to silk**	**Days to pollen**	**Final remark**
1	DMRH1301	13991	1	33.7	121.2	82.2	78.5	**Promoted**
2	BL 900	13570	2	29.7	122.7	84.0	82.0	**Promoted**
3	IM 8303	12166	3	16.3	123.3	83.7	81.2	**Promoted**
4	**Bio9637(C)Best Check**	**10465**	**10**	**-**	**117.0**	**82.8**	**80.0**	
	Final Consideration					**84.3**		
IVT Early (Tr. 3) to AVT-I Early (Tr. 6)								
Zone -II -IVT Early (Tr . 3) to AVT-I Early (Tr. 6) :No any entry was promoted								
Zone -III -IVT Early (Tr. 3) to AVT-I Early (Tr. 6) :No any entry was promoted								
Zone -IV -IVT Early (Tr. 3) to AVT-I Early (Tr. 6)								
1	IL 8235	8451	3	39.4	98.8	63.9	62.3	**Promoted**
2	**Prakash(C)Best Check**	**6063**	**11**	**-**	**90.8**	**62.4**	**60.3**	**Check**
	Final Consideration					**63.9**		
Zone -V -IVT Early (Tr 3) to AVT-I Early (Tr. 6) :No any entry was promoted								
AVT-I Late (Tr. 4) to AVT-II late (Tr. 7)								
Zone -II -AVT-I Late (Tr. 4) to AVT-II late (Tr.7)								
1	P3533	14568	1	15.7	181.5	133.4	131.7	**Promoted**
2	DKC 9120	14010	2	11.3	183.2	134.7	131.6	**Promoted**
3	IL 8534	13951	3	10.8	183.0	136.2	134.6	**Promoted**
4	KMH-2589	13874	4	10.2	180.2	133.4	131.2	**Promoted**

5	Bisco X 6573	13771	5	9.4	182.0	134.6	132.3	**Promoted**
6	PMH-2277	13455	6	6.9	184.7	134.4	131.4	**Promoted**
7	Il 8212	13420	7	6.6	181.5	137.6	135.4	**Promoted**
8	X35C537	13397	8	6.4	182.5	134.6	132.7	**Promoted**
9	**Bio9681(C)Best Check**	**12586**	**13**	**-**	**180.5**	**130.9**	**129.1**	**Check**
Zone -III -AVT-I Late (Tr. 4) to AVT-II late (Tr.7)								
1	IL 8534	10408	1	15.7	146.7	107.9	105.1	**Promoted**
2	Ivory	10283	2	14.3	145.3	107.1	103.9	**Promoted**
3	DKC 9120	10107	3	12.4	145.4	106.9	103.5	**Promoted**
4	TH22	10103	4	12.3	145.0	107.0	104.1	**Promoted**
5	P3533	9912	5	10.2	145.3	107.9	104.9	**Promoted**
6	Il 8212	9873	6	9.8	146.5	108.0	105.3	**Promoted**
7	PMH-2277	9850	7	9.5	144.4	107.7	104.7	**Promoted**
8	X35C537	9832	8	9.3	146.1	106.5	103.6	**Promoted**
9	Megan-G	9622	9	7	145.7	103.7	100.8	**Promoted**
10	PMH-189	9542	10	6.1	145.5	107.3	104.1	**Promoted**
11	TH2	9535	11	6	144.5	105.9	102.7	**Promoted**
12	**SeedTech2324 (C) Best Check**	**8993**	**16**	**-**	**145.8**	**106.9**	**103.7**	**Check**
Zone -IV -AVT-I Late (Tr. 4) to AVT-II late (Tr.7)								
1	PMH-189	8864	1	6	105.9	69.7	68.8	**Promoted**
2	X35C537	8833	2	5.6	108.7	69.7	68.1	**Promoted**
3	Il 8212	8828	3	5.6	107.9	69.9	68.9	**Promoted**
4	IL 8534	8774	4	4.9	108.5	70.7	68.7	**Promoted**
5	**SeedTech2324 (C) Best Check**	**8363**	**9**	**-**	**106.5**	**69.6**	**67.9**	
Zone -V -AVT-I Late (Tr. 4) to AVT-II late (Tr.7)								
1	DKC 9120	13853	1	28.6	134.0	89.2	86.7	**Promoted**
2	PMH-189	13581	2	26.1	130.0	88.7	86.5	**Promoted**
3	Ivory	13110	3	21.7	133.2	89.8	87.0	**Promoted**
4	GK 3150	13065	4	21.3	132.5	90.0	87.2	**Promoted**
5	Megan-G	12907	5	19.8	130.5	85.7	83.5	**Promoted**
6	P3533	12304	6	14.2	123.7	85.5	83.0	**Promoted**
7	TH22	12189	7	13.2	130.8	87.5	85.0	**Promoted**
8	Bisco X 6573	12096	8	12.3	132.0	90.3	87.5	**Promoted**
9	Il 8212	12033	9	11.7	128.7	89.8	86.5	**Promoted**
10	Venus	11937	10	10.8	129.0	85.2	81.7	**Promoted**
11	X35C537	11768	11	9.2	131.0	86.7	84.3	**Promoted**
12	IL 8534	11617	12	7.8	134.2	91.0	88.5	**Promoted**
13	PMH-2277	11604	13	7.7	130.8	89.7	87.2	**Promoted**
14	KMH-2589	11492	14	6.7	130.5	87.8	85.0	**Promoted**
15	**SeedTech2324 (C) Best Check**	**10772**	**19**	**-**	**131.8**	**87.5**	**84.8**	
AVT-I Medium (Tr 5) to AVT-II Medium (Tr. 8)								

Zone -II -AVT-I Medium (Tr. 5) to AVT-II Medium (Tr.8)								
S.N.	**Hybrids Name**	**Yield (kg/ha)**	**Rank**	**%SUP**	**Days to brown husking**	**Days to silk**	**Days to pollen**	**Final remark**
1	IJ 8521	11728	1	16.6	171.5	132.1	130.3	**Promoted**
2	PMH-2246	11695	2	16.3	171.3	128.8	126.6	**Promoted**
4	**BIO9637(C) Best Check**	**10056**	**7**	**-**	**175.8**	**133.2**	**131.0**	**Check**
	Final Consideration:					**134.7**		
Zone -III -AVT I Medium (Tr. 5) to AVT-II Medium (Tr.8)								
S.N.	**Hybrids Name**	**Yield (kg/ha)**	**Rank**	**%SUP**	**Days to brown husking**	**Days to silk**	**Days to pollen**	**Final remark**
1	IL 8536	10411	1	26.3	145.3	109.1	106.3	**Promoted**
2	IJ 8521	10375	2	25.9	143.7	106.7	103.7	**Promoted**
3	PMH-2246	9742	4	18.2	141.8	103.7	100.2	**Promoted**
4	IJ8214	9622	5	16.7	144.2	106.7	104.2	**Promoted**
5	**BIO9637(C)Best Check**	**8243**	**8**	**-**	**143.7**	**107.7**	**104.6**	**Check**
	Final Consideration					**109.2**		
Zone -IV -AVT I Medium (Tr. 5) to AVT-II Medium (Tr.8)								
S.N.	**Hybrids Name**	**Yield (kg/ha)**	**Rank**	**%SUP**	**Days to brown husking**	**Days to silk**	**Days to pollen**	**Final remark**
1	IL 8536	10066	1	40.5	102.2	69.3	67.7	**Promoted**
2	PMH-2246	8924	2	24.6	101.2	67.0	65.1	**Promoted**
3	KH-K26	8608	3	20.2	102.3	67.2	65.2	**Promoted**
4	IJ 8521	8316	5	16.1	101.5	68.7	66.9	**Promoted**
5	**BIO9637(C)Best Check**	**7164**	**9**	**-**	**102.1**	**68.3**	**66.1**	
	Final Consideration					**69.8**		
Zone -V -AVT-I Medium (Tr. 5) to AVT II- Medium (Tr.8) :No any entry was promoted								
AVT-I Early (Tr. 6) to AVT-II Early (Tr.9)								
Zone -II , III and IV -AVT-I Early (Tr. 6) to AVT-II Early (Tr.9) :No any entry was promoted								
Zone -V -AVT-I Early (Tr. 6) to AVT-II Early (Tr.9)								
1	KH-K25	6704	6	37.2	117.5	82.2	80.0	**Promoted**
2	**Prakash(C)Best Check**	**4886**	**10**	**-**	**114.7**	**81.0**	**78.5**	**Check**
	Final Consideration:					**82.5**		
List of entry promoted from Trial QPM-1 to Trial QPM-2								
Zone -II -QPM 1 to QPM 2								
1	MMHQPM-6-12-13	12033	1	7.2	182.0	130.1	127.8	**QPMI to II (Promoted)**
2	**HQPM1(C)Best Check**	**11227**	**4**	**-**	**183.0**	**133.9**	**132.1**	
Zone -III -QPM 1 to QPM 2								
1	MMHQPM-6-12-13	8991	1	16.4	146.3	110.9	107.6	**QPMI to II**

								(Promoted)
2	**HQPM 1(C)Best Check**	**7726**	**4**	**-**	**148.0**	**113.4**	**110.3**	
Zone -IV -QPM 1 to QPM 2								
1	MMHQPM-6-12-13	8028	1	26.1	106.7	69.8	67.5	**QPMI to II (Promoted)**
2	**HQPM7(C)Best Check**	**6365**	**4**	**-**	**108.3**	**69.6**	**67.9**	
Zone -V -QPM 1 to QPM 2 (No any QPM entry was promoted)								

Inbred lines development and evaluation

a. Stable sources of charcoal rot resistance

Set of 135 inbred lines with one check, each of resistant and susceptible were screened for charcoal rot disease under artificial inoculated condition at multi-locations in replicated trials. The disease scoring was done using 1-9 scale (1-highly resistant, and 9-highly susceptible). There was significant genotypic x environment interaction ($P<0.01$), observed for charcoal disease reaction. Some of the promising newly developed resistant and moderately resistant lines to charcoal rot are given in table C.

Table C. Promising new inbred lines identified resistant to moderately resistant for charcoal rot disease

S. No.	Genotype Name	Disease Score			
		Kharif 2013 (Delhi)	Kharif 2013 (Hyderabad)	Rabi 2012-13 (Hyderabad)	Remarks
1	DQL 1020	2.3	2.5	2.3	Resistant
2	DML1	2.8	2.6	2.3	Resistant
3	DML 339	2.4	2.1	2.8	Resistant
4	DML105	4.7	5.0	4.3	Moderately Resistant
5	DQL1030	4.3	4.5	4.2	Moderately Resistant
6	DML77	4.3	4.1	4.1	Moderately Resistant
7	DML68	3.4	4.1	4.9	Moderately Resistant
8	DML179	2.6	4.9	4.5	Moderately Resistant
9	DML167	4.3	3.4	4.2	Moderately Resistant
10	DML95	3.4	5.0	3.1	Moderately Resistant
11	DML152	2.1	4.6	4.6	Moderately Resistant
12	DML315	3.1	4.0	4.1	Moderately Resistant
13	DML128	2.4	4.6	4.0	Moderately Resistant
15	CM117-3-4-1-(C)	2.7	3.0	3.1	Resistant
16	WOSC (C)	7.0	7.6	7.0	Highly Susceptible

b. New inbred lines as source for high lysine and tryptophan content

A set of 15 newly developed QPM inbred lines were evaluated for lysine and tryptophan content in self seeds, continuously for three seasons (Rabi 2012-13, Kharif 2013 and Rabi 2013-14). These lines were also characterized for DUS traits. Percent lysine and tryptophan content of promising lines along with the QPM check has been given in table D.

Table D. Promising new inbred lines identified high in tryptophan and lysine content

S. No.	Genotype	Tryptophan content (%)			Lysine content (%)		
		Rabi 2012-13 (Hyderabad)	Kharif 2013 (Delhi)	Rabi 2013-14 (Delhi)	Rabi 2012-13 (Hyderabad)	Kharif 2013 (Delhi)	Rabi 2013-14 (Delhi)
1	DQL1019	0.87	0.89	0.94	3.59	3.71	3.89
2	DQL1022	0.85	0.88	0.91	3.51	3.63	3.82
3	DQL1017	0.73	0.78	0.81	3.1	3.23	3.38
4	DQL1005	0.69	0.74	0.79	2.98	3.1	3.28
5	DQL1018	0.63	0.65	0.68	2.64	2.69	2.89
6	DQL1001	0.7	0.76	0.85	3.01	3.2	3.55
7	CML176 (C)	0.6	0.64	0.65	2.51	2.68	2.71
8	HKI 163 (C)	0.61	0.65	0.68	2.57	2.71	2.87

c. New inbred lines as source for high protein, starch, iron and zinc content

A set of 45 newly developed inbred lines were evaluated in replicated trials continuously for three seasons for protein, starch, iron and zinc content in self seeds. There was huge range of genetic variations observed for all these biochemical traits viz. protein (7.9 to 13.5%), starch (66.19 to 74.03%), Fe (18 to 72.1ppm) and Zn content (16.8 to 55.7ppm). The details performance of the selected promising inbred lines for protein (Table E), Starch (Table F), Fe (Table G) and Zn (Table H) content are mentioned below.

Table E. Promising new inbred lines identified high in protein content

S. No.	Genotype	% Protein content in seeds		
		Rabi 2012-13 (Hyderabad)	Kharif 2013 (Delhi)	Rabi 2013-14 (Delhi)
1	DML37-1	12.95	13.11	13.37
2	DML281	13.03	12.85	13.2
3	DML59	11.32	11.65	11.52
4	DML62	11.27	11.85	11.76

5	DML300	12.15	12.52	12.22
6	DML221	11.68	12.02	11.99
7	DML1	11.8	11.45	10.66
8	BML6 (C)	11.02	11.23	11.47
9	HKI1128 (C)	11.52	11.34	11.33
10	HKI1105 (C)	10.65	10.45	10.47

Table F. Promising new inbred lines identified high in starch content in seed endosperm

S. No.	Genotype Name	% starch content in endosperm		
		Rabi 2012-13 (Hyderabad)	Kharif 2013 (Delhi)	Rabi 2013-14 (Delhi)
1	DML212-1	73.12	73.87	73.38
2	DML92	74.66	73.89	73.48
3	DML1	72.85	73.32	73.75
4	DQL1001	73.86	72.58	74.03
5	DML162	72.67	73.54	73.83
6	DML62	70.78	71.32	71.51
7	DML300	71.23	70.51	70.38
8	DML281	71.43	70.81	71.11
9	DML117-1	69.34	70.32	70.28
10	HKI1128 (C)	67.91	68.56	68.38
11	CML269(C)	68.75	70.23	69.24
12	BML6 (C)	70.12	69.59	70.27

Table G. Promising new inbred lines identified high in iron content across the locations and seasons.

S.No.	Genotype Name	Inbred Lines found high in iron content (ppm)		
		Rabi 2012-13 (Hyderabad)	Kharif 2013 (Delhi)	Rabi 2013-14 (Delhi)
1	DML 300	68.3	65.34	66.75
2	DML78	61.2	64.8	66.11
3	DML 221	72.1	69.2	61.23
4	DML 62	53.3	58.4	61.27
5	DQL 1005	50.2	48.6	50.56
6	DML60	53.9	57.1	53.62
7	DML106	53.8	50.2	54.13
8	DQL1022	59.3	56.2	60.61
9	DML216	58.1	55.2	56.25
10	DML59	58.4	62.7	64.51
11	CML269 (C)	30.2	33.4	35.98
12	BML6 (C)	45.3	47.2	48.93

Table H. Promising new inbred lines identified high in zinc content across the locations and seasons.

S. No.	Genotype Name	Inbred Lines found high in zinc content (ppm)		
		Rabi 2012-13 (Hyderabad)	Kharif 2013 (Delhi)	Rabi 2013-14 (Delhi)
1	DML 226	48.0	50.7	51.43
2	DML136	47.1	42.5	48.97
3	DML221	35.0	32.1	28.12
4	DML 269-1	33.2	37.0	38.6
5	DML281	35.9	40.3	40.64
6	DML37-1	36.3	38.2	40.12
7	DML 165	41.2	37.8	40.23
8	BML6 (C)	22.1	20.3	25.26
9	CML269 (C)	18.5	22.2	24.12

Table No. 1 **Performance of late maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. TR01 (IVT-L) during rabi 2013-14**

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE						ZN 2												ZN 3	
		KARN	R	LUDH	R	PANT	R	MEAN	R	BAHR	R	BHUB	R	DHOL	R	RANC	R	VARA	R	MEAN	R
1	CP-808	7588	23	11382	28	8748	23	9239	29	7969	13	6441	25	9882	26	10601	18	10623	23	9103	22
2	CP-838	9650	2	16295	4	10845	8	12264	2	9371	5	7221	13	10398	18	11741	12	13567	4	10460	5
3	CP-999	8251	13	11987	26	9100	22	9779	23	6114	28	6491	24	10706	12	10510	19	10636	22	8891	26
4	CP-111	7150	29	17319	2	10378	12	11616	7	9775	3	6705	20	10692	13	12359	8	12018	11	10310	7
5	CP-333	8020	18	11847	27	8692	24	9519	24	6516	27	5456	29	11563	3	12330	9	10127	26	9198	19
6	GK 3118	9408	4	16518	3	9167	21	11698	6	8381	11	7679	7	9725	29	13075	3	12072	9	10186	9
7	GK 3155	8541	12	12912	19	9628	18	10360	18	8263	12	8240	3	10237	21	13244	2	13026	5	10602	3
8	HTMH 5108	9290	5	13178	16	10852	7	11107	11	6613	26	7908	5	11420	6	13369	1	10890	18	10040	11
9	HTMH 5202	7453	25	15097	8	10293	13	10948	13	7562	16	8706	2	11214	8	12589	7	12299	7	10474	4
10	KH-2192	7306	28	10949	29	9988	15	9414	27	8621	9	7207	14	11061	10	8524	28	12093	8	9501	18
11	KH-3021	8554	11	15366	7	11318	5	11746	5	8692	8	6313	26	11213	9	11469	14	12467	6	10031	12
12	KMH-1411	9496	3	14302	10	11564	3	11787	4	9916	2	7474	10	12041	1	12803	4	11960	12	10839	2
13	IM 8222	8106	16	17554	1	13160	1	12940	1	7237	17	7062	15	10148	22	11700	13	14584	1	10146	10
14	IM 8226	7412	26	12736	22	8254	26	9467	25	6946	22	7785	6	11640	2	9882	24	12054	10	9661	16
15	X35F880	9894	1	15502	6	10452	11	11949	3	11269	1	7644	8	10660	14	11791	11	13612	3	10995	1
16	Rasi 864	8716	8	14647	9	9819	16	11061	12	6740	23	6996	16	11542	4	12081	10	14330	2	10338	6
17	Rasi 393	7378	27	13678	14	9465	19	10173	21	7163	19	8019	4	11260	7	12693	6	11884	13	10204	8
18	Rasi 950	7595	22	15728	5	10087	14	11137	10	6679	24	7546	9	10405	17	10050	23	10321	25	9000	23
19	VEH 13-1	8676	9	12073	25	10934	6	10561	16	6639	25	6284	27	10371	19	10062	22	9233	29	8518	29
20	CSM1	8617	10	12864	20	8023	27	9835	22	8612	10	9792	1	9850	28	10271	20	11574	14	10020	13
21	DMRH1302	7511	24	13849	13	10788	9	10716	14	7087	20	7242	12	10062	24	9023	27	10705	21	8824	28

Sl No	PEDIGREE	GRAIN YIELD (kg/ha) AT 15% MOISTURE																			
								ZN 2												ZN 3	
		KARN	R	LUDH	R	PANT	R	MEAN	R	BAHR	R	BHUB	R	DHOL	R	RANC	R	VARA	R	MEAN	R
22	DMRH1306	9218	7	13328	15	9298	20	10615	15	7003	21	6857	18	11538	5	9634	26	10778	20	9162	20
23	DMRH 1308	7905	20	13079	18	9759	17	10248	20	9609	4	6806	19	10308	20	11002	16	10330	24	9611	17
24	JH 248	7634	21	12862	21	7508	29	9335	28	7760	15	6579	23	10460	15	10910	17	9891	28	9120	21
25	JH358	8121	15	14112	12	12353	2	11529	8	9352	6	6616	21	10451	16	11238	15	10810	19	9693	15
26	JH412	8062	17	14264	11	8562	25	10296	19	9350	7	6594	22	10120	23	12785	5	9932	27	9756	14
	CHECKS																				
27	Buland(C)	9281	6	13143	17	11521	4	11315	9	7204	18	5988	28	9860	27	9654	25	11465	15	8834	27
28	SeedTech2324(C)	8159	14	12699	23	10530	10	10463	17	5442	29	6872	17	10793	11	10259	21	11127	16	8899	24
29	Bio9681(C)	8001	19	12556	24	7799	28	9452	26	7835	14	7253	11	9997	25	8281	29	11120	17	8897	25
	Location Mean	**8310**		**13856**		**9962**		**10709**		**7921**		**7165**		**10676**		**11170**		**11570**		**9701**	
	C.D. (5%)	458		2245		1985		1563		1003		737		1627		1795		1066		1246	
	C.V. (%)	3.37		9.9		12.18		-		7.74		6.29		9.32		7.83		5.63		-	
	F (Prob)	0		0		0				0		0		0.216		0		0			
	Plot Size	6		3.6		6		-		4.8		4.8		6		5.6		4.8		-	
	AGRONOMY DATA																				
	Sowing Date	23-11		22-11		17-12		-		21-11		30-11		27-11		5-12		25-11		-	
	Harvest Date	28-05		28-05		11-06		-		9-05		28-04		25-05		31-05		28-04		-	
	Irrigation Nos	8		12		6		-		6		10		5		8		3		-	
	Ferilizer Applied N	150		70		120		-		150		120		150		140		150		-	
	Ferilizer Applied P	60		24		60		-		75		60		70		60		75		-	
	Ferilizer Applied K	60		12		40		-		60		60		60		40		60		-	

Table No. 1 **(cont…)**

Sl No	PEDIGREE	ARBH	R	COIM	R	KOLH	R	MAND	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
1	CP-808	5940	25	5992	23	8031	20	7615	8	6198	28	6755	24	9131	14	6483	25	7807	26	8175	27
2	CP-838	9023	3	5739	26	9854	6	8285	7	9316	4	8443	6	11923	2	9061	16	10492	3	10153	2
3	CP-999	8590	4	7348	12	7375	24	7363	12	8325	14	7800	12	8663	19	11775	2	10219	4	8882	17
4	CP-111	6952	14	6537	21	10093	2	6673	19	7166	25	7484	16	7367	28	10287	7	8827	19	9431	11
5	CP-333	7628	8	6583	19	9090	8	6923	18	7512	22	7547	15	9251	13	11015	5	10133	6	8837	18
6	GK 3118	7861	7	8167	6	8602	14	7107	16	7274	24	7802	11	7739	26	5931	28	6835	28	9247	13
7	GK 3155	8560	5	8807	3	8775	9	8882	3	8319	15	8669	4	9719	11	6397	26	8058	24	9570	10
8	HTMH 5108	10251	2	7344	13	9879	4	7146	14	8903	7	8705	3	9991	7	9767	11	9879	9	9787	5
9	HTMH 5202	5792	26	8759	4	9483	7	7414	10	10095	1	8309	8	10816	4	9471	13	10143	5	9803	4
10	KH-2192	4448	29	7241	14	6482	28	7336	13	7542	21	6610	25	5975	29	5595	29	5785	29	8025	28
11	KH-3021	6788	16	7870	8	8696	11	6956	17	9323	3	7927	10	8533	20	10680	6	9606	12	9616	8
12	KMH-1411	6755	17	8630	5	10608	1	9025	2	6730	27	8350	7	10858	3	9045	17	9951	8	10080	3
13	IM 8222	7118	12	6977	16	8691	12	6429	21	8944	6	7632	14	9634	12	9171	15	9402	14	9768	6
14	IM 8226	10298	1	7463	10	8520	15	7582	9	10003	2	8773	2	9129	15	9624	12	9377	16	9289	12
15	X35F880	7334	9	11065	1	9859	5	10412	1	9020	5	9538	1	12530	1	9828	10	11179	2	10725	1
16	Rasi 864	7113	13	9427	2	8748	10	8479	6	8533	12	8460	5	8211	22	8852	20	8532	20	9616	9
17	Rasi 393	7966	6	6582	20	10031	3	7382	11	8488	13	8090	9	10181	6	13888	1	12035	1	9737	7
18	Rasi 950	5949	24	7597	9	6528	27	8857	4	8038	17	7394	17	9840	10	9342	14	9591	13	8971	15
19	VEH 13-1	6044	23	6601	18	7718	21	7114	15	7444	23	6984	23	7433	27	6284	27	6858	27	8194	26
20	CSM1	6190	21	5772	25	8409	16	6216	23	8666	9	7051	19	9892	8	8884	19	9388	15	8909	16
21	DMRH1302	6233	20	4186	29	6771	26	6233	22	7713	19	6227	28	9074	17	7819	22	8446	22	8286	25

Sl No	PEDIGREE	ARBH	R	COIM	R	KOLH	R	MAND	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
22	DMRH1306	5782	27	8035	7	7230	25	6215	24	7814	18	7015	20	8457	21	8392	21	8425	23	8639	23
23	DMRH 1308	6907	15	6794	17	5328	29	5144	29	8557	10	6546	27	7777	25	11536	3	9656	11	8723	20
24	JH 248	7256	11	7215	15	8373	17	5299	28	6892	26	7007	21	8204	23	11141	4	9672	10	8532	24
25	JH358	6062	22	5924	24	7562	23	6619	20	8836	8	7001	22	9865	9	10260	8	10063	7	9212	14
26	JH412	4877	28	5725	27	8650	13	5707	26	8085	16	6609	26	9085	16	8980	18	9033	17	8719	21
	CHECKS																				
27	Buland(C)	6426	18	7390	11	7592	22	5467	27	8554	11	7086	18	10183	5	6820	24	8501	21	8703	22
28	SeedTech2324(C)	7292	10	6386	22	8200	18	8746	5	7602	20	7645	13	8201	24	9860	9	9031	18	8811	19
29	Bio9681(C)	6419	19	4413	28	8036	19	5937	25	5534	29	6068	29	8674	18	7245	23	7959	25	7940	29
	Location Mean	**7029**		**7123**		**8387**		**7192**		**8118**		**7570**		**9184**		**9084**		**9134**		**9116**	
	C.D. (5%)	1955		735		1301		763		2195		1390		1660		907		1284		1362	
	C.V. (%)	17		6.31		9.48		6.49		16.53		-		11.05		6.1		-		-	
	F (Prob)	0		0		0		0		0.145				0		0					
	Plot Size	6		4.8		6		5.6		4.8		-		4.8		4.8		-		-	
	AGRONOMY DATA																				
	Sowing Date	11-12		4-01		12-06		27-11		28-11		-		26-11		30-11		-		-	
	Harvest Date	20-04		22-04		14-05		25-04		26-02		-		19-04		15-04		-		-	
	Irrigation Nos	8		10		-		12		12		-		6		12		-		-	
	Ferilizer Applied N	150		150		120		150		150		-		150		120		-		-	
	Ferilizer Applied P	75		75		60		75		75		-		80		50		-		-	
	Ferilizer Applied K	37.5		75		40		40		75		-		-		-		-		-	

Table No. 1 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Buland																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	CP-808	-	-	-	-	10.6	7.6	0.2	9.8	-	3	-	-	5.8	39.3	-	-	-	-	-	-
2	CP-838	4	24	-	8.4	30.1	20.6	5.5	21.6	18.3	18.4	40.4	-	29.8	51.5	8.9	19.2	17.1	32.9	23.4	16.7
3	CP-999	-	-	-	-	-	8.4	8.6	8.9	-	0.6	33.7	-	-	34.7	-	10.1	-	72.7	20.2	2.1
4	CP-111	-	31.8	-	2.7	35.7	12	8.4	28	4.8	16.7	8.2	-	32.9	22.1	-	5.6	-	50.8	3.8	8.4
5	CP-333	-	-	-	-	-	-	17.3	27.7	-	4.1	18.7	-	19.7	26.6	-	6.5	-	61.5	19.2	1.5
6	GK 3118	1.4	25.7	-	3.4	16.3	28.2	-	35.4	5.3	15.3	22.3	10.5	13.3	30	-	10.1	-	-	-	6.2
7	GK 3155	-	-	-	-	14.7	37.6	3.8	37.2	13.6	20	33.2	19.2	15.6	62.5	-	22.3	-	-	-	10
8	HTMH 5108	0.1	0.3	-	-	-	32.1	15.8	38.5	-	13.6	59.5	-	30.1	30.7	4.1	22.8	-	43.2	16.2	12.4
9	HTMH 5202	-	14.9	-	-	5	45.4	13.7	30.4	7.3	18.6	-	18.5	24.9	35.6	18	17.3	6.2	38.9	19.3	12.6
10	KH-2192	-	-	-	-	19.7	20.4	12.2	-	5.5	7.5	-	-	-	34.2	-	-	-	-	-	-
11	KH-3021	-	16.9	-	3.8	20.7	5.4	13.7	18.8	8.7	13.5	5.6	6.5	14.5	27.2	9	11.9	-	56.6	13	10.5
12	KMH-1411	2.3	8.8	0.4	4.2	37.6	24.8	22.1	32.6	4.3	22.7	5.1	16.8	39.7	65.1	-	17.8	6.6	32.6	17.1	15.8
13	IM 8222	-	33.6	14.2	14.4	0.5	17.9	2.9	21.2	27.2	14.9	10.8	-	14.5	17.6	4.6	7.7	-	34.5	10.6	12.2
14	IM 8226	-	-	-	-	-	30	18.1	2.4	5.1	9.4	60.2	1	12.2	38.7	16.9	23.8	-	41.1	10.3	6.7
15	X35F880	6.6	17.9	-	5.6	56.4	27.6	8.1	22.1	18.7	24.5	14.1	49.7	29.9	90.4	5.4	34.6	23	44.1	31.5	23.2
16	Rasi 864	-	11.4	-	-	-	16.8	17.1	25.1	25	17	10.7	27.6	15.2	55.1	-	19.4	-	29.8	0.4	10.5
17	Rasi 393	-	4.1	-	-	-	33.9	14.2	31.5	3.7	15.5	24	-	32.1	35	-	14.2	-	103.6	41.6	11.9
18	Rasi 950	-	19.7	-	-	-	26	5.5	4.1	-	1.9	-	2.8	-	62	-	4.3	-	37	12.8	3.1
19	VEH 13-1	-	-	-	-	-	4.9	5.2	4.2	-	-	-	-	1.7	30.1	-	-	-	-	-	-
20	CSM1	-	-	-	-	19.5	63.5	-	6.4	0.9	13.4	-	-	10.8	13.7	1.3	-	-	30.3	10.4	2.4
21	DMRH1302	-	5.4	-	-	-	20.9	2.1	-	-	-	-	-	-	14	-	-	-	14.7	-	-
22	DMRH1306	-	1.4	-	-	-	14.5	17	-	-	3.7	-	8.7	-	13.7	-	-	-	23.1	-	-
23	DMRH 1308	-	-	-	-	33.4	13.7	4.6	14	-	8.8	7.5	-	-	-	0	-	-	69.2	13.6	0.2
24	JH 248	-	-	-	-	7.7	9.9	6.1	13	-	3.2	12.9	-	10.3	-	-	-	-	63.4	13.8	-
25	JH358	-	7.4	7.2	1.9	29.8	10.5	6	16.4	-	9.7	-	-	-	21.1	3.3	-	-	50.5	18.4	5.8
26	JH412	-	8.5	-	-	29.8	10.1	2.6	32.4	-	10.4	-	-	13.9	4.4	-	-	-	31.7	6.2	0.2
	CHECKS																				
27	Buland(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
28	SeedTech2324(C)	-	-	-	-	-	14.8	9.5	6.3	-	0.7	13.5	-	8	60	-	7.9	-	44.6	6.2	1.2
29	Bio9681(C)	-	-	-	-	8.8	21.1	1.4	-	-	0.7	-	-	5.9	8.6	-	-	-	6.2	-	-

Table No. 1 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE SeedTech2324																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	CP-808	-	-	-	-	46.4	-	-	3.3	-	2.3	-	-	-	-	-	-	11.3	-	-	-
2	CP-838	18.3	28.3	3	17.2	72.2	5.1	-	14.4	21.9	17.5	23.7	-	20.2	-	22.5	10.4	45.4	-	16.2	15.2
3	CP-999	1.1	-	-	-	12.3	-	-	2.4	-	-	17.8	15.1	-	-	9.5	2	5.6	19.4	13.2	0.8
4	CP-111	-	36.4	-	11	79.6	-	-	20.5	8	15.9	-	2.4	23.1	-	-	-	-	4.3	-	7
5	CP-333	-	-	-	-	19.7	-	7.1	20.2	-	3.4	4.6	3.1	10.9	-	-	-	12.8	11.7	12.2	0.3
6	GK 3118	15.3	30.1	-	11.8	54	11.7	-	27.4	8.5	14.5	7.8	27.9	4.9	-	-	2.1	-	-	-	4.9
7	GK 3155	4.7	1.7	-	-	51.8	19.9	-	29.1	17.1	19.1	17.4	37.9	7	1.6	9.4	13.4	18.5	-	-	8.6
8	HTMH 5108	13.9	3.8	3.1	6.2	21.5	15.1	5.8	30.3	-	12.8	40.6	15	20.5	-	17.1	13.9	21.8	-	9.4	11.1
9	HTMH 5202	-	18.9	-	4.6	39	26.7	3.9	22.7	10.5	17.7	-	37.2	15.7	-	32.8	8.7	31.9	-	12.3	11.3
10	KH-2192	-	-	-	-	58.4	4.9	2.5	-	8.7	6.8	-	13.4	-	-	-	-	-	-	-	-
11	KH-3021	4.8	21	7.5	12.3	59.7	-	3.9	11.8	12	12.7	-	23.2	6.1	-	22.6	3.7	4	8.3	6.4	9.1
12	KMH-1411	16.4	12.6	9.8	12.7	82.2	8.8	11.6	24.8	7.5	21.8	-	35.2	29.4	3.2	-	9.2	32.4	-	10.2	14.4
13	IM 8222	-	38.2	25	23.7	33	2.8	-	14	31.1	14	-	9.3	6	-	17.6	-	17.5	-	4.1	10.9
14	IM 8226	-	0.3	-	-	27.6	13.3	7.8	-	8.3	8.6	41.2	16.9	3.9	-	31.6	14.8	11.3	-	3.8	5.4
15	X35F880	21.3	22.1	-	14.2	107.1	11.2	-	14.9	22.3	23.6	0.6	73.3	20.2	19.1	18.6	24.8	52.8	-	23.8	21.7
16	Rasi 864	6.8	15.3	-	5.7	23.9	1.8	6.9	17.8	28.8	16.2	-	47.6	6.7	-	12.2	10.7	0.1	-	-	9.1
17	Rasi 393	-	7.7	-	-	31.6	16.7	4.3	23.7	6.8	14.7	9.2	3.1	22.3	-	11.7	5.8	24.1	40.9	33.3	10.5
18	Rasi 950	-	23.9	-	6.4	22.7	9.8	-	-	-	1.1	-	19	-	1.3	5.7	-	20	-	6.2	1.8
19	VEH 13-1	6.3	-	3.8	0.9	22	-	-	-	-	-	-	3.4	-	-	-	-	-	-	-	-
20	CSM1	5.6	1.3	-	-	58.2	42.5	-	0.1	4	12.6	-	-	2.6	-	14	-	20.6	-	4	1.1
21	DMRH1302	-	9.1	2.4	2.4	30.2	5.4	-	-	-	-	-	-	-	-	1.5	-	10.6	-	-	-
22	DMRH1306	13	5	-	1.5	28.7	-	6.9	-	-	3	-	25.8	-	-	2.8	-	3.1	-	-	-
23	DMRH 1308	-	3	-	-	76.6	-	-	7.2	-	8	-	6.4	-	-	12.6	-	-	17	6.9	-
24	JH 248	-	1.3	-	-	42.6	-	-	6.3	-	2.5	-	13	2.1	-	-	-	0	13	7.1	-
25	JH358	-	11.1	17.3	10.2	71.8	-	-	9.5	-	8.9	-	-	-	-	16.2	-	20.3	4.1	11.4	4.5
26	JH412	-	12.3	-	-	71.8	-	-	24.6	-	9.6	-	-	5.5	-	6.4	-	10.8	-	0	-
	CHECKS																				
27	Buland(C)	13.7	3.5	9.4	8.1	32.4	-	-	-	3	-	-	15.7	-	-	12.5	-	24.2	-	-	-
28	SeedTech2324(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
29	Bio9681(C)	-	-	-	-	44	5.5	-	-	-	-	-	-	-	-	-	-	5.8	-	-	-

Table No.1 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Bio9681																			
		ZN 2									ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	CP-808	-	-	12.2	-	1.7	-	-	28	-	2.3	-	35.8	-	28.3	12	11.3	5.3	-	-	3
2	CP-838	20.6	29.8	39.1	29.7	19.6	-	4	41.8	22	17.6	40.6	30	22.6	39.5	68.3	39.1	37.5	25.1	31.8	27.9
3	CP-999	3.1	-	16.7	3.5	-	-	7.1	26.9	-	-	33.8	66.5	-	24	50.4	28.5	-	62.5	28.4	11.9
4	CP-111	-	37.9	33.1	22.9	24.8	-	7	49.2	8.1	15.9	8.3	48.1	25.6	12.4	29.5	23.3	-	42	10.9	18.8
5	CP-333	0.2	-	11.5	0.7	-	-	15.7	48.9	-	3.4	18.8	49.2	13.1	16.6	35.7	24.4	6.7	52	27.3	11.3
6	GK 3118	17.6	31.6	17.6	23.8	7	5.9	-	57.9	8.6	14.5	22.5	85	7	19.7	31.4	28.6	-	-	-	16.5
7	GK 3155	6.7	2.8	23.5	9.6	5.5	13.6	2.4	59.9	17.1	19.2	33.4	99.6	9.2	49.6	50.3	42.9	12	-	1.2	20.5
8	HTMH 5108	16.1	5	39.2	17.5	-	9	14.2	61.4	-	12.8	59.7	66.4	22.9	20.4	60.9	43.5	15.2	34.8	24.1	23.3
9	HTMH 5202	-	20.2	32	15.8	-	20	12.2	52	10.6	17.7	-	98.5	18	24.9	82.4	36.9	24.7	30.7	27.4	23.5
10	KH-2192	-	-	28.1	-	10	-	10.6	2.9	8.8	6.8	-	64.1	-	23.6	36.3	8.9	-	-	-	1.1
11	KH-3021	6.9	22.4	45.1	24.3	10.9	-	12.2	38.5	12.1	12.7	5.8	78.3	8.2	17.1	68.5	30.6	-	47.4	20.7	21.1
12	KMH-1411	18.7	13.9	48.3	24.7	26.6	3.1	20.4	54.6	7.6	21.8	5.2	95.5	32	52	21.6	37.6	25.2	24.9	25	27
13	IM 8222	1.3	39.8	68.8	36.9	-	-	1.5	41.3	31.2	14	10.9	58.1	8.2	8.3	61.6	25.8	11.1	26.6	18.1	23
14	IM 8226	-	1.4	5.8	0.2	-	7.3	16.4	19.3	8.4	8.6	60.4	69.1	6	27.7	80.8	44.6	5.2	32.8	17.8	17
15	X35F880	23.7	23.5	34	26.4	43.8	5.4	6.6	42.4	22.4	23.6	14.3	150.7	22.7	75.4	63	57.2	44.4	35.7	40.4	35.1
16	Rasi 864	8.9	16.7	25.9	17	-	-	15.4	45.9	28.9	16.2	10.8	113.6	8.9	42.8	54.2	39.4	-	22.2	7.2	21.1
17	Rasi 393	-	8.9	21.4	7.6	-	10.6	12.6	53.3	6.9	14.7	24.1	49.1	24.8	24.3	53.4	33.3	17.4	91.7	51.2	22.6
18	Rasi 950	-	25.3	29.3	17.8	-	4	4.1	21.4	-	1.2	-	72.1	-	49.2	45.3	21.9	13.4	28.9	20.5	13
19	VEH 13-1	8.4	-	40.2	11.7	-	-	3.7	21.5	-	-	-	49.6	-	19.8	34.5	15.1	-	-	-	3.2
20	CSM1	7.7	2.5	2.9	4.1	9.9	35	-	24	4.1	12.6	-	30.8	4.6	4.7	56.6	16.2	14	22.6	17.9	12.2
21	DMRH1302	-	10.3	38.3	13.4	-	-	0.7	9	-	-	-	-	-	5	39.4	2.6	4.6	7.9	6.1	4.4
22	DMRH1306	15.2	6.1	19.2	12.3	-	-	15.4	16.3	-	3	-	82.1	-	4.7	41.2	15.6	-	15.8	5.8	8.8
23	DMRH 1308	-	4.2	25.1	8.4	22.6	-	3.1	32.9	-	8	7.6	53.9	-	-	54.6	7.9	-	59.2	21.3	9.9
24	JH 248	-	2.4	-	-	-	-	4.6	31.8	-	2.5	13	63.5	4.2	-	24.5	15.5	-	53.8	21.5	7.5
25	JH358	1.5	12.4	58.4	22	19.4	-	4.5	35.7	-	8.9	-	34.2	-	11.5	59.7	15.4	13.7	41.6	26.4	16
26	JH412	0.8	13.6	9.8	8.9	19.3	-	1.2	54.4	-	9.7	-	29.7	7.6	-	46.1	8.9	4.7	24	13.5	9.8
	CHECKS																				
27	Buland(C)	16	4.7	47.7	19.7	-	-	-	16.6	3.1	-	0.1	67.4	-	-	54.6	16.8	17.4	-	6.8	9.6
28	SeedTech2324(C)	2	1.1	35	10.7	-	-	8	23.9	0.1	0	13.6	44.7	2	47.3	37.4	26	-	36.1	13.5	11
29	Bio9681(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No.1 (Cont..)

		STAND AT HARVEST ('000/ha)																		
					ZN 2					ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	CP-808	58.9	84.3	64.4	69.2	62.5	62.8	70.5	75.0	67.7	50.6	65.3	52.8	64.9	47.2	56.1	54.9	79.9	67.4	63.8
2	CP-838	59.4	86.1	64.4	70.0	63.9	61.1	66.1	78.5	67.4	53.3	66.7	54.4	63.1	52.8	58.1	56.3	81.9	69.1	64.9
3	CP-999	60.0	84.3	66.7	70.3	63.9	65.6	66.1	70.8	66.6	57.2	66.0	58.9	58.9	59.0	60.0	58.3	78.5	68.4	65.3
4	CP-111	60.6	88.9	66.7	72.0	63.9	64.4	65.2	77.8	67.8	56.7	66.0	55.6	61.9	52.8	58.6	53.5	83.3	68.4	65.5
5	CP-333	61.7	88.0	66.7	72.1	65.3	65.6	67.9	77.8	69.1	59.4	65.3	58.9	56.5	61.1	60.3	62.5	77.1	69.8	66.7
6	GK 3118	58.9	88.9	66.7	71.5	59.7	62.2	73.2	78.5	68.4	52.2	65.3	56.1	62.5	51.4	57.5	58.3	78.5	68.4	65.2
7	GK 3155	60.0	86.1	66.7	70.9	64.6	65.6	65.2	77.8	68.3	59.4	65.3	63.9	63.7	59.7	62.4	59.0	71.5	65.3	66.3
8	HTMH 5108	58.3	87.0	66.7	70.7	66.7	66.1	64.3	77.8	68.7	62.2	66.7	57.8	63.7	57.6	61.6	56.9	79.2	68.1	66.5
9	HTMH 5202	58.9	88.9	66.7	71.5	66.7	66.1	68.8	78.5	70.0	53.9	65.3	59.4	63.1	58.3	60.0	61.8	79.2	70.5	66.8
10	KH-2192	60.0	78.7	58.9	65.9	64.6	58.9	53.6	75.0	63.0	33.9	66.0	40.0	62.5	38.2	48.1	54.9	74.3	64.6	58.5
11	KH-3021	57.8	87.0	62.2	69.0	61.8	63.9	67.0	78.5	67.8	53.9	65.3	56.1	62.5	47.9	57.1	51.4	75.7	63.5	63.6
12	KMH-1411	60.6	88.9	66.7	72.0	66.7	63.9	67.9	79.2	69.4	60.6	66.7	58.9	60.7	54.2	60.2	62.5	80.6	71.5	67.0
13	IM 8222	57.2	87.0	66.7	70.3	66.7	65.6	65.2	80.6	69.5	51.7	66.0	55.6	63.1	56.9	58.6	54.9	81.3	68.1	65.6
14	IM 8226	58.9	86.1	66.7	70.6	68.8	66.7	70.5	80.6	71.6	59.4	65.3	59.4	61.9	54.9	60.2	65.3	79.2	72.2	67.4
15	X35F880	60.0	87.0	66.7	71.2	66.7	62.8	67.0	76.4	68.2	55.0	65.3	53.9	67.3	63.2	60.9	63.2	77.1	70.1	66.5
16	Rasi 864	60.0	88.9	66.7	71.9	64.6	65.0	66.1	80.6	69.1	53.3	66.0	57.8	63.7	57.6	59.7	66.0	75.0	70.5	66.5
17	Rasi 393	56.7	87.0	66.7	70.1	68.1	66.1	66.1	75.7	69.0	57.8	65.3	57.2	61.9	50.7	58.6	56.3	81.3	68.8	65.5
18	Rasi 950	60.0	86.1	66.7	70.9	64.6	65.6	68.8	74.3	68.3	58.9	66.0	57.2	63.7	54.9	60.1	57.6	82.6	70.1	66.2
19	VEH 13-1	57.8	84.3	63.3	68.5	66.7	65.6	61.6	64.6	64.6	50.0	65.3	50.0	61.3	47.9	54.9	52.8	79.9	66.3	62.2
20	CSM1	59.4	84.3	66.7	70.1	66.0	62.2	65.2	74.3	66.9	51.7	65.3	58.9	57.1	52.8	57.2	51.4	77.1	64.2	63.7
21	DMRH1302	58.3	85.2	66.7	70.1	63.2	61.1	65.2	74.3	65.9	48.9	65.3	55.0	56.0	45.1	54.1	61.8	77.1	69.4	63.1
22	DMRH1306	59.4	87.0	64.4	70.3	66.7	65.0	65.2	75.7	68.1	53.9	66.0	57.8	56.0	54.2	57.6	56.3	82.6	69.4	65.0
23	DMRH 1308	59.4	87.0	64.4	70.3	65.3	65.0	69.6	73.6	68.4	59.4	66.0	55.6	57.7	59.7	59.7	68.8	77.1	72.9	66.3
24	JH 248	59.4	88.9	66.7	71.7	64.6	66.1	67.0	76.4	68.5	55.6	65.3	55.6	60.7	56.3	58.7	61.8	79.2	70.5	66.0
25	JH358	61.1	84.3	66.7	70.7	64.6	62.2	63.4	72.2	65.6	53.9	66.0	52.8	59.5	53.5	57.1	59.0	81.3	70.1	64.3
26	JH412	61.1	84.3	66.7	70.7	65.3	62.8	67.9	76.4	68.1	49.4	64.6	58.9	61.3	57.6	58.4	63.9	81.3	72.6	65.8
	CHECKS																			
27	Buland(C)	60.0	86.1	66.7	70.9	66.0	66.1	71.4	80.6	71.0	61.7	66.0	60.6	60.1	47.9	59.2	54.9	73.6	64.2	65.8
28	SeedTech2324(C)	61.7	88.9	65.6	72.0	65.3	67.2	67.9	74.3	68.7	52.8	66.7	56.7	65.5	49.3	58.2	54.9	82.6	68.8	65.7
29	Bio9681(C)	58.9	84.3	66.1	69.8	64.6	63.3	65.2	79.2	68.1	43.3	66.0	51.1	61.9	43.1	53.1	54.9	71.5	63.2	62.4
	Loc. Mean	**59.5**	**86.3**	**65.8**	**70.5**	**65.1**	**64.3**	**66.5**	**76.4**	**68.1**	**54.1**	**65.7**	**56.1**	**61.5**	**53.3**	**58.1**	**58.4**	**78.6**	**68.5**	**65.1**
	C.D. (5%)	3.81	5.39	2.82	2.51	6.38	4.10	7.20	7.38	3.58	8.76	1.92	8.48	4.71	12.10	4.56	9.21	6.23	8.36	2.24
	C.V. (%)	3.92	3.82	2.62	2.18	6.00	3.90	5.28	5.91	3.74	9.89	1.78	9.25	4.68	13.87	6.25	9.64	4.85	5.96	4.63
	F (Prob)	0.69	0.14	0.00	0.01	0.86	0.02	0.03	0.04	0.01	0.00	0.90	0.01	0.00	0.03	0.00	0.02	0.01	0.64	0.00

Table No. 1 (Cont..)

		MOISTURE % AT HARVEST																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	CP-808	28.3	40.8	21.7	30.2	27.0	20.0	21.9	19.8	30.4	23.8	27.4	15.0	8.0	17.0	17.8	17.0	19.8	17.9	18.8	22.2
2	CP-838	26.0	36.5	17.8	26.7	27.0	19.3	20.9	21.6	30.9	23.9	24.6	17.7	8.1	16.1	20.1	17.3	19.9	18.3	19.1	21.6
3	CP-999	27.9	36.1	16.1	26.7	26.0	19.2	21.7	19.4	31.8	23.6	27.7	17.6	8.0	16.8	19.1	17.8	18.0	18.6	18.3	21.6
4	CP-111	28.5	33.8	19.0	27.1	25.2	18.3	20.9	18.5	29.0	22.4	23.1	18.7	7.9	15.5	16.9	16.4	18.5	18.0	18.2	20.8
5	CP-333	27.0	32.3	22.1	27.1	26.0	19.2	19.6	19.0	33.3	23.4	22.9	17.3	8.6	17.0	16.4	16.4	19.3	18.0	18.7	21.2
6	GK 3118	27.4	32.0	21.7	27.0	26.0	18.3	20.1	19.5	30.7	22.9	26.0	17.7	7.3	16.5	17.4	17.0	19.2	17.5	18.3	21.1
7	GK 3155	28.3	36.5	20.9	28.6	26.0	18.5	19.9	19.9	30.6	23.0	22.5	17.0	7.8	15.9	19.8	16.6	19.0	17.9	18.4	21.3
8	HTMH 5108	27.3	40.2	22.4	29.9	26.0	18.9	20.8	19.3	35.0	24.0	22.7	18.7	8.5	15.9	18.4	16.8	19.4	18.6	19.0	22.1
9	HTMH 5202	26.8	32.8	21.7	27.1	26.0	18.3	21.1	21.3	25.9	22.5	23.6	18.2	7.5	16.2	19.5	17.0	20.3	18.2	19.3	21.2
10	KH-2192	25.5	39.5	22.2	29.1	25.2	19.2	19.6	20.2	29.4	22.7	21.9	18.3	7.9	16.5	18.1	16.5	19.2	16.6	17.9	21.3
11	KH-3021	28.8	30.1	21.2	26.7	26.0	19.2	19.5	18.5	27.1	22.0	23.3	16.0	7.5	16.2	16.6	15.9	19.1	18.3	18.7	20.5
12	KMH-1411	27.6	35.7	22.2	28.5	27.0	19.4	19.2	18.9	31.6	23.2	23.8	19.5	8.1	16.3	19.3	17.4	19.9	18.6	19.2	21.8
13	IM 8222	25.9	34.4	21.8	27.3	26.3	19.1	20.3	18.4	29.2	22.6	20.1	18.7	8.2	15.9	16.8	15.9	19.3	17.4	18.3	20.8
14	IM 8226	28.0	37.0	21.3	28.7	24.7	20.1	21.7	19.8	32.9	23.8	27.3	15.7	8.6	15.4	16.4	16.7	18.7	18.2	18.5	21.7
15	X35F880	28.7	38.7	21.3	29.5	27.3	18.3	21.6	19.9	35.1	24.4	27.8	16.4	9.0	15.8	16.6	17.1	20.0	17.3	18.7	22.2
16	Rasi 864	26.3	34.5	22.1	27.6	25.0	19.1	20.2	19.0	27.3	22.1	24.0	16.9	9.4	16.1	18.1	16.9	18.7	15.9	17.3	20.8
17	Rasi 393	26.6	37.8	24.6	29.7	26.2	19.5	19.6	20.4	33.8	23.9	23.0	15.0	8.0	16.2	17.2	15.9	19.4	16.4	17.9	21.6
18	Rasi 950	27.0	29.3	22.4	26.2	24.2	19.0	20.7	19.7	28.9	22.5	23.3	17.9	8.5	16.0	17.0	16.5	18.6	17.2	17.9	20.6
19	VEH 13-1	27.2	35.0	22.3	28.1	26.1	19.2	19.8	19.4	30.3	22.9	24.2	14.2	8.3	15.8	19.7	16.4	18.1	18.0	18.1	21.1
20	CSM1	25.1	32.3	23.1	26.8	26.1	19.1	19.8	19.8	28.6	22.7	23.5	18.8	8.1	15.8	18.2	16.9	19.3	18.6	18.9	21.1
21	DMRH1302	29.8	31.3	19.6	26.9	26.0	18.6	19.7	20.2	30.4	23.0	19.2	15.0	8.2	15.0	15.3	14.5	19.6	18.1	18.8	20.4
22	DMRH1306	28.4	29.7	22.3	26.8	25.0	18.6	19.7	19.4	25.0	21.5	24.1	15.7	8.8	14.5	17.6	16.1	18.5	18.4	18.4	20.4
23	DMRH 1308	26.9	30.5	20.2	25.9	26.0	18.7	19.1	19.8	27.4	22.2	22.3	14.7	8.1	16.1	17.4	15.7	18.5	16.6	17.6	20.1
24	JH 248	25.8	35.7	22.9	28.1	25.0	18.8	20.1	19.3	30.0	22.6	22.6	15.8	7.8	15.4	19.4	16.2	19.2	19.3	19.2	21.1
25	JH358	26.0	34.1	21.7	27.3	26.9	19.1	20.3	19.7	29.6	23.1	25.4	20.9	8.5	15.8	18.5	17.8	19.6	18.3	18.9	21.6
26	JH412	28.1	33.6	24.2	28.6	26.2	19.0	19.3	18.7	30.6	22.7	26.2	15.7	8.1	15.6	17.9	16.7	19.6	17.4	18.5	21.3
	CHECKS																				
27	Buland(C)	29.0	36.2	21.4	28.8	25.0	19.1	19.1	19.7	29.3	22.4	23.9	15.4	8.0	15.7	15.5	15.7	19.5	17.5	18.5	20.9
28	SeedTech2324(C)	28.1	35.9	25.2	29.7	26.0	19.5	20.6	19.4	31.5	23.4	25.9	18.0	7.3	15.9	17.3	16.9	19.2	16.9	18.0	21.8
29	Bio9681(C)	25.8	31.0	20.1	25.6	24.8	19.1	20.8	18.8	24.6	21.6	19.4	14.9	7.5	15.6	17.5	15.0	18.8	17.3	18.0	19.7
	Loc. Mean	**27.3**	**34.6**	**21.5**	**27.8**	**25.8**	**19.0**	**20.3**	**19.5**	**30.0**	**22.9**	**23.8**	**16.9**	**8.1**	**15.9**	**17.8**	**16.5**	**19.2**	**17.7**	**18.5**	**21.2**
	C.D. (5%)	0.38	2.11	1.75	3.64	0.63	0.32	1.71	2.02	0.49	1.57	2.59	0.81	0.78	0.83	1.61	1.69	1.27	0.43	1.32	1.03
	C.V. (%)	0.86	3.73	4.97	8.00	1.49	1.04	5.16	5.04	1.00	5.48	6.65	2.93	5.90	3.18	5.55	8.16	4.04	1.49	3.49	6.81
	F (Prob)	0.00	0.00	0.00	0.48	0.00	0.00	0.02	0.35	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.06	0.07	0.00	0.31	0.00

Table No. 1 (Cont..)

		GRAIN SHELLING %																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	CP-808	79.0	81.1	83.8	81.3	76.0	80.2	79.5	83.9	76.5	79.2	80.5	80.6	70.8	82.3	78.3	78.5	74.9	76.6	75.8	78.9
2	CP-838	77.0	85.1	82.9	81.7	80.6	81.3	78.5	86.3	75.8	80.5	87.4	79.7	70.8	82.4	79.9	80.0	79.7	82.2	80.9	80.6
3	CP-999	78.5	87.5	82.2	82.7	74.5	80.6	81.5	82.8	77.0	79.3	84.3	82.0	58.2	82.0	77.7	76.8	76.9	79.4	78.1	79.0
4	CP-111	77.4	84.2	82.7	81.4	77.8	79.8	83.0	84.8	76.1	80.3	81.8	80.0	78.1	81.1	80.5	80.3	75.2	79.8	77.5	80.1
5	CP-333	77.1	81.1	78.0	78.7	73.9	80.5	78.5	82.7	78.0	78.7	80.7	77.9	72.9	79.9	76.9	77.6	73.2	79.9	76.6	78.1
6	GK 3118	77.5	85.7	80.7	81.3	79.3	80.6	77.5	85.8	75.3	79.7	84.6	83.2	69.8	80.4	79.9	79.6	70.1	83.7	76.9	79.6
7	GK 3155	76.0	84.5	81.7	80.7	76.9	80.4	77.5	86.5	77.3	79.7	85.8	83.2	69.6	81.1	78.1	79.5	77.2	80.8	79.0	79.8
8	HTMH 5108	78.9	81.2	81.1	80.4	76.1	81.9	82.5	85.2	77.1	80.5	81.4	80.6	71.9	66.3	79.5	75.9	76.3	78.4	77.4	78.5
9	HTMH 5202	77.1	84.6	82.5	81.4	79.6	80.6	80.5	87.1	75.0	80.5	82.6	83.4	80.6	79.5	80.8	81.4	79.9	85.7	82.8	81.3
10	KH-2192	77.0	80.9	83.8	80.5	75.1	79.2	82.5	84.7	77.4	79.8	80.9	82.8	67.9	78.4	77.8	77.5	74.1	79.6	76.9	78.8
11	KH-3021	78.9	84.8	81.1	81.6	79.1	80.6	82.0	80.9	76.9	79.9	83.3	80.7	71.0	78.5	80.0	78.7	74.3	83.7	79.0	79.7
12	KMH-1411	78.0	76.8	81.3	78.7	80.0	80.0	82.5	83.5	75.4	80.3	80.1	81.4	88.0	78.6	77.1	81.0	78.4	78.5	78.4	79.9
13	IM 8222	77.1	91.0	82.9	83.7	79.2	81.7	77.5	82.7	74.8	79.2	86.2	80.7	71.1	80.3	79.2	79.5	78.0	81.9	79.9	80.3
14	IM 8226	77.2	84.7	81.1	81.0	66.5	80.1	81.5	83.8	77.4	77.8	85.3	80.2	67.8	79.9	80.5	78.7	78.3	77.0	77.6	78.7
15	X35F880	75.0	85.5	79.5	80.0	81.9	78.6	82.5	84.9	76.6	80.9	79.3	83.1	73.7	83.2	78.4	79.5	81.6	77.2	79.4	80.0
16	Rasi 864	79.1	82.7	86.9	82.9	76.0	80.3	79.0	81.9	75.2	78.5	81.1	81.1	71.1	82.0	78.3	78.7	78.9	81.0	79.9	79.6
17	Rasi 393	79.0	79.2	80.8	79.6	72.9	81.9	80.5	82.1	76.0	78.7	80.1	78.9	74.9	80.6	76.1	78.1	78.9	81.6	80.2	78.9
18	Rasi 950	78.8	82.2	82.9	81.3	73.5	80.4	82.5	85.0	76.9	79.6	81.0	79.7	57.5	80.9	72.7	74.4	78.5	75.4	76.9	77.8
19	VEH 13-1	78.9	83.3	80.9	81.0	71.0	80.1	79.0	83.7	76.1	78.0	79.3	86.2	68.1	81.5	80.6	79.1	73.3	78.1	75.7	78.7
20	CSM1	79.0	85.5	81.8	82.1	77.2	79.7	80.5	85.9	74.9	79.6	81.1	79.7	67.8	82.9	78.2	78.0	77.2	80.4	78.8	79.4
21	DMRH1302	78.0	83.6	79.3	80.3	76.8	78.4	80.5	82.8	75.3	78.7	85.2	82.5	63.5	79.2	80.8	78.2	75.2	67.2	71.2	77.9
22	DMRH1306	80.1	82.4	81.0	81.2	74.8	82.0	78.5	81.2	78.2	78.9	79.1	81.0	68.1	83.0	78.7	78.0	73.6	79.0	76.3	78.7
23	DMRH 1308	75.3	80.0	87.0	80.7	76.9	80.8	80.5	81.4	76.1	79.1	80.2	80.7	54.8	81.1	76.2	74.6	68.8	79.5	74.1	77.3
24	JH 248	78.7	81.3	77.5	79.2	76.3	79.5	76.5	80.4	77.2	78.0	79.9	81.3	71.9	81.9	80.5	79.1	74.0	87.8	80.9	79.0
25	JH358	75.0	81.3	86.3	80.8	78.1	79.5	83.5	86.3	76.7	80.8	80.6	81.0	66.8	80.6	78.5	77.5	80.7	76.8	78.7	79.4
26	JH412	78.1	85.7	79.7	81.1	80.0	81.8	79.5	85.5	76.5	80.7	81.1	79.9	67.5	79.1	80.3	77.6	76.1	80.6	78.3	79.4
	CHECKS																				
27	Buland(C)	79.1	76.3	79.5	78.3	67.6	80.3	80.0	81.7	75.4	77.0	79.6	81.5	63.6	80.4	80.5	77.1	76.1	76.0	76.0	77.2
28	SeedTech2324(C)	80.0	82.4	80.1	80.8	71.5	81.7	80.0	83.5	77.4	78.8	82.0	80.7	73.2	82.0	80.4	79.6	78.3	82.4	80.4	79.7
29	Bio9681(C)	79.9	83.6	82.7	82.1	76.6	82.0	80.5	84.6	75.5	79.8	80.1	80.2	65.3	79.4	80.6	77.1	76.0	80.6	78.3	79.2
	Loc. Mean	**77.9**	**83.0**	**81.7**	**80.9**	**76.0**	**80.5**	**80.3**	**83.8**	**76.3**	**79.4**	**81.9**	**81.2**	**69.5**	**80.3**	**78.8**	**78.3**	**76.3**	**79.7**	**78.0**	**79.2**
	C.D. (5%)	0.88	-	2.83	4.01	1.01	1.14	1.86	4.25	0.75	2.61	1.72	1.93	1.50	4.49	2.43	4.49	3.55	5.06	7.09	2.04
	C.V. (%)	0.69	-	2.12	3.03	0.81	0.87	1.41	2.47	0.60	2.63	1.29	1.46	1.32	3.42	1.88	4.58	2.85	3.88	4.44	3.59
	F (Prob)	0.00	0.00	0.00	0.79	0.00	0.00	0.00	0.10	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.63	0.02

Table No.1 (Cont..)

		DAYS TO 50% POLLEN SHED																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	CP-808	137.0	145.3	122.3	134.9	128.7	73.0	124.7	123.0	111.3	112.1	84.3	60.3	75.0	72.0	58.3	70.0	89.0	83.0	86.0	99.2
2	CP-838	133.7	142.7	120.7	132.3	126.7	72.0	122.3	119.5	111.3	110.4	81.0	57.0	71.0	71.0	53.3	66.7	85.0	82.3	83.7	96.6
3	CP-999	135.0	141.0	121.3	132.4	126.7	74.0	123.0	119.5	109.0	110.4	85.7	60.3	75.0	69.3	56.3	69.3	87.0	80.0	83.5	97.5
4	CP-111	139.7	142.0	121.0	134.2	127.7	74.0	123.0	119.0	108.3	110.4	83.3	58.3	72.0	72.7	59.3	69.1	84.0	82.7	83.3	97.8
5	CP-333	132.3	135.7	120.7	129.6	122.3	72.3	120.3	114.5	106.7	107.2	82.3	57.0	70.0	69.0	59.3	67.5	88.0	81.3	84.7	95.5
6	GK 3118	132.0	135.3	119.3	128.9	122.7	74.0	124.0	118.5	107.3	109.3	83.3	60.0	77.0	71.0	57.7	69.8	84.3	80.0	82.2	96.4
7	GK 3155	131.7	139.3	120.3	130.4	124.7	74.0	123.0	118.5	107.7	109.6	83.3	61.7	75.0	71.3	66.7	71.6	84.0	81.0	82.5	97.5
8	HTMH 5108	135.0	144.0	123.3	134.1	129.0	73.0	124.0	118.0	109.3	110.7	83.0	59.7	73.0	72.0	54.0	68.3	87.3	83.3	85.3	97.9
9	HTMH 5202	133.3	136.3	120.0	129.9	125.7	72.0	120.3	118.5	107.3	108.8	84.0	58.3	72.0	69.3	53.3	67.4	85.0	81.0	83.0	95.8
10	KH-2192	134.0	138.0	119.0	130.3	125.3	73.0	123.0	116.5	106.3	108.8	83.0	58.7	76.0	68.7	55.3	68.3	89.0	82.3	85.7	96.5
11	KH-3021	133.0	137.0	118.3	129.4	124.0	72.3	121.3	119.5	104.7	108.4	83.0	60.7	76.0	67.0	57.3	68.8	86.3	82.0	84.2	96.2
12	KMH-1411	132.0	134.3	119.0	128.4	126.7	72.7	121.3	116.5	106.3	108.7	85.0	61.3	75.0	70.7	56.3	69.7	85.0	81.7	83.3	96.3
13	IM 8222	133.0	140.7	117.3	130.3	122.7	73.0	123.3	120.5	107.3	109.4	80.3	56.7	69.0	70.3	53.3	65.9	85.7	81.7	83.7	95.7
14	IM 8226	140.0	145.0	124.0	136.3	128.7	75.0	125.7	123.0	111.0	112.7	85.0	60.3	79.0	72.0	56.7	70.6	83.7	83.7	83.7	99.5
15	X35F880	133.3	138.7	120.0	130.7	124.7	75.0	124.0	121.5	107.7	110.6	83.0	60.0	76.0	72.0	61.3	70.5	86.3	81.3	83.8	97.7
16	Rasi 864	139.0	141.0	119.3	133.1	127.7	76.0	121.0	120.5	107.3	110.5	83.0	58.0	75.0	69.7	56.3	68.4	84.0	81.0	82.5	97.3
17	Rasi 393	138.0	145.5	125.7	136.4	127.7	73.0	126.3	121.0	110.7	111.7	83.3	61.0	74.0	72.0	54.7	69.0	84.0	83.3	83.7	98.7
18	Rasi 950	138.0	141.3	120.3	133.2	128.7	74.0	124.7	119.5	110.7	111.5	84.7	60.0	78.0	72.0	57.0	70.3	91.3	83.7	87.5	98.9
19	VEH 13-1	136.7	141.0	121.0	132.9	125.7	74.0	122.0	119.5	106.7	109.6	84.7	62.7	74.0	71.3	56.7	69.9	85.0	82.3	83.7	97.5
20	CSM1	136.3	139.7	120.7	132.2	124.3	73.3	124.0	118.5	109.0	109.8	84.0	59.3	75.0	68.7	56.7	68.7	87.0	79.0	83.0	97.0
21	DMRH1302	131.3	135.3	116.7	127.8	124.0	70.7	120.7	116.0	103.7	107.0	79.0	57.7	70.0	67.0	52.3	65.2	85.7	74.7	80.2	93.6
22	DMRH1306	134.3	140.0	120.0	131.4	124.7	72.3	121.3	118.5	106.3	108.6	81.3	57.7	69.0	67.7	53.0	65.7	82.3	78.0	80.2	95.1
23	DMRH 1308	130.3	136.7	118.7	128.6	123.7	72.0	121.0	118.0	104.3	107.8	79.7	58.3	72.0	68.3	63.7	68.4	82.7	75.3	79.0	95.0
24	JH 248	137.7	141.7	124.7	134.7	127.7	76.3	124.7	122.0	110.3	112.2	83.3	60.3	75.0	70.7	67.7	71.4	83.3	81.7	82.5	99.1
25	JH358	134.0	140.7	121.3	132.0	124.7	73.0	124.0	119.0	107.3	109.6	83.3	59.7	69.0	70.0	54.0	67.2	87.7	81.3	84.5	96.6
26	JH412	134.3	141.7	123.7	133.2	126.7	73.7	121.3	118.5	109.0	109.8	84.0	60.0	77.0	70.7	55.0	69.3	87.3	81.7	84.5	97.6
	CHECKS																				
27	Buland(C)	136.3	145.7	126.0	136.0	128.7	76.3	124.7	123.0	110.7	112.7	86.0	62.0	79.0	72.7	56.3	71.2	86.0	84.0	85.0	99.8
28	SeedTech2324(C)	134.7	139.0	119.7	131.1	123.7	72.0	122.0	118.5	107.7	108.8	81.3	59.7	71.0	69.0	56.0	67.4	86.0	78.3	82.2	95.9
29	Bio9681(C)	133.3	135.3	117.3	128.7	123.7	71.7	121.3	118.0	106.0	108.1	79.0	57.0	73.0	66.7	53.3	65.8	86.3	75.7	81.0	94.5
	Loc. Mean	**134.8**	**140.0**	**120.7**	**131.8**	**125.8**	**73.4**	**122.8**	**119.2**	**108.0**	**109.8**	**83.0**	**59.4**	**73.9**	**70.2**	**56.9**	**68.7**	**85.8**	**80.9**	**83.4**	**97.0**
	C.D. (5%)	1.03	2.88	3.23	2.56	1.40	1.64	2.94	2.17	2.73	1.50	2.48	1.07	0.53	3.25	3.65	2.58	2.13	1.91	3.99	1.33
	C.V. (%)	0.47	1.26	1.64	1.19	0.68	1.37	1.46	0.89	1.54	1.09	1.82	1.10	0.44	2.83	3.91	3.00	1.52	1.44	2.34	1.91
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00

Table No. 1 (Cont..)

		DAYS TO 50% SILKING																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	CP-808	139.0	145.3	125.3	136.6	130.7	75.7	126.0	127.5	114.7	114.9	84.7	62.7	76.0	74.0	61.3	71.7	92.3	85.0	88.7	101.3
2	CP-838	135.7	143.0	123.7	134.1	128.7	74.7	124.7	123.5	114.7	113.2	81.0	60.3	72.0	73.0	56.0	68.5	91.7	83.3	87.5	99.1
3	CP-999	137.0	141.0	124.7	134.2	128.7	76.7	125.0	123.5	113.7	113.5	83.0	62.3	76.0	71.7	59.3	70.5	90.7	82.0	86.3	99.7
4	CP-111	141.7	141.3	124.0	135.7	129.7	76.0	125.7	123.5	111.3	113.2	83.0	60.7	73.0	73.7	62.3	70.5	88.0	84.3	86.2	99.9
5	CP-333	135.7	139.7	123.7	133.0	124.3	74.7	123.0	119.0	110.7	110.3	80.7	59.0	71.0	70.7	62.0	68.7	91.7	82.0	86.8	97.8
6	GK 3118	134.7	138.3	122.3	131.8	124.7	76.0	126.0	123.0	111.3	112.2	80.7	62.0	78.0	72.7	61.0	70.9	87.3	81.3	84.3	98.6
7	GK 3155	133.7	142.0	123.0	132.9	126.7	76.3	125.3	124.0	111.3	112.7	83.0	63.7	76.0	73.7	70.3	73.3	88.0	82.0	85.0	99.9
8	HTMH 5108	137.3	145.0	126.3	136.2	131.0	75.0	126.0	122.5	114.0	113.7	81.0	61.7	74.0	74.3	56.7	69.5	90.3	83.7	87.0	99.9
9	HTMH 5202	135.7	141.7	123.0	133.4	127.7	74.3	122.7	123.5	112.0	112.0	79.7	62.0	73.0	71.7	56.7	68.6	88.7	82.3	85.5	98.3
10	KH-2192	136.0	140.7	122.0	132.9	127.3	76.0	125.3	121.0	111.3	112.2	81.7	60.7	77.0	71.0	58.0	69.7	93.0	83.0	88.0	98.9
11	KH-3021	135.0	140.3	121.3	132.2	126.0	75.0	124.0	124.5	109.7	111.8	83.7	63.0	77.0	70.0	60.7	70.9	89.7	82.3	86.0	98.8
12	KMH-1411	134.3	138.0	122.0	131.4	128.7	74.7	124.3	121.5	111.3	112.1	81.7	63.3	76.0	73.0	59.7	70.7	88.0	83.0	85.5	98.6
13	IM 8222	135.0	141.3	120.7	132.3	124.7	76.0	126.3	124.5	110.7	112.4	80.7	58.7	70.0	72.7	56.0	67.6	88.7	83.0	85.8	97.9
14	IM 8226	142.0	-	126.7	134.3	130.7	77.3	127.7	127.5	115.0	115.6	84.0	62.7	80.0	73.3	60.0	72.0	87.0	85.0	86.0	98.5
15	X35F880	135.3	140.3	123.0	132.9	126.7	77.3	126.0	126.0	114.3	114.1	83.7	62.0	77.0	74.3	64.3	72.3	90.0	82.3	86.2	100.2
16	Rasi 864	141.0	143.3	122.3	135.6	129.7	78.0	124.0	124.5	111.0	113.4	82.0	60.0	76.0	71.0	59.7	69.7	87.7	82.0	84.8	99.5
17	Rasi 393	140.0	147.0	128.7	138.6	129.7	75.3	128.3	125.5	114.3	114.6	83.3	63.0	75.0	74.3	57.7	70.7	87.3	84.3	85.8	100.9
18	Rasi 950	140.0	142.7	123.3	135.3	130.7	77.0	126.7	124.5	114.7	114.7	85.0	62.3	79.0	74.0	60.0	72.1	94.7	85.0	89.8	101.3
19	VEH 13-1	138.7	143.7	123.7	135.3	127.7	76.3	124.7	123.5	111.3	112.7	83.3	64.7	75.0	72.7	59.7	71.1	88.3	84.3	86.3	99.8
20	CSM1	138.7	142.7	123.7	135.0	126.3	76.3	125.7	123.5	113.3	113.0	82.7	62.3	76.0	70.7	61.0	70.5	90.3	81.0	85.7	99.6
21	DMRH1302	133.3	137.3	119.3	130.0	126.0	73.0	123.0	120.5	108.3	110.2	81.0	59.7	71.0	68.7	55.0	67.1	89.0	76.0	82.5	96.1
22	DMRH1306	136.3	140.0	123.0	133.1	126.7	74.3	124.0	123.5	109.3	111.6	81.0	59.7	70.0	70.7	55.3	67.3	86.0	80.0	83.0	97.3
23	DMRH 1308	132.7	140.0	121.7	131.4	125.7	74.0	123.0	122.0	108.0	110.5	79.3	60.3	73.0	69.7	67.0	69.9	86.3	76.0	81.2	97.2
24	JH 248	140.0	144.0	127.7	137.2	129.7	78.3	127.3	126.0	114.7	115.2	81.3	62.7	76.0	72.0	71.0	72.6	86.3	83.0	84.7	101.3
25	JH358	136.0	141.0	124.0	133.7	126.7	75.0	126.0	123.0	110.7	112.3	82.7	61.7	70.0	71.3	57.3	68.6	91.0	82.0	86.5	98.6
26	JH412	136.3	141.7	126.7	134.9	128.7	76.0	123.3	123.0	113.3	112.9	83.7	62.7	78.0	71.7	58.3	70.9	90.3	83.0	86.7	99.8
	CHECKS																				
27	Buland(C)	138.7	146.0	129.0	137.9	130.7	78.7	126.7	127.5	114.7	115.6	84.7	64.3	80.0	74.3	59.0	72.5	89.7	84.3	87.0	101.9
28	SeedTech2324(C)	136.7	139.3	122.7	132.9	125.7	74.3	124.7	123.0	110.7	111.7	81.0	61.7	72.0	71.0	59.0	68.9	89.7	79.0	84.3	98.0
29	Bio9681(C)	135.7	136.7	120.3	130.9	125.7	73.7	124.0	122.5	110.3	111.2	78.0	59.0	74.0	67.7	55.3	66.8	89.3	77.7	83.5	96.7
	Loc. Mean	**137.0**	**141.5**	**123.7**	**134.0**	**127.8**	**75.7**	**125.1**	**123.7**	**112.1**	**112.9**	**82.1**	**61.7**	**74.9**	**72.0**	**60.0**	**70.1**	**89.3**	**82.1**	**85.7**	**99.2**
	C.D. (5%)	1.31	3.18	3.18	3.00	1.40	1.81	3.03	2.48	3.13	1.46	2.86	1.15	0.53	3.48	3.99	2.67	1.53	1.54	3.94	2.03
	C.V. (%)	0.58	1.35	1.57	1.37	0.67	1.46	1.48	0.98	1.71	1.04	2.13	1.14	0.43	2.95	4.07	3.03	1.05	1.15	2.25	2.85
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.07	0.00

Table No. 1 (Cont..)

		DAYS TO 75% DRY HUSK																		
				ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	CP-808	180.3	187.3	183.8	159.7	120.3	160.7	166.5	148.7	151.2	119.3	96.7	110.0	113.7	94.0	106.7	124.7	118.0	121.3	135.7
2	CP-838	181.0	186.0	183.5	162.3	117.3	157.7	167.0	149.3	150.7	117.7	95.3	110.0	113.7	93.0	105.9	125.3	121.7	123.5	135.5
3	CP-999	179.3	185.0	182.2	163.7	117.7	160.0	166.5	149.3	151.4	120.3	97.3	109.0	114.3	95.3	107.3	123.7	117.7	120.7	135.7
4	CP-111	180.3	186.0	183.2	164.7	118.0	158.3	164.0	148.7	150.7	119.3	95.3	111.0	114.7	96.3	107.3	121.7	122.0	121.8	135.7
5	CP-333	180.0	184.7	182.3	161.7	117.3	156.7	165.0	145.0	149.1	119.0	96.0	109.0	114.3	95.7	106.8	125.7	117.7	121.7	134.8
6	GK 3118	176.0	185.3	180.7	166.7	120.3	160.0	166.0	149.0	152.4	119.7	97.3	109.0	115.0	96.7	107.5	120.7	109.0	114.8	135.0
7	GK 3155	174.0	184.3	179.2	165.7	118.7	159.7	166.5	148.7	151.8	120.3	98.0	106.0	115.7	100.0	108.0	120.7	124.7	122.7	135.9
8	HTMH 5108	177.0	186.0	181.5	163.3	118.0	160.0	165.5	149.3	151.2	120.7	96.7	111.0	114.7	95.3	107.7	123.0	122.0	122.5	135.9
9	HTMH 5202	180.0	186.0	183.0	164.7	120.0	157.7	168.0	148.3	151.7	120.3	97.3	109.0	118.0	96.7	108.3	119.0	114.0	116.5	135.6
10	KH-2192	177.7	184.7	181.2	165.7	119.7	161.3	167.0	149.0	152.5	121.3	95.7	108.0	115.0	97.3	107.5	125.3	125.3	125.3	136.6
11	KH-3021	174.0	181.0	177.5	162.3	117.0	157.0	164.5	146.0	149.4	119.7	97.7	110.0	112.3	94.0	106.7	121.0	118.0	119.5	133.9
12	KMH-1411	184.3	184.3	184.3	161.7	117.0	158.7	165.0	147.0	149.9	121.7	98.0	108.0	114.7	95.3	107.5	124.0	124.3	124.2	136.0
13	IM 8222	177.0	186.3	181.7	162.3	118.7	156.0	166.0	149.3	150.5	119.7	95.3	110.0	115.7	95.7	107.3	122.3	122.0	122.2	135.5
14	IM 8226	184.0	184.7	184.3	167.3	119.0	161.3	164.0	149.0	152.1	122.3	97.7	111.0	114.3	94.3	107.9	120.7	124.3	122.5	136.7
15	X35F880	175.0	183.7	179.3	163.7	119.0	159.3	166.5	146.7	151.0	120.0	97.0	110.0	117.7	97.3	108.4	122.7	123.3	123.0	135.8
16	Rasi 864	178.0	184.3	181.2	165.7	120.0	157.0	166.0	148.7	151.5	118.0	95.7	111.0	115.3	86.3	105.3	120.0	113.3	116.7	134.2
17	Rasi 393	180.0	187.0	183.5	160.7	116.7	162.7	167.0	149.0	151.2	120.7	99.3	109.0	113.7	94.7	107.5	119.0	124.3	121.7	136.0
18	Rasi 950	180.3	185.3	182.8	163.7	119.0	159.0	165.0	149.0	151.1	118.7	97.7	107.0	114.7	95.7	106.7	127.3	114.7	121.0	135.5
19	VEH 13-1	178.3	181.0	179.7	155.3	116.3	157.3	164.0	145.3	147.7	120.0	100.0	107.0	110.7	93.7	106.3	121.0	109.0	115.0	132.8
20	CSM1	182.0	185.7	183.8	163.7	119.0	158.7	167.0	149.3	151.5	122.3	97.3	108.0	113.0	93.7	106.9	124.0	114.0	119.0	135.5
21	DMRH1302	176.3	183.3	179.8	158.7	116.3	156.0	166.5	146.3	148.8	119.3	95.0	108.0	113.7	93.3	105.9	123.7	117.3	120.5	133.8
22	DMRH1306	176.0	178.3	177.2	157.3	116.0	156.0	165.5	143.0	147.6	117.0	95.0	106.0	110.7	87.0	103.1	119.7	118.0	118.8	131.8
23	DMRH 1308	174.3	179.0	176.7	156.3	116.3	155.0	166.0	142.0	147.1	117.0	96.3	107.0	110.0	96.3	105.3	119.0	114.0	116.5	132.0
24	JH 248	177.0	184.7	180.8	161.7	120.0	158.3	166.5	149.3	151.2	121.0	97.3	109.0	113.0	99.3	107.9	119.0	122.0	120.5	135.6
25	JH358	178.3	184.0	181.2	161.7	116.7	160.7	166.5	146.3	150.4	118.3	96.7	108.0	113.7	94.7	106.3	124.7	122.0	123.3	135.2
26	JH412	175.0	183.0	179.0	163.7	116.0	156.7	166.0	147.0	149.9	120.3	97.7	107.0	113.7	95.3	106.8	123.3	118.0	120.7	134.5
	CHECKS																			
27	Buland(C)	177.0	187.0	182.0	165.3	120.0	159.3	165.0	148.7	151.7	120.3	101.3	108.0	112.3	95.3	107.5	122.7	109.0	115.8	135.1
28	SeedTech2324(C)	178.3	185.7	182.0	166.3	119.0	156.7	165.0	145.7	150.5	118.3	96.7	110.0	114.3	93.0	106.5	124.3	120.0	122.2	135.2
29	Bio9681(C)	181.0	182.7	181.8	154.7	116.0	157.3	163.0	145.7	147.3	118.0	95.0	106.0	110.7	87.3	103.4	122.3	122.0	122.2	133.0
	Loc. Mean	**178.3**	**184.4**	**181.4**	**162.4**	**118.1**	**158.4**	**165.8**	**147.5**	**150.5**	**119.7**	**97.0**	**108.7**	**113.9**	**94.6**	**106.8**	**122.4**	**118.7**	**120.6**	**135.0**
	C.D. (5%)	1.07	3.89	3.93	1.52	2.33	3.56	3.21	2.24	2.06	2.91	0.97	1.58	2.70	2.33	2.18	2.29	4.85	7.48	1.63
	C.V. (%)	0.37	1.29	1.06	0.57	1.21	1.38	0.95	0.93	1.09	1.49	0.61	0.89	1.45	1.50	1.63	1.14	2.50	3.03	1.62
	F (Prob)	0.00	0.00	0.01	0.00	0.00	0.00	0.43	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00

Table No. 1 (Cont..)

		PLANT HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	CP-808	158.3	196.7	216.7	190.6	179.3	231.9	160.0	176.6	203.3	190.2	166.0	180.9	196.7	209.7	197.1	190.1	243.3	211.3	227.3	195.2
2	CP-838	196.7	198.7	236.0	210.4	200.7	207.7	155.0	184.4	210.0	191.5	198.5	177.0	213.3	217.0	208.7	202.9	276.7	213.3	245.0	206.2
3	CP-999	156.7	173.3	213.0	181.0	171.7	198.6	151.7	202.2	191.7	183.2	195.0	161.1	193.3	210.0	193.4	190.6	206.7	208.3	207.5	188.4
4	CP-111	155.0	198.3	229.7	194.3	206.3	217.1	147.7	193.7	191.7	191.3	188.0	179.4	208.3	210.3	193.8	196.0	261.7	213.3	237.5	199.6
5	CP-333	143.3	138.3	205.7	162.4	155.3	176.7	130.0	184.5	160.0	161.3	174.0	161.3	173.3	207.3	172.9	177.8	231.7	213.7	222.7	175.2
6	GK 3118	163.3	178.3	200.7	180.8	191.7	219.2	122.0	185.1	183.3	180.3	178.0	183.2	196.7	207.7	198.4	192.8	280.7	222.3	251.5	194.0
7	GK 3155	168.3	161.7	235.0	188.3	182.3	196.1	148.7	184.9	188.3	180.1	177.0	198.9	195.0	218.3	203.5	198.6	188.3	207.0	197.7	190.2
8	HTMH 5108	168.3	175.0	195.3	179.6	162.0	221.5	137.3	182.7	183.3	177.4	186.0	190.7	181.7	212.0	193.7	192.8	266.7	220.7	243.7	191.8
9	HTMH 5202	143.3	163.3	218.3	175.0	191.3	215.7	150.0	200.8	180.0	187.6	170.0	186.4	195.0	210.7	208.7	194.1	271.7	208.3	240.0	194.2
10	KH-2192	143.3	190.0	237.3	190.2	216.7	229.5	163.3	205.6	216.7	206.4	179.0	175.5	198.3	212.3	209.9	195.0	260.0	211.7	235.8	203.3
11	KH-3021	176.7	183.3	230.3	196.8	195.7	222.0	153.7	176.0	195.0	188.5	169.5	172.8	180.0	207.3	192.7	184.5	255.3	216.7	236.0	195.1
12	KMH-1411	178.3	185.0	237.0	200.1	236.3	256.7	166.7	203.3	215.0	215.6	196.5	197.2	221.7	216.3	195.9	205.5	288.3	227.3	257.8	214.8
13	IM 8222	163.3	186.7	225.3	191.8	203.7	227.3	139.0	187.9	193.3	190.2	173.5	178.6	211.7	208.7	202.4	195.0	275.0	211.7	243.3	199.2
14	IM 8226	186.7	206.7	211.0	201.4	197.7	226.5	166.7	179.0	230.0	200.0	213.0	201.9	216.7	217.7	200.1	209.9	288.0	208.7	248.3	210.0
15	X35F880	178.3	178.3	231.7	196.1	221.0	238.9	147.3	190.6	213.3	202.2	199.0	199.0	210.0	220.7	205.6	206.9	306.7	208.3	257.5	209.9
16	Rasi 864	176.7	183.3	204.3	188.1	180.3	212.3	136.7	187.0	203.3	183.9	177.0	185.2	195.0	211.3	194.5	192.6	251.7	213.0	232.3	194.1
17	Rasi 393	191.7	196.7	258.7	215.7	214.3	243.9	175.0	211.9	230.0	215.0	197.5	188.3	225.0	211.7	206.0	205.7	278.3	211.7	245.0	216.0
18	Rasi 950	143.3	190.0	218.3	183.9	216.7	243.1	145.0	192.4	210.0	201.4	139.0	187.1	193.3	209.7	184.1	182.6	281.7	213.3	247.5	197.8
19	VEH 13-1	178.3	186.7	220.0	195.0	190.7	216.8	154.3	188.1	203.3	190.6	188.5	185.9	186.7	214.0	215.1	198.0	228.3	210.0	219.2	197.8
20	CSM1	155.0	171.7	195.0	173.9	217.0	224.9	140.7	190.2	216.7	197.9	183.5	175.5	196.7	213.0	208.6	195.5	291.7	181.7	236.7	197.4
21	DMRH1302	168.3	161.7	209.3	179.8	191.7	212.8	147.3	183.6	183.3	183.7	161.5	141.9	165.0	202.3	183.5	170.8	248.3	174.0	211.2	182.3
22	DMRH1306	186.7	185.0	242.0	204.6	196.7	233.1	154.7	192.8	193.3	194.1	176.0	189.8	186.7	213.3	208.3	194.8	226.7	209.0	217.8	199.6
23	DMRH 1308	173.3	178.3	226.0	192.6	192.3	218.4	143.3	191.0	188.3	186.7	188.0	186.3	181.7	212.0	210.7	195.7	263.3	212.3	237.8	197.7
24	JH 248	150.0	171.7	192.0	171.2	175.0	198.1	120.7	159.9	175.0	165.7	149.5	174.5	170.0	197.0	191.0	176.4	236.7	176.7	206.7	175.8
25	JH358	191.7	180.0	223.0	198.2	187.3	224.4	133.0	199.8	193.3	187.6	186.0	175.1	195.0	211.0	214.9	196.4	255.0	208.3	231.7	198.5
26	JH412	206.7	191.7	231.0	209.8	198.3	234.1	143.3	195.5	200.0	194.2	173.0	182.6	206.7	209.7	206.7	195.7	278.3	216.7	247.5	204.9
	CHECKS																				
27	Buland(C)	178.3	205.0	244.0	209.1	212.7	241.8	175.7	201.1	216.7	209.6	210.5	191.1	216.7	225.7	218.4	212.5	273.3	215.0	244.2	215.1
28	SeedTech2324(C)	171.7	175.0	209.0	185.2	178.3	225.4	145.0	180.8	195.0	184.9	185.0	167.9	181.7	210.3	176.1	184.2	288.3	226.7	257.5	194.4
29	Bio9681(C)	158.3	183.3	216.0	185.9	196.0	231.5	152.0	184.0	193.3	191.4	180.5	168.5	191.7	212.3	204.8	191.6	208.3	188.3	198.3	191.3
	Loc. Mean	**169.3**	**181.9**	**221.1**	**190.8**	**195.1**	**222.3**	**148.5**	**189.5**	**198.5**	**190.8**	**181.3**	**180.8**	**196.0**	**211.7**	**200.0**	**194.0**	**259.0**	**208.9**	**234.0**	**197.6**
	C.D. (5%)	5.63	24.01	13.16	19.37	27.81	21.50	19.37	17.42	16.36	12.46	16.98	6.17	19.13	10.59	15.96	11.75	39.01	21.32	39.80	8.96
	C.V. (%)	2.03	8.07	3.64	6.21	8.71	5.91	7.97	4.49	5.04	5.21	5.73	2.09	5.97	3.06	4.88	4.84	9.21	6.24	8.30	6.32
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.11	0.00

Table No. 1 (Cont..)

		EAR HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	CP-808	71.7	95.0	90.3	85.7	83.3	108.0	69.0	95.3	103.3	91.8	72.0	130.2	98.3	103.0	85.2	97.8	118.3	96.7	107.5	94.6
2	CP-838	90.0	86.7	84.3	87.0	101.3	95.5	70.0	92.8	105.0	92.9	95.0	78.1	96.7	108.7	104.7	96.6	110.0	99.3	104.7	94.5
3	CP-999	75.0	81.7	96.0	84.2	82.3	92.2	65.7	98.4	106.7	89.1	89.0	80.5	95.0	102.7	85.8	90.6	96.7	83.3	90.0	88.7
4	CP-111	66.7	93.3	87.3	82.4	113.3	108.5	63.7	109.1	81.7	95.3	88.5	82.7	100.0	102.3	83.5	91.4	115.0	109.0	112.0	93.6
5	CP-333	56.7	53.3	78.3	62.8	60.3	79.3	55.7	90.1	65.0	70.1	78.5	78.7	93.3	101.7	82.6	87.0	105.0	105.7	105.3	78.9
6	GK 3118	81.7	78.3	76.3	78.8	87.7	121.7	59.0	100.3	90.0	91.7	94.0	94.8	101.7	99.3	106.5	99.3	118.3	105.0	111.7	94.3
7	GK 3155	76.7	71.7	101.3	83.2	92.0	98.6	69.0	99.6	88.3	89.5	94.0	100.4	98.3	113.3	98.7	100.9	103.7	105.7	104.7	94.1
8	HTMH 5108	81.7	93.3	88.7	87.9	96.7	113.6	65.7	107.1	96.7	95.9	98.0	93.0	101.7	111.7	102.3	101.3	103.3	105.7	104.5	97.3
9	HTMH 5202	61.7	86.7	95.3	81.2	93.0	107.5	68.7	102.0	81.7	90.6	86.5	93.6	96.7	102.0	102.7	96.3	115.0	87.3	101.2	92.0
10	KH-2192	60.0	85.0	93.0	79.3	101.3	112.6	71.7	101.2	123.3	102.0	81.5	79.3	98.3	108.7	94.1	92.4	135.0	82.3	108.7	95.2
11	KH-3021	90.0	101.7	91.7	94.4	93.7	105.5	74.0	94.4	91.7	91.9	77.5	83.3	85.0	102.7	88.7	87.4	122.3	111.7	117.0	94.3
12	KMH-1411	76.7	80.0	81.3	79.3	102.7	108.9	71.3	100.5	76.7	92.0	86.5	100.3	110.0	102.0	94.8	98.7	123.3	130.7	127.0	96.4
13	IM 8222	71.7	80.0	83.7	78.4	88.7	98.3	61.7	86.9	80.0	83.1	81.5	94.3	98.3	99.0	85.4	91.7	115.0	83.3	99.2	87.2
14	IM 8226	68.3	103.3	91.7	87.8	76.0	110.3	82.0	92.4	118.3	95.8	97.5	99.1	103.3	108.0	91.0	99.8	107.0	103.3	105.2	96.8
15	X35F880	88.3	75.0	94.7	86.0	104.0	118.2	68.3	96.5	96.7	96.7	93.5	97.3	110.0	120.3	91.7	102.6	133.3	91.0	112.2	98.6
16	Rasi 864	93.3	96.7	86.0	92.0	78.0	97.0	62.3	92.3	95.0	84.9	89.0	93.3	96.7	101.7	91.8	94.5	98.3	108.3	103.3	92.0
17	Rasi 393	91.7	103.3	118.7	104.6	110.3	133.9	86.7	116.6	120.0	113.5	92.0	100.8	116.7	109.0	97.9	103.3	121.7	111.7	116.7	108.7
18	Rasi 950	68.3	90.0	93.0	83.8	121.7	135.1	77.3	108.2	96.7	107.8	89.0	95.7	100.0	102.7	93.1	96.1	110.0	104.0	107.0	99.0
19	VEH 13-1	85.0	80.0	88.0	84.3	94.7	99.3	51.7	80.5	80.0	81.2	84.5	97.1	93.3	103.7	103.1	96.3	113.7	105.7	109.7	90.7
20	CSM1	81.7	91.7	86.0	86.4	116.0	128.2	64.3	110.2	111.7	106.1	91.5	82.4	100.0	113.3	99.5	97.4	123.3	101.7	112.5	100.1
21	DMRH1302	83.3	93.3	89.0	88.6	102.3	113.3	67.3	99.6	93.3	95.2	76.0	79.9	90.0	93.3	88.1	85.5	108.3	103.3	105.8	92.0
22	DMRH1306	101.7	86.7	118.7	102.3	81.7	119.2	71.3	108.3	85.0	93.1	92.5	102.2	96.7	104.3	106.1	100.4	110.0	105.7	107.8	99.3
23	DMRH 1308	75.0	75.0	94.0	81.3	92.0	107.1	65.7	95.7	76.7	87.4	92.5	96.9	93.3	109.3	103.9	99.2	130.0	115.0	122.5	94.8
24	JH 248	66.7	86.7	85.7	79.7	93.3	102.6	60.7	92.1	86.7	87.1	76.5	92.4	95.0	93.0	92.8	89.9	103.7	76.7	90.2	87.0
25	JH358	91.7	83.3	87.7	87.6	91.7	101.7	55.0	103.9	86.7	87.8	95.0	89.5	98.3	103.3	108.5	98.9	103.3	106.7	105.0	93.8
26	JH412	108.3	98.3	94.7	100.4	103.7	114.1	64.0	112.0	93.3	97.4	87.0	91.9	108.3	106.3	105.9	99.9	110.3	122.3	116.3	101.4
	CHECKS																				
27	Buland(C)	93.3	115.0	121.3	109.9	111.3	138.4	95.0	117.2	110.0	114.4	106.0	104.2	116.7	119.3	121.0	113.4	123.7	112.7	118.2	113.7
28	SeedTech2324(C)	95.0	103.3	91.7	96.7	96.3	123.9	75.7	112.3	106.7	103.0	91.5	89.7	110.0	112.0	95.3	99.7	123.3	112.7	118.0	102.6
29	Bio9681(C)	71.7	90.0	84.0	81.9	57.0	106.1	64.0	94.1	86.7	81.6	85.0	78.3	96.7	105.7	88.9	90.9	103.7	66.7	85.2	85.2
	Loc. Mean	**80.1**	**88.2**	**92.1**	**86.8**	**94.0**	**110.3**	**68.1**	**100.3**	**94.3**	**93.4**	**88.3**	**92.4**	**99.9**	**105.6**	**96.3**	**96.5**	**114.0**	**101.8**	**107.9**	**95.1**
	C.D. (5%)	4.69	21.14	8.08	14.93	18.59	14.32	14.21	12.73	17.17	11.00	8.85	19.07	15.75	14.39	11.03	8.51	18.40	11.48	22.51	6.55
	C.V. (%)	3.58	14.65	5.36	10.51	12.09	7.94	12.75	6.20	11.14	9.40	6.13	12.62	9.63	8.33	7.00	7.03	9.87	6.89	10.18	9.59
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.07	0.00	0.00	0.00	0.00	0.17	0.00

TABLE No. 2 : Performance of medium maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 02 (IVT1- M) during rabi 2013-14.

	GRAIN YIELD (kg/ha) AT 15% MOISTURE																																					
Sl							ZN 2										ZN 3										ZN 4								ZN 5		OV'L	
No	PEDIGREE	KARN	R	LUDH	R	PANT	R	MEAN	R	BAHR	R	BHUB	R	DHOL	R	RANC	R	VARA	R	MEAN	R	ARBH	R	COIM	R	KOLH	R	MAND	R	VAGA	R	MEAN	R	BANS	R	GODH	R	MEAN	R	MEAN	R
1	Bio 9662	8744	6	10990	7	13990	3	11241	4	8740	9	6865	9	8973	19	10316	12	9103	13	8799	12	5356	15	7822	6	9025	13	7714	9	7479	6	8010	10	9602	1	13090	9	11346	4	9461	7
2	BL 798	8477	9	10378	10	14331	2	11062	7	9160	7	7450	3	9416	11	11633	7	10240	6	9580	6	6316	9	9222	3	10874	5	7390	14	6957	11	8611	4	7122	22	10877	15	9000	21	9538	6
3	BL 900	8062	17	12853	3	12791	6	11235	5	10635	2	6738	11	9914	4	11059	9	10797	3	9829	4	8543	1	8716	4	11350	3	9342	2	8734	1	9535	2	8207	11	18932	1	13570	2	10581	3
4	BL 147	8161	15	10153	13	14959	1	11091	6	9746	5	7494	2	9929	3	12130	4	10205	7	9901	3	4390	22	8676	5	9381	11	7191	17	7017	10	8066	8	9039	4	9942	19	9491	16	9573	5
5	KH-517	8192	13	8925	23	10854	13	9324	17	7798	14	5964	19	9249	12	12035	5	8890	15	8787	13	6669	6	6784	15	8905	14	7771	8	7638	3	7775	12	7801	16	14750	5	11275	5	8968	10
6	IM 8303	9218	4	13907	2	13446	5	12190	2	9915	4	7701	1	9616	7	11454	8	9455	11	9628	5	7705	3	12107	1	10888	4	9870	1	8026	2	10223	1	8132	12	16199	3	12166	3	10710	2
7	IM 8189	9945	2	14291	1	13857	4	12698	1	12098	1	7060	7	11279	1	13372	1	13690	1	11500	1	8105	2	9469	2	11720	2	9082	3	6869	13	9285	3	7231	21	14473	6	10852	8	11031	1
8	MMH11-12-13	8341	11	9650	18	10336	16	9442	16	5698	25	5971	18	8830	20	10373	11	9288	12	8032	16	3058	24	6694	17	9081	12	8173	7	7285	8	7808	11	7713	18	12538	10	10125	11	8569	16
9	MMH12-12-13	8249	12	9456	19	8479	23	8728	23	7147	18	6142	16	9090	17	7594	22	8033	21	7601	20	3667	23	5399	25	8000	20	6405	22	7627	4	6858	20	8892	6	9203	21	9047	19	7837	20
10	MMH-13-12-13	9375	3	9819	16	8289	24	9161	19	7836	13	6816	10	8786	21	8127	20	9012	14	8115	15	4488	19	6211	20	7798	22	5602	24	6534	16	6536	22	8022	14	11240	14	9631	15	8105	18
11	MMH-14-12-13	8141	16	9226	20	10323	17	9230	18	6972	20	4987	24	8429	23	6984	24	7388	22	6952	24	3018	25	7602	8	9595	10	6520	20	6096	17	7453	14	6002	25	7831	23	6917	25	7578	22
12	MMH-15-12-13	7295	23	10002	15	9384	20	8894	20	6191	22	6321	14	9225	13	7520	23	8274	18	7506	22	5370	14	5467	24	8816	15	5321	25	5608	21	6303	24	7407	20	10608	17	9007	20	7674	21
13	GPS Sarayu	8394	10	8142	25	8924	22	8487	24	5904	24	7176	4	8439	22	7855	21	6214	25	7118	23	4814	17	5489	23	7225	25	6083	23	3565	25	5590	25	7073	23	7636	24	7354	24	7009	25
14	GPS Maina	10464	1	10722	9	12704	7	11297	3	8847	8	6655	12	9440	9	11762	6	9611	10	9263	7	4990	16	6782	16	9618	9	7290	15	5597	22	7322	15	7626	19	7590	25	7608	23	8908	11
15	DMRH 1302	7855	20	10786	8	9806	19	9483	14	9707	6	5060	23	9197	15	9808	14	10342	5	8823	11	6634	7	7600	9	8508	16	8736	5	7344	7	8047	9	7966	15	14180	7	11073	6	9064	9
16	CSM2	7170	24	10195	12	11051	12	9472	15	8688	10	6378	13	9469	8	12178	3	8294	17	9001	8	7170	4	7510	11	10422	6	7600	10	7485	5	8254	6	6041	24	15125	4	10583	9	9115	8
17	DMRH1301	7880	19	9801	17	11681	10	9787	12	10412	3	7080	6	9790	6	13335	2	12208	2	10565	2	5936	11	7283	12	12692	1	8267	6	5985	18	8557	5	9530	2	18451	2	13991	1	10314	4
18	VaMH 08015	1766	25	8316	24	7960	25	6014	25	7275	16	6055	17	10565	2	8224	18	7255	23	7875	19	4461	20	6185	21	7938	21	6951	18	4703	24	6444	23	8542	8	10832	16	9687	14	7326	24
19	DMRH1303	8629	7	10115	14	11903	9	10216	11	8551	11	5836	21	9205	14	9300	17	9716	9	8522	14	4576	18	6929	14	7631	24	6665	19	7276	9	7125	17	8099	13	13718	8	10908	7	8827	14
20	DMRH1305	8861	5	11071	6	10751	14	10228	10	6520	21	6149	15	9136	16	10056	13	8158	19	8004	17	4431	21	6538	18	8041	18	7406	13	6875	12	7215	16	8872	7	11348	13	10110	12	8556	2
21	DMRH1306	8189	14	12436	4	11166	11	10597	9	8412	12	6917	8	9831	5	9761	15	9855	8	8955	9	6383	8	7576	10	8198	17	7450	12	6630	15	7463	13	7769	17	10495	18	9132	18	8906	4
22	DMRH1307	7854	21	10315	11	10385	15	9518	13	7140	19	7153	5	9081	18	10805	10	10378	4	8911	10	6962	5	7073	13	9692	8	8939	4	6752	14	8114	7	9065	3	9638	20	9352	17	8876	13
23	AH1314	7987	18	9111	22	9209	21	8769	22	7265	17	4512	25	8226	25	9559	16	8134	20	7539	21	5642	12	6281	19	7645	23	7477	11	5818	19	6805	21	8360	10	11440	12	9900	13	7930	19
24	AH1315	7397	22	9180	21	9854	18	8811	21	6145	23	5613	22	8407	24	6228	25	6615	24	6602	25	6102	10	7616	7	8028	19	6443	21	5747	20	6959	19	8908	5	8401	22	8654	22	7470	23
	CHECKS																																								
25	Bio9637(C)	8488	8	11078	5	12638	8	10735	8	7381	15	5946	20	9428	10	8172	19	8765	16	7938	18	5557	13	5787	22	9793	7	7281	16	5575	23	7109	18	8525	9	12404	11	10465	10	8661	15
	Location Mean	**8125**		**10437**		**11163**		**9908**		**8167**		**6401**		**9318**		**9986**		**9197**		**8614**		**5614**		**7313**		**9235**		**7479**		**6609**		**7659**		**8062**		**12038**		**10050**		**8823**	
	C.D. (5%)	577		2261		1797		1545		847		635		1419		1995		1159		1211		1941		634		2452		686		2771		1636		1224		1171		1198		1402	
	C.V. (%)	4.32		13.19		9.8		-		6.32		6.04		9.27		9.66		7.67		-		**21.05**		5.28		16.17		5.59		**20.27**		-		9.25		5.92		-		-	
	F (Prob)	0		0		0				0		0		0.028		0		0				0		0		0.001		0		0.178				0		0					
	Plot Size	6		3.6		6		-		4.8		4.8		6		5.6		4.8		-		6		4.8		6		5.6		4.8		-		4.8		4.8		-		-	
	AGRONOMY DATA																																								
	Sowing Date	23-11		22-11		17-12		-		22-11		30-11		29-11		5-12		25-11		-		11-12		4-01		23-12		27-11		28-11		-		26-11		24-11		-		-	
	Harvest Date	25-05		28-05		11-06		-		9-05		25-04		27-05		3-06		26-04		-		20-04		22-04		6-03		25-04		26-02		-		19-04		16-04		-		-	
	Irrigation Nos	8		12		6		-		6		10		5		8		3		-		8		10		-		12		10		-		6		12		-		-	
	Ferilizer Applied	150		70		120		-		150		120		150		140		150		-		150		150		120		150		150		-		150		120		-		-	
	Ferilizer Applied	60		24		60		-		75		60		70		60		75		-		75		75		60		75		75		-		80		50		-		-	
	Ferilizer Applied	60		12		40		-		60		60		60		40		60		-		37.5		75		40		40		75		-		-		-		-		-	

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 21%) : ARBH 21.0 %, two replications of vagarai data was taken for analysis to reduce the high CV due to abnormal third replication data.

TABLE No. 2 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Bio9637(C)																			
		ZN 2								ZN 3							ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	Bio 9662	3	-	10.7	4.7	18.4	15.5	-	26.2	3.9	10.8	-	35.2	-	5.9	34.2	12.7	12.6	5.5	8.4	9.2
2	BL 798	-	-	13.4	3.1	24.1	25.3	-	42.4	16.8	20.7	13.7	59.4	11	1.5	24.8	21.1	-	-	-	10.1
3	BL 900	-	16	1.2	4.7	44.1	13.3	5.2	35.3	23.2	23.8	53.7	50.6	15.9	28.3	56.7	34.1	-	52.6	29.7	22.2
4	BL 147	-	-	18.4	3.3	32	26	5.3	48.4	16.4	24.7	-	49.9	-	-	25.9	13.5	6	-	-	10.5
5	KH-517	-	-	-	-	5.7	0.3	-	47.3	1.4	10.7	20	17.2	-	6.7	37	9.4	-	18.9	7.7	3.5
6	IM 8303	8.6	25.5	6.4	13.6	34.3	29.5	2	40.2	7.9	21.3	38.7	109.2	11.2	35.6	44	43.8	-	30.6	16.3	23.6
7	IM 8189	17.2	29	9.6	18.3	63.9	18.7	19.6	63.6	56.2	44.9	45.9	63.6	19.7	24.7	23.2	30.6	-	16.7	3.7	27.4
8	MMH11-12-13	-	-	-	-	-	0.4	-	26.9	6	1.2	-	15.7	-	12.3	30.7	9.8	-	1.1	-	-
9	MMH12-12-13	-	-	-	-	-	3.3	-	-	-	-	-	-	-	-	36.8	-	4.3	-	-	-
10	MMH-13-12-13	10.5	-	-	-	6.2	14.6	-	-	2.8	2.2	-	7.3	-	-	17.2	-	-	-	-	-
11	MMH-14-12-13	-	-	-	-	-	-	-	-	-	-	-	31.4	-	-	9.3	4.8	-	-	-	-
12	MMH-15-12-13	-	-	-	-	-	6.3	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-
13	GPS Sarayu	-	-	-	-	-	20.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	GPS Maina	23.3	-	0.5	5.2	19.9	11.9	0.1	43.9	9.7	16.7	-	17.2	-	0.1	0.4	3	-	-	-	2.8
15	DMRH 1302	-	-	-	-	31.5	-	-	20	18	11.1	19.4	31.3	-	20	31.7	13.2	-	14.3	5.8	4.6
16	CSM2	-	-	-	-	17.7	7.3	0.4	49	-	13.4	29	29.8	6.4	4.4	34.3	16.1	-	21.9	1.1	5.2
17	DMRH1301	-	-	-	-	41.1	19.1	3.8	63.2	39.3	33.1	6.8	25.9	29.6	13.5	7.4	20.4	11.8	48.8	33.7	19.1
18	VaMH 08015	-	-	-	-	-	1.8	12.1	0.6	-	-	-	6.9	-	-	-	-	0.2	-	-	-
19	DMRH1303	1.7	-	-	-	15.8	-	-	13.8	10.9	7.3	-	19.7	-	-	30.5	0.2	-	10.6	4.2	1.9
20	DMRH1305	4.4	-	-	-	-	3.4	-	23.1	-	0.8	-	13	-	1.7	23.3	1.5	4.1	-	-	-
21	DMRH1306	-	12.3	-	-	14	16.3	4.3	19.4	12.4	12.8	14.9	30.9	-	2.3	18.9	5	-	-	-	2.8
22	DMRH1307	-	-	-	-	-	20.3	-	32.2	18.4	12.3	25.3	22.2	-	22.8	21.1	14.1	6.3	-	-	2.5
23	AH1314	-	-	-	-	-	-	-	17	-	-	1.5	8.5	-	2.7	4.4	-	-	-	-	-
24	AH1315	-	-	-	-	-	-	-	-	-	-	9.8	31.6	-	-	3.1	-	4.5	-	-	-
	CHECKS																				
25	Bio9637(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

LOCATIONS REJECTED DUE TO HIGH C.V.(i.e.> 21%) : ARBH 21.0 %

Table No. 2 (Cont..)

		STAND AT HARVEST ('000/ha)																		
					ZN 2					ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bio 9662	62.8	75.0	71.7	69.8	64.6	65.6	65.2	62.5	64.5	45.0	64.6	50.6	60.7	54.9	55.1	59.7	75.0	67.4	62.7
2	BL 798	61.1	88.9	70.6	73.5	67.4	63.3	63.4	78.5	68.1	55.0	66.7	57.2	62.5	55.6	59.4	61.1	83.3	72.2	66.8
3	BL 900	60.0	83.3	69.4	70.9	66.7	67.2	67.0	81.9	70.7	61.7	65.3	57.2	63.1	59.7	61.4	59.7	82.6	71.2	67.5
4	BL 147	61.7	79.6	70.6	70.6	66.0	67.2	68.8	72.9	68.7	43.9	64.6	60.0	67.9	53.5	58.0	61.1	77.8	69.4	65.4
5	KH-517	58.3	79.6	71.7	69.9	63.2	65.6	66.1	77.1	68.0	50.6	65.3	63.3	60.1	52.1	58.3	62.5	80.6	71.5	65.4
6	IM 8303	59.4	88.0	70.6	72.7	66.7	65.6	65.2	81.9	69.8	58.9	65.3	57.2	65.5	57.6	60.9	55.6	83.3	69.4	67.2
7	IM 8189	58.3	87.0	70.0	71.8	67.4	66.1	68.8	79.2	70.3	59.4	65.3	58.9	61.9	46.5	58.4	58.3	83.3	70.8	66.5
8	MMH11-12-13	60.6	86.1	62.8	69.8	63.9	66.7	66.1	77.8	68.6	43.9	66.7	56.7	60.7	50.7	55.7	59.7	75.0	67.4	64.1
9	MMH12-12-13	61.7	83.3	68.9	71.3	64.6	65.6	64.3	81.3	68.9	45.6	66.7	58.3	61.3	59.7	58.3	60.4	78.5	69.4	65.7
10	MMH-13-12-13	57.2	84.3	67.8	69.8	62.5	66.1	65.2	76.4	67.5	50.6	66.0	61.7	61.3	50.0	57.9	59.0	72.9	66.0	64.3
11	MMH-14-12-13	58.3	88.0	68.9	71.7	62.5	65.0	67.0	76.4	67.7	49.4	65.3	60.0	61.3	54.9	58.2	62.5	77.8	70.1	65.5
12	MMH-15-12-13	58.9	88.9	68.3	72.0	62.5	66.7	66.1	75.0	67.6	53.3	66.0	58.9	59.5	47.9	57.1	55.6	75.0	65.3	64.5
13	GPS Sarayu	60.6	81.5	55.6	65.9	66.7	66.7	64.3	69.4	66.8	31.7	66.7	47.8	63.1	40.3	49.9	53.5	75.0	64.2	60.2
14	GPS Maina	59.4	74.1	60.0	64.5	65.3	66.1	65.2	79.9	69.1	33.3	64.6	46.7	63.7	45.8	50.8	57.6	59.0	58.3	60.1
15	DMRH 1302	59.4	84.3	68.9	70.9	60.4	64.4	67.9	76.4	67.3	48.9	65.3	53.3	63.7	56.3	57.5	60.4	79.2	69.8	64.9
16	CSM2	57.2	84.3	63.9	68.5	62.5	65.6	67.9	82.6	69.6	57.2	66.0	55.0	54.8	51.4	56.9	53.5	80.6	67.0	64.4
17	DMRH1301	58.9	71.3	51.7	60.6	65.3	65.6	65.2	79.2	68.8	48.9	66.0	56.7	61.3	43.1	55.2	59.0	77.8	68.4	62.1
18	VaMH 08015	16.1	60.2	58.9	45.1	63.9	64.4	50.9	70.8	62.5	46.1	65.3	41.7	61.3	30.6	49.0	58.3	74.3	66.3	54.5
19	DMRH1303	60.0	82.4	71.7	71.4	67.4	66.1	67.0	77.1	69.4	51.1	65.3	52.8	60.1	52.8	56.4	63.9	78.5	71.2	65.4
20	DMRH1305	60.6	77.8	71.7	70.0	62.5	66.1	64.3	76.4	67.3	49.4	65.3	59.4	59.5	56.9	58.1	61.8	70.1	66.0	64.4
21	DMRH1306	58.9	86.1	68.9	71.3	63.2	66.1	67.9	75.7	68.2	53.9	64.6	53.3	57.1	49.3	55.7	54.2	74.3	64.2	63.8
22	DMRH1307	59.4	88.9	71.7	73.3	60.4	66.1	66.1	81.9	68.6	59.4	66.7	55.6	56.0	54.2	58.4	63.2	80.6	71.9	66.4
23	AH1314	59.4	84.3	70.6	71.4	61.1	65.6	68.8	72.9	67.1	49.4	66.7	52.8	60.7	52.1	56.3	58.3	83.3	70.8	64.7
24	AH1315	58.9	83.3	68.9	70.4	62.5	66.7	67.0	76.4	68.1	62.8	65.3	60.6	60.1	48.6	59.5	59.0	81.9	70.5	65.9
	CHECKS																			
25	Bio9637(C)	59.4	79.6	70.0	69.7	66.0	66.7	67.0	78.5	69.5	54.4	64.6	56.7	61.9	47.9	57.1	60.4	81.3	70.8	65.3
	Loc. Mean	**57.9**	**82.0**	**67.3**	**69.1**	**64.2**	**65.9**	**65.7**	**76.7**	**68.1**	**50.6**	**65.6**	**55.7**	**61.2**	**50.9**	**56.8**	**59.1**	**77.6**	**68.4**	**64.3**
	C.D. (5%)	3.02	11.81	6.85	8.34	5.95	3.35	6.46	8.23	4.11	11.14	1.64	7.97	4.86	10.95	5.90	7.93	6.94	8.38	3.28
	C.V. (%)	3.18	8.77	6.20	7.35	5.64	3.10	4.77	6.53	4.28	13.42	1.53	8.72	4.84	13.10	8.28	8.17	5.45	5.94	6.85
	F (Prob)	0.00	0.00	0.00	0.00	0.38	0.93	0.02	0.00	0.12	0.00	0.06	0.00	0.00	0.00	0.01	0.40	0.00	0.29	0.00

Table No.2 (Cont..)

		MOISTURE % AT HARVEST																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bio 9662	25.2	40.7	17.7	27.9	24.8	18.8	21.5	21.3	34.5	24.1	27.4	17.3	9.8	15.5	16.9	17.3	16.8	22.1	19.5	22.0
2	BL 798	27.4	34.5	20.7	27.5	25.1	18.4	21.4	20.1	31.8	23.3	19.9	15.3	8.9	15.7	17.0	15.3	15.9	18.2	17.0	20.7
3	BL 900	29.2	35.4	21.2	28.6	25.9	19.2	21.5	20.1	33.4	24.0	26.7	15.8	7.5	15.4	15.7	16.2	16.7	20.3	18.5	21.6
4	BL 147	29.0	34.3	18.5	27.3	23.4	18.9	20.7	20.0	31.5	22.9	18.5	16.7	7.8	14.7	15.8	14.7	17.7	19.0	18.4	20.4
5	KH-517	26.8	32.5	20.9	26.7	23.1	19.3	21.4	19.4	32.0	23.0	24.1	19.7	8.0	15.7	18.6	17.2	16.6	20.7	18.6	21.2
6	IM 8303	27.0	30.3	24.2	27.1	24.3	19.5	20.9	20.8	36.1	24.3	21.5	16.1	8.7	16.7	17.2	16.0	16.6	19.7	18.2	21.3
7	IM 8189	27.6	34.6	20.8	27.7	25.8	18.8	21.3	19.9	35.6	24.3	24.3	17.5	8.4	15.6	16.1	16.4	16.7	21.5	19.1	21.6
8	MMH11-12-13	26.9	40.7	22.6	30.0	23.1	18.7	21.6	19.4	31.5	22.8	24.3	20.1	8.8	14.5	17.9	17.1	16.4	19.2	17.8	21.7
9	MMH12-12-13	27.9	31.3	22.8	27.3	23.2	19.0	21.8	19.3	30.9	22.8	22.2	14.7	7.5	14.9	16.5	15.1	16.2	17.6	16.9	20.4
10	MMH-13-12-13	25.8	40.8	20.5	29.0	24.1	18.8	22.3	20.9	36.8	24.6	29.1	17.7	8.8	16.9	16.3	17.7	17.0	20.2	18.6	22.4
11	MMH-14-12-13	27.8	23.6	15.9	22.4	24.0	19.3	21.5	19.9	26.5	22.2	15.7	16.0	7.1	14.4	15.0	13.6	16.6	19.5	18.0	18.8
12	MMH-15-12-13	29.3	32.4	20.3	27.3	23.0	19.3	20.8	19.0	32.8	23.0	22.6	14.7	7.9	14.7	16.4	15.2	16.4	19.2	17.8	20.6
13	GPS Sarayu	25.9	29.5	18.6	24.7	22.7	19.1	20.6	18.2	28.7	21.9	20.1	13.6	8.9	12.7	15.5	14.1	16.1	16.8	16.4	19.1
14	GPS Maina	28.2	31.2	21.6	27.0	25.0	19.2	21.1	20.4	30.2	23.1	24.1	14.7	8.4	15.7	16.3	15.8	17.2	18.9	18.0	20.8
15	DMRH 1302	28.1	30.9	19.9	26.3	23.0	19.1	21.0	21.5	30.9	23.1	26.3	14.9	7.3	14.8	17.2	16.1	16.2	19.1	17.6	20.7
16	CSM2	28.4	35.7	24.0	29.3	23.2	19.7	21.5	18.6	34.5	23.5	28.5	16.4	8.4	16.4	16.2	17.2	15.6	19.2	17.4	21.7
17	DMRH1301	28.9	32.8	23.9	28.5	25.8	18.7	21.7	19.2	32.9	23.7	22.1	15.9	8.7	15.8	16.8	15.8	17.1	11.1	14.1	20.7
18	VaMH 08015	28.0	35.5	20.3	27.9	23.1	18.3	20.2	19.6	32.8	22.8	25.3	14.2	9.3	15.5	16.9	16.2	16.5	17.9	17.2	20.9
19	DMRH1303	26.6	28.8	20.8	25.4	22.9	19.3	21.5	19.0	30.5	22.6	25.7	15.5	8.8	14.7	16.4	16.2	17.1	19.0	18.1	20.4
20	DMRH1305	25.9	31.2	19.8	25.6	22.9	18.9	21.0	19.6	28.6	22.2	24.9	15.9	7.6	14.6	16.0	15.8	17.3	20.9	19.1	20.3
21	DMRH1306	26.9	30.9	22.9	26.9	22.1	18.1	20.3	18.8	29.8	21.8	25.9	14.2	7.5	15.4	15.8	15.8	17.3	19.1	18.2	20.3
22	DMRH1307	29.8	33.4	21.7	28.3	23.9	19.1	21.4	18.8	32.9	23.2	26.5	18.0	9.3	14.2	20.5	17.7	17.4	18.9	18.1	21.7
23	AH1314	25.7	28.2	17.7	23.8	23.0	19.2	21.2	19.2	27.6	22.0	19.5	14.7	8.7	14.9	17.0	15.0	16.6	16.6	16.6	19.3
24	AH1315	27.0	25.3	16.1	22.8	22.9	19.9	20.5	19.2	26.7	21.8	19.1	14.8	9.5	14.4	15.8	14.7	16.5	16.2	16.3	18.9
	CHECKS																				
25	Bio9637(C)	29.1	32.1	20.0	27.0	24.1	18.7	20.6	18.8	32.5	22.9	25.0	16.0	8.4	15.6	17.0	16.4	16.6	20.0	18.3	20.9
	Loc. Mean	**27.5**	**32.6**	**20.5**	**26.9**	**23.8**	**19.0**	**21.1**	**19.6**	**31.7**	**23.0**	**23.6**	**16.0**	**8.4**	**15.1**	**16.7**	**15.9**	**16.7**	**18.8**	**17.7**	**20.7**
	C.D. (5%)	0.93	1.88	2.41	4.31	0.69	0.55	1.16	2.49	1.16	1.62	2.77	0.55	0.84	0.49	1.54	2.06	0.83	3.42	3.17	1.25
	C.V. (%)	2.07	3.51	7.14	9.76	1.77	1.76	3.34	6.15	2.24	5.59	7.15	2.11	6.13	1.96	5.63	10.31	3.05	11.09	8.67	8.39
	F (Prob)	0.00	0.00	0.00	0.09	0.00	0.00	0.11	0.52	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.45	0.00

Table No. 2 (Cont..)

		GRAIN SHELLING %																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bio 9662	77.5	79.1	79.0	78.5	75.6	80.8	77.5	85.9	77.2	79.4	82.5	82.1	84.0	82.0	79.0	81.9	76.7	80.1	78.4	79.9
2	BL 798	78.4	77.7	82.6	79.6	76.0	79.1	82.5	88.2	76.2	80.4	81.8	82.3	85.4	80.2	80.3	82.0	72.0	83.0	77.5	80.4
3	BL 900	77.5	80.8	86.7	81.7	81.3	81.6	79.0	87.1	77.1	81.2	85.6	79.7	85.2	80.1	79.8	82.1	76.2	82.4	79.3	81.3
4	BL 147	77.8	80.0	79.6	79.1	78.3	80.2	80.5	84.8	76.2	80.0	83.2	80.7	82.3	81.4	80.0	81.5	77.0	79.6	78.3	80.1
5	KH-517	78.6	75.0	81.7	78.4	77.8	80.7	82.5	85.7	78.0	80.9	82.9	78.4	84.6	82.3	77.3	81.1	73.3	81.4	77.3	80.0
6	IM 8303	78.6	78.5	81.7	79.6	76.0	80.2	76.5	82.7	75.3	78.1	82.4	81.8	83.7	80.2	80.6	81.7	73.7	79.2	76.5	79.4
7	IM 8189	76.8	78.6	83.3	79.6	81.8	79.4	81.5	84.4	76.5	80.7	83.7	80.3	85.6	80.1	78.2	81.6	74.6	80.6	77.6	80.3
8	MMH11-12-13	79.0	73.0	78.8	76.9	74.4	80.3	81.5	80.4	77.8	78.9	76.9	78.9	84.7	81.3	78.5	80.0	73.4	80.0	76.7	78.6
9	MMH12-12-13	80.0	81.8	79.4	80.4	79.1	80.0	80.5	80.2	76.8	79.3	80.9	80.7	84.0	81.4	80.0	81.4	75.1	79.1	77.1	79.9
10	MMH-13-12-13	78.0	75.3	71.2	74.8	75.7	82.1	76.5	81.4	74.8	78.1	77.9	78.3	81.3	80.9	80.6	79.8	73.7	78.8	76.3	77.8
11	MMH-14-12-13	79.2	79.6	80.7	79.8	79.7	80.4	81.0	82.7	75.4	79.8	76.8	82.1	86.2	81.8	79.2	81.2	74.6	82.8	78.7	80.1
12	MMH-15-12-13	79.4	79.2	76.6	78.4	66.1	80.5	82.5	80.3	79.6	77.8	82.9	81.0	79.6	81.0	73.5	79.6	74.7	82.8	78.7	78.6
13	GPS Sarayu	79.5	77.3	78.5	78.4	78.7	81.6	80.0	82.9	75.5	79.7	82.3	81.0	83.1	81.6	78.3	81.2	75.6	81.5	78.5	79.8
14	GPS Maina	78.8	77.9	84.8	80.5	78.5	81.3	82.5	84.0	77.2	80.7	83.9	79.8	86.9	81.3	80.4	82.5	71.4	78.6	75.0	80.5
15	DMRH 1302	76.7	76.9	80.0	77.9	79.1	78.9	80.5	84.7	75.6	79.7	82.9	81.6	83.7	81.4	79.5	81.8	72.8	84.2	78.5	79.9
16	CSM2	77.0	82.1	79.5	79.5	74.0	79.0	80.5	86.1	75.5	79.0	82.9	80.3	84.2	80.6	80.0	81.6	75.9	82.2	79.0	80.0
17	DMRH1301	78.2	80.5	83.0	80.5	79.9	80.8	81.0	86.2	75.4	80.6	83.9	81.6	84.8	81.5	80.4	82.4	72.9	81.3	77.1	80.7
18	VaMH 08015	78.5	78.9	77.1	78.1	78.2	80.9	82.5	85.8	77.2	80.9	83.8	81.7	86.7	80.5	77.3	82.0	73.3	81.6	77.4	80.2
19	DMRH1303	80.0	77.6	86.4	81.3	74.6	81.2	78.0	82.0	75.9	78.3	80.4	80.3	85.3	82.0	79.8	81.5	70.0	79.2	74.6	79.5
20	DMRH1305	79.9	77.6	78.3	78.6	76.7	81.4	83.0	81.9	75.9	79.8	79.8	80.6	83.1	80.9	75.6	80.0	78.8	79.5	79.2	79.5
21	DMRH1306	78.0	81.3	79.3	79.5	76.9	81.3	80.5	82.7	77.7	79.8	82.3	81.3	85.0	81.1	76.4	81.2	70.6	79.9	75.2	79.6
22	DMRH1307	78.9	73.5	78.5	77.0	74.1	78.4	83.0	84.2	77.8	79.5	82.1	80.1	83.1	80.9	76.2	80.5	78.0	76.6	77.3	79.0
23	AH1314	79.1	79.2	78.1	78.8	79.1	79.4	81.0	84.5	75.5	79.9	81.8	81.2	84.4	81.0	80.6	81.8	74.2	83.1	78.6	80.1
24	AH1315	78.4	81.1	80.5	80.0	77.9	80.9	77.0	81.0	76.1	78.6	83.3	81.7	83.5	82.7	79.4	82.1	78.2	78.9	78.5	80.0
	CHECKS																				
25	Bio9637(C)	80.0	80.0	81.7	80.6	76.8	81.1	81.5	85.5	77.7	80.5	81.8	79.1	84.1	82.8	80.6	81.7	75.3	83.2	79.3	80.7
	Loc. Mean	**78.5**	**78.5**	**80.3**	**79.1**	**77.0**	**80.4**	**80.5**	**83.8**	**76.5**	**79.7**	**81.9**	**80.7**	**84.2**	**81.2**	**78.9**	**81.4**	**74.5**	**80.8**	**77.6**	**79.8**
	C.D. (5%)	1.27	0.00	4.09	3.80	0.95	1.31	2.63	4.50	1.00	2.54	1.26	0.98	2.63	1.43	3.56	1.93	3.76	3.56	4.68	1.38
	C.V. (%)	0.98	0.00	3.10	2.93	0.75	0.99	1.99	2.60	0.79	2.54	0.94	0.74	1.91	1.08	2.75	1.89	3.07	2.68	2.92	2.40
	F (Prob)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.04	0.00	0.30	0.00	0.00	0.00	0.01	0.01	0.15	0.00	0.01	0.79	0.00

Table No.2 (Cont..)

		DAYS TO 50% POLLEN SHED																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bio 9662	134.0	145.5	124.3	134.6	126.7	70.7	124.0	120.5	112.7	110.9	85.3	59.3	83.0	71.3	56.3	71.1	82.0	80.0	81.0	98.4
2	BL 798	131.0	137.3	119.0	129.1	123.7	66.0	121.3	118.0	106.7	107.1	79.7	55.0	73.0	66.0	53.3	65.4	79.0	79.3	79.2	93.9
3	BL 900	136.0	139.0	121.0	132.0	124.7	67.0	123.7	118.0	107.3	108.1	81.3	56.7	74.0	66.0	53.0	66.2	83.0	81.0	82.0	95.4
4	BL 147	136.0	141.0	119.0	132.0	126.3	66.3	126.3	119.0	111.0	109.8	80.7	55.3	73.0	67.7	54.7	66.3	80.3	79.0	79.7	95.7
5	KH-517	132.7	135.0	117.3	128.3	123.7	64.7	117.0	116.5	107.0	105.8	82.3	56.3	75.0	66.0	53.0	66.5	83.0	74.0	78.5	93.6
6	IM 8303	134.0	136.7	119.3	130.0	124.7	68.0	122.3	118.5	108.3	108.4	80.7	56.7	76.0	66.3	56.7	67.3	82.3	80.0	81.2	95.4
7	IM 8189	136.0	145.3	123.0	134.8	127.3	68.3	124.3	119.5	112.3	110.4	83.0	58.0	79.0	69.0	55.3	68.9	79.7	80.0	79.8	97.3
8	MMH11-12-13	136.0	141.3	121.0	132.8	127.3	68.7	123.0	121.5	111.3	110.4	85.7	58.3	77.0	71.7	55.0	69.5	81.7	82.0	81.8	97.4
9	MMH12-12-13	136.0	139.3	120.0	131.8	124.3	68.0	121.0	122.5	108.3	108.8	85.0	58.0	78.0	66.7	56.3	68.8	81.0	78.0	79.5	96.2
10	MMH-13-12-13	129.3	144.3	122.0	131.9	127.3	69.7	125.0	124.0	113.3	111.9	87.0	56.0	80.0	71.7	55.0	69.9	91.3	83.0	87.2	98.6
11	MMH-14-12-13	135.7	129.7	110.7	125.3	112.7	60.7	112.7	111.0	95.7	98.5	78.0	48.0	70.0	60.3	50.3	61.3	76.3	74.0	75.2	88.4
12	MMH-15-12-13	136.0	134.3	119.7	130.0	120.3	66.7	122.7	118.5	107.3	107.1	83.3	54.0	76.0	66.3	53.3	66.6	83.0	79.0	81.0	94.7
13	GPS Sarayu	130.7	132.7	115.0	126.1	112.7	61.7	111.0	114.0	100.3	99.9	78.3	56.3	69.0	63.7	58.0	65.1	77.0	71.0	74.0	90.1
14	GPS Maina	131.0	133.7	117.0	127.2	122.7	67.3	116.3	114.5	106.7	105.5	80.0	55.0	71.0	66.7	56.7	65.9	78.7	79.3	79.0	93.1
15	DMRH 1302	132.3	135.0	117.0	128.1	119.3	64.0	122.0	117.5	105.7	105.7	77.0	56.0	72.0	64.3	52.3	64.3	79.7	74.0	76.8	92.5
16	CSM2	136.3	139.7	120.7	132.2	124.7	67.7	121.3	122.0	111.0	109.3	83.7	58.3	75.0	66.0	56.0	67.8	81.7	81.0	81.3	96.3
17	DMRH1301	135.7	136.0	117.7	129.8	123.7	66.7	119.7	117.5	108.3	107.2	82.0	54.7	76.0	66.3	57.3	67.3	79.7	77.3	78.5	94.6
18	VaMH 08015	139.0	136.3	118.3	131.2	121.7	68.7	122.0	120.0	107.7	108.0	82.3	56.7	77.0	66.0	54.7	67.3	79.0	76.0	77.5	95.0
19	DMRH1303	132.0	136.3	120.0	129.4	121.7	67.0	119.3	115.0	108.0	106.2	82.0	56.7	70.0	67.0	55.3	66.2	79.7	79.0	79.3	93.9
20	DMRH1305	129.7	144.7	121.0	131.8	126.7	67.0	122.3	120.0	110.7	109.3	84.3	57.0	76.0	66.3	53.7	67.5	80.3	78.7	79.5	95.9
21	DMRH1306	135.0	137.7	120.3	131.0	124.7	66.7	121.7	118.0	107.3	107.7	81.7	55.3	69.0	66.3	52.0	64.9	79.7	79.7	79.7	94.3
22	DMRH1307	134.0	138.7	123.3	132.0	124.3	68.0	121.0	118.5	107.7	107.9	86.0	55.3	75.0	66.7	56.0	67.8	77.3	79.0	78.2	95.4
23	AH1314	131.0	135.0	119.0	128.3	121.3	66.7	119.7	117.0	107.7	106.5	80.7	56.0	74.0	65.0	53.7	65.9	82.3	79.0	80.7	93.9
24	AH1315	136.0	132.3	114.7	127.7	115.3	63.0	116.0	116.0	105.0	103.1	77.0	52.3	72.0	64.3	51.0	63.3	79.0	72.3	75.7	91.1
	CHECKS																				
25	Bio9637(C)	135.0	137.7	118.3	130.3	122.7	67.3	122.3	118.0	109.3	107.9	82.7	56.7	74.0	66.3	53.7	66.7	80.3	79.7	80.0	94.9
	Loc. Mean	**134.0**	**137.8**	**119.1**	**130.3**	**122.8**	**66.7**	**120.7**	**118.2**	**107.9**	**107.3**	**82.0**	**55.9**	**74.6**	**66.6**	**54.5**	**66.7**	**80.7**	**78.2**	**79.4**	**94.6**
	C.D. (5%)	0.60	2.47	3.12	4.53	1.77	1.29	2.35	1.72	1.84	1.97	1.92	1.03	1.71	2.25	2.47	2.20	1.49	2.15	4.10	1.45
	C.V. (%)	0.27	1.09	1.59	2.12	0.88	1.18	1.18	0.71	1.04	1.46	1.43	1.13	1.39	2.06	2.76	2.62	1.13	1.68	2.50	2.13
	F (Prob)	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table No. 2 (Cont..)

		DAYS TO 50% SILKING																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bio 9662	136.0	147.0	127.3	136.8	128.7	73.0	126.0	125.5	117.3	114.1	84.3	61.7	81.0	72.3	59.0	71.7	85.0	82.0	83.5	100.4
2	BL 798	133.0	140.7	122.0	131.9	125.7	68.0	123.7	122.5	110.7	110.1	78.0	57.0	74.0	67.7	56.3	66.6	82.7	80.7	81.7	96.2
3	BL 900	138.0	143.0	123.7	134.9	126.7	69.7	126.0	122.5	112.0	111.4	80.7	58.7	75.0	68.3	56.3	67.8	86.0	82.0	84.0	97.9
4	BL 147	138.3	145.5	122.0	135.3	128.3	68.7	128.3	123.0	115.3	112.7	80.3	57.3	74.0	69.7	57.0	67.7	83.7	81.0	82.3	98.2
5	KH-517	135.0	136.0	120.3	130.4	125.7	67.3	119.7	121.0	110.7	108.9	81.3	58.3	76.0	67.3	56.0	67.8	86.0	76.0	81.0	95.8
6	IM 8303	136.0	138.7	122.3	132.3	126.7	70.7	124.3	123.0	112.7	111.5	81.0	58.7	77.0	67.7	59.3	68.7	85.3	82.0	83.7	97.7
7	IM 8189	138.3	145.5	125.0	136.3	129.3	70.3	126.7	123.5	115.7	113.1	82.0	60.0	80.0	70.3	58.3	70.1	82.7	82.0	82.3	99.3
8	MMH11-12-13	138.0	144.0	124.0	135.3	129.3	71.7	125.0	125.5	115.3	113.4	85.0	60.3	78.0	72.3	58.0	70.7	84.7	84.0	84.3	99.7
9	MMH12-12-13	138.0	142.3	123.0	134.4	126.3	70.7	123.0	127.0	113.0	112.0	82.3	60.0	79.0	69.7	60.3	70.3	84.0	82.0	83.0	98.7
10	MMH-13-12-13	132.0	145.0	124.7	133.9	129.3	72.3	127.0	129.0	118.0	115.1	85.0	58.0	81.0	74.3	57.7	71.2	94.7	84.0	89.3	100.8
11	MMH-14-12-13	137.7	131.3	114.0	127.7	114.7	64.0	114.7	116.0	100.0	101.9	73.0	50.0	71.0	62.0	53.3	61.9	80.0	75.3	77.7	90.5
12	MMH-15-12-13	138.0	136.3	122.7	132.3	122.3	69.0	124.3	123.5	112.3	110.3	81.0	56.0	77.0	69.7	56.3	68.0	86.0	81.0	83.5	97.0
13	GPS Sarayu	132.7	132.3	118.0	127.7	114.7	64.0	113.0	119.0	105.7	103.3	77.3	58.3	70.0	66.0	61.3	66.6	80.0	73.0	76.5	92.4
14	GPS Maina	133.0	135.7	120.0	129.6	124.7	69.7	118.3	119.0	111.3	108.6	80.0	57.0	72.0	69.0	60.3	67.7	82.0	80.0	81.0	95.5
15	DMRH 1302	134.3	136.7	119.7	130.2	121.3	68.0	124.0	123.0	110.3	109.3	77.3	58.0	73.0	66.3	55.7	66.1	83.0	76.0	79.5	95.1
16	CSM2	138.3	140.3	123.0	133.9	126.7	70.0	123.3	126.0	115.3	112.3	81.3	60.7	76.0	68.3	59.0	69.1	84.7	83.3	84.0	98.4
17	DMRH1301	138.0	137.3	120.7	132.0	125.7	68.7	121.0	121.0	112.0	109.7	81.0	56.7	77.0	69.7	60.3	68.9	83.7	80.7	82.2	96.9
18	VaMH 08015	141.3	136.0	121.7	133.0	123.7	71.3	123.7	124.0	112.3	111.0	81.3	58.7	78.0	69.0	57.7	68.9	82.3	77.3	79.8	97.2
19	DMRH1303	134.0	137.3	122.7	131.3	123.7	69.0	121.3	119.0	111.0	108.8	81.7	58.7	71.0	68.0	58.0	67.5	82.7	81.0	81.8	95.9
20	DMRH1305	131.7	138.5	124.0	131.4	128.7	69.0	124.3	124.0	114.7	112.1	83.7	59.0	77.0	68.3	56.3	68.9	83.7	81.0	82.3	97.6
21	DMRH1306	137.0	138.7	123.3	133.0	126.7	68.3	124.0	123.5	111.7	110.8	80.7	57.3	70.0	67.7	55.0	66.1	83.0	82.0	82.5	96.6
22	DMRH1307	136.3	141.0	126.3	134.6	126.3	70.7	123.0	123.0	112.3	111.1	81.3	57.3	76.0	70.3	59.3	68.9	80.7	84.0	82.3	97.9
23	AH1314	133.0	136.3	122.0	130.4	123.3	69.0	122.0	121.0	112.3	109.5	78.0	58.0	75.0	67.7	56.3	67.0	85.3	81.3	83.3	96.0
24	AH1315	138.7	133.7	117.7	130.0	117.3	65.3	118.0	120.0	108.3	105.8	76.7	54.3	73.0	65.3	53.3	64.5	82.3	74.0	78.2	93.2
	CHECKS																				
25	Bio9637(C)	137.7	140.0	121.3	133.0	124.7	69.7	124.0	123.0	114.0	111.1	80.3	58.7	75.0	68.3	56.3	67.7	83.7	82.0	82.8	97.2
	Loc. Mean	**136.2**	**139.2**	**122.1**	**132.5**	**124.8**	**69.1**	**122.7**	**122.7**	**112.2**	**110.3**	**80.6**	**57.9**	**75.4**	**68.6**	**57.5**	**68.0**	**83.9**	**80.3**	**82.1**	**96.9**
	C.D. (5%)	0.82	3.28	3.13	4.41	1.77	1.78	2.50	1.89	1.94	2.01	1.87	1.04	-	2.77	2.40	2.06	1.65	0.67	4.58	1.44
	C.V. (%)	0.37	1.43	1.56	2.03	0.87	1.57	1.24	0.75	1.05	1.45	1.41	1.09	-	2.46	2.54	2.41	1.20	0.50	2.70	2.06
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.01	0.00

Table No. 2 (Cont..)

		DAYS TO 75% DRY HUSK																		
				ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bio 9662	172.3	181.7	177.0	163.7	109.7	158.3	166.5	150.7	149.8	118.7	96.7	110.3	114.7	95.3	107.1	114.3	131.0	122.7	134.6
2	BL 798	167.7	176.7	172.2	162.7	106.7	158.3	165.5	144.7	147.6	116.7	92.3	107.0	108.7	92.0	103.3	111.7	127.3	119.5	131.3
3	BL 900	174.7	180.7	177.7	162.7	107.0	159.0	165.5	145.3	147.9	118.7	95.7	110.0	110.3	93.3	105.6	116.3	129.0	122.7	133.4
4	BL 147	172.3	178.3	175.3	159.3	108.3	163.0	164.5	148.0	148.6	114.3	94.0	110.3	107.3	87.3	102.7	115.7	127.3	121.5	132.2
5	KH-517	171.3	175.7	173.5	161.3	108.0	156.0	165.0	145.7	147.2	118.3	94.7	108.0	106.7	95.3	104.6	113.3	131.0	122.2	132.2
6	IM 8303	172.7	178.7	175.7	161.7	107.7	159.3	166.0	146.3	148.2	117.3	95.3	108.3	109.3	96.3	105.3	117.7	129.0	123.3	133.3
7	IM 8189	176.3	179.0	177.7	164.7	110.0	159.7	166.0	150.3	150.1	118.0	96.7	111.0	111.3	89.0	105.2	112.0	131.0	121.5	133.9
8	MMH11-12-13	175.3	179.7	177.5	160.7	108.0	157.7	165.5	149.7	148.3	118.0	96.3	111.0	109.7	95.0	106.0	115.7	127.3	121.5	133.5
9	MMH12-12-13	169.0	176.0	172.5	161.3	110.3	156.7	163.5	146.7	147.7	118.0	94.3	110.0	107.3	93.7	104.7	114.3	125.7	120.0	131.9
10	MMH-13-12-13	167.0	178.7	172.8	160.7	108.3	160.0	167.0	150.0	149.2	118.0	94.7	108.0	110.0	94.3	105.0	124.0	127.3	125.7	133.4
11	MMH-14-12-13	172.0	175.3	173.7	155.3	101.7	153.3	163.0	136.0	141.9	114.3	89.3	107.0	103.0	85.7	99.9	116.0	125.7	120.8	128.4
12	MMH-15-12-13	173.0	176.7	174.8	155.7	103.3	158.7	164.0	147.0	145.7	118.0	91.3	109.7	107.7	93.3	104.0	118.3	127.3	122.8	131.7
13	GPS Sarayu	169.7	174.7	172.2	155.7	104.7	151.0	163.0	144.0	143.7	117.3	95.3	109.3	106.0	95.7	104.7	111.0	126.3	118.7	130.3
14	GPS Maina	169.3	180.3	174.8	163.0	109.3	155.0	165.0	147.7	148.0	116.7	93.7	112.0	110.0	96.0	105.7	112.0	129.0	120.5	132.8
15	DMRH 1302	170.3	177.3	173.8	160.7	107.0	157.7	166.5	144.7	147.3	118.7	93.7	108.0	111.3	94.3	105.2	112.7	130.0	121.3	132.3
16	CSM2	171.7	179.7	175.7	160.7	107.0	157.0	165.5	148.3	147.7	118.0	96.3	110.3	106.7	94.7	105.2	113.0	129.0	121.0	132.7
17	DMRH1301	172.0	180.7	176.3	156.7	108.7	155.3	165.0	145.7	146.3	117.3	93.0	110.0	110.0	94.3	104.9	113.3	129.0	121.2	132.2
18	VaMH 08015	175.3	179.3	177.3	158.3	108.3	159.3	165.0	146.7	147.5	117.7	95.0	114.0	110.0	96.3	106.6	112.7	130.0	121.3	133.4
19	DMRH1303	169.3	179.3	174.3	155.7	106.7	157.0	164.0	145.3	145.7	118.7	95.7	109.0	106.7	89.3	103.9	110.7	130.0	120.3	131.2
20	DMRH1305	167.0	177.7	172.3	160.7	107.0	159.0	165.0	146.3	147.6	117.7	94.0	111.0	109.3	91.7	104.7	113.7	131.0	122.3	132.2
21	DMRH1306	173.0	177.7	175.3	154.7	110.0	158.7	164.0	144.7	146.4	117.7	95.0	108.0	106.0	86.0	102.5	112.0	130.0	121.0	131.2
22	DMRH1307	174.3	178.0	176.2	156.3	109.0	158.3	163.5	145.3	146.5	117.7	94.3	111.0	110.3	96.3	105.9	109.7	129.3	119.5	132.4
23	AH1314	169.3	176.3	172.8	154.3	106.0	155.3	164.0	145.7	145.1	118.0	92.3	109.0	106.0	86.0	102.3	115.3	128.3	121.8	130.4
24	AH1315	173.3	173.7	173.5	152.7	107.0	154.0	163.5	131.0	141.6	115.7	90.7	107.0	102.0	86.3	100.3	113.0	126.0	119.5	128.3
	CHECKS																			
25	Bio9637(C)	175.3	177.7	176.5	157.3	107.7	158.3	163.5	147.7	146.9	118.0	94.3	109.0	109.7	87.3	103.7	114.3	119.7	117.0	131.4
	Loc. Mean	**171.7**	**178.0**	**174.9**	**159.1**	**107.5**	**157.4**	**164.8**	**145.7**	**146.9**	**117.5**	**94.2**	**109.5**	**108.4**	**92.2**	**104.4**	**114.1**	**128.3**	**121.2**	**132.0**
	C.D. (5%)	1.26	3.79	4.37	2.57	2.44	3.44	2.15	6.42	2.69	2.23	1.20	1.30	2.61	2.56	2.37	4.52	4.63	6.23	1.65
	C.V. (%)	0.45	1.30	1.21	0.99	1.38	1.33	0.63	2.68	1.46	1.16	0.78	0.72	1.47	1.69	1.81	2.41	2.20	2.49	1.68
	F (Prob)	0.00	0.01	0.15	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.86	0.00

Table No. 2 (Cont..)

		PLANT HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bio 9662	180.0	191.7	250.0	207.2	218.7	234.5	173.0	213.0	203.3	208.5	171.5	193.0	221.7	219.7	209.4	203.1	247.3	225.0	236.2	210.1
2	BL 798	171.7	160.0	235.3	189.0	204.7	227.4	168.7	200.3	191.7	198.5	159.5	194.3	198.3	214.0	195.7	192.4	236.7	202.7	219.7	197.4
3	BL 900	160.0	188.3	250.7	199.7	226.0	197.9	172.3	207.4	201.7	201.1	184.5	202.4	225.0	217.3	209.7	207.8	273.7	215.3	244.5	208.8
4	BL 147	160.0	193.3	265.0	206.1	233.0	258.3	178.3	219.1	210.0	219.7	177.0	199.9	233.3	233.0	213.5	211.4	256.7	235.3	246.0	217.7
5	KH-517	135.0	146.7	189.3	157.0	181.0	189.5	129.7	172.8	175.0	169.6	150.0	167.9	170.0	199.3	171.3	171.7	276.7	178.7	227.7	175.5
6	IM 8303	168.3	156.7	235.7	186.9	208.7	226.8	151.7	198.6	191.7	195.5	179.5	190.7	205.0	216.0	194.9	197.2	260.0	217.0	238.5	200.1
7	IM 8189	151.7	176.7	230.7	186.3	206.7	196.9	143.3	193.8	193.3	186.8	168.5	185.6	198.3	220.7	180.7	190.7	278.3	210.7	244.5	195.7
8	MMH11-12-13	171.7	175.0	238.7	195.1	234.7	231.1	155.0	188.7	201.7	202.2	143.5	187.8	216.7	222.7	215.1	197.2	257.0	214.3	235.7	203.6
9	MMH12-12-13	156.7	158.3	204.3	173.1	187.0	233.5	138.0	183.3	170.0	182.4	143.5	170.7	188.3	215.7	193.5	182.3	228.3	176.7	202.5	183.2
10	MMH-13-12-13	171.7	166.7	238.0	192.1	204.0	211.9	153.7	158.6	191.7	184.0	165.0	177.3	208.3	210.3	206.1	193.4	250.3	205.3	227.8	194.6
11	MMH-14-12-13	161.7	148.3	201.3	170.4	190.0	208.9	148.7	183.3	171.7	180.5	151.0	166.0	193.3	220.7	177.5	181.7	258.3	213.7	236.0	186.3
12	MMH-15-12-13	161.7	165.0	225.0	183.9	190.0	235.5	148.0	185.5	196.7	191.1	165.0	198.9	183.3	223.3	212.7	196.7	211.7	221.0	216.3	194.9
13	GPS Sarayu	128.3	121.7	204.7	151.6	141.0	192.0	125.0	165.6	128.3	150.4	153.0	138.5	203.3	205.0	171.4	174.3	227.0	168.3	197.7	164.9
14	GPS Maina	145.0	138.3	213.0	165.4	180.3	202.2	137.3	183.2	166.7	173.9	146.5	176.0	178.3	213.0	173.1	177.4	198.3	172.0	185.2	174.9
15	DMRH 1302	155.0	151.7	211.7	172.8	200.3	195.2	131.7	151.6	168.3	169.4	147.5	173.5	176.7	214.7	187.3	179.9	245.3	210.3	227.8	181.4
16	CSM2	145.0	168.3	228.7	180.7	211.7	241.3	159.7	163.9	198.3	195.0	186.5	203.2	210.0	217.3	204.9	204.4	255.3	209.3	232.3	200.2
17	DMRH1301	141.7	173.3	220.3	178.4	216.3	218.3	158.0	208.6	198.3	199.9	154.0	182.1	215.0	213.0	178.7	188.6	215.3	179.3	197.3	191.5
18	VaMH 08015	135.0	161.7	229.0	175.2	187.7	216.6	134.7	181.3	170.0	178.0	144.5	186.7	185.0	213.7	166.3	179.2	258.3	173.7	216.0	182.9
19	DMRH1303	153.3	158.3	243.0	184.9	221.0	217.3	164.0	211.3	198.3	202.4	155.5	200.6	220.0	211.0	213.6	200.1	270.0	221.7	245.8	203.9
20	DMRH1305	186.7	180.0	228.3	198.3	205.3	217.4	150.7	190.1	186.7	190.0	145.5	187.8	196.7	220.0	187.3	187.5	253.3	197.3	225.3	195.5
21	DMRH1306	166.7	175.0	249.7	197.1	215.7	236.9	142.7	216.7	191.7	200.7	175.5	190.5	216.7	222.7	202.3	201.5	258.7	211.7	235.2	204.9
22	DMRH1307	141.7	168.3	241.7	183.9	202.3	245.1	138.3	207.2	201.7	198.9	169.0	183.6	215.0	225.7	210.7	200.8	240.3	213.7	227.0	200.3
23	AH1314	156.7	146.7	214.7	172.7	196.3	204.7	140.0	174.3	180.0	179.1	154.5	175.9	183.3	213.0	194.5	184.2	260.3	206.0	233.2	186.7
24	AH1315	136.7	136.7	193.3	155.6	150.0	204.4	118.3	159.1	163.3	159.0	152.5	183.7	178.3	212.3	185.5	182.5	258.3	172.7	215.5	173.7
	CHECKS																				
25	Bio9637(C)	151.7	178.3	251.0	193.7	230.7	230.5	169.7	212.5	206.7	210.0	172.0	183.9	208.3	224.3	198.8	197.5	265.3	221.7	243.5	207.0
	Loc. Mean	**155.7**	**163.4**	**227.7**	**182.3**	**201.7**	**219.0**	**149.2**	**189.2**	**186.3**	**189.1**	**160.6**	**184.0**	**201.1**	**216.7**	**194.2**	**191.3**	**249.6**	**202.9**	**226.3**	**193.4**
	C.D. (5%)	4.74	18.57	13.44	17.90	24.29	13.30	17.87	45.93	21.84	14.16	12.29	16.36	26.63	13.95	25.18	12.22	43.52	16.91	32.82	8.57
	C.V. (%)	1.86	6.92	3.59	5.98	7.33	3.70	7.30	11.76	7.14	5.97	4.66	5.41	8.06	3.92	7.90	5.09	10.62	5.07	7.03	6.17
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.05	0.00	0.03	0.00

Table No. 2 (Cont..)

		EAR HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bio 9662	93.3	100.0	121.0	104.8	109.7	116.3	86.7	122.3	95.0	106.0	69.5	97.9	150.0	116.3	109.5	108.6	107.3	117.7	112.5	107.5
2	BL 798	90.0	57.5	93.3	80.3	77.7	100.1	65.7	93.7	65.0	80.4	65.0	92.2	86.7	106.3	82.5	86.5	104.3	90.3	97.3	84.7
3	BL 900	73.3	100.0	93.0	88.8	109.0	94.9	78.7	112.0	85.0	95.9	73.0	96.2	108.3	121.0	103.7	100.5	107.3	118.7	113.0	98.3
4	BL 147	60.0	77.5	118.3	85.3	135.0	126.8	88.7	114.9	98.3	112.7	94.0	101.5	125.0	122.7	94.9	107.6	117.0	120.0	118.5	106.3
5	KH-517	68.3	72.5	91.0	77.3	96.3	103.5	63.3	93.2	91.7	89.6	65.5	90.4	85.0	101.0	86.8	85.7	115.3	80.0	97.7	86.9
6	IM 8303	70.0	67.5	94.7	77.4	96.7	91.5	58.7	96.4	75.0	83.6	71.5	89.3	96.7	104.0	75.9	87.5	112.3	106.0	109.2	87.1
7	IM 8189	61.7	87.5	97.0	82.1	95.7	96.9	64.0	100.7	90.0	89.5	69.0	84.9	100.0	112.0	78.0	88.8	117.3	86.7	102.0	89.4
8	MMH11-12-13	85.0	92.5	110.7	96.1	128.3	118.6	69.0	105.1	93.3	102.9	54.5	92.7	111.7	121.3	111.4	98.3	105.7	113.3	109.5	100.9
9	MMH12-12-13	90.0	82.5	91.3	87.9	105.0	122.5	64.7	99.6	73.3	93.0	62.5	93.5	100.0	114.0	110.2	96.0	99.3	80.0	89.7	92.6
10	MMH-13-12-13	98.3	92.5	127.0	105.9	129.3	131.1	85.0	119.2	106.7	114.3	77.5	83.5	125.0	111.0	99.9	99.4	115.7	109.3	112.5	107.4
11	MMH-14-12-13	75.0	67.5	93.3	78.6	98.7	102.5	61.3	86.3	78.3	85.4	62.0	76.6	101.7	115.0	88.3	88.7	104.0	105.0	104.5	87.7
12	MMH-15-12-13	88.3	82.5	112.3	94.4	104.0	118.5	70.7	113.1	101.7	101.6	84.5	102.3	96.7	116.7	116.8	103.4	107.7	116.7	112.2	102.2
13	GPS Sarayu	55.0	60.0	83.3	66.1	74.0	91.5	57.3	78.5	58.3	71.9	46.0	69.2	86.7	96.3	81.5	75.9	90.3	70.0	80.2	73.2
14	GPS Maina	65.0	67.5	98.0	76.8	94.0	101.9	63.3	98.6	76.7	86.9	67.5	88.7	110.0	101.3	85.1	90.5	108.7	75.3	92.0	86.8
15	DMRH 1302	78.3	72.5	96.0	82.3	104.0	97.3	66.7	95.2	75.0	87.6	67.0	88.1	90.0	105.3	93.9	88.9	105.7	117.0	111.3	90.1
16	CSM2	71.7	90.0	103.3	88.3	108.3	116.7	81.3	107.4	95.0	101.8	81.5	110.2	115.0	116.7	86.5	102.0	108.7	109.3	109.0	100.1
17	DMRH1301	65.0	87.5	112.3	88.3	103.3	105.7	71.3	94.9	95.0	94.0	57.5	82.6	105.0	92.0	79.3	83.3	107.0	77.0	92.0	89.0
18	VaMH 08015	55.0	75.0	94.3	74.8	84.7	108.8	63.7	96.7	95.0	89.8	59.0	89.9	96.7	108.3	79.2	86.6	117.3	71.7	94.5	86.4
19	DMRH1303	80.0	87.5	115.0	94.2	113.3	112.3	78.0	123.0	95.0	104.3	80.5	102.9	123.3	110.7	112.3	105.9	117.3	113.3	115.3	104.3
20	DMRH1305	96.7	82.5	107.7	95.6	127.0	113.6	81.3	109.5	90.0	104.3	57.0	90.6	103.3	112.7	94.9	91.7	105.0	94.3	99.7	97.7
21	DMRH1306	76.7	82.5	118.7	92.6	121.7	112.3	72.3	113.8	88.3	101.7	73.5	97.3	110.0	111.0	89.8	96.3	108.7	106.3	107.5	98.9
22	DMRH1307	70.0	82.5	103.7	85.4	108.0	133.9	71.3	113.1	98.3	104.9	83.0	102.7	116.7	127.0	97.8	105.4	104.3	112.0	108.2	101.6
23	AH1314	83.3	72.5	95.7	83.8	114.0	111.3	68.3	98.9	88.3	96.2	62.5	89.3	101.7	108.0	98.9	92.1	109.3	104.3	106.8	93.8
24	AH1315	60.0	60.0	82.3	67.4	78.3	97.5	59.0	90.9	73.3	79.8	73.0	90.3	96.7	99.3	93.9	90.6	107.0	86.7	96.8	83.2
	CHECKS																				
25	Bio9637(C)	60.0	77.5	120.7	86.1	119.0	117.4	93.3	111.1	95.0	107.2	70.5	95.1	96.7	118.3	94.3	95.0	108.7	107.7	108.2	99.0
	Loc. Mean	**74.8**	**79.1**	**103.0**	**85.6**	**105.4**	**109.7**	**71.3**	**103.5**	**87.1**	**95.4**	**69.1**	**91.9**	**105.5**	**110.7**	**93.8**	**94.2**	**108.5**	**99.5**	**104.0**	**94.2**
	C.D. (5%)	4.90	15.05	9.50	15.36	20.26	12.74	15.07	19.63	16.80	8.93	6.00	9.72	25.35	15.87	18.57	10.35	14.80	13.41	24.04	6.20
	C.V. (%)	3.99	11.59	5.62	10.93	11.71	7.07	12.87	9.19	11.75	7.46	5.29	6.44	14.63	8.73	12.06	8.75	8.31	8.20	11.20	9.16
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.26	0.00

Table No. 3: **Performance of early maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 03 (IVT1- E) during rabi 2013-14.**

		GRAIN YIELD (kg/ha) AT 15% MOISTURE																																					
Sl								ZN 2												ZN 3												ZN 4						ZN 5		OV'L	
No	PEDIGREE	KARN	R	LUDH	R	PANT	R	MEAN	R	BAHR	R	BHUB	R	DHOL	R	RANC	R	VARA	R	MEAN	R	ARBH	R	COIM	R	KOLH	R	MAND	R	VAGA	R	MEAN	R	BANS	R	GODH	R	MEAN	R	MEAN	R
1	B-52	5585	13	9913	7	11787	6	9095	9	9128	5	6349	1	5817	7	8213	7	10340	4	7969	5	6998	1	7221	6	6178	12	7193	2	5380	13	6493	9	8064	9	7307	9	7686	8	7748	8
2	NMH-51	7639	10	9277	9	13277	4	10064	6	10276	3	4962	11	5073	10	9546	2	10203	5	8012	4	6035	3	8008	3	9906	4	6744	6	9523	2	8545	2	9828	2	9066	4	9447	4	8809	4
3	IM 8013	9152	2	14261	1	14375	2	12596	1	11496	1	5863	3	6349	3	12431	1	12582	1	9744	1	4925	8	7048	8	13890	1	7405	1	9761	1	9526	1	11379	1	9312	3	10346	3	10379	1
4	IL 8033	7752	7	13780	2	13323	3	11618	2	8790	7	5230	9	6911	1	9221	3	11674	2	8365	2	4012	11	7616	4	9947	3	7169	3	6633	7	7841	4	9704	3	11243	2	10474	1	9214	2
5	IL 8235	9241	1	9398	8	14898	1	11179	3	10605	2	5964	2	5948	6	9135	4	10034	6	8337	3	6410	2	8756	1	10764	2	7052	4	7231	6	8451	3	9376	5	7883	8	8630	6	9020	3
6	IH-072	7699	9	4303	13	8637	13	6880	13	6289	13	4875	12	4424	14	5841	11	6176	14	5521	14	4681	9	5681	11	7753	7	5828	9	6460	9	6430	10	6397	13	5132	13	5765	14	6107	13
7	IH-061	2897	14	3363	14	5990	14	4083	14	5836	14	5279	8	5242	9	-		6658	13	5754	13	2696	14	3819	14	1609	14	-		2402	14	2610	14	9384	4	3528	14	6456	12	4667	14
8	IHQ-091	7604	11	6030	12	9774	11	7803	12	6609	12	5692	6	6763	2	6892	9	7953	11	6782	9	3072	12	5548	12	6297	11	5459	12	5873	11	5794	13	6306	14	6588	10	6447	13	6670	12
9	DMRH1303	7950	3	11014	4	12002	5	10322	4	8995	6	5723	5	4789	13	5804	12	10923	3	7247	8	4625	10	8113	2	7382	10	5746	11	9439	3	7670	5	8626	7	12198	1	10412	2	8479	5
10	DMRH1304	7787	6	12210	3	10198	9	10065	5	9655	4	5858	4	6317	4	8437	6	9002	7	7854	6	5739	5	7198	7	7712	9	6004	7	7397	5	7078	7	8906	6	8851	5	8879	5	8252	6
11	DMRH1305	7865	4	10939	5	11188	7	9997	7	8517	8	5431	7	6277	5	8839	5	8844	8	7582	7	5573	6	6086	10	9367	5	6855	5	7862	4	7542	6	7885	10	8409	6	8147	7	8169	7
12	AH1312	7802	5	7040	11	9048	12	7963	11	7856	9	5217	10	5628	8	4129	13	8540	9	6274	12	5882	4	6104	9	6026	13	5984	8	5945	10	6015	12	6950	12	7893	7	7422	9	6726	11
13	AH1313	7554	12	9210	10	10427	8	9064	10	7467	10	4007	14	4861	12	6824	10	8459	10	6323	10	5252	7	7303	5	7714	8	5784	10	6540	8	6835	8	7401	11	6581	11	6991	10	7152	9
	CHECKS																																								
14	Prakash(C)	7715	8	9960	6	10108	10	9261	8	6825	11	4861	13	4882	11	7041	8	7794	12	6281	11	3071	13	5283	13	9092	6	4269	13	5611	12	6063	11	8421	8	5212	12	6816	11	6934	10
	Location Mean	**7446**		**9336**		**11074**		**9285**		**8453**		**5379**		**5663**		**7873**		**9227**		**7319**		**4926**		**6699**		**8117**		**6269**		**6861**		**6986**		**8473**		**7800**		**8137**		**7762**	
	C.D. (5%)	448		1737		2663		1616		833		534		1661		3207		1273		1502		1744		681		1984		557		2305		1382		1315		781		1048		1427	
	C.V. (%)	3.58		11.06		14.3		-		5.86		5.9		17.45		18.51		8.2		-		**21.06**		6.04		14.54		5.26		19.98		-		9.23		5.95		-		-	
	F (Prob)	0		0		0				0		0		0.061		0.007		0				0		0		0		0		0				0		0				-	
	Plot Size	6		3.6		6		-		4.8		4.8		6		5.6		4.8		-		6		4.8		6		5.6		4.8		-		4.8		4.8		-		-	
	AGRONOMY DATA																																								
	Sowing Date	23-11		27-11		17-12		-		22-11		29-11		27-11		5-12		25-11		-		11-12		4-01		23-12		27-11		28-11		-		26-11		24-11		-		-	
	Harvest Date	20-05		24-05		11-06		-		9-05		22-04		23-05		4-06		25-04		-		18-04		16-04		6-03		26-04		26-02		-		19-04		28-04		-		-	
	Irrigation Nos	7		11		6		-		6		10		5		8		3		-		8		9		-		12		8		-		6		14		-		-	
	Ferilizer Applied N	150		70		120		-		150		120		150		140		150		-		150		150		100		150		150		-		150		120		-		-	
	Ferilizer Applied P	60		24		60		-		75		60		70		60		75		-		75		75		50		75		75		-		80		50		-		-	
	Ferilizer Applied K	60		12		40		-		60		60		60		40		60		-		37.5		75		30		40		75		-		-		-		-		-	

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

Table No. 3 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Prakash(C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	B-52	-	-	16.6	-	33.7	30.6	19.1	16.6	32.7	26.9	127.9	36.7	-	68.5	-	7.1	-	40.2	12.8	11.7
2	NMH-51	-	-	31.4	8.7	50.6	2.1	3.9	35.6	30.9	27.6	96.6	51.6	9	58	69.7	40.9	16.7	73.9	38.6	27
3	IM 8013	18.6	43.2	42.2	36	68.4	20.6	30	76.5	61.4	55.1	60.4	33.4	52.8	73.5	74	57.1	35.1	78.7	51.8	49.7
4	IL 8033	0.5	38.4	31.8	25.5	28.8	7.6	41.5	31	49.8	33.2	30.7	44.2	9.4	67.9	18.2	29.3	15.2	115.7	53.7	32.9
5	IL 8235	19.8	-	47.4	20.7	55.4	22.7	21.8	29.7	28.7	32.7	108.8	65.7	18.4	65.2	28.9	39.4	11.3	51.3	26.6	30.1
6	IH-072	-	-	-	-	-	0.3	-	-	-	-	52.4	7.5	-	36.5	15.1	6	-	-	-	-
7	IH-061	-	-	-	-	-	8.6	7.4	-	-	-	-	-	-	-	-	-	11.4	-	-	-
8	IHQ-091	-	-	-	-	-	17.1	38.5	-	2	8	0	5	-	27.9	4.7	-	-	26.4	-	-
9	DMRH1303	3	10.6	18.7	11.5	31.8	17.7	-	-	40.2	15.4	50.6	53.6	-	34.6	68.2	26.5	2.4	134	52.8	22.3
10	DMRH1304	0.9	22.6	0.9	8.7	41.5	20.5	29.4	19.8	15.5	25	86.9	36.2	-	40.7	31.8	16.7	5.8	69.8	30.3	19
11	DMRH1305	1.9	9.8	10.7	8	24.8	11.7	28.6	25.5	13.5	20.7	81.5	15.2	3	60.6	40.1	24.4	-	61.3	19.5	17.8
12	AH1312	1.1	-	-	-	15.1	7.3	15.3	-	9.6	-	91.6	15.5	-	40.2	6	-	-	51.5	8.9	-
13	AH1313	-	-	3.2	-	9.4	-	-	-	8.5	0.7	71.1	38.2	-	35.5	16.6	12.7	-	26.3	2.6	3.2
	CHECKS																				
14	Prakash(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No. 3 (Cont..)

		STAND AT HARVEST ('000/ha)																		
					ZN 2					ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	B-52	57.8	69.4	51.1	59.4	64.6	64.4	55.4	75.0	64.8	41.1	66.0	37.8	64.3	38.9	49.6	56.3	52.1	54.2	56.7
2	NMH-51	60.6	84.3	65.0	69.9	60.4	63.3	67.9	79.9	67.9	55.0	66.7	61.1	56.5	52.8	58.4	59.0	42.4	50.7	62.5
3	IM 8013	58.9	83.3	66.7	69.6	66.0	66.7	63.4	79.2	68.8	51.7	66.7	62.8	60.7	57.6	59.9	63.2	69.4	66.3	65.4
4	IL 8033	58.9	83.3	66.7	69.6	64.6	66.7	60.7	82.6	68.7	47.2	66.0	58.9	64.3	52.1	57.7	60.4	66.0	63.2	64.2
5	IL 8235	58.9	62.0	62.8	61.2	62.5	64.4	58.9	70.1	64.0	50.6	66.0	59.4	66.1	52.1	58.8	54.2	64.6	59.4	60.9
6	IH-072	62.2	75.9	65.0	67.7	66.7	63.3	64.3	81.3	68.9	52.2	65.3	58.9	58.3	55.6	58.1	52.1	57.6	54.9	62.8
7	IH-061	23.3	32.4	43.3	33.0	66.0	63.9	10.7	53.5	48.5	20.0	63.9	7.2	-	11.1	25.6	56.9	61.8	59.4	39.5
8	IHQ-091	58.3	72.2	66.7	65.7	63.2	66.7	67.9	79.9	69.4	46.1	65.3	51.7	59.5	50.0	54.5	56.3	50.0	53.1	61.0
9	DMRH1303	60.6	83.3	66.1	70.0	67.4	64.4	67.9	77.8	69.4	58.3	66.7	48.3	60.1	59.7	58.6	56.9	63.2	60.1	64.3
10	DMRH1304	61.1	83.3	66.7	70.4	65.3	66.7	66.1	78.5	69.1	55.0	66.7	58.3	62.5	56.3	59.8	57.6	61.8	59.7	64.7
11	DMRH1305	59.4	77.8	66.1	67.8	63.9	65.0	74.1	77.8	70.2	53.9	64.6	53.3	57.7	54.2	56.7	61.1	72.2	66.7	64.4
12	AH1312	60.0	81.5	56.7	66.0	64.6	66.7	65.2	75.0	67.9	55.0	65.3	49.4	62.5	54.2	57.3	54.9	71.5	63.2	63.0
13	AH1313	61.7	77.8	66.7	68.7	67.4	64.4	64.3	79.2	68.8	58.9	65.3	56.1	62.5	54.9	59.5	54.9	61.8	58.3	64.0
	CHECKS																			
14	Prakash(C)	57.8	75.0	66.7	66.5	67.4	65.0	64.3	80.6	69.3	46.1	65.3	66.7	61.9	58.3	59.7	57.6	79.9	68.8	65.2
	Loc. Mean	**57.1**	**74.4**	**62.6**	**64.7**	**65.0**	**65.1**	**60.8**	**76.4**	**66.8**	**49.4**	**65.7**	**52.1**	**61.3**	**50.5**	**55.3**	**57.2**	**62.5**	**59.8**	**61.3**
	C.D. (5%)	4.13	10.74	7.73	8.74	5.94	2.27	9.89	7.34	10.56	9.15	1.93	10.50	8.28	10.83	8.17	6.60	7.87	14.60	5.13
	C.V. (%)	4.31	8.60	7.36	8.05	5.45	2.08	7.53	5.72	11.05	11.04	1.75	12.00	7.72	12.77	11.65	6.87	7.51	11.29	11.21
	F (Prob)	0.00	0.00	0.00	0.00	0.49	0.01	0.00	0.00	0.02	0.00	0.14	0.00	0.44	0.00	0.00	0.12	0.00	0.33	0.00

Table No. 3 (Cont..)

		MOISTURE % AT HARVEST																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	B-52	28.9	33.3	16.2	26.1	19.9	17.9	20.8	20.3	28.8	21.5	22.8	16.0	8.0	13.4	15.8	15.2	15.9	16.6	16.2	19.6
2	NMH-51	22.9	34.5	17.4	24.9	20.0	18.0	22.1	20.1	29.6	21.9	19.6	18.1	8.7	14.9	16.1	15.5	17.1	14.8	15.9	19.6
3	IM 8013	26.7	34.2	20.7	27.2	21.0	18.7	22.8	21.5	31.4	23.1	15.4	15.2	8.6	14.4	17.0	14.1	17.0	15.2	16.1	20.0
4	IL 8033	26.8	33.0	19.9	26.5	20.0	19.2	22.2	20.5	29.2	22.2	20.6	16.2	8.1	14.6	16.6	15.2	16.7	18.1	17.4	20.1
5	IL 8235	22.1	32.9	18.3	24.4	20.0	17.6	22.1	22.3	31.3	22.7	20.0	17.0	7.3	14.6	16.1	15.0	16.4	15.3	15.8	19.5
6	IH-072	25.2	27.8	18.1	23.7	19.0	17.7	23.8	19.3	25.8	21.1	17.4	14.2	9.4	13.6	16.1	14.1	15.7	15.9	15.8	18.6
7	IH-061	27.0	33.5	20.6	27.0	19.2	18.3	22.9	-	30.4	22.7	20.4	17.1	8.9	-	16.0	15.6	16.0	14.6	15.3	20.4
8	IHQ-091	25.3	35.3	20.6	27.0	19.8	19.2	22.1	20.2	29.9	22.2	20.2	16.0	8.8	14.8	16.4	15.2	15.7	16.0	15.9	20.0
9	DMRH1303	27.0	31.0	17.6	25.2	20.0	18.5	21.9	19.6	29.2	21.8	22.9	17.6	9.4	14.0	14.9	15.7	16.9	15.3	16.1	19.7
10	DMRH1304	28.1	29.9	23.0	27.0	20.6	17.1	20.8	21.3	28.2	21.6	22.4	18.2	7.5	15.4	15.8	15.9	16.9	17.6	17.2	20.2
11	DMRH1305	23.9	32.9	21.3	26.0	18.9	17.7	22.1	21.9	30.5	22.2	20.9	16.0	7.6	14.9	15.7	15.0	15.9	17.1	16.5	19.8
12	AH1312	25.6	29.1	18.8	24.5	19.1	18.7	22.1	19.7	29.1	21.7	18.1	14.7	8.9	13.8	16.3	14.3	16.0	14.7	15.3	19.0
13	AH1313	26.5	25.7	17.9	23.4	19.0	17.8	21.9	20.0	26.9	21.1	18.7	15.6	7.8	12.3	15.3	13.9	16.0	15.6	15.8	18.5
	CHECKS																				
14	Prakash(C)	25.0	27.8	20.4	24.4	19.0	18.3	21.9	20.5	26.0	21.1	14.0	14.7	7.3	13.5	16.0	13.1	16.3	17.2	16.7	18.5
	Loc. Mean	**25.8**	**31.5**	**19.3**	**25.5**	**19.6**	**18.2**	**22.1**	**20.5**	**29.0**	**21.9**	**19.5**	**16.2**	**8.3**	**14.1**	**16.0**	**14.8**	**16.3**	**16.0**	**16.1**	**19.5**
	C.D. (5%)	0.81	1.48	2.86	3.84	0.78	0.64	0.00	2.58	1.08	1.23	2.91	0.60	1.15	0.31	0.75	1.67	0.81	1.55	1.91	1.04
	C.V. (%)	1.86	2.79	8.82	8.96	2.36	2.11	0.00	5.57	2.23	4.42	8.88	2.21	8.30	1.27	2.80	8.87	2.96	5.77	5.49	7.40
	F (Prob)	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.32	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.51	0.00

Table No. 3 (Cont..)

		GRAIN SHELLING %																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	B-52	76.1	81.0	80.8	79.3	74.2	80.2	82.0	81.7	75.7	78.7	83.0	81.0	81.4	81.2	80.7	81.4	74.7	81.3	78.0	79.6
2	NMH-51	78.5	78.3	81.8	79.5	77.8	78.8	83.0	83.0	74.8	79.5	81.5	75.6	80.9	80.8	79.8	79.7	74.8	78.4	76.6	79.2
3	IM 8013	78.3	89.6	79.2	82.3	79.9	80.2	85.0	87.5	77.9	82.1	83.3	80.8	86.8	80.8	79.9	82.3	75.9	80.8	78.3	81.7
4	IL 8033	76.4	82.4	76.4	78.4	76.0	80.1	86.0	84.4	76.1	80.5	82.1	81.8	82.8	79.4	80.3	81.3	75.8	80.4	78.1	80.0
5	IL 8235	78.9	80.3	79.2	79.4	75.0	79.8	80.0	86.1	76.4	79.5	84.0	80.7	86.2	81.9	79.9	82.5	78.8	82.0	80.4	80.6
6	IH-072	79.9	77.1	78.4	78.5	73.1	79.6	80.0	80.9	75.4	77.8	80.1	81.0	81.4	80.9	80.5	80.8	72.5	81.3	76.9	78.8
7	IH-061	79.9	77.3	80.7	79.3	76.8	80.7	80.0	-	76.5	78.5	83.5	81.6	81.9	-	76.1	80.8	77.4	81.6	79.5	79.5
8	IHQ-091	75.6	81.5	80.4	79.2	73.1	79.8	83.0	82.1	76.4	78.9	81.2	80.0	81.0	76.4	79.6	79.6	76.5	76.4	76.4	78.9
9	DMRH1303	79.0	81.0	82.0	80.7	74.0	78.2	83.0	80.7	75.5	78.3	80.3	80.9	83.4	81.5	79.4	81.1	74.3	79.4	76.9	79.5
10	DMRH1304	73.0	81.2	76.4	76.9	77.1	80.1	83.0	81.6	75.6	79.5	84.4	81.0	80.3	80.4	79.6	81.1	78.1	82.1	80.1	79.6
11	DMRH1305	77.1	77.8	82.0	79.0	72.6	80.0	85.0	81.6	76.4	79.1	81.7	79.9	85.5	79.3	76.7	80.6	69.5	79.2	74.3	78.9
12	AH1312	76.1	84.4	83.5	81.3	70.7	80.2	85.0	81.5	76.0	78.7	81.4	81.1	82.9	80.6	81.3	81.4	72.8	83.2	78.0	80.0
13	AH1313	76.8	82.5	83.5	80.9	77.8	81.7	85.0	81.1	75.4	80.2	80.9	79.1	82.6	79.8	80.2	80.5	73.9	81.6	77.7	80.1
	CHECKS																				
14	Prakash(C)	75.9	83.6	76.5	78.7	77.5	79.0	80.0	84.8	75.3	79.3	83.1	79.7	84.4	79.9	80.5	81.5	76.3	84.7	80.5	80.1
	Loc. Mean	**77.2**	**81.3**	**80.0**	**79.5**	**75.4**	**79.9**	**82.9**	**82.8**	**75.9**	**79.3**	**82.2**	**80.3**	**82.9**	**80.2**	**79.6**	**81.0**	**75.1**	**80.9**	**78.0**	**79.8**
	C.D. (5%)	0.75	0.00	4.81	4.60	0.74	1.62	-	2.26	0.68	2.25	1.11	2.15	2.87	2.50	0.82	1.91	2.59	3.42	4.49	1.39
	C.V. (%)	0.58	0.00	3.58	3.44	0.58	1.21	-	1.20	0.54	2.23	0.81	1.60	2.06	1.78	0.61	1.85	2.06	2.52	2.66	2.43
	F (Prob)	0.00	0.00	0.04	0.68	0.00	0.03	-	0.00	0.00	0.06	0.00	0.00	0.00	0.01	0.00	0.15	0.00	0.01	0.28	0.01

Table No. 3 (Cont..)

		DAYS TO 50% POLLEN SHED																		
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	B-52	135.0	138.0	117.3	130.1	124.7	59.7	113.3	118.0	105.3	104.2	76.7	54.0	74.0	64.7	53.0	64.5	75.0	82.0	78.5	92.7
2	NMH-51	130.0	136.7	116.0	127.6	123.7	63.0	115.3	114.0	104.0	104.0	77.0	53.0	72.0	64.0	55.7	64.3	73.3	79.0	76.2	91.8
3	IM 8013	129.0	136.0	117.3	127.4	120.3	61.7	113.3	116.0	104.3	103.1	76.3	51.0	71.0	64.3	52.3	63.0	72.7	76.0	74.3	90.8
4	IL 8033	133.0	132.0	115.3	126.8	120.7	61.3	113.3	115.5	103.0	102.8	76.0	54.0	74.0	63.7	51.7	63.9	74.0	79.0	76.5	91.1
5	IL 8235	132.0	136.0	114.7	127.6	126.3	62.3	121.0	115.5	104.3	105.9	75.0	51.0	70.3	64.0	51.0	62.3	71.7	78.0	74.8	91.5
6	IH-072	134.0	129.0	110.0	124.3	109.3	54.3	109.3	103.0	88.0	92.8	68.0	47.0	69.0	57.3	51.7	58.6	70.7	69.0	69.8	84.6
7	IH-061	134.3	134.3	117.7	128.8	119.3	64.0	117.7	-	104.0	101.3	76.3	56.0	78.0	-	57.0	66.8	75.3	79.0	77.2	93.3
8	IHQ-091	128.0	138.5	120.3	128.9	123.7	63.0	122.7	120.5	107.3	107.4	81.3	56.0	75.0	65.0	57.3	66.9	74.3	79.0	76.7	94.1
9	DMRH1303	134.3	137.3	118.0	129.9	122.3	63.7	118.0	120.0	105.7	105.9	79.3	56.0	78.0	65.7	54.7	66.7	73.3	80.0	76.7	93.8
10	DMRH1304	130.0	134.3	116.7	127.0	121.3	59.3	120.7	116.0	102.0	103.9	76.7	53.0	73.0	63.7	52.3	63.7	74.3	79.7	77.0	91.5
11	DMRH1305	131.7	139.7	121.0	130.8	119.7	56.7	120.3	121.0	109.0	105.3	79.0	55.0	73.0	67.0	52.7	65.3	75.0	79.7	77.3	93.4
12	AH1312	132.7	136.3	119.3	129.4	119.3	62.0	115.7	120.0	104.3	104.3	78.0	56.0	73.0	65.3	52.3	64.9	83.3	82.0	82.7	93.3
13	AH1313	133.7	132.3	117.3	127.8	115.7	62.0	113.0	114.0	101.7	101.3	77.3	53.0	73.3	63.0	51.0	63.5	73.3	80.0	76.7	90.7
	CHECKS																				
14	Prakash(C)	129.0	131.0	112.0	124.0	117.3	57.0	111.7	115.0	97.0	99.6	70.3	48.0	72.0	61.0	50.3	60.3	73.3	72.0	72.7	87.8
	Loc. Mean	**131.9**	**135.1**	**116.6**	**127.9**	**120.3**	**60.7**	**116.1**	**116.0**	**102.9**	**103.0**	**76.2**	**53.1**	**73.3**	**63.7**	**53.1**	**63.9**	**74.3**	**78.2**	**76.2**	**91.5**
	C.D. (5%)	1.02	3.97	2.15	4.09	1.89	1.48	6.16	1.80	1.74	4.00	3.59	0.45	0.37	1.86	2.97	1.94	1.05	0.82	4.73	2.53
	C.V. (%)	0.46	1.75	1.10	1.91	0.94	1.46	3.16	0.69	1.01	3.06	2.81	0.50	0.30	1.67	3.34	2.39	0.84	0.62	2.87	3.83
	F (Prob)	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00

Table No. 3 (Cont..)

		DAYS TO 50% SILKING																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	B-52	137.7	139.0	120.3	132.3	126.7	62.0	116.0	123.0	110.0	107.5	77.7	56.0	75.0	66.3	56.3	66.3	78.0	84.0	81.0	95.2
2	NMH-51	132.0	136.0	119.0	129.0	125.7	65.0	117.7	118.0	109.0	107.1	78.0	55.0	73.0	66.0	58.7	66.1	76.3	80.7	78.5	94.0
3	IM 8013	131.3	138.0	120.3	129.9	122.3	63.7	116.3	119.0	107.7	105.8	78.3	53.0	72.0	66.0	55.3	64.9	75.7	78.0	76.8	93.1
4	IL 8033	135.7	132.0	118.3	128.7	122.7	63.3	116.0	119.0	106.3	105.5	76.3	56.0	75.0	65.3	54.7	65.5	77.0	80.7	78.8	93.2
5	IL 8235	134.0	135.3	117.7	129.0	128.3	64.7	123.0	119.0	108.0	108.6	74.3	53.0	71.3	66.0	55.0	63.9	74.7	81.0	77.8	93.7
6	IH-072	136.3	127.7	113.3	125.8	111.3	57.3	112.0	110.0	92.7	96.7	68.0	49.7	70.0	59.7	55.0	60.5	74.0	71.0	72.5	87.2
7	IH-061	137.3	133.5	120.7	130.5	121.3	67.0	120.0	-	109.0	104.3	78.7	58.0	79.0	-	59.7	68.8	78.3	81.0	79.7	95.7
8	IHQ-091	130.0	140.0	123.3	131.1	125.7	66.0	124.7	125.0	111.7	110.6	83.3	58.0	76.0	67.0	60.3	68.9	78.0	81.3	79.7	96.7
9	DMRH1303	136.3	138.3	121.0	131.9	124.3	66.0	120.0	124.0	108.7	108.6	80.3	58.0	79.0	66.7	57.7	68.3	76.3	82.0	79.2	95.9
10	DMRH1304	132.3	136.0	119.7	129.3	123.3	62.0	122.7	119.0	105.7	106.5	78.3	55.0	74.0	66.0	55.3	65.7	77.3	81.7	79.5	93.9
11	DMRH1305	134.0	139.0	123.7	132.2	121.7	60.0	122.3	125.0	112.7	108.3	80.3	57.0	74.0	69.0	56.0	67.3	78.7	81.7	80.2	95.7
12	AH1312	134.7	135.7	122.3	130.9	121.3	65.0	117.7	124.5	108.7	107.4	79.7	58.0	74.3	67.3	54.7	66.8	86.3	84.0	85.2	95.6
13	AH1313	135.7	132.3	120.3	129.4	117.7	64.3	116.0	118.0	105.3	104.3	77.7	55.0	74.3	65.3	53.7	65.2	77.0	82.0	79.5	93.0
	CHECKS																				
14	Prakash(C)	131.3	130.0	115.0	125.4	119.3	59.3	114.3	118.5	102.0	102.7	72.7	50.0	73.0	62.3	54.0	62.4	76.3	73.0	74.7	90.1
	Loc. Mean	**134.2**	**135.2**	**119.6**	**129.7**	**122.3**	**63.3**	**118.5**	**120.2**	**107.0**	**106.0**	**77.4**	**55.1**	**74.3**	**65.6**	**56.2**	**65.8**	**77.4**	**80.1**	**78.8**	**93.8**
	C.D. (5%)	1.14	4.07	2.08	4.53	1.89	1.91	5.78	1.65	2.03	4.02	3.95	0.71	0.45	2.13	2.90	2.04	1.15	0.59	5.00	2.58
	C.V. (%)	0.50	1.79	1.04	2.08	0.92	1.80	2.91	0.61	1.13	2.99	3.04	0.76	0.36	1.86	3.08	2.44	0.88	0.44	2.94	3.81
	F (Prob)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00

Table No.3 (Cont..)

		DAYS TO 75% DRY HUSK																		
				ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	B-52	171.0	174.3	172.7	155.7	90.3	146.3	167.0	142.3	140.3	87.7	90.0	107.0	107.3	86.3	95.7	112.7	124.0	118.3	125.9
2	NMH-51	162.0	176.7	169.3	158.7	96.0	148.7	166.0	142.7	142.4	96.3	87.3	103.0	103.0	93.7	96.7	110.3	120.0	115.2	126.0
3	IM 8013	164.7	175.7	170.2	156.3	90.3	147.7	166.5	147.0	141.6	94.7	87.7	103.0	110.0	92.3	97.5	108.0	120.0	114.0	126.0
4	IL 8033	167.7	180.7	174.2	161.7	96.0	146.7	165.5	142.3	142.4	84.7	88.7	109.0	109.3	92.7	96.9	107.3	124.0	115.7	126.9
5	IL 8235	161.3	176.0	168.7	160.3	94.3	152.3	167.0	144.7	143.7	96.7	86.3	107.0	108.7	95.3	98.8	107.0	120.0	113.5	126.9
6	IH-072	164.3	165.3	164.8	147.7	85.3	144.7	163.0	132.7	134.7	81.0	82.0	103.0	99.0	85.7	90.1	107.7	116.7	112.2	119.9
7	IH-061	165.0	178.7	171.8	155.3	98.3	150.3	-	145.7	137.4	97.3	92.0	112.3	-	94.7	99.1	108.3	120.0	114.2	126.5
8	IHQ-091	161.7	177.7	169.7	153.7	96.0	154.7	166.0	145.3	143.1	98.3	92.0	106.0	106.7	94.7	99.5	118.3	120.0	119.2	127.9
9	DMRH1303	166.0	176.7	171.3	151.7	96.0	150.3	163.5	146.0	141.5	83.0	92.0	105.3	106.3	94.3	96.2	105.3	124.0	114.7	125.8
10	DMRH1304	166.3	173.7	170.0	154.3	93.0	152.7	168.0	140.7	141.7	88.3	88.3	104.3	106.0	95.0	96.4	110.3	124.0	117.2	126.1
11	DMRH1305	162.7	176.3	169.5	157.7	92.0	152.7	166.5	144.7	142.7	96.0	91.7	108.0	108.0	93.7	99.5	108.7	120.0	114.3	127.0
12	AH1312	163.3	172.0	167.7	151.7	90.0	147.7	163.5	142.3	139.0	88.0	92.0	104.3	103.0	86.7	94.8	113.7	124.0	118.8	124.4
13	AH1313	168.0	169.7	168.8	147.7	92.0	146.0	163.5	138.0	137.4	86.3	87.7	104.3	102.0	86.0	93.3	111.0	124.0	117.5	123.3
	CHECKS																			
14	Prakash(C)	163.3	171.7	167.5	150.3	87.0	146.0	165.0	137.7	137.2	80.0	85.3	104.0	100.7	84.0	90.8	109.3	120.0	114.7	121.7
	Loc. Mean	**164.8**	**174.6**	**169.7**	**154.5**	**92.6**	**149.0**	**165.5**	**142.3**	**140.4**	**89.9**	**88.8**	**105.8**	**105.4**	**91.1**	**96.1**	**109.9**	**121.5**	**115.7**	**125.3**
	C.D. (5%)	1.25	4.15	7.62	1.67	2.77	4.67	3.09	6.25	5.64	15.05	0.99	0.99	2.93	1.97	4.32	3.99	1.29	5.93	3.33
	C.V. (%)	0.45	1.42	2.08	0.65	1.78	1.87	0.83	2.62	3.17	9.98	0.66	0.56	1.59	1.29	3.54	2.16	0.64	2.37	3.56
	F (Prob)	0.00	0.00	0.59	0.00	0.00	0.00	0.04	0.00	0.05	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00

Table No. 3 (Cont..)

		PLANT HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	B-52	128.3	140.0	219.0	162.4	207.0	180.9	166.7	181.8	180.0	183.3	160.5	175.9	178.3	204.0	197.3	183.2	235.3	203.3	219.3	183.9
2	NMH-51	168.3	150.0	227.0	181.8	200.7	175.8	162.3	162.2	178.3	175.9	156.5	185.9	178.3	207.7	195.0	184.7	244.3	176.7	210.5	184.6
3	IM 8013	151.7	153.3	235.7	180.2	216.3	197.4	162.3	187.9	208.3	194.5	168.0	191.9	205.0	211.3	202.3	195.7	237.0	193.3	215.2	194.8
4	IL 8033	191.7	146.7	231.0	189.8	193.3	181.2	162.7	189.7	178.3	181.0	167.0	186.5	180.0	205.7	203.5	188.5	259.0	178.3	218.7	190.3
5	IL 8235	145.0	146.7	234.0	175.2	210.0	185.6	165.3	198.8	170.0	185.9	167.0	202.8	196.7	220.3	199.8	197.3	272.0	196.7	234.3	194.0
6	IH-072	178.3	130.0	188.7	165.7	150.7	163.8	132.0	172.3	138.3	151.4	162.0	174.9	176.7	200.7	172.0	177.3	160.0	170.0	165.0	164.7
7	IH-061	160.0	130.0	214.7	168.2	165.3	155.5	138.0	-	163.3	155.5	156.5	196.9	178.3	-	191.5	180.8	150.0	173.3	161.7	167.2
8	IHQ-091	168.3	135.0	195.0	166.1	174.3	166.0	144.3	177.8	158.3	164.2	140.0	187.0	183.3	195.3	193.1	179.8	215.7	200.0	207.8	175.6
9	DMRH1303	173.3	155.0	248.3	192.2	179.7	191.7	163.3	180.7	202.3	183.6	179.5	201.1	201.7	221.0	225.5	205.8	217.0	180.0	198.5	194.7
10	DMRH1304	131.7	150.0	216.7	166.1	196.3	184.0	162.3	178.4	183.3	180.9	159.0	168.9	165.0	199.3	184.7	175.4	231.7	180.0	205.8	179.4
11	DMRH1305	155.0	161.7	242.0	186.2	210.3	181.8	150.7	182.5	183.3	181.7	164.0	191.6	188.3	214.0	197.2	191.0	228.3	206.7	217.5	190.5
12	AH1312	160.0	140.0	208.0	169.3	172.7	151.3	128.0	154.0	160.0	153.2	145.5	182.9	158.3	189.7	174.7	170.2	242.0	176.7	209.3	169.6
13	AH1313	155.0	140.0	208.3	167.8	178.0	155.0	131.0	170.6	136.7	154.3	159.0	185.3	173.3	202.3	198.3	183.6	255.7	163.3	209.5	174.1
	CHECKS																				
14	Prakash(C)	150.0	141.7	202.0	164.6	184.0	168.3	146.7	190.6	148.3	167.6	166.5	180.9	185.0	209.7	207.3	189.9	225.3	171.7	198.5	178.5
	Loc. Mean	**158.3**	**144.3**	**219.3**	**174.0**	**188.5**	**174.2**	**151.1**	**179.0**	**170.6**	**172.3**	**160.8**	**186.6**	**182.0**	**206.2**	**195.9**	**185.9**	**226.7**	**183.6**	**205.1**	**181.6**
	C.D. (5%)	5.42	27.72	8.89	23.54	24.60	19.85	21.15	36.72	15.78	12.60	13.50	8.65	26.60	21.15	16.08	9.11	44.63	14.65	51.48	9.72
	C.V. (%)	2.04	11.45	2.42	8.06	7.78	6.79	8.34	9.07	5.51	5.76	5.00	2.76	8.71	5.87	4.89	3.86	11.73	4.75	11.62	7.43
	F (Prob)	0.00	0.51	0.00	0.16	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.06	0.12	0.00	0.00	0.00	0.00	0.28	0.00

Table No. 3 (Cont..)

		EAR HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	B-52	58.3	78.3	103.0	80.7	106.7	83.8	85.0	101.8	98.3	95.1	84.5	89.6	91.7	109.7	96.6	94.4	107.0	88.3	97.7	93.2
2	NMH-51	90.0	60.0	95.3	92.7	97.3	80.2	75.0	87.1	81.7	84.3	72.0	94.3	88.3	105.7	99.0	91.9	112.7	88.3	100.5	90.5
3	IM 8013	60.0	60.0	92.7	76.3	102.0	81.7	73.3	87.6	81.7	85.3	70.0	94.4	100.0	96.7	91.1	90.4	118.3	88.3	103.3	88.4
4	IL 8033	111.7	68.3	105.0	108.3	95.7	70.9	72.7	88.9	68.3	79.3	84.0	92.2	86.7	103.3	94.3	92.1	98.7	100.0	99.3	90.9
5	IL 8235	70.0	51.7	103.0	86.5	86.7	62.3	68.3	80.5	53.3	70.2	74.0	99.6	101.7	101.7	89.9	93.4	105.0	71.7	88.3	83.4
6	IH-072	98.3	58.3	71.7	85.0	68.3	65.2	60.3	79.5	63.3	67.3	77.0	88.7	93.3	101.3	88.2	89.7	80.3	103.3	91.8	81.4
7	IH-061	80.0	55.0	99.7	89.8	75.7	62.4	60.3	-	78.3	69.2	78.5	99.8	86.7	-	107.1	93.0	77.3	80.0	78.7	82.2
8	IHQ-091	95.0	66.7	87.7	91.3	90.7	75.4	67.3	88.7	75.0	79.4	67.5	101.0	96.7	110.3	105.1	96.1	83.7	85.0	84.3	87.8
9	DMRH1303	90.0	70.0	121.3	105.7	95.3	85.5	82.0	104.3	96.7	92.8	98.5	103.1	103.3	105.0	109.1	103.8	104.0	88.3	96.2	99.0
10	DMRH1304	60.0	91.7	112.3	86.2	115.0	90.5	94.0	97.7	98.3	99.1	87.5	89.9	81.7	103.3	92.7	91.0	111.0	78.3	94.7	93.7
11	DMRH1305	95.0	88.3	117.3	106.2	114.3	81.9	79.0	89.7	86.7	90.3	84.0	97.9	91.7	105.7	109.5	97.7	104.0	100.0	102.0	96.9
12	AH1312	95.0	58.3	83.0	89.0	71.7	57.8	58.0	78.5	65.0	66.2	62.0	87.7	76.7	88.3	85.0	79.9	99.3	80.0	89.7	77.7
13	AH1313	88.3	66.7	87.7	88.0	78.0	75.7	66.3	95.8	65.0	76.2	86.5	93.4	93.3	100.3	97.5	94.2	98.7	75.0	86.8	85.8
	CHECKS																				
14	Prakash(C)	78.3	61.7	101.0	89.7	86.7	77.1	69.0	103.6	75.0	82.3	80.5	87.8	103.3	106.0	104.5	96.4	110.7	78.3	94.5	90.1
	Loc. Mean	**83.6**	**66.8**	**98.6**	**91.1**	**91.7**	**75.0**	**72.2**	**91.1**	**77.6**	**81.2**	**79.0**	**94.2**	**92.5**	**102.9**	**97.8**	**93.2**	**100.8**	**86.1**	**93.4**	**88.6**
	C.D. (5%)	5.78	24.53	5.74	35.66	17.14	11.79	11.74	14.55	18.20	8.09	9.08	4.62	21.85	18.10	17.83	7.72	18.12	8.51	26.04	7.14
	C.V. (%)	4.12	21.89	3.47	18.12	11.14	9.37	9.69	7.07	13.97	7.85	6.85	2.92	14.07	10.06	10.86	6.53	10.72	5.89	12.90	10.79
	F (Prob)	0.00	0.06	0.00	0.77	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.36	0.55	0.11	0.00	0.00	0.00	0.73	0.00

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

Table No. 4

Performance of late maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 04 (AVT1- L) during rabi 2013-14.

	GRAIN YIELD (kg/ha) AT 15% MOISTURE																																			
SI							ZN 2											ZN 3											ZN 4						ZN 5		OV'L	
No	PEDIGREE	KARN	R	LUDH	R	PANT	R	MEAN	R	BAHR	R	BHUB	R	DHOL	R	RANC	R	VARA	R	MEAN	R	ARBH	R	COIM	R	KOLH	R	MAND	R	VAGA	R	MEAN	R	BANS	R	GODH	R	MEAN	R	MEAN	R
1	Bisco X 6573	9773	16	17240	6	14300	7	13771	5	9672	13	6806	18	5996	9	9701	21	11713	15	8778	19	6718	12	6241	11	12125	9	9152	8	7485	11	8344	10	8434	8	15759	8	12096	8	10074	11
2	GK 3149	9008	22	15519	15	10962	21	11830	23	11242	3	6519	22	5953	10	10803	16	11861	14	9276	12	7371	10	6204	13	11056	14	8338	16	7739	7	8142	14	7000	18	13971	17	10485	20	9570	18
3	GK 3150	10263	12	16848	8	10156	22	12423	17	9401	17	7298	8	6521	3	11209	12	11393	18	9164	14	7962	8	4994	18	10085	23	8711	10	8327	3	8016	18	8427	9	17704	4	13065	4	9953	13
4	X-1228	8742	23	15336	16	12069	12	12049	21	8797	21	6982	14	5004	18	10747	17	11610	17	8628	20	8600	4	6225	12	10854	16	8748	9	6261	20	8138	15	7487	15	14301	16	10894	17	9451	19
5	KH-K25 Gold	10393	9	15641	14	11238	20	12424	16	13014	1	6894	16	5421	15	10045	20	10875	21	9250	13	6368	15	4569	20	10538	19	8443	15	7179	16	7420	20	6187	22	13531	20	9859	21	9356	20
6	KMH-2589	10171	14	16700	9	14751	4	13874	4	7668	22	6948	15	4855	21	10979	13	11253	19	8341	21	6582	14	5993	15	13540	2	9309	5	7716	8	8628	6	8002	12	14983	11	11492	14	9963	12
7	II 8212	11207	4	17325	5	11729	13	13420	7	11169	5	6656	20	5073	17	13786	1	12680	10	9873	6	9096	1	5777	16	12645	6	9867	3	6756	17	8828	3	8481	7	15584	9	12033	9	10522	5
8	DKC 9120	9648	19	17346	4	15036	2	14010	2	10086	12	7614	2	7057	1	12551	7	13225	6	10107	3	6168	17	4566	21	12511	7	9524	4	8854	1	8325	11	8275	11	19432	1	13853	1	10793	1
9	IL 8534	11111	6	15926	12	14817	3	13951	3	12828	2	7079	12	6664	2	13548	3	11918	13	10408	1	8372	5	4848	19	12935	5	10312	1	7404	12	8774	4	6890	20	16345	7	11617	12	10733	3
10	Venus	9861	15	12553	23	13574	8	11996	22	9038	19	6777	19	5385	16	11465	11	12301	11	8993	15	6885	11	6052	14	11885	11	8583	14	6724	18	8026	17	9205	2	14668	14	11937	10	9664	16
11	PMH-2277	9765	17	16072	11	14529	5	13455	6	9465	16	7416	5	5568	14	12440	8	14360	3	9850	7	3920	23	7061	7	13325	4	9155	7	8483	2	8389	8	8341	10	14867	12	11604	13	10318	9
12	Ivory	9371	21	15067	17	14509	6	12982	9	11235	4	7345	6	6102	8	13631	2	13103	7	10283	2	5155	18	7638	4	11997	10	8666	11	8017	6	8295	12	7076	17	19144	2	13110	3	10537	4
13	Megan-G	10697	7	16098	10	11370	16	12722	12	10587	6	7023	13	6276	5	10868	14	13359	5	9622	9	8015	7	5254	17	11866	12	7330	20	8135	4	8120	16	8886	5	16928	5	12907	5	10179	10
14	PMH-189	10317	11	15879	13	11358	17	12518	14	9134	18	7194	9	4875	20	12796	5	13711	4	9542	10	3964	22	9838	1	12377	8	10005	2	8134	5	8864	1	9197	3	17965	3	13581	2	10450	7
15	Rasi-750	11428	2	15016	18	12431	10	12958	10	10314	9	6437	23	6146	6	10359	19	11654	16	8982	17	8776	2	7642	3	10788	17	8611	13	6692	19	8502	7	8494	6	13396	21	10945	16	9879	14
16	X35C537	10227	13	18246	1	11718	14	13397	8	10115	11	7580	3	6119	7	12380	9	12965	8	9832	8	8626	3	7807	2	13868	1	8093	18	5774	22	8833	2	9666	1	13871	18	11768	11	10470	6
17	P3533	11157	5	17415	3	15131	1	14568	1	10534	7	7129	11	6462	4	10844	15	14592	1	9912	5	8334	6	6452	9	13511	3	7778	19	7375	13	8690	5	7694	14	16915	6	12304	6	10755	2
18	DADA	10355	10	14198	21	12680	9	12411	18	9480	15	7715	1	4659	23	10504	18	11985	12	8869	18	6716	13	4345	22	10421	21	6490	22	7654	9	7125	21	6930	19	14755	13	10842	18	9259	21
19	TH2	11449	1	14121	22	11323	19	12298	19	10222	10	7131	10	5664	13	11843	10	12815	9	9535	11	4672	19	7119	6	10096	22	8128	17	7230	15	7449	19	7405	16	14586	15	10995	15	9587	17
20	TH22	9679	18	17836	2	11323	18	12946	11	10434	8	7321	7	5718	11	12681	6	14364	2	10103	4	6205	16	7565	5	10434	20	9244	6	7639	10	8217	13	8981	4	15396	10	12189	7	10321	8
	CHECKS																																								
21	Buland(C)	9405	20	17020	7	9974	23	12133	20	7396	23	7509	4	4913	19	8472	23	10796	22	7817	23	4391	20	6354	10	10773	18	4942	23	5924	21	6477	22	6690	21	7502	23	7096	23	8137	23
22	SeedTech2324(C)	10601	8	14509	20	12190	11	12434	15	8869	20	6629	21	5712	12	12827	4	10928	20	8993	16	7828	9	6806	8	11193	13	8634	12	7352	14	8363	9	7804	13	13740	19	10772	19	9708	15
23	Bio9681(C)	11318	3	14780	19	11660	15	12586	13	9533	14	6836	17	4754	22	9515	22	9814	23	8090	22	4361	21	3772	23	10868	15	7308	21	5765	23	6415	23	4787	23	12117	22	8452	22	8479	22
	Location Mean	**10259**		**15943**		**12558**		**12920**		**10010**		**7080**		**5691**		**11478**		**12316**		**9315**		**6743**		**6223**		**11726**		**8494**		**7331**		**8103**		**7841**		**15107**		**11474**		**9920**	
	C.D. (5%)	342		2972		1360		1558		804		380		1670		2067		667		1118		1449		479		1776		541		2151		1279		1305		2645		1975		1374	
	C.V. (%)	2.03		11.32		6.58		-		4.88		3.26		17.82		10.94		3.29		-		13.05		4.67		9.2		3.86		17.82		-		10.11		10.63		-		-	
	F (Prob)	0		0.044		0				0		0		0.184		0		0				0		0		0		0		0.225				0		0					
	Plot Size	12		7.2		12		-		9.6		9.6		12		9.6		9.6		-		12		9.6		12		11.2		9.6		-		9.6		9.6		-		-	
	AGRONOMY DATA																																								
	Sowing Date	23-11		22-11		17-12		-		21-11		29-11		28-11		15-01		26-11		-		11-12		7-12		22-12		27-11		28-11		-		26-11		24-11		-		-	
	Harvest Date	28-05		28-05		12-06		-		12-05		27-04		29-05		13-06		2-05		-		19-04		4-04		1-06		26-04		26-02		-		19-04		16-04		-		-	
	Irrigation Nos	9		12		6		-		4		10		5		6		3		-		8		10		-		12		12		-		6		12		-		-	
	Ferilizer Applied N	150		70		120		-		150		120		150		140		150		-		150		150		120		150		150		-		150		120		-		-	
	Ferilizer Applied P	60		24		60		-		75		60		70		60		75		-		75		75		60		75		75		-		80		50		-		-	
	Ferilizer Applied K	60		12		40		-		60		60		60		40		60		-		37.5		75		40		40		75		-		-		-		-		-	

Table No. 4 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Buland(C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	Bisco X 6573	3.9	1.3	43.4	13.5	30.8	-	22	14.5	8.5	12.3	53	-	12.5	85.2	26.3	28.8	26.1	110.1	70.5	23.8
2	GK 3149	-	-	9.9	-	52	-	21.2	27.5	9.9	18.7	67.9	-	2.6	68.7	30.6	25.7	4.6	86.2	47.8	17.6
3	GK 3150	9.1	-	1.8	2.4	27.1	-	32.7	32.3	5.5	17.2	81.4	-	-	76.3	40.6	23.8	26	136	84.1	22.3
4	X-1228	-	-	21	-	18.9	-	1.9	26.8	7.5	10.4	95.9	-	0.8	77	5.7	25.6	11.9	90.6	53.5	16.1
5	KH-K25 Gold	10.5	-	12.7	2.4	76	-	10.3	18.6	0.7	18.3	45	-	-	70.8	21.2	14.6	-	80.4	38.9	15
6	KMH-2589	8.1	-	47.9	14.4	3.7	-	-	29.6	4.2	6.7	49.9	-	25.7	88.4	30.2	33.2	19.6	99.7	62	22.4
7	II 8212	19.2	1.8	17.6	10.6	51	-	3.2	62.7	17.4	26.3	107.2	-	17.4	99.7	14	36.3	26.8	107.7	69.6	29.3
8	DKC 9120	2.6	1.9	50.8	15.5	36.4	1.4	43.6	48.1	22.5	29.3	40.5	-	16.1	92.7	49.4	28.5	23.7	159	95.2	32.6
9	IL 8534	18.1	-	48.6	15	73.4	-	35.6	59.9	10.4	33.1	90.7	-	20.1	108.7	25	35.5	3	117.9	63.7	31.9
10	Venus	4.9	-	36.1	-	22.2	-	9.6	35.3	13.9	15	56.8	-	10.3	73.7	13.5	23.9	37.6	95.5	68.2	18.8
11	PMH-2277	3.8	-	45.7	10.9	28	-	13.3	46.8	33	26	-	11.1	23.7	85.2	43.2	29.5	24.7	98.2	63.5	26.8
12	Ivory	-	-	45.5	7	51.9	-	24.2	60.9	21.4	31.5	17.4	20.2	11.4	75.4	35.3	28.1	5.8	155.2	84.8	29.5
13	Megan-G	13.7	-	14	4.9	43.1	-	27.7	28.3	23.7	23.1	82.6	-	10.2	48.3	37.3	25.4	32.8	125.6	81.9	25.1
14	PMH-189	9.7	-	13.9	3.2	23.5	-	-	51	27	22.1	-	54.8	14.9	102.5	37.3	36.9	37.5	139.5	91.4	28.4
15	Rasi-750	21.5	-	24.6	6.8	39.4	-	25.1	22.3	7.9	14.9	99.9	20.3	0.1	74.2	13	31.3	27	78.6	54.2	21.4
16	X35C537	8.7	7.2	17.5	10.4	36.8	0.9	24.5	46.1	20.1	25.8	96.5	22.9	28.7	63.8	-	36.4	44.5	84.9	65.8	28.7
17	P3533	18.6	2.3	51.7	20.1	42.4	-	31.5	28	35.2	26.8	89.8	1.5	25.4	57.4	24.5	34.2	15	125.5	73.4	32.2
18	DADA	10.1	-	27.1	2.3	28.2	2.7	-	24	11	13.4	53	-	-	31.3	29.2	10	3.6	96.7	52.8	13.8
19	TH2	21.7	-	13.5	1.4	38.2	-	15.3	39.8	18.7	22	6.4	12	-	64.5	22	15	10.7	94.4	55	17.8
20	TH22	2.9	4.8	13.5	6.7	41.1	-	16.4	49.7	33	29.2	41.3	19.1	-	87	28.9	26.9	34.2	105.2	71.8	26.8
	CHECKS																				
21	Buland(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SeedTech2324(C)	12.7	-	22.2	2.5	19.9	-	16.3	51.4	1.2	15	78.3	7.1	3.9	74.7	24.1	29.1	16.7	83.1	51.8	19.3
23	Bio9681(C)	20.3	-	16.9	3.7	28.9	-	-	12.3	-	3.5	-	-	0.9	47.9	-	-	-	61.5	19.1	4.2

Table No. 4 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE SeedTech2324(C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	Bisco X 6573	-	18.8	17.3	10.8	9.1	2.7	5	-	7.2	-	-	-	8.3	6	1.8	-	8.1	14.7	12.3	3.8
2	GK 3149	-	7	-	-	26.8	-	4.2	-	8.5	3.1	-	-	-	-	5.3	-	-	1.7	-	-
3	GK 3150	-	16.1	-	-	6	10.1	14.2	-	4.3	1.9	1.7	-	-	0.9	13.3	-	8	28.8	21.3	2.5
4	X-1228	-	5.7	-	-	-	5.3	-	-	6.2	-	9.9	-	-	1.3	-	-	-	4.1	1.1	-
5	KH-K25 Gold	-	7.8	-	-	46.7	4	-	-	-	2.9	-	-	-	-	-	-	-	-	-	-
6	KMH-2589	-	15.1	21	11.6	-	4.8	-	-	3	-	-	-	21	7.8	4.9	3.2	2.5	9	6.7	2.6
7	II 8212	5.7	19.4	-	7.9	25.9	0.4	-	7.5	16	9.8	16.2	-	13	14.3	-	5.6	8.7	13.4	11.7	8.4
8	DKC 9120	-	19.6	23.3	12.7	13.7	14.9	23.5	-	21	12.4	-	-	11.8	10.3	20.4	-	6	41.4	28.6	11.2
9	IL 8534	4.8	9.8	21.5	12.2	44.6	6.8	16.7	5.6	9.1	15.7	7	-	15.6	19.4	0.7	4.9	-	19	7.8	10.6
10	Venus	-	-	11.4	-	1.9	2.2	-	-	12.6	0	-	-	6.2	-	-	-	18	6.8	10.8	-
11	PMH-2277	-	10.8	19.2	8.2	6.7	11.9	-	-	31.4	9.5	-	3.8	19	6	15.4	0.3	6.9	8.2	7.7	6.3
12	Ivory	-	3.8	19	4.4	26.7	10.8	6.8	6.3	19.9	14.3	-	12.2	7.2	0.4	9	-	-	39.3	21.7	8.5
13	Megan-G	0.9	11	-	2.3	19.4	5.9	9.9	-	22.2	7	2.4	-	6	-	10.7	-	13.9	23.2	19.8	4.9
14	PMH-189	-	9.4	-	0.7	3	8.5	-	-	25.5	6.1	-	44.6	10.6	15.9	10.6	6	17.8	30.7	26.1	7.6
15	Rasi-750	7.8	3.5	2	4.2	16.3	-	7.6	-	6.6	-	12.1	12.3	-	-	-	1.7	8.8	-	1.6	1.8
16	X35C537	-	25.8	-	7.8	14.1	14.3	7.1	-	18.6	9.3	10.2	14.7	23.9	-	-	5.6	23.9	1	9.2	7.9
17	P3533	5.2	20	24.1	17.2	18.8	7.5	13.1	-	33.5	10.2	6.5	-	20.7	-	0.3	3.9	-	23.1	14.2	10.8
18	DADA	-	-	4	-	6.9	16.4	-	-	9.7	-	-	-	-	-	4.1	-	-	7.4	0.7	-
19	TH2	8	-	-	-	15.3	7.6	-	-	17.3	6	-	4.6	-	-	-	-	-	6.2	2.1	-
20	TH22	-	22.9	-	4.1	17.6	10.4	0.1	-	31.4	12.3	-	11.2	-	7.1	3.9	-	15.1	12.1	13.2	6.3
	CHECKS																				
21	Buland(C)	-	17.3	-	-	-	13.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
22	SeedTech2324(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
23	Bio9681(C)	6.8	1.9	-	1.2	7.5	3.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No. 4 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Bio9681(C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	Bisco X 6573	-	16.6	22.6	9.4	1.5	-	26.1	2	19.3	8.5	54	65.4	11.6	25.2	29.8	30.1	76.2	30.1	43.1	18.8
2	GK 3149	-	5	-	-	17.9	-	25.2	13.5	20.9	14.7	69	64.5	1.7	14.1	34.2	26.9	46.2	15.3	24.1	12.9
3	GK 3150	-	14	-	-	-	6.8	37.2	17.8	16.1	13.3	82.6	32.4	-	19.2	44.4	25	76	46.1	54.6	17.4
4	X-1228	-	3.8	3.5	-	-	2.1	5.3	12.9	18.3	6.6	97.2	65	-	19.7	8.6	26.9	56.4	18	28.9	11.5
5	KH-K25 Gold	-	5.8	-	-	36.5	0.9	14	5.6	10.8	14.3	46	21.1	-	15.5	24.5	15.7	29.3	11.7	16.7	10.3
6	KMH-2589	-	13	26.5	10.2	-	1.6	2.1	15.4	14.7	3.1	50.9	58.9	24.6	27.4	33.8	34.5	67.2	23.7	36	17.5
7	II 8212	-	17.2	0.6	6.6	17.2	-	6.7	44.9	29.2	22	108.6	53.1	16.3	35	17.2	37.6	77.2	28.6	42.4	24.1
8	DKC 9120	-	17.4	28.9	11.3	5.8	11.4	48.4	31.9	34.8	24.9	41.4	21	15.1	30.3	53.6	29.8	72.9	60.4	63.9	27.3
9	IL 8534	-	7.8	27.1	10.8	34.6	3.6	40.2	42.4	21.4	28.6	92	28.5	19	41.1	28.4	36.8	43.9	34.9	37.5	26.6
10	Venus	-	-	16.4	-	-	-	13.3	20.5	25.3	11.2	57.9	60.4	9.4	17.5	16.6	25.1	92.3	21.1	41.2	14
11	PMH-2277	-	8.7	24.6	6.9	-	8.5	17.1	30.7	46.3	21.7	-	87.2	22.6	25.3	47.1	30.8	74.2	22.7	37.3	21.7
12	Ivory	-	1.9	24.4	3.1	17.9	7.4	28.4	43.3	33.5	27.1	18.2	102.5	10.4	18.6	39.1	29.3	47.8	58	55.1	24.3
13	Megan-G	-	8.9	-	1.1	11.1	2.7	32	14.2	36.1	18.9	83.8	39.3	9.2	0.3	41.1	26.6	85.6	39.7	52.7	20.1
14	PMH-189	-	7.4	-	-	-	5.2	2.5	34.5	39.7	17.9	-	160.8	13.9	36.9	41.1	38.2	92.1	48.3	60.7	23.2
15	Rasi-750	1	1.6	6.6	3	8.2	-	29.3	8.9	18.7	11	101.2	102.6	-	17.8	16.1	32.5	77.4	10.6	29.5	16.5
16	X35C537	-	23.4	0.5	6.4	6.1	10.9	28.7	30.1	32.1	21.5	97.8	107	27.6	10.7	0.2	37.7	101.9	14.5	39.2	23.5
17	P3533	-	17.8	29.8	15.7	10.5	4.3	35.9	14	48.7	22.5	91.1	71	24.3	6.4	27.9	35.5	60.7	39.6	45.6	26.8
18	DADA	-	-	8.7	-	-	12.9	-	10.4	22.1	9.6	54	15.2	-	-	32.8	11.1	44.8	21.8	28.3	9.2
19	TH2	1.2	-	-	-	7.2	4.3	19.1	24.5	30.6	17.9	7.1	88.7	-	11.2	25.4	16.1	54.7	20.4	30.1	13.1
20	TH22	-	20.7	-	2.9	9.5	7.1	20.3	33.3	46.4	24.9	42.3	100.6	-	26.5	32.5	28.1	87.6	27.1	44.2	21.7
	CHECKS																				
21	Buland(C)	-	15.1	-	-	-	9.9	3.4	-	10	-	0.7	68.4	-	-	2.8	1	39.8	-	-	-
22	SeedTech2324(C)	-	-	4.5	-	-	-	20.2	34.8	11.4	11.2	79.5	80.4	3	18.1	27.5	30.4	63	13.4	27.5	14.5
23	Bio9681(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No. 4 (Cont..)

S.No.	PEDIGREE	STAND AT HARVEST ('000/ha)																		
					ZN 2					ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	Mean	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bisco X 6573	62.2	86.1	66.7	71.7	66.3	66.4	69.8	76.7	69.8	55.6	66.0	53.6	56.8	57.6	57.9	50.7	74.0	62.3	64.9
2	GK 3149	60.8	88.0	63.6	70.8	67.4	65.3	75.7	76.4	71.2	57.8	66.0	51.9	61.9	54.5	58.4	53.8	69.8	61.8	65.2
3	GK 3150	62.8	87.5	64.4	71.6	69.8	58.9	74.0	75.3	69.5	53.1	66.0	47.5	57.7	53.8	55.6	57.3	82.3	69.8	65.0
4	X-1228	62.2	87.5	65.0	71.6	67.4	60.8	73.3	77.8	69.8	55.6	66.3	54.4	67.0	55.9	59.8	55.6	76.7	66.1	66.1
5	KH-K25 Gold	62.5	83.8	65.6	70.6	66.0	64.4	71.5	77.8	69.9	53.1	66.0	45.8	59.5	53.5	55.6	47.9	82.6	65.3	64.3
6	KMH-2589	62.2	88.0	66.4	72.2	67.0	65.3	72.6	75.0	70.0	57.2	65.6	57.8	57.7	59.0	59.5	56.6	81.9	69.3	66.6
7	II 8212	61.7	87.0	65.3	71.3	67.0	64.7	72.2	78.5	70.6	59.7	66.3	55.3	61.9	49.0	58.4	58.3	76.4	67.4	66.0
8	DKC 9120	62.5	85.2	66.7	71.5	69.1	66.9	74.7	80.2	72.7	53.9	65.6	61.4	59.2	56.3	59.3	54.5	82.6	68.6	67.1
9	IL 8534	62.2	87.5	66.7	72.1	65.6	65.8	68.8	70.5	67.7	53.3	66.7	55.8	66.1	43.1	57.0	55.2	67.0	61.1	63.9
10	Venus	62.8	81.9	66.7	70.5	67.0	64.4	71.9	76.7	70.0	51.1	66.3	59.2	59.8	51.0	57.5	59.4	75.7	67.5	65.3
11	PMH-2277	61.7	89.4	65.3	72.1	67.7	66.7	71.2	77.8	70.8	51.1	66.0	60.3	67.0	53.8	59.6	51.4	79.5	65.5	66.3
12	Ivory	61.4	85.2	66.7	71.1	67.7	66.7	74.7	77.8	71.7	51.1	66.3	59.4	62.8	56.9	59.3	51.0	82.3	66.7	66.4
13	Megan-G	63.3	87.5	66.1	72.3	68.1	64.2	70.5	76.7	69.9	53.9	66.0	54.7	61.3	57.6	58.7	56.6	81.6	69.1	66.3
14	PMH-189	63.1	90.3	65.8	73.1	65.6	66.7	70.8	78.1	70.3	46.7	66.3	55.0	65.8	51.7	57.1	52.4	76.4	64.4	65.3
15	Rasi-750	63.1	88.4	66.7	72.7	67.7	66.4	72.6	77.8	71.1	55.6	66.0	58.6	58.6	56.9	59.1	59.7	77.8	68.7	66.8
16	X35C537	61.9	87.5	66.7	72.0	69.8	66.4	72.6	74.0	70.7	56.7	66.0	57.5	62.2	55.2	59.5	58.0	73.6	65.8	66.3
17	P3533	61.9	88.9	66.7	72.5	67.7	66.9	72.2	77.1	71.0	61.7	65.6	57.2	65.8	59.0	61.9	59.4	78.8	69.1	67.8
18	DADA	63.1	84.3	64.7	70.7	68.8	65.3	68.1	68.8	67.7	45.0	66.0	46.7	60.7	55.2	54.7	53.1	72.9	63.0	63.0
19	TH2	64.2	86.1	63.1	71.1	68.8	65.6	70.5	72.2	69.3	48.3	66.0	45.3	59.2	52.4	54.2	55.6	63.5	59.5	62.9
20	TH22	62.2	80.1	64.7	69.0	65.3	64.2	72.9	79.2	70.4	57.5	66.7	48.6	58.6	52.1	56.7	51.4	67.0	59.2	63.6
	CHECKS																			
21	Buland(C)	62.8	88.9	66.7	72.8	67.0	66.1	71.9	78.1	70.8	54.7	65.6	56.7	58.6	51.7	57.5	57.6	75.3	66.5	65.8
22	SeedTech2324(C)	63.6	84.3	64.7	70.9	66.0	64.7	70.8	77.1	69.7	59.2	65.6	54.7	63.7	58.3	60.3	55.6	69.4	62.5	65.6
23	Bio9681(C)	62.2	87.0	65.6	71.6	67.7	66.7	70.5	77.1	70.5	41.4	66.0	47.5	56.8	40.6	50.5	58.3	71.2	64.8	62.8
	Loc. Mean	**62.5**	**86.5**	**65.7**	**71.5**	**67.4**	**65.2**	**71.9**	**76.4**	**70.2**	**53.6**	**66.0**	**54.1**	**61.3**	**53.7**	**57.7**	**55.2**	**75.6**	**65.4**	**65.4**
	C.D. (5%)	1.87	6.41	3.00	2.63	3.17	4.03	5.29	6.83	2.75	8.08	0.83	7.05	5.17	9.85	4.46	9.95	8.61	9.68	2.26
	C.V. (%)	1.82	4.50	2.78	2.23	2.86	3.76	4.47	5.44	2.77	9.16	0.76	7.92	5.13	11.14	6.14	10.95	6.92	7.14	4.64
	F (Prob)	0.23	0.32	0.43	0.49	0.22	0.04	0.48	0.23	0.20	0.00	0.37	0.00	0.00	0.05	0.00	0.64	0.00	0.56	0.00

Table No. 4 (Cont..)

		MOISTURE % AT HARVEST																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bisco X 6573	26.0	33.4	23.1	27.5	24.1	20.4	23.5	24.0	34.6	25.3	24.1	17.4	7.7	16.3	17.1	16.5	18.1	21.7	19.9	22.1
2	GK 3149	27.5	34.4	24.2	28.7	25.1	20.3	20.5	23.6	30.7	24.0	25.1	19.7	8.8	16.5	17.0	17.4	18.3	20.8	19.5	22.1
3	GK 3150	28.0	30.4	24.0	27.5	24.2	19.7	20.9	22.7	32.8	24.0	24.5	19.2	8.7	17.8	16.2	17.2	18.1	22.7	20.4	22.0
4	X-1228	27.0	31.2	22.9	27.0	25.0	20.0	21.1	23.3	26.8	23.2	26.0	18.7	9.0	15.6	15.9	17.0	17.4	20.1	18.8	21.3
5	KH-K25 Gold	26.2	34.2	21.3	27.2	24.4	18.8	21.2	23.1	30.1	23.5	24.1	19.3	7.5	16.0	15.8	16.5	16.9	22.2	19.5	21.4
6	KMH-2589	27.2	30.8	23.6	27.2	25.9	20.0	20.8	21.5	34.7	24.6	25.4	18.9	8.8	17.9	20.1	18.2	18.5	21.4	19.9	22.3
7	II 8212	28.6	31.9	25.7	28.7	26.8	20.0	20.6	23.6	31.8	24.5	27.9	19.1	7.8	15.7	17.1	17.5	19.3	22.1	20.7	22.5
8	DKC 9120	27.7	32.9	25.8	28.8	25.0	19.9	20.4	18.2	31.9	23.1	25.6	18.8	8.0	18.9	18.2	17.9	16.7	21.0	18.8	21.9
9	IL 8534	28.9	34.7	22.1	28.6	27.8	19.2	20.8	20.7	32.2	24.1	25.9	15.2	8.4	19.3	17.7	17.3	17.6	23.8	20.7	22.3
10	Venus	28.2	27.3	21.9	25.8	26.1	19.7	20.2	21.4	30.7	23.6	22.6	17.6	8.1	17.6	16.6	16.5	17.9	19.0	18.4	21.0
11	PMH-2277	28.0	31.6	22.7	27.4	26.2	20.5	21.4	22.9	31.2	24.4	25.7	19.9	9.9	19.2	18.3	18.6	17.5	21.7	19.6	22.4
12	Ivory	27.0	28.2	20.7	25.3	26.0	19.5	21.0	20.0	30.1	23.3	25.9	19.7	7.3	18.6	19.6	18.2	17.7	21.9	19.8	21.5
13	Megan-G	26.9	27.1	21.1	25.0	25.0	20.3	20.1	21.2	28.6	23.0	23.5	18.3	9.0	16.0	15.8	16.5	18.1	22.6	20.3	20.9
14	PMH-189	25.4	30.7	22.9	26.3	27.2	19.3	21.0	21.0	30.1	23.7	24.3	20.1	8.3	19.2	16.7	17.7	17.7	17.9	17.8	21.4
15	Rasi-750	28.1	28.5	22.1	26.2	24.0	20.6	21.2	21.2	29.7	23.3	26.4	18.1	8.1	15.8	18.0	17.2	18.1	18.6	18.4	21.2
16	X35C537	26.0	31.6	20.3	25.9	23.1	19.6	21.1	23.1	30.5	23.5	22.5	18.8	8.3	15.1	18.4	16.6	18.3	20.5	19.4	21.1
17	P3533	28.9	29.9	24.9	27.9	24.8	18.9	20.7	21.8	31.5	23.5	26.8	18.0	7.6	15.7	17.7	17.1	18.8	18.4	18.6	21.6
18	DADA	25.9	28.4	22.5	25.6	26.1	18.9	20.5	20.2	30.7	23.3	25.6	17.0	8.0	15.6	16.5	16.5	17.5	22.0	19.8	21.0
19	TH2	27.4	29.2	21.6	26.0	27.0	19.8	20.2	21.8	31.1	24.0	26.1	19.3	8.2	14.8	18.4	17.3	17.2	22.9	20.0	21.7
20	TH22	27.0	33.0	23.8	27.9	24.2	20.0	21.3	22.6	32.7	24.1	23.1	20.9	9.7	17.5	16.1	17.4	18.9	19.9	19.4	22.0
	CHECKS																				
21	Buland(C)	27.9	27.9	23.1	26.3	23.8	18.3	21.5	22.1	31.8	23.5	24.4	16.0	8.1	16.0	16.6	16.2	18.0	17.2	17.6	20.8
22	SeedTech2324(C)	28.7	30.2	25.8	28.2	24.9	19.2	20.8	19.7	30.2	22.9	24.4	18.8	8.9	15.6	16.0	16.7	18.0	19.7	18.9	21.4
23	Bio9681(C)	26.8	26.9	23.4	25.7	23.8	19.9	20.3	22.1	28.9	23.0	19.3	17.0	8.0	19.0	16.5	15.9	17.1	18.2	17.6	20.5
	Loc. Mean	**27.3**	**30.6**	**23.0**	**27.0**	**25.2**	**19.7**	**20.9**	**21.8**	**31.0**	**23.7**	**24.7**	**18.5**	**8.3**	**16.9**	**17.2**	**17.1**	**17.9**	**20.7**	**19.3**	**21.6**
	C.D. (5%)	0.20	2.67	1.37	2.64	0.83	0.68	1.28	0.86	1.16	1.52	2.27	0.76	1.09	0.72	1.26	1.64	0.89	1.96	2.93	0.96
	C.V. (%)	0.45	5.30	3.62	5.95	2.01	2.10	3.73	2.39	2.27	5.10	5.57	2.49	7.96	2.57	4.44	7.61	3.03	5.77	7.34	6.19
	F (Prob)	0.00	0.00	0.00	0.08	0.00	0.00	0.01	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.64	0.00

Table No. 4 (Cont..)

		GRAIN SHELLING %																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bisco X 6573	80.4	81.1	80.7	80.7	76.1	79.3	80.0	86.0	76.6	79.6	80.9	80.7	88.6	80.3	79.2	81.9	74.7	79.8	77.2	80.3
2	GK 3149	77.4	82.8	81.0	80.4	77.1	80.1	79.0	88.8	75.9	80.2	85.7	81.2	86.4	82.2	79.8	83.0	74.1	80.0	77.0	80.8
3	GK 3150	78.8	84.0	84.1	82.3	78.4	81.5	81.5	88.6	78.3	81.6	85.5	80.9	86.4	83.8	80.8	83.5	78.9	82.5	80.7	82.2
4	X-1228	78.9	82.5	86.5	82.6	78.2	80.9	82.0	88.1	75.6	81.0	84.5	80.8	82.8	84.1	79.2	82.3	74.2	81.6	77.9	81.3
5	KH-K25 Gold	78.6	84.8	81.2	81.5	80.3	81.2	81.5	87.5	77.2	81.5	82.0	79.2	88.1	82.6	80.5	82.5	74.7	79.5	77.1	81.2
6	KMH-2589	77.9	81.3	81.5	80.2	75.2	79.0	81.5	86.7	79.2	80.3	80.8	79.7	91.1	80.8	79.3	82.3	77.5	79.4	78.4	80.7
7	II 8212	78.9	81.9	79.9	80.2	79.2	79.0	81.5	86.6	76.5	80.5	83.5	79.8	88.1	80.9	75.9	81.6	72.7	84.1	78.4	80.5
8	DKC 9120	78.1	78.3	83.2	79.9	76.2	80.0	79.5	85.5	78.0	79.8	82.6	79.5	87.0	79.8	80.6	81.9	76.7	80.6	78.6	80.4
9	IL 8534	79.7	75.6	80.4	78.6	82.1	78.0	82.0	85.3	76.2	80.7	81.0	79.5	88.7	81.8	79.4	82.1	76.1	82.6	79.4	80.5
10	Venus	79.7	85.2	81.7	82.2	78.7	80.7	81.5	87.3	75.6	80.8	84.5	80.2	83.7	80.6	79.8	81.8	79.3	81.8	80.5	81.3
11	PMH-2277	79.3	75.5	80.1	78.3	72.2	81.3	80.0	88.5	76.3	79.6	79.9	79.9	88.7	80.5	80.2	81.8	78.5	71.7	75.1	79.5
12	Ivory	78.0	74.4	81.7	78.0	73.7	80.4	78.0	88.8	75.8	79.3	81.6	79.7	86.3	81.9	79.7	81.8	74.2	78.1	76.2	79.5
13	Megan-G	77.4	84.1	78.9	80.1	77.1	80.2	83.0	87.7	75.4	80.7	82.7	81.1	92.0	80.1	80.5	83.3	75.9	81.2	78.5	81.1
14	PMH-189	79.1	73.7	82.5	78.4	74.7	79.9	79.0	88.1	75.5	79.4	81.1	80.6	84.4	83.6	79.1	81.7	78.8	80.7	79.8	80.0
15	Rasi-750	79.5	78.2	81.7	79.8	79.6	78.4	82.5	85.9	75.1	80.3	81.4	80.1	85.2	80.2	79.5	81.3	71.3	81.3	76.3	80.0
16	X35C537	79.9	83.2	80.5	81.2	78.1	80.7	82.5	92.6	76.0	82.0	83.7	81.7	82.2	80.5	79.8	81.6	79.6	81.6	80.6	81.5
17	P3533	79.7	80.4	82.1	80.7	75.1	79.1	81.5	84.8	77.8	79.7	79.1	80.2	84.1	82.4	79.8	81.1	76.6	83.2	79.9	80.4
18	DADA	78.9	81.8	81.1	80.6	79.3	80.8	78.0	85.9	76.7	80.1	82.4	80.1	82.9	79.0	80.7	81.0	72.0	79.6	75.8	79.9
19	TH2	79.1	69.1	79.2	75.8	72.5	79.5	78.0	91.4	77.3	79.7	81.5	81.8	78.7	79.9	80.3	80.4	72.0	79.3	75.6	78.6
20	TH22	77.2	79.2	81.4	79.2	75.9	80.3	82.5	87.2	78.4	80.9	83.1	81.9	81.1	80.6	78.9	81.1	74.8	79.7	77.2	80.1
	CHECKS																				
21	Buland(C)	80.1	75.3	81.6	79.0	69.6	78.9	83.0	81.9	77.6	78.2	78.6	78.4	81.9	81.1	80.5	80.1	70.4	75.6	73.0	78.3
22	SeedTech2324(C)	78.0	77.3	81.3	78.9	74.5	79.6	82.5	86.9	76.4	80.0	83.1	80.1	88.1	80.7	80.2	82.5	74.7	79.7	77.2	80.2
23	Bio9681(C)	78.5	79.6	81.5	79.8	79.1	81.5	77.5	85.2	76.1	79.9	82.0	80.4	92.1	79.3	79.8	82.7	77.6	79.7	78.6	80.6
	Loc. Mean	**78.8**	**79.5**	**81.5**	**79.9**	**76.6**	**80.0**	**80.8**	**87.2**	**76.7**	**80.3**	**82.2**	**80.3**	**86.0**	**81.1**	**79.7**	**81.9**	**75.4**	**80.1**	**77.8**	**80.4**
	C.D. (5%)	0.59	-	2.78	4.22	1.24	0.92	4.58	1.88	0.86	2.47	1.55	1.12	5.03	1.50	1.77	2.53	4.00	3.79	5.19	1.50
	C.V. (%)	0.45	-	2.08	3.21	0.98	0.70	3.45	1.31	0.68	2.45	1.15	0.85	3.56	1.12	1.35	2.46	3.22	2.87	3.22	2.59
	F (Prob)	0.00	0.00	0.00	0.36	0.00	0.00	0.26	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.65	0.00	0.00	0.33	0.00

Table No. 4 (Cont..)

		DAYS TO 50% POLLEN SHED																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bisco X 6573	138.0	139.0	120.0	132.3	123.3	71.7	126.3	91.3	114.7	105.5	82.7	59.0	75.0	70.7	54.7	68.4	92.0	83.0	87.5	96.1
2	GK 3149	139.3	135.3	121.7	132.1	119.3	74.7	121.7	90.3	108.7	102.9	82.0	59.0	74.0	69.7	55.0	67.9	89.0	81.3	85.2	94.7
3	GK 3150	140.0	135.0	119.3	131.4	121.3	73.0	123.7	89.7	110.0	103.5	81.3	59.7	76.0	70.0	53.7	68.1	92.3	82.0	87.2	95.1
4	X-1228	139.0	137.7	119.0	131.9	122.3	74.0	120.0	90.3	110.0	103.3	79.0	57.7	75.0	69.0	53.3	66.8	90.7	80.7	85.7	94.5
5	KH-K25 Gold	138.0	135.7	118.3	130.7	120.3	71.3	122.0	91.3	109.7	102.9	82.0	60.3	76.0	69.0	54.0	68.3	89.0	82.0	85.5	94.6
6	KMH-2589	137.7	136.3	119.7	131.2	117.7	74.0	121.0	90.0	110.0	102.5	84.0	58.7	75.0	70.7	58.0	69.3	88.0	82.0	85.0	94.8
7	II 8212	139.7	142.7	124.0	135.4	121.7	75.7	126.0	91.0	112.3	105.3	81.7	58.7	76.0	70.3	57.7	68.9	89.3	83.7	86.5	96.7
8	DKC 9120	140.0	135.7	119.0	131.6	122.3	72.7	120.3	91.7	110.7	103.5	83.3	58.0	74.0	70.0	55.3	68.1	91.3	82.0	86.7	95.1
9	IL 8534	139.3	143.7	120.7	134.6	118.3	73.0	126.0	93.0	115.3	105.1	83.0	58.3	76.0	69.7	56.7	68.7	93.0	84.0	88.5	96.7
10	Venus	136.0	131.7	115.7	127.8	114.7	73.7	119.3	88.0	115.0	102.1	79.7	59.0	74.0	69.0	57.3	67.8	87.3	76.0	81.7	93.1
11	PMH-2277	138.7	135.3	120.3	131.4	124.3	73.7	122.0	91.3	112.0	104.7	84.3	57.7	74.0	70.0	56.3	68.5	92.3	82.0	87.2	95.6
12	Ivory	138.7	135.3	120.0	131.3	120.7	75.0	121.7	92.0	110.3	103.9	83.7	58.0	76.0	70.0	58.0	69.1	92.0	82.0	87.0	95.6
13	Megan-G	134.0	132.7	117.7	128.1	117.7	72.0	119.7	88.0	106.7	100.8	79.7	58.3	75.0	68.3	54.0	67.1	87.0	80.0	83.5	92.7
14	PMH-189	137.7	135.3	123.0	132.0	121.3	74.7	123.0	92.0	109.3	104.1	83.3	60.0	74.0	70.0	56.7	68.8	91.0	82.0	86.5	95.6
15	Rasi-750	136.0	137.0	122.0	131.7	121.3	73.7	119.3	90.0	109.7	102.8	80.3	58.0	74.0	70.7	55.7	67.7	87.0	80.0	83.5	94.3
16	X35C537	140.0	136.7	121.3	132.7	119.7	74.7	123.3	90.3	110.0	103.6	80.3	58.0	75.0	69.3	58.0	68.1	87.7	81.0	84.3	95.0
17	P3533	138.0	137.0	120.0	131.7	126.3	75.0	122.7	90.0	110.3	104.9	83.7	57.0	75.0	72.7	57.7	69.2	86.0	80.0	83.0	95.4
18	DADA	135.0	131.7	117.7	128.1	114.7	73.0	120.0	86.3	108.7	100.5	80.7	55.7	74.0	69.3	55.7	67.1	90.0	80.7	85.3	92.9
19	TH2	139.7	136.0	121.3	132.3	119.3	73.3	119.7	90.3	110.7	102.7	84.3	56.3	74.0	70.0	57.7	68.5	91.3	82.0	86.7	95.1
20	TH22	139.7	135.0	119.3	131.3	122.3	74.3	123.0	91.3	109.3	104.1	82.0	60.0	74.0	69.3	56.0	68.3	88.0	82.0	85.0	95.0
	CHECKS																				
21	Buland(C)	141.7	143.7	124.3	136.6	124.7	75.7	125.7	93.0	115.0	106.8	85.0	62.0	78.0	74.7	60.3	72.0	92.0	84.0	88.0	98.6
22	SeedTech2324(C)	138.0	135.3	121.0	131.4	124.3	72.0	121.7	90.0	110.7	103.7	82.3	59.0	74.0	68.7	55.7	67.9	89.7	80.0	84.8	94.8
23	Bio9681(C)	135.3	133.3	118.7	129.1	119.3	71.3	118.7	88.7	110.3	101.7	78.0	54.0	75.0	66.7	55.3	65.8	89.0	76.0	82.5	92.6
	Loc. Mean	**138.2**	**136.4**	**120.2**	**131.6**	**120.8**	**73.6**	**122.0**	**90.4**	**110.8**	**103.5**	**82.0**	**58.4**	**74.9**	**69.9**	**56.2**	**68.3**	**89.8**	**81.2**	**85.5**	**95.0**
	C.D. (5%)	1.13	2.64	4.36	2.63	1.85	1.17	4.47	2.15	2.43	2.22	2.33	0.92	-	1.89	2.55	1.53	1.95	0.64	2.82	1.13
	C.V. (%)	0.50	1.18	2.20	1.21	0.93	0.97	2.23	1.44	1.33	1.70	1.72	0.96	-	1.64	2.75	1.78	1.32	0.48	1.59	1.66
	F (Prob)	0.00	0.00	0.05	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table No. 4 (Cont..)

		DAYS TO 50% SILKING																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bisco X 6573	140.0	140.7	123.0	134.6	125.3	74.0	128.3	95.7	118.3	108.3	80.7	62.0	76.0	74.0	58.0	70.1	95.0	85.7	90.3	98.4
2	GK 3149	141.3	137.0	124.7	134.3	121.3	77.7	123.7	94.3	113.0	106.0	80.3	62.0	75.0	72.7	58.7	69.7	92.3	82.3	87.3	97.1
3	GK 3150	142.0	136.7	122.3	133.7	123.3	75.7	125.3	93.0	114.0	106.3	80.0	62.0	77.0	72.7	56.7	69.7	95.3	84.7	90.0	97.4
4	X-1228	141.3	139.3	122.0	134.2	124.3	76.0	122.3	94.3	113.7	106.1	77.3	59.7	76.0	72.7	56.3	68.4	93.7	82.0	87.8	96.7
5	KH-K25 Gold	140.3	137.7	121.0	133.0	122.3	74.0	124.0	95.3	114.3	106.0	79.3	62.3	77.0	72.7	57.7	69.8	92.3	83.0	87.7	96.9
6	KMH-2589	140.3	137.3	122.7	133.4	119.7	76.7	123.0	94.0	115.0	105.7	82.0	61.3	76.0	72.7	61.0	70.6	91.7	84.0	87.8	97.2
7	II 8212	141.7	145.0	126.0	137.6	123.7	78.0	128.0	95.0	115.3	108.0	80.7	61.0	77.0	69.7	61.0	69.9	92.3	87.3	89.8	98.8
8	DKC 9120	142.0	140.0	122.0	134.7	124.3	75.0	123.3	96.3	115.3	106.9	81.0	60.3	75.0	72.7	58.3	69.5	94.7	83.7	89.2	97.6
9	IL 8534	141.3	143.5	123.7	136.2	120.3	75.7	128.0	97.0	118.7	107.9	81.3	61.3	77.0	74.0	60.0	70.7	96.0	86.0	91.0	98.9
10	Venus	138.0	132.0	118.7	129.6	116.7	76.3	121.7	92.3	111.7	103.7	78.3	61.7	75.0	70.7	61.0	69.3	92.3	78.0	85.2	95.0
11	PMH-2277	141.7	138.3	123.3	134.4	126.3	76.0	124.3	95.7	116.3	107.7	81.7	60.0	75.0	74.0	59.3	70.0	95.3	84.0	89.7	98.1
12	Ivory	141.3	137.0	123.0	133.8	122.7	77.3	123.3	96.7	115.7	107.1	80.0	60.3	77.0	73.3	61.3	70.4	95.0	84.7	89.8	97.9
13	Megan-G	135.7	133.0	120.3	129.7	119.7	74.7	122.0	92.0	110.0	103.7	78.7	61.3	76.0	70.3	57.7	68.8	90.0	81.3	85.7	94.8
14	PMH-189	140.0	138.7	126.0	134.9	123.3	76.7	125.3	97.0	114.0	107.3	79.7	62.0	75.0	72.0	59.7	69.7	94.3	83.0	88.7	97.8
15	Rasi-750	138.3	138.3	125.0	133.9	123.3	76.0	121.3	94.0	113.7	105.7	78.7	60.3	75.0	73.3	58.7	69.2	90.3	82.0	86.2	96.6
16	X35C537	142.3	137.0	124.3	134.6	121.7	77.7	125.3	94.3	113.3	106.5	80.7	60.0	76.0	70.7	61.0	69.7	91.3	82.0	86.7	97.2
17	P3533	140.3	137.3	122.7	133.4	128.3	77.0	126.0	94.0	114.0	107.9	83.3	59.0	76.0	73.3	61.0	70.5	89.0	82.0	85.5	97.6
18	DADA	137.3	132.3	120.3	130.0	116.7	75.0	122.3	91.3	111.7	103.4	79.3	59.0	75.0	72.0	58.7	68.8	93.7	82.0	87.8	95.1
19	TH2	142.3	139.0	124.0	135.1	121.3	76.3	122.3	95.3	114.3	105.9	82.0	58.3	75.0	72.7	61.7	69.9	94.7	84.0	89.3	97.6
20	TH22	141.7	136.7	122.3	133.6	124.3	77.0	125.3	95.0	113.3	107.0	78.3	62.0	75.0	71.3	58.3	69.0	91.3	83.7	87.5	97.0
	CHECKS																				
21	Buland(C)	143.7	143.3	127.3	138.1	126.7	77.7	128.0	98.0	116.7	109.4	82.3	64.0	79.0	74.7	63.7	72.7	95.0	86.7	90.8	100.4
22	SeedTech2324(C)	140.3	137.0	124.0	133.8	126.3	74.7	124.7	94.3	114.3	106.9	81.0	61.7	75.0	71.7	58.7	69.6	93.0	82.0	87.5	97.2
23	Bio9681(C)	137.7	133.3	121.7	130.9	121.3	73.3	121.3	93.0	114.0	104.6	75.7	57.3	76.0	68.7	58.7	67.3	92.3	78.0	85.2	94.8
	Loc. Mean	**140.5**	**137.8**	**123.1**	**133.8**	**122.8**	**76.0**	**124.3**	**94.7**	**114.4**	**106.4**	**80.1**	**60.8**	**75.9**	**72.3**	**59.4**	**69.7**	**93.1**	**83.1**	**88.1**	**97.2**
	C.D. (5%)	1.01	2.80	4.14	2.57	1.85	1.37	4.44	2.61	1.64	2.04	2.49	1.09	-	2.51	2.98	1.63	1.87	1.08	3.18	1.12
	C.V. (%)	0.44	1.23	2.04	1.17	0.92	1.09	2.17	1.67	0.87	1.52	1.89	1.09	-	2.11	3.05	1.86	1.22	0.79	1.74	1.61
	F (Prob)	0.00	0.00	0.03	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00

Table No. 4 (Cont..)

S.No.	PEDIGREE	DAYS TO 75% DRY HUSK																		
				ZN 2						ZN 3					ZN 4			ZN 5		OV'L
		KARN	LUDH	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bisco X 6573	179.0	185.0	182.0	162.7	120.3	158.7	141.0	152.3	147.0	121.3	97.0	110.0	115.0	92.0	107.1	130.0	134.0	132.0	135.6
2	GK 3149	179.0	184.7	181.8	161.3	119.3	154.7	139.3	150.0	144.9	122.3	96.0	111.0	113.3	95.0	107.5	127.0	132.0	129.5	134.6
3	GK 3150	179.0	186.3	182.7	163.3	119.7	156.0	141.3	150.0	146.1	121.3	97.0	111.0	115.7	95.3	108.1	127.0	138.0	132.5	135.8
4	X-1228	181.7	183.3	182.5	157.3	118.7	154.3	139.3	149.3	143.8	121.7	95.0	110.0	112.3	84.7	104.7	128.7	132.0	130.3	133.5
5	KH-K25 Gold	180.7	183.0	181.8	159.0	118.3	154.7	140.7	146.7	143.9	119.3	97.0	111.0	109.3	90.7	105.5	127.0	134.0	130.5	133.7
6	KMH-2589	175.3	185.0	180.2	159.3	118.0	154.7	139.3	149.0	144.1	122.0	97.3	110.0	112.3	100.0	108.3	128.0	133.0	130.5	134.5
7	II 8212	176.3	186.7	181.5	164.7	119.0	158.0	139.7	151.0	146.5	122.0	96.7	111.0	116.7	93.3	107.9	122.3	135.0	128.7	135.2
8	DKC 9120	178.3	188.0	183.2	163.7	120.0	154.0	139.7	149.7	145.4	121.3	95.7	112.0	115.7	94.0	107.7	130.0	138.0	134.0	135.7
9	IL 8534	180.0	186.0	183.0	165.3	118.7	157.7	139.3	152.3	146.7	122.3	96.7	111.0	117.0	95.3	108.5	130.3	138.0	134.2	136.4
10	Venus	177.0	185.3	181.2	158.7	117.0	153.7	139.0	150.0	143.7	121.0	96.3	111.0	113.7	100.7	108.5	126.0	132.0	129.0	134.4
11	PMH-2277	180.3	189.0	184.7	159.7	118.3	154.7	139.3	150.0	144.4	116.3	95.7	111.0	115.0	94.3	106.5	126.3	135.3	130.8	134.7
12	Ivory	179.0	184.7	181.8	162.7	120.0	154.0	140.3	149.7	145.3	117.7	96.3	111.0	111.0	94.7	106.1	130.3	136.0	133.2	134.8
13	Megan-G	176.7	185.7	181.2	163.3	119.0	155.7	141.0	149.3	145.7	122.7	96.7	110.0	112.3	99.0	108.1	125.0	136.0	130.5	135.2
14	PMH-189	180.0	184.3	182.2	162.7	119.0	156.3	140.3	149.3	145.5	116.3	97.0	111.0	113.0	92.3	105.9	128.0	132.0	130.0	134.4
15	Rasi-750	177.0	182.0	179.5	160.7	118.0	153.0	140.0	148.0	143.9	120.0	95.3	112.0	112.3	91.0	106.1	124.7	128.7	126.7	133.0
16	X35C537	181.0	184.0	182.5	163.3	119.0	156.0	139.7	152.3	146.1	121.7	95.0	111.0	114.0	101.7	108.7	126.0	136.0	131.0	135.8
17	P3533	181.0	182.0	181.5	163.3	117.0	157.0	140.0	149.3	145.3	122.0	95.3	111.0	109.0	95.7	106.6	123.3	124.0	123.7	133.6
18	DADA	174.3	186.3	180.3	160.7	119.7	153.7	139.3	152.7	145.2	119.7	95.3	110.0	109.7	96.0	106.1	127.3	132.0	129.7	134.0
19	TH2	180.0	186.3	183.2	159.3	120.3	153.0	139.3	150.3	144.5	118.7	94.3	110.0	116.3	94.3	106.7	127.7	137.3	132.5	134.8
20	TH22	177.7	187.3	182.5	160.7	119.3	155.7	140.3	149.0	145.0	119.3	96.3	112.0	116.3	94.3	107.7	125.7	136.0	130.8	135.0
	CHECKS																			
21	Buland(C)	181.7	184.3	183.0	161.3	120.0	158.0	140.0	149.0	145.7	120.3	98.0	112.0	111.0	101.3	108.5	128.3	124.0	126.2	135.0
22	SeedTech2324(C)	178.7	183.7	181.2	162.7	119.0	158.3	139.7	149.3	145.8	122.3	96.7	110.0	113.3	90.3	106.5	127.0	136.7	131.8	134.8
23	Bio9681(C)	179.0	182.0	180.5	157.3	119.0	153.7	139.7	149.3	143.8	116.0	94.3	111.0	111.0	90.7	104.6	126.0	132.0	129.0	132.9
	Loc. Mean	**178.8**	**185.0**	**181.9**	**161.4**	**119.0**	**155.4**	**139.9**	**149.9**	**145.1**	**120.3**	**96.1**	**110.9**	**113.3**	**94.6**	**107.0**	**127.0**	**133.6**	**130.3**	**134.7**
	C.D. (5%)	1.01	2.98	4.52	1.95	2.27	3.71	1.73	2.92	1.62	2.12	0.92	-	2.15	3.19	2.84	4.93	3.30	5.64	1.53
	C.V. (%)	0.34	0.98	1.20	0.74	1.16	1.45	0.75	1.19	0.89	1.07	0.58	-	1.15	2.05	2.11	2.36	1.50	2.09	1.53
	F (Prob)	0.00	0.00	0.90	0.00	0.20	0.04	0.38	0.03	0.00	0.00	0.00	-	0.00	0.00	0.10	0.13	0.00	0.12	0.00

Table No. 4 (Cont..)

		PLANT HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bisco X 6573	186.7	233.3	250.7	223.6	235.7	217.5	172.7	199.9	215.0	208.1	186.5	207.6	205.0	233.3	221.4	210.8	266.7	231.7	249.2	217.6
2	GK 3149	140.0	201.7	244.3	195.3	210.0	202.9	135.7	165.2	180.0	178.7	180.5	202.1	210.0	230.0	225.9	209.7	261.7	210.0	235.8	200.0
3	GK 3150	161.7	208.3	252.0	207.3	198.0	213.9	136.7	181.9	186.7	183.4	175.5	168.9	220.0	226.7	229.4	204.1	230.0	210.0	220.0	200.0
4	X-1228	160.0	213.3	241.3	204.9	230.0	211.9	162.0	166.7	201.7	194.5	176.0	198.0	221.7	223.7	229.8	209.8	240.0	211.7	225.8	205.9
5	KH-K25 Gold	171.7	211.7	237.3	206.9	204.3	207.0	157.7	167.7	190.0	185.3	169.0	178.7	208.3	217.3	209.6	196.6	266.7	220.0	243.3	201.1
6	KMH-2589	161.7	195.0	240.7	199.1	209.3	210.7	157.3	183.5	193.3	190.8	184.5	198.3	221.7	218.7	216.3	207.9	195.3	220.0	207.7	200.4
7	II 8212	180.0	225.0	244.3	216.4	250.0	205.2	158.7	195.8	211.7	204.3	203.5	196.0	220.0	233.7	209.3	212.5	250.0	230.0	240.0	214.2
8	DKC 9120	168.3	191.7	250.7	203.6	234.7	224.1	147.0	186.2	193.3	197.1	183.5	195.3	218.3	228.0	225.4	210.1	251.7	216.7	234.2	207.7
9	IL 8534	208.3	245.0	252.0	235.1	254.0	234.3	172.3	205.0	211.7	215.5	209.5	187.9	223.3	230.3	226.2	215.4	243.7	223.3	233.5	221.8
10	Venus	160.0	178.3	238.3	192.2	180.0	216.1	152.0	178.4	180.0	181.3	163.0	197.7	198.3	234.7	211.5	201.0	263.3	220.0	241.7	198.1
11	PMH-2277	150.0	191.7	217.0	186.2	187.3	209.8	149.0	172.0	168.3	177.3	163.5	179.0	200.0	224.7	207.9	195.0	257.0	220.0	238.5	193.1
12	Ivory	141.7	188.3	217.0	182.3	211.3	207.1	139.7	210.1	176.7	189.0	165.0	182.5	205.0	208.3	211.7	194.5	255.3	218.3	236.8	195.9
13	Megan-G	131.7	183.3	229.0	181.3	188.0	204.4	154.7	169.3	168.3	176.9	185.5	181.5	216.7	229.0	214.0	205.3	260.0	210.0	235.0	195.0
14	PMH-189	150.0	206.7	221.7	192.8	207.7	209.7	126.0	159.1	178.3	176.2	172.0	191.0	205.0	215.0	211.1	198.8	233.7	218.3	226.0	193.7
15	Rasi-750	180.0	163.3	231.3	191.6	206.0	195.7	147.0	176.3	178.3	180.7	184.0	198.5	188.3	211.3	199.6	196.4	266.7	210.0	238.3	195.8
16	X35C537	208.3	228.3	249.7	228.8	256.0	228.3	170.0	209.4	233.3	219.4	202.5	203.3	226.7	223.7	222.0	215.6	265.3	235.0	250.2	224.1
17	P3533	208.3	226.7	263.3	232.8	233.3	225.7	168.0	199.7	221.7	209.7	204.5	182.1	208.3	222.0	231.4	209.7	247.0	226.7	236.8	217.9
18	DADA	160.0	180.0	247.3	195.8	178.0	207.9	156.0	176.6	183.3	180.4	169.0	184.8	208.3	221.3	214.7	199.6	252.7	220.0	236.3	197.3
19	TH2	150.0	190.0	228.3	189.4	198.7	208.1	143.3	175.5	178.3	180.8	184.5	173.9	196.7	216.7	209.3	196.2	248.3	218.3	233.3	194.7
20	TH22	208.3	226.7	239.3	224.8	229.7	204.9	159.0	186.8	216.7	199.4	186.5	202.8	221.7	235.0	224.1	214.0	289.0	230.0	259.5	217.4
	CHECKS																				
21	Buland(C)	200.0	251.7	254.7	235.4	217.0	233.8	165.7	205.3	220.0	208.3	184.5	203.1	226.7	235.7	222.2	214.4	265.3	221.7	243.5	220.5
22	SeedTech2324(C)	178.3	216.7	224.7	206.6	207.0	198.0	146.7	171.9	185.0	181.7	181.0	153.3	216.7	212.0	194.3	191.5	235.7	225.0	230.3	196.4
23	Bio9681(C)	180.0	216.7	248.0	214.9	225.0	211.1	165.7	180.3	183.3	193.1	180.0	187.4	195.0	225.7	208.3	199.3	223.3	226.7	225.0	203.8
	Loc. Mean	**171.5**	**207.5**	**240.1**	**206.4**	**215.3**	**212.5**	**154.0**	**183.6**	**193.7**	**191.8**	**182.3**	**189.3**	**211.4**	**224.2**	**216.3**	**204.7**	**250.8**	**220.6**	**235.7**	**204.9**
	C.D. (5%)	3.96	33.15	10.20	21.45	20.71	17.48	20.53	25.39	16.35	13.39	13.86	8.17	20.44	15.68	17.80	11.37	56.31	23.83	28.48	8.62
	C.V. (%)	1.40	9.71	2.58	6.32	5.85	5.00	8.10	8.40	5.13	5.55	4.62	2.62	5.88	4.25	5.00	4.42	13.64	6.56	5.83	5.85
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.55	0.75	0.32	0.00

Table No. 4 (Cont..)

		EAR HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	Bisco X 6573	100.0	125.0	126.7	117.2	119.3	113.7	91.7	104.1	111.7	108.1	105.0	114.1	108.3	126.7	121.5	115.1	111.7	121.7	116.7	113.4
2	GK 3149	51.7	91.7	114.0	85.8	106.3	95.7	68.3	84.9	95.0	90.1	92.5	104.0	100.0	125.0	120.6	108.4	122.0	103.3	112.7	98.3
3	GK 3150	85.0	105.0	113.7	101.2	92.3	99.0	66.3	89.5	91.7	87.8	93.0	100.3	108.3	123.7	122.4	109.5	122.3	106.7	114.5	101.3
4	X-1228	85.0	121.7	114.3	107.0	123.3	104.9	78.0	82.7	105.0	98.8	95.5	107.7	130.0	118.3	120.5	114.4	115.7	116.7	116.2	108.0
5	KH-K25 Gold	78.3	110.0	112.0	100.1	99.3	92.3	76.3	75.9	98.3	88.4	84.0	86.2	98.3	113.7	104.8	97.4	103.3	110.0	106.7	96.2
6	KMH-2589	66.7	106.7	110.3	94.6	106.3	93.4	78.0	85.5	88.3	90.3	85.5	103.1	116.7	110.3	111.5	105.4	97.3	100.0	98.7	97.3
7	II 8212	71.7	100.0	86.7	86.1	109.0	80.9	65.7	83.5	86.7	85.1	79.5	99.5	101.7	116.7	86.7	96.8	99.0	103.3	101.2	91.4
8	DKC 9120	71.7	115.0	106.0	97.6	114.7	104.6	66.7	83.2	85.0	90.8	83.5	84.6	100.0	123.0	103.5	98.9	114.0	105.0	109.5	97.4
9	IL 8534	100.0	113.3	102.7	105.3	112.0	103.9	79.3	89.0	100.0	96.9	94.0	97.1	100.0	118.7	101.3	102.2	96.7	126.7	111.7	102.3
10	Venus	73.3	80.0	95.0	82.8	87.3	95.7	63.3	86.8	68.3	80.3	99.0	99.0	103.3	119.7	108.0	105.8	110.7	101.7	106.2	92.7
11	PMH-2277	58.3	90.0	85.0	77.8	81.7	88.9	61.7	87.2	76.7	79.2	71.0	94.1	98.3	118.0	92.3	94.7	107.3	106.7	107.0	87.8
12	Ivory	61.7	80.0	90.7	77.4	100.3	91.8	69.0	81.3	81.7	84.8	81.5	90.9	103.3	109.7	96.3	96.3	113.7	110.0	111.8	90.8
13	Megan-G	58.3	95.0	97.7	83.7	92.0	89.3	64.3	79.1	68.3	78.6	99.0	87.4	113.3	127.7	111.1	107.7	122.0	100.0	111.0	93.6
14	PMH-189	71.7	90.0	85.0	82.2	94.0	94.7	61.7	80.8	76.7	81.6	84.0	96.8	110.0	109.7	101.9	100.5	114.0	110.0	112.0	92.1
15	Rasi-750	100.0	100.0	110.7	103.6	121.7	95.1	70.3	90.9	93.3	94.3	98.0	97.1	93.3	112.0	97.2	99.5	115.7	103.0	109.3	99.9
16	X35C537	103.3	123.3	102.7	109.8	139.0	107.3	87.3	96.5	111.7	108.3	99.0	101.7	108.3	124.0	101.1	106.8	113.3	116.7	115.0	109.0
17	P3533	108.3	130.0	123.0	120.4	117.3	106.9	88.3	94.9	98.3	101.2	107.0	100.3	115.0	136.7	119.3	115.6	108.7	100.0	104.3	110.3
18	DADA	73.3	75.0	114.0	87.4	73.0	92.7	69.0	84.1	76.7	79.1	113.0	90.4	103.3	122.3	110.4	107.9	107.0	90.0	98.5	92.9
19	TH2	68.3	71.7	93.3	77.8	93.0	93.7	61.7	91.1	75.0	82.9	81.5	96.8	95.0	109.7	97.0	96.0	122.0	86.7	104.3	89.1
20	TH22	101.7	113.3	91.7	102.2	106.3	84.4	69.7	93.9	95.0	89.9	95.5	105.2	105.0	123.7	110.7	108.0	122.3	120.0	121.2	102.6
	CHECKS																				
21	Buland(C)	91.7	145.0	131.3	122.7	123.0	132.0	84.0	110.7	115.0	112.9	113.0	121.4	135.0	138.3	125.5	126.7	113.7	115.0	114.3	119.6
22	SeedTech2324(C)	88.3	138.3	121.3	116.0	119.0	100.2	79.3	98.0	105.0	100.3	97.5	97.3	116.7	128.7	110.4	110.1	106.7	116.7	111.7	108.2
23	Bio9681(C)	71.7	96.7	114.3	94.2	90.7	96.1	69.7	96.3	86.7	87.9	82.5	91.0	106.7	110.3	94.5	97.0	94.0	105.0	99.5	93.7
	Loc. Mean	**80.0**	**105.1**	**106.2**	**97.1**	**105.3**	**98.1**	**72.6**	**89.1**	**90.9**	**91.2**	**92.8**	**98.5**	**107.4**	**120.3**	**107.3**	**105.3**	**111.0**	**107.6**	**109.3**	**99.5**
	C.D. (5%)	5.64	21.74	7.36	18.21	21.41	14.48	11.48	9.86	13.05	9.13	11.70	8.80	14.76	14.76	14.37	8.14	22.27	15.20	19.99	6.45
	C.V. (%)	4.29	12.58	4.21	11.40	12.36	8.97	9.61	6.72	8.72	7.96	7.66	5.43	8.35	7.46	8.14	6.15	12.19	8.58	8.82	9.03
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.69	0.00

Table No. 5

Performance of medium & early maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 05 & 6 (AVT1- M and AVT1-E) during rabi 2013-14.

GRAIN YIELD (kg/ha) AT 15% MOISTURE

Sl No	PEDIGREE	KARN	R	LUDH	R	PANT	R	ZN 2 MEAN	R	BAHR	R	BHUB	R	DHOL	R	RANC	R	VARA	R	ZN 3 MEAN	R
1	KH-K26	9477	5	9086	10	11564	5	10042	8	8839	7	6714	9	6829	4	11111	5	7224	10	8143	9
2	KMH-4210	10471	4	11362	5	12706	2	11513	4	10829	2	7738	6	6477	7	11146	4	14416	2	10121	3
3	IJ 8521	9335	7	13357	1	12493	4	11728	1	9291	5	8052	4	8944	1	11161	3	14427	1	10375	2
4	IL 8536	10803	1	11493	4	12532	3	11609	3	12913	1	6744	8	7575	3	10895	6	13929	3	10411	1
5	IL 8537	7365	9	10974	6	11103	6	9814	9	9066	6	8218	2	6261	8	9780	8	11784	5	9022	6
6	IJ8214	8624	8	13244	2	9412	9	10427	6	10241	3	6704	10	8241	2	12103	2	10819	6	9622	5
7	PMH-2246	10757	2	10248	8	14080	1	11695	2	7766	9	8442	1	6477	6	12450	1	13578	4	9742	4
8	KH-K25	10584	3	12679	3	10715	7	11326	5	9912	4	8162	3	6545	5	9258	9	10777	7	8931	7
	CHECKS																				
9	Prakash(C)	6522	10	9810	9	8171	10	8168	10	8206	8	7302	7	5858	9	7565	10	9816	9	7749	10
10	BIO9637(C)	9388	6	10496	7	10285	8	10056	7	7021	10	7885	5	5548	10	10105	7	10657	8	8243	8
	Location Mean	**9333**		**11275**		**11306**		**10638**		**9408**		**7596**		**6875**		**10558**		**11743**		**9236**	
	C.D. (5%)	688		2809		2729		2075		1034		465		1485		2145		1020		1230	
	C.V. (%)	4.28		14.46		14.01		-		6.38		3.55		12.54		11.79		5.04		-	
	F (Prob)	0		0.045		0.007				0		0		0.002		0.004		0			
	Plot Size	12		7.2		12		-		9.6		9.6		12		5.6		9.6		-	
	AGRONOMY DATA																				
	Sowing Date	23-11		27-11		17-12		-		24-11		29-11		27-11		13-12		26-11		-	
	Harvest Date	25-05		26-05		10-06		-		13-05		21-04		23-05		17-05		1-05		-	
	Irrigation Nos	8		12		6		-		6		10		5		8		3		-	
	Ferilizer Applied N	150		70		120		-		150		120		150		140		150		-	
	Ferilizer Applied P	60		24		60		-		75		60		70		60		75		-	
	Ferilizer Applied K	60		12		40		-		60		60		60		40		60		-	

Sl No	PEDIGREE	ARBH	R	COIM	R	KOLH	R	MAND	R	VAGA	R	ZN 4 MEAN	R	BANS	R	GODH	R	ZN 5 MEAN	R	OV'L MEAN	R
1	KH-K26	7805	3	7184	6	11226	2	9202	2	7622	7	8608	3	8680	4	5685	4	7183	3	8550	6
2	KMH-4210	7662	4	7582	4	10243	5	8269	3	8150	3	8381	4	7190	8	5838	3	6514	7	9339	4
3	IJ 8521	6482	8	8787	2	10852	3	7522	6	7934	6	8316	5	10155	2	5041	6	7598	2	9589	2
4	IL 8536	11172	1	8507	3	12098	1	9263	1	9290	1	10066	1	9420	3	4735	9	7078	5	10091	1
5	IL 8537	6765	7	7131	7	10735	4	8244	4	8116	4	8198	6	7243	7	4759	8	6001	9	8503	8
6	IJ8214	6813	6	6053	10	9068	8	7120	8	8319	2	7474	7	10243	1	5004	7	7623	1	8801	5
7	PMH-2246	10192	2	8883	1	9283	6	8211	5	8053	5	8924	2	5442	10	7121	1	6281	8	9399	3
8	KH-K25	6419	9	7203	5	9224	7	6410	9	6788	9	7209	8	7905	5	5503	5	6704	6	8539	7
	CHECKS																				
9	Prakash(C)	3864	10	6821	8	7448	10	4857	10	6912	8	5980	10	6968	9	2805	10	4886	10	6862	10
10	BIO9637(C)	7033	5	6352	9	9051	9	7165	7	6220	10	7164	9	7742	6	6538	2	7140	4	8099	9
	Location Mean	**7421**		**7450**		**9923**		**7626**		**7740**		**8032**		**8099**		**5303**		**6701**		**8777**	
	C.D. (5%)	1857		831		2408		799		2151		1609		1280		728		1004		1495	
	C.V. (%)	14.53		6.47		14.08		6.08		16.13		-		9.18		7.97		-		-	
	F (Prob)	0		0		0.022		0		0.213				0		0					
	Plot Size	12		9.6		12		11.2		9.6		-		9.6		7.2		-		-	
	AGRONOMY DATA																				
	Sowing Date	11-12		7-12		23-12		27-11		28-11		-		26-11		30-11		-		-	
	Harvest Date	18-04		2-04		30-05		29-04		26-02		-		19-04		15-04		-		-	
	Irrigation Nos	8		10		-		12		11		-		6		12		-		-	
	Ferilizer Applied N	150		150		120		150		150		-		150		120		-		-	
	Ferilizer Applied P	75		75		60		75		75		-		80		50		-		-	
	Ferilizer Applied K	37.5		75		40		40		75		-		-		-		-		-	

Table No. 5 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Prakash(C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	KH-K26	45.3	-	41.5	23	7.7	-	16.6	46.9	-	5.1	102	5.3	50.7	89.5	10.3	43.9	24.6	102.7	47	24.6
2	KMH-4210	60.6	15.8	55.5	41	32	6	10.6	47.3	46.9	30.6	98.3	11.2	37.5	70.3	17.9	40.2	3.2	108.1	33.3	36.1
3	IJ 8521	43.1	36.2	52.9	43.6	13.2	10.3	52.7	47.5	47	33.9	67.8	28.8	45.7	54.9	14.8	39.1	45.7	79.7	55.5	39.7
4	IL 8536	65.7	17.2	53.4	42.1	57.4	-	29.3	44	41.9	34.3	189.2	24.7	62.4	90.7	34.4	68.3	35.2	68.8	44.8	47.1
5	IL 8537	12.9	11.9	35.9	20.2	10.5	12.5	6.9	29.3	20	16.4	75.1	4.6	44.1	69.7	17.4	37.1	3.9	69.7	22.8	23.9
6	IJ8214	32.2	35	15.2	27.7	24.8	-	40.7	60	10.2	24.2	76.3	-	21.7	46.6	20.4	25	47	78.4	56	28.3
7	PMH-2246	64.9	4.5	72.3	43.2	-	15.6	10.6	64.6	38.3	25.7	163.8	30.2	24.6	69.1	16.5	49.2	-	153.9	28.5	37
8	KH-K25	62.3	29.2	31.1	38.7	20.8	11.8	11.7	22.4	9.8	15.2	66.1	5.6	23.8	32	-	20.5	13.4	96.2	37.2	24.4
	CHECKS																				
9	Prakash(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	BIO9637(C)	43.9	7	25.9	23.1	-	8	-	33.6	8.6	6.4	82	-	21.5	47.5	-	19.8	11.1	133.1	46.1	18

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE BIO9637(C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	KH-K26	0.9	-	12.4	-	25.9	-	23.1	10	-	-	11	13.1	24	28.4	22.5	20.2	12.1	-	0.6	5.6
2	KMH-4210	11.5	8.3	23.5	14.5	54.2	-	16.7	10.3	35.3	22.8	8.9	19.4	13.2	15.4	31	17	-	-	-	15.3
3	IJ 8521	-	27.3	21.5	16.6	32.3	2.1	61.2	10.5	35.4	25.9	-	38.3	19.9	5	27.6	16.1	31.2	-	6.4	18.4
4	IL 8536	15.1	9.5	21.8	15.4	83.9	-	36.5	7.8	30.7	26.3	58.9	33.9	33.7	29.3	49.4	40.5	21.7	-	-	24.6
5	IL 8537	-	4.6	7.9	-	29.1	4.2	12.9	-	10.6	9.4	-	12.3	18.6	15	30.5	14.4	-	-	-	5
6	IJ8214	-	26.2	-	3.7	45.9	-	48.6	19.8	1.5	16.7	-	-	0.2	-	33.8	4.3	32.3	-	6.8	8.7
7	PMH-2246	14.6	-	36.9	16.3	10.6	7.1	16.8	23.2	27.4	18.2	44.9	39.8	2.6	14.6	29.5	24.6	-	8.9	-	16
8	KH-K25	12.7	20.8	4.2	12.6	41.2	3.5	18	-	1.1	8.3	-	13.4	1.9	-	9.1	0.6	2.1	-	-	5.4
	CHECKS																				
9	Prakash(C)	-	-	-	-	16.9	-	5.6	-	-	-	-	7.4	-	-	11.1	-	-	-	-	-
10	BIO9637(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No. 5 (Cont..)

	STAND AT HARVEST ('000/ha)																		
				ZN 2					ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	KH-K26	63.3	81.9	66.7	70.6	66.3	62.2	60.7	30.6	55.0	57.2	66.3	57.5	57.7	55.9	58.9	58.0	74.1	66.0	61.3
2	KMH-4210	62.2	83.3	66.7	70.7	64.2	65.3	60.1	75.0	66.2	56.7	66.7	55.0	58.9	60.4	59.5	53.8	63.4	58.6	63.7
3	IJ 8521	62.2	82.4	64.7	69.8	67.0	66.4	61.9	78.1	68.4	55.3	66.3	56.1	60.4	58.0	59.2	63.5	72.2	67.9	65.3
4	IL 8536	63.3	83.3	66.7	71.1	68.8	67.2	61.3	80.9	69.5	63.1	66.7	58.9	58.0	60.4	61.4	61.1	74.1	67.6	66.7
5	IL 8537	63.3	83.3	66.7	71.1	69.1	63.9	58.9	75.7	66.9	56.9	66.7	59.7	59.2	60.4	60.6	64.9	82.4	73.7	66.5
6	IJ8214	62.2	78.7	62.2	67.7	68.4	65.0	56.0	76.4	66.4	54.7	66.0	54.2	63.7	59.0	59.5	57.6	74.5	66.1	64.2
7	PMH-2246	63.1	84.7	66.7	71.5	66.0	63.6	58.9	75.3	66.0	57.5	66.0	60.6	60.4	58.3	60.6	56.6	71.8	64.2	65.0
8	KH-K25	61.9	78.7	66.7	69.1	68.1	67.5	58.9	79.9	68.6	58.9	66.7	58.3	65.2	56.3	61.1	61.1	59.3	60.2	64.8
	CHECKS																			
9	Prakash(C)	61.9	82.4	66.4	70.2	67.7	66.9	60.1	82.3	69.3	53.6	66.0	61.4	57.1	58.7	59.4	56.3	66.7	61.5	64.8
10	BIO9637(C)	61.9	81.0	66.1	69.7	68.1	64.2	60.1	77.1	67.4	54.4	66.7	49.4	59.2	50.3	56.0	54.5	65.3	59.9	62.7
	Loc. Mean	**62.6**	**82.0**	**65.9**	**70.2**	**67.4**	**65.2**	**59.7**	**73.1**	**66.4**	**56.8**	**66.4**	**57.1**	**60.0**	**57.8**	**59.6**	**58.8**	**70.4**	**64.6**	**64.5**
	C.D. (5%)	1.99	8.52	3.44	1.95	3.72	5.95	7.22	7.87	10.83	6.82	0.76	8.96	3.43	5.95	3.19	9.39	6.08	9.12	3.61
	C.V. (%)	1.85	6.06	3.04	1.62	3.22	5.32	7.05	6.27	11.25	6.99	0.67	9.15	3.33	6.00	4.18	9.32	5.04	6.25	7.48
	F (Prob)	0.56	0.87	0.20	0.02	0.25	0.64	0.88	0.00	0.30	0.26	0.20	0.26	0.00	0.06	0.09	0.25	0.00	0.08	0.12

	MOISTURE % AT HARVEST																				
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	KH-K26	28.0	33.2	25.5	28.9	24.2	19.2	19.2	20.8	31.6	23.0	27.7	14.9	9.0	15.5	17.6	16.9	16.4	18.5	17.5	21.4
2	KMH-4210	25.2	36.6	22.3	28.0	25.1	19.1	19.4	20.9	30.3	22.9	24.6	18.1	9.0	15.6	16.9	16.8	16.6	18.2	17.4	21.2
3	IJ 8521	24.5	31.8	24.0	26.7	25.1	20.5	19.1	20.7	27.4	22.5	22.1	18.2	8.4	14.7	16.1	15.9	17.2	19.8	18.5	20.6
4	IL 8536	27.2	37.9	26.5	30.5	25.8	19.9	19.4	20.8	35.7	24.3	24.4	17.7	7.3	15.4	16.9	16.3	17.3	21.2	19.3	22.2
5	IL 8537	28.7	37.7	26.3	30.9	25.2	21.2	19.9	21.4	31.2	23.8	26.8	18.3	8.9	15.6	17.9	17.5	17.5	19.6	18.5	22.4
6	IJ8214	27.9	34.0	23.3	28.4	24.9	19.5	18.5	20.8	27.5	22.2	21.7	16.0	8.1	14.5	16.4	15.3	16.8	18.9	17.8	20.6
7	PMH-2246	23.4	31.0	21.2	25.2	26.2	19.3	18.9	20.5	28.4	22.6	26.0	18.9	8.9	15.4	16.9	17.2	16.0	16.9	16.4	20.5
8	KH-K25	26.8	28.6	20.6	25.3	24.0	19.1	19.3	19.4	24.5	21.2	23.6	15.0	8.5	14.6	17.5	15.8	17.6	19.9	18.8	19.9
	CHECKS																				
9	Prakash(C)	24.3	27.2	18.5	23.3	21.9	19.4	19.4	19.2	25.6	21.1	16.3	14.7	9.0	13.5	16.8	14.1	16.9	16.3	16.6	18.6
10	BIO9637(C)	26.1	33.6	21.7	27.1	23.3	19.6	19.3	19.7	29.9	22.4	26.4	15.0	8.8	16.3	16.7	16.6	17.1	19.9	18.5	20.9
	Loc. Mean	**26.2**	**33.1**	**23.0**	**27.4**	**24.5**	**19.7**	**19.2**	**20.4**	**29.2**	**22.6**	**23.9**	**16.7**	**8.6**	**15.1**	**17.0**	**16.2**	**16.9**	**18.9**	**17.9**	**20.8**
	C.D. (5%)	0.21	2.14	2.83	2.99	0.86	0.70	0.56	1.68	1.68	1.86	2.99	0.77	1.15	0.41	0.64	2.04	0.67	2.38	1.94	1.17
	C.V. (%)	0.48	3.76	7.19	6.37	2.03	2.08	1.69	4.79	3.35	6.41	7.27	2.68	7.84	1.60	2.19	9.81	2.30	7.33	4.78	7.75
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.18	0.00	0.03	0.00	0.00	0.10	0.00	0.00	0.06	0.00	0.01	0.10	0.00

Table No. 5 (Cont..)

GRAIN SHELLING %

S.No.	PEDIGREE	KARN	LUDH	PANT	ZN 2 Mean	BAHR	BHUB	DHOL	RANC	VARA	ZN 3 Mean	ARBH	COIM	KOLH	MAND	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	KH-K26	76.8	78.0	80.9	78.6	78.4	80.8	83.5	83.4	77.0	80.6	84.1	79.7	85.0	80.8	80.7	82.0	75.4	78.5	77.0	80.2
2	KMH-4210	73.3	80.0	83.3	78.9	79.0	79.6	80.5	83.8	76.5	79.9	83.1	79.7	82.7	82.8	81.0	81.9	70.6	81.3	76.0	79.8
3	IJ 8521	75.3	80.8	84.0	80.0	74.1	80.5	82.5	84.8	75.1	79.4	83.0	80.7	85.1	81.5	80.4	82.1	74.2	81.2	77.7	80.2
4	IL 8536	78.1	75.3	80.5	78.0	80.5	79.3	81.0	81.8	79.7	80.4	82.1	79.3	82.0	82.6	77.5	80.7	72.3	77.6	74.9	79.3
5	IL 8537	75.3	76.9	78.8	77.0	77.1	80.7	80.5	81.5	76.8	79.3	81.0	80.9	83.8	79.8	74.1	79.9	73.4	77.6	75.5	78.5
6	IJ8214	75.4	86.2	80.7	80.8	79.1	79.9	80.5	87.3	75.1	80.4	87.5	78.7	88.6	79.8	80.2	83.0	79.9	87.8	83.8	81.8
7	PMH-2246	77.0	80.0	83.9	80.3	76.7	81.5	81.5	86.1	75.5	80.2	87.0	79.7	85.8	80.1	80.3	82.6	73.5	82.2	77.9	80.7
8	KH-K25	79.0	82.1	82.1	81.1	79.8	81.3	84.0	84.1	74.7	80.8	82.3	81.0	84.9	82.5	80.1	82.2	80.5	84.6	82.5	81.5
	CHECKS																				
9	Prakash(C)	73.0	84.1	82.1	79.7	77.3	79.5	82.5	83.6	75.5	79.7	83.5	81.3	85.1	79.1	80.3	81.8	76.9	82.1	79.5	80.4
10	BIO9637(C)	74.9	78.9	79.2	77.6	75.7	79.5	82.5	83.3	76.3	79.5	83.2	80.9	85.4	81.0	78.6	81.8	73.1	79.7	76.4	79.5
	Loc. Mean	**75.8**	**80.2**	**81.5**	**79.2**	**77.7**	**80.2**	**81.9**	**84.0**	**76.2**	**80.0**	**83.7**	**80.2**	**84.8**	**81.0**	**79.3**	**81.8**	**75.0**	**81.3**	**78.1**	**80.2**
	C.D. (5%)	0.27	-	3.66	4.21	0.94	1.71	1.82	1.81	0.96	2.02	2.55	1.00	0.80	1.47	2.47	2.08	4.13	2.10	3.74	1.36
	C.V. (%)	0.21	-	2.61	3.10	0.71	1.24	1.29	1.25	0.74	1.97	1.78	0.73	0.55	1.06	1.82	1.98	3.21	1.51	2.11	2.35
	F (Prob)	0.00	0.00	0.07	0.50	0.00	0.11	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.01	0.00

DAYS TO 50% POLLEN SHED

S.No.	PEDIGREE	KARN	LUDH	PANT	ZN 2 Mean	BAHR	BHUB	DHOL	RANC	VARA	ZN 3 Mean	ARBH	COIM	KOLH	MAND	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	KH-K26	127.0	134.3	117.0	126.1	120.7	65.3	115.7	107.0	105.3	102.8	78.3	56.0	72.0	67.7	52.0	65.2	83.3	76.0	79.7	91.8
2	KMH-4210	138.7	139.7	120.7	133.0	126.3	68.0	122.0	109.3	109.7	107.1	80.0	59.3	77.3	70.0	54.7	68.3	84.3	83.0	83.7	96.2
3	IJ 8521	133.0	138.7	119.3	130.3	122.7	66.3	115.7	108.0	106.0	103.7	78.0	57.0	75.3	70.7	53.3	66.9	77.3	79.7	78.5	93.4
4	IL 8536	137.7	142.7	121.3	133.9	122.7	68.3	122.0	108.0	110.7	106.3	80.7	58.0	76.0	72.0	52.0	67.7	83.7	81.7	82.7	95.8
5	IL 8537	138.3	143.0	121.7	134.3	125.3	66.0	123.0	109.3	110.3	106.8	80.7	57.7	76.3	73.3	53.7	68.3	86.0	80.7	83.3	96.4
6	IJ8214	134.7	136.7	119.0	130.1	122.0	66.7	117.7	108.0	106.7	104.2	77.3	57.3	72.3	69.0	52.0	65.6	83.3	81.0	82.2	93.6
7	PMH-2246	133.0	130.7	116.0	126.6	116.7	64.0	114.7	102.0	103.7	100.2	76.7	56.0	73.0	67.0	52.7	65.1	80.0	75.7	77.8	90.8
8	KH-K25	131.0	134.0	120.0	128.3	116.3	61.0	114.0	107.0	104.7	100.6	76.3	53.3	73.3	67.0	51.3	64.3	85.0	75.0	80.0	91.3
	CHECKS																				
9	Prakash(C)	124.0	130.7	113.0	122.6	113.7	60.7	112.0	101.7	103.0	98.2	72.0	49.7	71.3	65.7	51.3	62.0	86.0	71.0	78.5	88.4
10	BIO9637(C)	133.7	138.7	120.7	131.0	122.3	65.0	120.7	107.0	108.0	104.6	77.7	57.0	73.3	69.3	53.3	66.1	85.0	81.3	83.2	94.2
	Loc. Mean	**133.1**	**136.9**	**118.9**	**129.6**	**120.9**	**65.1**	**117.7**	**106.7**	**106.8**	**103.5**	**77.8**	**56.1**	**74.0**	**69.2**	**52.6**	**65.9**	**83.4**	**78.5**	**81.0**	**93.2**
	C.D. (5%)	0.78	2.69	2.99	3.34	4.18	2.30	2.37	2.34	2.71	1.89	1.29	1.52	0.48	2.93	3.20	1.57	0.92	2.71	7.84	1.35
	C.V. (%)	0.34	1.14	1.47	1.50	2.02	2.06	1.18	1.28	1.48	1.42	0.97	1.57	0.38	2.47	3.54	1.85	0.64	2.01	4.28	2.01
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.58	0.00

Table No. 5 (Cont..)

DAYS TO 50% SILKING

S.No.	PEDIGREE	KARN	LUDH	PANT	ZN 2 Mean	BAHR	BHUB	DHOL	RANC	VARA	ZN 3 Mean	ARBH	COIM	KOLH	MAND	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	KH-K26	129.0	136.3	120.0	128.4	122.7	68.0	118.0	110.3	111.7	106.1	78.7	58.7	73.0	69.3	56.3	67.2	86.3	77.0	81.7	94.4
2	KMH-4210	140.7	141.5	123.7	135.3	128.3	70.7	124.7	113.7	114.3	110.3	80.7	61.3	78.0	74.0	57.3	70.3	87.3	84.3	85.8	98.7
3	IJ 8521	135.3	138.7	122.3	132.1	124.7	68.3	118.3	112.0	110.0	106.7	79.7	59.0	76.0	71.3	57.3	68.7	80.7	80.7	80.7	95.6
4	IL 8536	140.0	143.0	124.3	135.8	124.7	70.3	124.7	111.7	114.0	109.1	80.3	60.0	77.0	74.0	55.3	69.3	87.3	83.0	85.2	98.0
5	IL 8537	140.3	143.7	124.7	136.2	127.3	68.0	125.0	113.7	114.3	109.7	81.0	59.7	77.0	74.0	57.7	69.9	89.0	82.3	85.7	98.5
6	IJ8214	136.7	137.3	122.0	132.0	124.0	68.3	120.0	111.7	109.7	106.7	78.3	59.3	73.0	71.0	55.7	67.5	86.3	82.0	84.2	95.7
7	PMH-2246	135.0	132.7	118.7	128.8	118.7	66.7	117.0	108.0	108.0	103.7	78.3	58.0	74.0	69.0	55.7	67.0	84.3	77.0	80.7	93.4
8	KH-K25	133.0	135.3	123.0	130.4	118.3	63.7	116.7	110.7	110.0	103.9	77.3	55.3	74.0	69.0	55.0	66.1	88.0	76.3	82.2	93.7
	CHECKS																				
9	Prakash(C)	126.3	132.3	116.0	124.9	115.7	63.0	114.7	107.3	104.3	101.0	73.0	51.7	73.7	67.0	54.3	63.9	89.0	73.0	81.0	90.8
10	BIO9637(C)	135.7	140.3	123.7	133.2	124.3	67.3	123.7	110.7	112.7	107.7	79.0	59.7	74.0	72.0	56.7	68.3	88.3	82.7	85.5	96.7
	Loc. Mean	**135.2**	**138.1**	**121.8**	**131.7**	**122.9**	**67.4**	**120.3**	**111.0**	**110.9**	**106.5**	**78.6**	**58.3**	**75.0**	**71.1**	**56.1**	**67.8**	**86.7**	**79.8**	**83.3**	**95.5**
	C.D. (5%)	0.87	3.79	2.96	3.16	4.18	1.86	2.38	2.68	3.53	1.93	1.48	1.45	1.57	2.43	2.93	1.54	0.83	3.05	7.33	1.31
	C.V. (%)	0.37	1.60	1.42	1.40	1.99	1.61	1.16	1.41	1.86	1.41	1.10	1.45	1.22	2.00	3.04	1.77	0.56	2.23	3.89	1.90
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.54	0.00

DAYS TO 75% DRY HUSK

S.No.	PEDIGREE	KARN	LUDH	ZN 2 Mean	BAHR	BHUB	DHOL	RANC	VARA	ZN 3 Mean	COIM	KOLH	MAND	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	KH-K26	171.0	172.7	171.8	161.3	109.0	150.7	150.7	146.3	143.6	92.3	110.0	112.3	94.3	102.3	117.3	117.0	117.2	131.2
2	KMH-4210	173.0	174.7	173.8	161.3	108.7	156.3	151.3	149.0	145.3	95.7	111.0	113.0	92.7	103.1	122.0	116.0	119.0	132.7
3	IJ 8521	171.7	171.3	171.5	160.7	109.7	149.7	150.3	148.3	143.7	93.3	108.0	112.7	92.0	101.5	113.3	117.7	115.5	130.7
4	IL 8536	174.3	175.7	175.0	161.7	107.0	156.7	151.7	149.3	145.3	94.0	111.0	111.0	92.7	102.2	119.3	117.7	118.5	132.5
5	IL 8537	183.0	182.3	182.7	164.3	108.0	157.7	154.0	149.7	146.7	94.0	110.0	113.0	95.3	103.1	120.0	116.3	118.2	134.4
6	IJ8214	176.0	178.0	177.0	164.3	107.7	149.7	152.0	147.3	144.2	93.3	109.0	112.0	91.3	101.4	119.7	115.7	117.7	132.0
7	PMH-2246	173.0	169.7	171.3	156.7	106.3	148.0	150.7	147.3	141.8	92.0	110.0	110.0	92.7	101.2	115.3	115.0	115.2	129.7
8	KH-K25	174.7	171.7	173.2	157.3	97.3	148.0	148.0	144.3	139.0	88.0	108.0	111.0	91.7	99.7	120.3	114.7	117.5	128.8
	CHECKS																		
9	Prakash(C)	169.0	168.3	168.7	153.3	97.7	145.3	146.0	142.3	136.9	85.0	107.0	105.7	88.7	96.6	118.7	110.7	114.7	126.0
10	BIO9637(C)	176.3	175.3	175.8	156.7	108.0	155.7	151.0	147.3	143.7	93.3	109.0	114.0	92.0	102.1	118.7	122.3	120.5	132.3
	Loc. Mean	**174.2**	**174.0**	**174.1**	**159.8**	**105.9**	**151.8**	**150.6**	**147.1**	**143.0**	**92.1**	**109.3**	**111.5**	**92.3**	**101.3**	**118.5**	**116.3**	**117.4**	**131.0**
	C.D. (5%)	2.05	3.81	3.06	2.08	2.28	3.85	2.88	2.59	2.71	0.88	0.00	1.74	1.68	2.01	1.77	5.77	6.53	1.70
	C.V. (%)	0.69	1.28	0.78	0.76	1.26	1.48	1.12	1.02	1.48	0.56	0.00	0.91	1.06	1.37	0.87	2.89	2.46	1.67
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.62	0.00

Table No. 5 (Cont..)

PLANT HEIGHT(cm)

S.No.	PEDIGREE	KARN	LUDH	PANT	ZN 2 Mean	BAHR	BHUB	DHOL	RANC	VARA	ZN 3 Mean	ARBH	COIM	KOLH	MAND	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	KH-K26	150.0	126.7	223.3	166.7	191.7	177.9	151.7	209.5	161.7	178.5	162.5	174.1	170.0	215.0	162.0	176.7	245.3	186.7	216.0	180.5
2	KMH-4210	198.3	183.3	250.3	210.7	259.0	226.9	186.3	237.2	252.3	232.4	210.0	191.3	213.3	221.0	206.9	208.5	273.3	222.3	247.8	222.1
3	IJ 8521	176.7	146.7	243.3	188.9	232.7	202.1	176.7	218.9	208.3	207.7	182.5	189.8	198.3	220.3	194.0	197.0	287.0	193.3	240.2	204.7
4	IL 8536	185.0	178.3	245.0	202.8	231.7	203.7	170.3	214.5	205.0	205.0	187.5	187.7	208.3	222.0	178.8	196.9	287.0	191.7	239.3	206.4
5	IL 8537	171.7	170.0	242.3	194.7	223.0	230.7	169.7	236.9	223.3	216.7	210.0	210.6	210.0	232.0	203.7	213.3	231.7	205.7	218.7	211.4
6	IJ8214	166.7	166.7	224.0	185.8	232.0	218.7	170.7	228.9	205.0	211.1	180.0	188.3	190.0	230.0	190.1	195.7	258.7	183.3	221.0	202.2
7	PMH-2246	190.0	133.3	217.7	180.3	221.0	169.5	170.3	219.6	186.7	193.4	180.0	189.9	188.3	210.0	195.8	192.8	255.0	186.7	220.8	194.3
8	KH-K25	148.3	163.3	210.0	173.9	221.3	207.1	160.0	204.3	195.0	197.5	152.5	180.5	186.7	222.0	185.4	185.4	263.7	176.7	220.2	191.8
	CHECKS																				
9	Prakash(C)	153.3	143.3	214.7	170.4	196.3	183.1	149.3	192.8	166.7	177.6	137.5	184.0	178.3	226.7	181.1	181.5	272.0	190.0	231.0	184.6
10	BIO9637(C)	186.7	166.7	261.3	204.9	239.3	227.5	178.7	217.0	176.7	207.8	175.0	202.3	200.0	223.3	203.3	200.8	277.0	186.7	231.8	208.1
	Loc. Mean	**172.7**	**157.8**	**233.2**	**187.9**	**224.8**	**204.7**	**168.4**	**218.0**	**198.1**	**202.8**	**177.8**	**189.8**	**194.3**	**222.2**	**190.1**	**194.9**	**265.1**	**192.3**	**228.7**	**200.6**
	C.D. (5%)	3.50	27.77	14.40	20.62	28.12	20.37	21.09	20.25	25.28	14.85	18.13	12.26	18.74	21.32	17.43	13.05	64.79	18.71	35.48	8.71
	C.V. (%)	1.18	10.26	3.60	6.40	7.29	5.80	7.30	5.42	7.44	5.71	5.95	3.77	5.62	5.59	5.35	5.22	14.25	5.67	6.86	6.01
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.72	0.00	0.51	0.00

EAR HEIGHT(cm)

S.No.	PEDIGREE	KARN	LUDH	PANT	ZN 2 Mean	BAHR	BHUB	DHOL	RANC	VARA	ZN 3 Mean	ARBH	COIM	KOLH	MAND	VAGA	ZN 4 Mean	BANS	GODH	ZN 5 Mean	OV'L Mean
1	KH-K26	78.3	66.7	104.0	83.0	98.0	89.3	77.3	108.3	83.3	91.3	90.0	94.6	86.7	119.7	81.0	94.4	112.0	104.0	108.0	92.9
2	KMH-4210	95.0	81.7	116.0	97.6	138.3	104.1	92.3	122.9	111.7	113.9	97.5	97.5	106.7	123.3	100.9	105.2	117.3	103.3	110.3	107.2
3	IJ 8521	91.7	65.0	92.7	83.1	102.0	81.0	76.7	105.1	76.7	88.3	85.0	91.6	90.0	117.3	86.9	94.2	122.0	83.3	102.7	91.1
4	IL 8536	95.0	85.0	108.3	96.1	124.3	90.1	77.7	100.7	93.3	97.2	90.0	93.0	106.7	122.0	86.1	99.5	117.3	86.0	101.7	98.4
5	IL 8537	78.3	73.3	102.3	84.7	102.3	90.3	73.3	111.1	90.0	93.4	85.0	104.5	103.3	120.0	92.5	101.1	110.3	76.0	93.2	94.2
6	IJ8214	83.3	85.0	92.7	87.0	110.3	98.2	75.7	115.3	85.0	96.9	82.5	94.1	81.7	116.0	92.6	93.4	127.3	76.7	102.0	94.4
7	PMH-2246	108.3	61.7	100.3	90.1	107.3	68.3	82.7	108.9	85.0	90.4	85.0	93.0	90.0	104.7	96.4	93.8	107.7	80.0	93.8	92.0
8	KH-K25	75.0	76.7	80.7	77.4	104.7	91.5	75.0	102.9	85.0	91.8	70.0	87.3	93.3	112.7	80.7	88.8	103.7	77.3	90.5	87.8
	CHECKS																				
9	Prakash(C)	78.3	76.7	104.3	86.4	101.7	82.1	75.3	106.7	66.7	86.5	67.5	93.7	103.3	126.3	96.2	97.4	113.7	91.7	102.7	92.3
10	BIO9637(C)	90.0	73.3	121.3	94.9	118.0	108.4	84.0	123.3	98.3	106.4	85.0	99.9	95.0	111.7	99.3	98.2	138.7	90.0	114.3	102.4
	Loc. Mean	**87.3**	**74.5**	**102.3**	**88.0**	**110.7**	**90.3**	**79.0**	**110.5**	**87.5**	**95.6**	**83.8**	**94.9**	**95.7**	**117.4**	**91.2**	**96.6**	**117.0**	**86.8**	**101.9**	**95.3**
	C.D. (5%)	6.62	22.63	8.83	16.65	20.66	14.78	11.19	17.95	16.77	8.44	16.36	7.68	13.38	18.42	12.86	8.29	27.99	7.90	21.94	5.58
	C.V. (%)	4.42	17.70	5.03	11.02	10.88	9.54	8.26	9.47	11.17	6.88	11.38	4.71	8.15	9.15	8.22	6.69	13.95	5.30	9.52	8.10
	F (Prob)	0.00	0.38	0.00	0.28	0.01	0.00	0.06	0.17	0.00	0.00	0.04	0.01	0.01	0.43	0.03	0.02	0.36	0.00	0.37	0.00

Table No. 6

Performance of late & medium maturing experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. 7 & 8 (AVT2- L and AVT2-M during rabi 2013-14.

		GRAIN YIELD (kg/ha) AT 15% MOISTURE																																					
SI							ZN 2												ZN 3												ZN 4							ZN 5		OV'L	
No	PEDIGREE	KARN	R	LUDH	R	PANT	R	MEAN	R	BAHR	R	BHUB	R	DHOL	R	RANC	R	VARA	R	MEAN	R	ARBH	R	COIM	R	KOLH	R	MAND	R	VAGA	R	MEAN	R	BANS	R	GODH	R	MEAN	R	MEAN	R
1	A 7501	8956	10	9668	9	10424	9	9683	10	12199	3	7459	9	4959	3	8664	9	9953	7	8647	4	6415	5	8176	4	7928	10	8228	4	8367	2	7823	5	10638	5	8308	10	9473	8	8689	8
2	Bio 237	9024	9	11017	4	11148	7	10396	9	12374	2	7940	2	5130	2	10573	5	10873	5	9378	2	5936	7	8108	5	9902	5	7979	5	6698	8	7725	6	11005	3	12615	3	11810	2	9355	4
3	Bisco X 5141	10092	3	13018	1	9126	11	10746	7	8197	10	7664	7	4076	12	9147	7	12396	2	8296	8	5962	6	7437	6	10417	4	6657	9	7604	5	7616	7	8665	10	10042	5	9353	9	8700	7
4	KMH-7148	9413	8	11634	3	13680	1	11576	2	12786	1	7953	1	4898	5	13143	1	12697	1	10295	1	3321	12	8554	1	12021	1	5757	10	9467	1	7824	4	10760	4	9746	6	10253	4	9722	1
5	NMH-1247	9586	7	12357	2	13135	4	11692	1	10243	4	7678	6	4921	4	10589	4	12040	3	9094	3	9003	1	8442	2	10480	3	5625	11	7924	3	8295	1	11091	2	8758	9	9924	5	9458	2
6	PRO-385	10953	1	10355	8	13171	3	11493	3	9837	6	7570	8	4157	10	11073	3	10367	6	8601	5	6679	4	7225	7	9888	7	6766	8	7346	6	7581	8	9308	6	9668	7	9488	7	8958	6
7	X35B349	8952	11	10837	5	12902	5	10897	5	9530	7	7430	10	4378	9	11722	2	9908	8	8594	6	7952	2	5728	11	11186	2	8575	1	7678	4	8224	2	9293	7	15644	1	12469	1	9448	3
8	VEH 11-1	9815	5	7443	12	9342	10	8867	12	8378	9	6983	12	4669	6	8511	10	9223	9	7553	10	4585	10	5695	12	7543	12	7753	6	6315	11	6378	11	8924	9	9258	8	9091	10	7629	12
	CHECKS																																								
9	BIO 9637(C)	10014	4	8978	11	7978	12	8990	11	7603	11	7924	3	4559	8	8104	11	9196	10	7477	12	5015	8	6137	9	8049	9	8508	2	6604	9	6863	9	8656	11	10352	4	9504	6	7845	10
10	Buland(C)	9772	6	10800	6	12604	6	11059	4	8471	8	7831	4	4143	11	8979	8	8196	12	7524	11	4533	11	5979	10	8105	8	7537	7	6367	10	6504	10	12089	1	5857	12	8973	11	8084	9
11	Seed Tech2324(C)	8910	12	9547	10	13307	2	10588	8	10124	5	7375	11	5780	1	10173	6	8853	11	8461	7	7393	3	8289	3	9900	6	8287	3	6877	7	8149	3	8980	8	13029	2	11005	3	9122	5
12	Bio 9681(C)	10696	2	10704	7	10970	8	10790	6	7560	12	7703	5	4657	7	6855	12	10992	4	7553	9	4668	9	6676	8	7699	11	5537	12	6181	12	6152	12	8113	12	6862	11	7488	12	7725	11
	Location Mean	**9682**		**10530**		**11482**		**10565**		**9775**		**7626**		**4694**		**9794**		**10391**		**8456**		**5955**		**7204**		**9427**		**7267**		**7286**		**7428**		**9794**		**10011**		**9903**		**8728**	
	C.D. (5%)	220		1980		1527		1242		843		345		952		2127		613		976		1361		496		3196		390		1737		1436		526		623		575		1129	
	C.V. (%)	1.34		11.07		7.83		-		5.08		2.66		11.95		12.79		3.47		-		13.46		4.05		19.97		3.16		14.04		-		3.17		3.66		-		-	
	F (Prob)	0		0		0				0		0		0.039		0		0				0		0		0.076		0		0.018				0		0					
	Plot Size	18		7.2		18		-		14.4		14.4		18		5.6		14.4		-		18		14.4		18		16.8		9.6		-		14.4		14.4		-		-	
	AGRONOMY DATA																																								
	Sowing Date	23-11		22-11		17-12		-		21-11		29-11		27-11		6-12		25-11		-		11-12		11-12		23-12		12-11		28-11		-		26-11		24-11		-		-	
	Harvest Date	28-05		29-05		10-06		-		13-05		24-04		28-05		7-06		30-04		-		19-04		4-04		29-05		5-05		26-02		-		20-04		28-04		-		-	
	Irrigation Nos	9		12		6		-		6		10		5		8		3		-		8		10		-		12		12		-		6		14		-		-	
	Ferilizer Applied N	150		70		120		-		150		120		150		140		150		-		150		150		120		150		150		-		150		120		-		-	
	Ferilizer Applied P	60		24		60		-		75		60		70		60		75		-		75		75		60		75		75		-		80		50		-		-	
	Ferilizer Applied K	60		12		40		-		60		60		60		40		60		-		37.5		75		40		40		75		-		-		-		-		-	

Table No. 6 (Cont..)

		GRAIN YIELD % SUPERIORITY OVER THE BIO 9637(C)																			
Sl					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
No	PEDIGREE	KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	A 7501	-	7.7	30.7	7.7	60.4	-	8.8	6.9	8.2	15.6	27.9	33.2	-	-	26.7	14	22.9	-	-	10.8
2	Bio 237	-	22.7	39.7	15.6	62.8	0.2	12.5	30.5	18.2	25.4	18.4	32.1	23	-	1.4	12.6	27.1	21.9	24.3	19.2
3	Bisco X 5141	0.8	45	14.4	19.5	7.8	-	-	12.9	34.8	11	18.9	21.2	29.4	-	15.1	11	0.1	-	-	10.9
4	KMH-7148	-	29.6	71.5	28.8	68.2	0.4	7.4	62.2	38.1	37.7	-	39.4	49.4	-	43.3	14	24.3	-	7.9	23.9
5	NMH-1247	-	37.6	64.6	30.1	34.7	-	7.9	30.7	30.9	21.6	79.5	37.6	30.2	-	20	20.9	28.1	-	4.4	20.6
6	PRO-385	9.4	15.3	65.1	27.8	29.4	-	-	36.6	12.7	15	33.2	17.7	22.9	-	11.2	10.5	7.5	-	-	14.2
7	X35B349	-	20.7	61.7	21.2	25.3	-	-	44.6	7.8	14.9	58.6	-	39	0.8	16.3	19.8	7.4	51.1	31.2	20.4
8	VEH 11-1	-	-	17.1	-	10.2	-	2.4	5	0.3	1	-	-	-	-	-	-	3.1	-	-	-
	CHECKS																				
9	BIO 9637(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	Buland(C)	-	20.3	58	23	11.4	-	-	10.8	-	0.6	-	-	0.7	-	-	-	39.7	-	-	3
11	Seed Tech2324(C)	-	6.3	66.8	17.8	33.2	-	26.8	25.5	-	13.2	47.4	35.1	23	-	4.1	18.7	3.7	25.9	15.8	16.3
12	Bio 9681(C)	6.8	19.2	37.5	20	-	-	2.1	-	19.5	1	-	8.8	-	-	-	-	-	-	-	-

		GRAIN YIELD % SUPERIORITY OVER THE Buland(C)																			
Sl					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
No	PEDIGREE	KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	A 7501	-	-	-	-	44	-	19.7	-	21.4	14.9	41.5	36.8	-	9.2	31.4	20.3	-	41.8	5.6	7.5
2	Bio 237	-	2	-	-	46.1	1.4	23.8	17.8	32.7	24.6	31	35.6	22.2	5.9	5.2	18.8	-	115.4	31.6	15.7
3	Bisco X 5141	3.3	20.5	-	-	-	-	-	1.9	51.2	10.3	31.5	24.4	28.5	-	19.4	17.1	-	71.5	4.2	7.6
4	KMH-7148	-	7.7	8.5	4.7	50.9	1.6	18.2	46.4	54.9	36.8	-	43.1	48.3	-	48.7	20.3	-	66.4	14.3	20.3
5	NMH-1247	-	14.4	4.2	5.7	20.9	-	18.8	17.9	46.9	20.9	98.6	41.2	29.3	-	24.4	27.5	-	49.5	10.6	17
6	PRO-385	12.1	-	4.5	3.9	16.1	-	0.3	23.3	26.5	14.3	47.4	20.8	22	-	15.4	16.6	-	65.1	5.7	10.8
7	X35B349	-	0.3	2.4	-	12.5	-	5.7	30.5	20.9	14.2	75.4	-	38	13.8	20.6	26.4	-	167.1	39	16.9
8	VEH 11-1	0.4	-	-	-	-	-	12.7	-	12.5	0.4	1.2	-	-	2.9	-	-	-	58.1	1.3	-
	CHECKS																				
9	BIO 9637(C)	2.5	-	-	-	-	1.2	10	-	12.2	-	10.6	2.6	-	12.9	3.7	5.5	-	76.7	5.9	-
10	Buland(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Seed Tech2324(C)	-	-	5.6	-	19.5	-	39.5	13.3	8	12.5	63.1	38.6	22.1	9.9	8	25.3	-	122.5	22.6	12.8
12	Bio 9681(C)	9.5	-	-	-	-	-	12.4	-	34.1	0.4	3	11.7	-	-	-	-	-	17.2	-	-

Table No. 6 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Seed Tech2324(C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	A 7501	0.5	1.3	-	-	20.5	1.1	-	-	12.4	2.2	-	-	-	-	21.7	-	18.5	-	-	-
2	Bio 237	1.3	15.4	-	-	22.2	7.7	-	3.9	22.8	10.8	-	-	0	-	-	-	22.5	-	7.3	2.6
3	Bisco X 5141	13.3	36.4	-	1.5	-	3.9	-	-	40	-	-	-	5.2	-	10.6	-	-	-	-	-
4	KMH-7148	5.6	21.9	2.8	9.3	26.3	7.8	-	29.2	43.4	21.7	-	3.2	21.4	-	37.7	-	19.8	-	-	6.6
5	NMH-1247	7.6	29.4	-	10.4	1.2	4.1	-	4.1	36	7.5	21.8	1.8	5.9	-	15.2	1.8	23.5	-	-	3.7
6	PRO-385	22.9	8.5	-	8.5	-	2.6	-	8.8	17.1	1.7	-	-	-	-	6.8	-	3.6	-	-	-
7	X35B349	0.5	13.5	-	2.9	-	0.7	-	15.2	11.9	1.6	7.6	-	13	3.5	11.6	0.9	3.5	20.1	13.3	3.6
8	VEH 11-1	10.2	-	-	-	-	-	-	-	4.2	-	-	-	-	-	-	-	-	-	-	-
	CHECKS																				
9	BIO 9637(C)	12.4	-	-	-	-	7.4	-	-	3.9	-	-	-	-	2.7	-	-	-	-	-	-
10	Buland(C)	9.7	13.1	-	4.4	-	6.2	-	-	-	-	-	-	-	-	-	-	34.6	-	-	-
11	Seed Tech2324(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Bio 9681(C)	20.1	12.1	-	1.9	-	4.4	-	-	24.2	-	-	-	-	-	-	-	-	-	-	-

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE Bio 9681(C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	A 7501	-	-	-	-	61.4	-	6.5	26.4	-	14.5	37.4	22.5	3	48.6	35.4	27.2	31.1	21.1	26.5	12.5
2	Bio 237	-	2.9	1.6	-	63.7	3.1	10.2	54.3	-	24.2	27.2	21.4	28.6	44.1	8.4	25.6	35.6	83.8	57.7	21.1
3	Bisco X 5141	-	21.6	-	-	8.4	-	-	33.4	12.8	9.8	27.7	11.4	35.3	20.2	23	23.8	6.8	46.3	24.9	12.6
4	KMH-7148	-	8.7	24.7	7.3	69.1	3.2	5.2	91.7	15.5	36.3	-	28.1	56.1	4	53.2	27.2	32.6	42	36.9	25.9
5	NMH-1247	-	15.4	19.7	8.4	35.5	-	5.7	54.5	9.5	20.4	92.9	26.5	36.1	1.6	28.2	34.8	36.7	27.6	32.5	22.4
6	PRO-385	2.4	-	20.1	6.5	30.1	-	-	61.5	-	13.9	43.1	8.2	28.4	22.2	18.8	23.2	14.7	40.9	26.7	16
7	X35B349	-	1.2	17.6	1	26.1	-	-	71	-	13.8	70.4	-	45.3	54.9	24.2	33.7	14.5	128	66.5	22.3
8	VEH 11-1	-	-	-	-	10.8	-	0.3	24.2	-	-	-	-	-	40	2.2	3.7	10	34.9	21.4	-
	CHECKS																				
9	BIO 9637(C)	-	-	-	-	0.6	2.9	-	18.2	-	-	7.4	-	4.5	53.7	6.8	11.5	6.7	50.8	26.9	1.6
10	Buland(C)	-	0.9	14.9	2.5	12.1	1.7	-	31	-	-	-	-	5.3	36.1	3	5.7	49	-	19.8	4.7
11	Seed Tech2324(C)	-	-	21.3	-	33.9	-	24.1	48.4	-	12	58.4	24.2	28.6	49.7	11.3	32.5	10.7	89.9	47	18.1
12	Bio 9681(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No. 6 (Cont..)

		STAND AT HARVEST ('000/ha)																		
					ZN 2					ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	A 7501	60.9	85.2	65.6	70.6	67.8	66.3	67.9	63.9	66.5	35.9	66.2	41.5	55.0	58.3	51.4	63.4	42.8	53.1	60.0
2	Bio 237	60.6	87.5	66.7	71.6	66.9	66.3	69.0	79.4	70.4	51.9	66.0	56.7	56.7	51.4	56.5	66.7	77.5	72.1	65.9
3	Bisco X 5141	62.6	88.4	66.7	72.6	67.4	66.1	63.7	75.9	68.3	59.1	66.7	57.2	55.8	59.0	59.5	67.1	74.1	70.6	66.4
4	KMH-7148	61.7	86.1	66.3	71.4	66.2	66.3	67.3	77.3	69.3	33.9	66.0	54.4	58.5	58.0	54.2	65.3	62.3	63.8	63.5
5	NMH-1247	61.7	89.4	65.7	72.3	69.2	66.7	67.9	78.7	70.6	51.1	66.2	56.3	55.8	57.6	57.4	64.6	69.7	67.1	65.7
6	PRO-385	62.8	88.4	64.6	71.9	65.3	66.7	67.9	81.7	70.4	47.6	66.4	49.4	55.2	59.4	55.6	66.4	63.2	64.8	64.6
7	X35B349	61.1	88.0	65.4	71.5	65.5	66.1	68.5	76.2	69.1	57.2	66.7	55.0	52.8	59.4	58.2	62.7	63.4	63.1	64.8
8	VEH 11-1	61.5	60.6	60.2	60.8	66.4	66.1	64.3	63.9	65.2	34.1	66.7	36.3	54.4	46.5	47.6	62.0	59.0	60.5	57.3
	CHECKS																			
9	BIO 9637(C)	62.2	81.9	65.6	69.9	64.4	66.7	73.8	77.1	70.5	43.0	66.4	45.9	54.6	52.4	52.5	62.7	66.9	64.8	63.1
10	Buland(C)	62.6	87.5	66.3	72.1	67.6	66.3	70.2	79.2	70.8	49.1	66.2	61.7	56.9	50.7	56.9	66.4	67.4	66.9	65.6
11	Seed Tech2324(C)	62.0	84.3	65.7	70.7	66.9	66.7	67.3	76.2	69.2	55.0	66.7	55.4	57.9	60.1	59.0	65.3	63.9	64.6	65.2
12	Bio 9681(C)	62.8	81.5	66.3	70.2	68.3	66.7	69.0	75.0	69.8	33.7	66.7	45.7	56.3	50.0	50.5	64.6	62.3	63.4	62.1
	Loc. Mean	**61.9**	**84.1**	**65.4**	**70.5**	**66.8**	**66.4**	**68.1**	**75.4**	**69.2**	**46.0**	**66.4**	**51.3**	**55.8**	**55.2**	**54.9**	**64.8**	**64.4**	**64.6**	**63.7**
	C.D. (5%)	2.18	7.22	2.07	7.03	2.83	0.60	4.57	6.57	4.44	9.63	0.45	8.35	2.49	8.78	6.43	2.04	3.83	12.14	3.28
	C.V. (%)	2.08	5.07	1.87	5.90	2.50	0.53	3.97	5.15	4.46	12.37	0.40	9.61	2.63	9.39	9.18	1.86	3.52	8.54	6.89
	F (Prob)	0.45	0.00	0.00	0.13	0.08	0.24	0.02	0.00	0.27	0.00	0.01	0.00	0.01	0.04	0.01	0.00	0.00	0.24	0.00

		MOISTURE % AT HARVEST																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	A 7501	26.8	36.3	23.0	28.7	25.9	19.6	21.0	20.5	33.0	24.0	27.6	17.9	12.3	17.0	17.0	18.3	18.5	15.4	16.9	22.1
2	Bio 237	23.9	31.2	20.9	25.3	24.9	19.4	22.0	20.7	30.8	23.6	22.9	16.8	11.5	16.7	17.3	17.0	19.3	17.9	18.6	21.1
3	Bisco X 5141	25.4	31.9	25.0	27.4	23.9	19.0	22.0	21.1	31.6	23.5	22.8	16.9	10.5	15.7	17.2	16.6	18.6	17.2	17.9	21.2
4	KMH-7148	27.9	38.2	25.3	30.5	27.1	20.0	24.0	19.8	33.8	24.9	26.6	17.3	12.3	15.9	17.9	18.0	19.8	18.5	19.2	22.9
5	NMH-1247	27.1	29.4	21.8	26.1	23.9	19.3	20.0	20.1	33.2	23.3	25.5	16.4	10.9	15.5	17.9	17.2	19.6	17.1	18.4	21.2
6	PRO-385	25.9	37.6	24.9	29.5	26.2	19.1	21.0	20.0	33.9	24.0	26.8	20.1	13.5	17.9	17.7	19.2	19.5	17.6	18.5	22.8
7	X35B349	24.7	32.3	24.1	27.0	23.9	20.6	21.0	20.3	32.5	23.6	26.1	19.0	12.0	16.8	17.0	18.1	18.9	17.2	18.1	21.7
8	VEH 11-1	26.8	29.8	23.5	26.7	25.9	19.0	20.0	20.1	30.5	23.1	22.0	18.2	10.8	16.6	16.1	16.7	17.3	16.0	16.6	20.8
	CHECKS																				
9	BIO 9637(C)	25.1	34.4	22.8	27.4	23.9	18.9	20.0	21.9	30.0	22.9	23.8	15.6	11.3	16.4	16.1	16.6	18.4	15.8	17.1	20.9
10	Buland(C)	24.0	31.5	24.7	26.7	25.8	19.0	21.0	19.9	30.5	23.2	25.3	14.5	10.3	16.4	16.5	16.6	19.5	15.5	17.5	20.9
11	Seed Tech2324(C)	25.8	33.6	24.0	27.8	25.4	19.3	20.0	19.0	31.1	22.9	19.5	17.3	11.7	17.5	17.5	16.7	18.3	16.1	17.2	21.1
12	Bio 9681(C)	27.0	30.0	19.9	25.6	26.0	18.5	22.0	21.5	29.7	23.5	21.6	15.0	10.8	15.9	17.1	16.1	18.1	17.9	18.0	20.7
	Loc. Mean	**25.8**	**33.0**	**23.3**	**27.4**	**25.2**	**19.3**	**21.2**	**20.4**	**31.7**	**23.6**	**24.2**	**17.1**	**11.5**	**16.5**	**17.1**	**17.3**	**18.8**	**16.8**	**17.8**	**21.5**
	C.D. (5%)	0.57	2.04	2.78	3.10	0.79	0.53	-	2.79	1.15	1.32	4.11	0.78	1.20	0.37	0.63	1.59	0.68	0.68	1.55	0.93
	C.V. (%)	1.31	3.65	7.03	6.69	1.86	1.62	-	8.06	2.14	4.39	10.03	2.71	6.18	1.34	2.17	7.21	2.15	2.39	3.95	5.99
	F (Prob)	0.00	0.00	0.01	0.07	0.00	0.00	-	0.70	0.00	0.17	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.08	0.00

Table No. 6 (Cont..)

	GRAIN SHELLING %																			
				ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No. PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1 A 7501	76.4	81.2	79.2	78.9	80.3	80.0	80.0	85.9	76.8	80.6	82.0	81.2	84.9	81.5	79.0	81.7	80.9	81.5	81.2	80.7
2 Bio 237	77.1	81.2	78.7	79.0	80.9	81.8	85.0	88.5	76.9	82.6	85.2	79.7	87.0	82.0	80.0	82.8	81.0	77.5	79.3	81.5
3 Bisco X 5141	79.0	77.8	78.7	78.5	79.0	80.2	85.0	85.0	77.3	81.3	84.7	80.5	82.3	79.9	80.6	81.6	80.5	80.5	80.5	80.7
4 KMH-7148	76.1	75.6	81.7	77.8	81.6	82.4	81.0	83.6	78.5	81.4	80.5	80.3	82.3	81.7	78.4	80.6	77.9	79.5	78.7	80.0
5 NMH-1247	77.0	79.5	80.4	79.0	77.8	79.6	80.0	85.6	76.3	79.8	82.9	79.7	86.0	81.1	79.6	81.9	78.5	75.5	77.0	79.9
6 PRO-385	79.1	77.6	80.3	79.0	76.9	79.4	85.0	84.0	78.0	80.6	82.0	80.6	81.1	82.6	80.4	81.3	79.2	80.0	79.6	80.4
7 X35B349	76.1	80.0	78.7	78.2	77.3	80.1	82.0	85.8	76.8	80.4	81.2	79.4	83.0	80.8	80.4	80.9	78.0	80.0	79.0	79.9
8 VEH 11-1	78.2	76.3	84.8	79.8	75.7	79.7	85.0	84.6	77.2	80.4	81.3	79.9	86.1	82.1	80.2	81.9	81.8	75.5	78.7	80.5
CHECKS																				
9 BIO 9637(C)	74.4	80.3	80.0	78.2	77.1	81.7	83.0	84.6	76.1	80.5	85.9	79.9	82.9	82.4	79.7	82.1	79.6	82.5	81.1	80.7
10 Buland(C)	75.9	73.2	80.3	76.5	72.8	78.9	81.0	80.1	75.6	77.7	78.2	80.5	80.8	80.6	79.2	79.8	77.8	79.0	78.4	78.2
11 Seed Tech2324(C)	73.1	78.1	81.7	77.6	77.4	79.9	85.0	83.6	75.7	80.3	82.0	81.2	87.9	80.6	80.1	82.3	81.4	79.5	80.4	80.5
12 Bio 9681(C)	79.0	79.7	81.7	80.1	75.6	78.3	83.0	83.4	77.4	79.5	83.0	79.6	80.7	81.2	80.5	81.0	79.3	80.5	79.9	80.2
Loc. Mean	**76.8**	**78.4**	**80.5**	**78.5**	**77.7**	**80.1**	**82.9**	**84.5**	**76.8**	**80.4**	**82.4**	**80.2**	**83.7**	**81.4**	**79.8**	**81.5**	**79.6**	**79.3**	**79.5**	**80.3**
C.D. (5%)	0.72	-	2.91	3.72	2.17	1.19	-	2.73	0.77	1.98	1.43	0.63	1.23	1.95	1.41	1.93	1.91	3.77	4.25	1.21
C.V. (%)	0.55	-	2.14	2.80	1.65	0.88	-	1.91	0.59	1.93	1.03	0.47	0.87	1.41	1.05	1.85	1.42	2.81	2.43	2.09
F (Prob)	0.00	0.00	0.01	0.81	0.00	0.00	-	0.00	0.00	0.01	0.00	0.00	0.00	0.19	0.09	0.19	0.00	0.02	0.63	0.00

	DAYS TO 50% POLLEN SHED																			
				ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No. PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1 A 7501	139.7	135.7	122.0	132.4	123.0	73.7	121.0	120.0	108.7	109.3	85.0	61.0	74.0	69.0	54.0	68.6	88.3	79.7	84.0	97.0
2 Bio 237	140.7	136.7	118.7	132.0	125.0	72.7	122.7	115.7	109.0	109.0	83.0	60.0	72.0	68.0	53.7	67.3	89.0	78.7	83.8	96.4
3 Bisco X 5141	135.0	136.0	119.3	130.1	124.3	72.7	122.7	115.0	107.7	108.5	82.0	57.3	75.0	69.0	51.7	67.0	76.7	78.7	77.7	94.9
4 KMH-7148	141.7	137.3	118.7	132.6	123.3	72.7	123.0	117.3	109.0	109.1	86.0	57.3	75.0	69.3	55.3	68.6	89.0	84.7	86.8	97.3
5 NMH-1247	139.0	141.7	120.7	133.8	128.0	72.7	123.3	116.7	111.0	110.3	83.0	58.0	77.0	69.7	53.7	68.3	88.3	80.7	84.5	97.6
6 PRO-385	138.3	143.3	118.7	133.4	127.3	72.3	122.7	117.7	111.0	110.2	85.0	60.0	75.0	70.0	53.7	68.7	87.3	79.7	83.5	97.5
7 X35B349	141.3	142.3	120.0	134.6	132.0	73.0	124.0	117.7	114.3	112.2	85.0	58.7	75.0	70.0	55.7	68.9	87.3	83.7	85.5	98.7
8 VEH 11-1	135.0	138.7	120.7	131.4	123.3	73.0	121.3	116.7	109.0	108.7	82.7	60.0	73.0	68.0	54.0	67.5	85.0	81.3	83.2	96.1
CHECKS																				
9 BIO 9637(C)	135.7	138.7	119.3	131.2	122.3	70.3	122.7	114.7	109.7	107.9	82.7	56.0	75.0	67.7	54.3	67.1	79.3	78.7	79.0	95.1
10 Buland(C)	143.0	143.7	123.7	136.8	126.0	75.7	120.7	120.3	113.7	111.3	86.3	63.0	80.0	72.3	56.7	71.7	94.3	84.7	89.5	100.3
11 Seed Tech2324(C)	134.7	142.3	118.7	131.9	124.7	73.3	121.3	116.0	109.0	108.9	84.0	58.7	73.0	69.0	57.0	68.3	84.0	75.0	79.5	96.0
12 Bio 9681(C)	134.7	136.0	118.3	129.7	120.3	70.0	121.3	116.3	106.0	106.8	79.3	54.0	73.0	68.0	52.3	65.3	77.3	75.0	76.2	93.5
Loc. Mean	**138.2**	**139.4**	**119.9**	**132.5**	**125.0**	**72.7**	**122.2**	**117.0**	**109.8**	**109.3**	**83.7**	**58.7**	**74.8**	**69.2**	**54.3**	**68.1**	**85.5**	**80.0**	**82.8**	**96.7**
C.D. (5%)	0.97	2.74	1.83	3.85	3.22	1.24	2.04	2.50	2.37	2.07	2.66	0.78	-	1.99	2.36	1.68	1.06	0.92	6.12	1.39
C.V. (%)	0.42	1.16	0.90	1.72	1.52	1.01	0.98	1.26	1.28	1.48	1.88	0.79	-	1.70	2.57	1.93	0.73	0.68	3.36	1.99
F (Prob)	0.00	0.00	0.00	0.05	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	-	0.01	0.00	0.00	0.00	0.00	0.02	0.00

Table No. 6 (Cont..)

		DAYS TO 50% SILKING																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	A 7501	141.7	138.7	125.0	135.1	125.0	76.0	123.3	124.7	113.7	112.5	83.7	63.7	75.0	72.3	57.7	70.5	92.3	81.7	87.0	99.6
2	Bio 237	142.7	142.7	121.3	135.6	127.0	75.3	125.0	119.3	113.0	111.9	81.7	62.3	73.0	71.0	57.3	69.1	92.3	81.7	87.0	99.0
3	Bisco X 5141	137.7	137.0	122.3	132.3	126.3	75.3	124.7	118.7	111.7	111.3	80.7	59.3	76.0	72.3	55.3	68.7	79.7	79.7	79.7	97.1
4	KMH-7148	143.7	139.7	121.3	134.9	125.3	74.7	125.7	121.3	113.3	112.1	82.3	59.7	76.0	74.3	59.7	70.4	92.7	86.7	89.7	99.8
5	NMH-1247	141.0	143.3	123.0	135.8	130.0	75.7	126.0	121.7	114.0	113.5	82.0	61.0	78.0	73.0	57.7	70.3	91.7	82.7	87.2	100.0
6	PRO-385	140.3	145.7	121.7	135.9	129.3	74.7	125.0	122.3	115.7	113.4	82.7	62.0	76.0	73.0	57.0	70.1	90.7	81.7	86.2	99.8
7	X35B349	143.3	144.3	122.7	136.8	134.0	75.7	127.0	122.0	118.0	115.3	84.7	61.7	76.0	72.3	59.7	70.9	90.7	84.7	87.7	101.1
8	VEH 11-1	137.7	140.0	123.7	133.8	125.3	75.7	124.3	121.3	113.3	112.0	82.7	62.3	74.0	70.3	57.0	69.3	88.7	83.3	86.0	98.6
	CHECKS																				
9	BIO 9637(C)	137.7	140.7	122.0	133.4	124.3	73.0	125.0	118.7	114.3	111.1	81.0	58.0	76.0	70.7	58.0	68.7	82.7	80.7	81.7	97.5
10	Buland(C)	145.0	146.7	126.7	139.4	128.0	77.7	123.3	124.3	117.7	114.2	86.0	65.0	81.0	74.3	59.3	73.1	98.0	86.7	92.3	102.6
11	Seed Tech2324(C)	136.7	143.3	121.7	133.9	126.7	76.0	123.7	121.0	113.0	112.1	83.7	61.0	74.0	71.7	61.0	70.3	87.0	76.7	81.8	98.5
12	Bio 9681(C)	136.7	137.3	121.3	131.8	122.3	71.7	124.0	120.7	110.3	109.8	79.7	56.0	74.0	70.0	55.3	67.0	80.3	76.0	78.2	95.7
	Loc. Mean	**140.3**	**141.6**	**122.7**	**134.9**	**127.0**	**75.1**	**124.8**	**121.3**	**114.0**	**112.4**	**82.6**	**61.0**	**75.8**	**72.1**	**57.9**	**69.9**	**88.9**	**81.8**	**85.4**	**99.1**
	C.D. (5%)	0.97	4.54	2.15	3.59	3.22	1.61	2.33	2.86	2.80	2.07	2.12	0.71	-	2.24	2.68	1.76	1.32	1.09	5.76	1.41
	C.V. (%)	0.41	1.89	1.04	1.57	1.50	1.27	1.11	1.39	1.45	1.45	1.52	0.68	-	1.83	2.73	1.98	0.87	0.79	3.07	1.97
	F (Prob)	0.00	0.00	0.00	0.02	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	-	0.01	0.01	0.00	0.00	0.00	0.01	0.00

		DAYS TO 75% DRY HUSK																		
				ZN 2					ZN 3						ZN 4			ZN 5	OV'L	
S.No.	PEDIGREE	KARN	LUDH	Mean	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean	
1	A 7501	180.7	179.0	179.8	121.0	154.7	164.0	149.3	147.3	121.3	98.0	109.0	117.0	95.0	108.1	125.3	128.0	126.7	134.0	
2	Bio 237	173.0	178.3	175.7	118.3	155.7	164.3	148.7	146.8	121.0	97.3	110.0	114.0	93.3	107.1	124.7	129.0	126.8	132.9	
3	Bisco X 5141	169.0	177.0	173.0	116.7	155.0	165.3	145.0	145.5	119.7	93.3	110.0	114.0	86.3	104.7	110.7	124.0	117.3	129.7	
4	KMH-7148	179.7	180.0	179.8	119.0	155.7	164.3	152.0	147.8	119.0	93.7	108.0	117.0	97.7	107.1	125.7	115.0	120.3	132.8	
5	NMH-1247	175.0	177.0	176.0	119.3	156.3	164.7	146.7	146.8	122.0	96.0	108.0	114.0	93.3	106.7	125.3	124.0	124.7	132.4	
6	PRO-385	173.3	177.7	175.5	118.0	156.0	165.0	147.3	146.6	121.7	97.0	109.0	114.0	88.0	105.9	124.3	124.0	124.2	131.9	
7	X35B349	178.0	177.7	177.8	120.0	157.3	165.0	150.0	148.1	123.0	96.3	108.0	114.0	93.3	106.9	124.7	124.0	124.3	133.2	
8	VEH 11-1	176.0	177.0	176.5	118.0	155.0	165.0	147.7	146.4	120.3	97.0	108.0	112.0	87.7	105.0	119.7	115.0	117.3	130.6	
	CHECKS																			
9	BIO 9637(C)	179.0	177.7	178.3	118.3	156.0	166.3	150.0	147.7	120.7	92.0	108.0	114.0	93.3	105.6	113.3	124.0	118.7	131.7	
10	Buland(C)	178.0	178.7	178.3	119.0	153.7	165.0	149.0	146.7	123.0	100.0	109.0	114.0	93.7	107.9	130.7	115.0	122.8	133.0	
11	Seed Tech2324(C)	174.7	177.7	176.2	119.0	155.0	162.7	146.7	145.8	122.0	95.7	110.0	114.0	92.0	106.7	114.7	124.0	119.3	131.4	
12	Bio 9681(C)	171.7	177.0	174.3	118.3	155.3	165.0	145.7	146.1	119.7	88.0	109.0	113.0	85.7	103.1	111.0	124.0	117.5	129.5	
	Loc. Mean	**175.7**	**177.9**	**176.8**	**118.8**	**155.5**	**164.7**	**148.2**	**146.8**	**121.1**	**95.4**	**108.8**	**114.3**	**91.6**	**106.2**	**120.8**	**122.5**	**121.7**	**131.9**	
	C.D. (5%)	0.97	2.30	4.68	2.00	2.40	3.88	3.68	1.75	1.56	0.76	-	1.17	1.95	2.72	3.72	-	14.26	2.15	
	C.V. (%)	0.32	0.76	1.20	1.00	0.91	1.39	1.47	0.83	0.76	0.47	-	0.60	1.26	2.01	1.82	-	5.33	2.10	
	F (Prob)	0.00	0.22	0.14	0.03	0.30	0.92	0.03	0.12	0.00	0.00	-	0.00	0.00	0.02	0.00	-	0.77	0.00	

Table No. 6 (Cont..)

	PLANT HEIGHT(cm)																				
				ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	A 7501	126.7	148.3	214.7	163.2	205.0	207.5	149.7	177.3	180.0	183.9	173.5	175.4	193.3	207.0	189.9	187.8	257.0	168.0	212.5	184.9
2	Bio 237	185.0	193.3	257.3	211.9	262.7	236.8	163.3	204.8	215.0	216.5	196.0	206.7	226.7	219.7	231.3	216.1	255.0	207.0	231.0	217.4
3	Bisco X 5141	156.7	171.7	238.3	188.9	235.3	234.6	153.0	189.4	203.3	203.1	182.0	202.2	218.3	213.3	226.3	208.4	275.3	212.7	244.0	207.5
4	KMH-7148	166.7	171.7	266.3	201.6	249.3	237.5	168.7	201.1	191.7	209.7	196.5	206.1	226.7	222.3	232.1	216.7	267.0	206.3	236.7	214.0
5	NMH-1247	196.7	173.3	248.7	206.2	235.0	208.9	155.7	201.3	201.7	200.5	200.5	188.4	216.7	213.7	211.4	206.1	240.3	213.3	226.8	207.0
6	PRO-385	168.3	168.3	235.7	190.8	216.3	225.0	161.3	199.4	188.3	198.1	183.5	190.8	200.0	210.0	209.9	198.9	230.3	196.0	213.2	198.9
7	X35B349	195.0	166.7	230.3	197.3	244.0	208.7	171.0	190.8	200.0	202.9	183.5	201.9	223.3	215.7	215.1	207.9	230.3	227.7	229.0	206.9
8	VEH 11-1	165.0	150.0	216.3	177.1	220.0	197.6	151.0	183.4	173.3	185.1	176.5	190.0	196.7	206.0	213.0	196.4	260.3	209.7	235.0	193.9
	CHECKS																				
9	BIO 9637(C)	178.3	178.3	261.7	206.1	246.3	233.3	178.7	191.7	208.3	211.7	188.0	201.1	223.3	224.3	217.7	210.9	292.0	215.3	253.7	215.9
10	Buland(C)	175.0	196.7	256.7	209.4	221.3	252.7	172.7	194.4	210.0	210.2	193.0	201.2	220.0	215.7	208.2	207.6	270.3	214.0	242.2	213.5
11	Seed Tech2324(C)	161.7	150.0	231.0	180.9	206.0	201.5	160.7	184.3	183.3	187.2	172.0	202.1	205.0	209.7	189.0	195.6	213.7	206.0	209.8	191.7
12	Bio 9681(C)	180.0	165.0	239.7	194.9	229.3	224.9	157.7	190.0	201.7	200.7	169.0	190.1	223.3	207.3	210.5	200.1	246.7	201.3	224.0	202.4
	Loc. Mean	**171.3**	**169.4**	**241.4**	**194.0**	**230.9**	**222.4**	**161.9**	**192.3**	**196.4**	**200.8**	**184.5**	**196.3**	**214.4**	**213.7**	**212.9**	**204.4**	**253.2**	**206.4**	**229.8**	**204.5**
	C.D. (5%)	4.48	23.05	9.60	18.57	24.28	36.82	21.02	21.61	22.13	12.12	11.57	9.05	21.23	10.67	20.52	8.77	6.15	24.78	39.96	7.41
	C.V. (%)	1.55	8.03	2.35	5.65	6.21	9.78	7.67	6.63	6.65	4.74	3.70	2.72	5.85	2.95	5.69	3.37	1.43	7.09	7.90	5.02
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.10	0.15	0.31	0.01	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.02	0.43	0.00

	EAR HEIGHT(cm)																				
				ZN 2						ZN 3							ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	A 7501	65.0	61.7	94.0	73.6	106.3	104.2	69.7	95.3	76.7	90.4	86.5	85.6	106.7	106.0	95.1	96.0	116.7	72.0	94.3	89.4
2	Bio 237	93.3	105.0	113.0	103.8	139.7	111.0	82.0	101.7	98.3	106.5	96.0	103.6	113.3	109.7	115.5	107.6	112.3	89.3	100.8	105.6
3	Bisco X 5141	73.3	85.0	110.0	89.4	90.3	117.3	67.0	93.7	81.7	90.0	84.5	102.3	120.0	144.0	107.3	111.6	126.7	105.3	116.0	100.6
4	KMH-7148	75.0	70.0	118.0	87.7	106.3	101.0	68.7	86.5	66.7	85.8	89.5	101.8	113.3	110.3	109.7	104.9	115.3	99.0	107.2	95.4
5	NMH-1247	110.0	70.0	120.7	100.2	127.7	116.5	75.0	111.1	105.0	107.0	113.5	99.9	130.0	108.7	109.7	112.4	94.0	116.3	105.2	107.2
6	PRO-385	75.0	93.3	101.0	89.8	112.3	112.0	80.0	103.7	88.3	99.3	87.5	93.8	101.7	101.7	112.6	99.4	107.7	103.0	105.3	98.2
7	X35B349	98.3	63.3	94.0	85.2	117.7	97.1	71.3	94.3	86.7	93.4	79.5	101.3	110.0	107.3	101.8	100.0	103.7	116.3	110.0	96.2
8	VEH 11-1	83.3	60.0	90.7	78.0	111.3	95.8	65.7	87.7	71.7	86.4	99.0	95.4	100.0	100.0	103.3	99.5	109.3	104.0	106.7	91.8
	CHECKS																				
9	BIO 9637(C)	98.3	98.3	126.7	107.8	121.7	112.9	100.0	103.1	83.3	104.2	100.5	101.4	116.7	113.0	104.4	107.2	140.7	111.3	126.0	108.8
10	Buland(C)	100.0	108.3	134.7	114.3	127.3	146.5	79.0	101.4	108.3	112.5	108.0	109.1	136.7	113.7	127.1	118.9	118.7	117.3	118.0	115.7
11	Seed Tech2324(C)	83.3	81.7	118.0	94.3	129.7	102.5	78.0	104.1	105.0	103.9	88.5	108.0	123.3	107.7	101.6	105.8	102.7	143.0	122.8	105.1
12	Bio 9681(C)	85.0	60.0	96.0	80.3	103.3	97.6	69.0	95.3	71.7	87.4	75.5	94.4	120.0	102.7	97.8	98.1	109.3	110.7	110.0	92.6
	Loc. Mean	**86.7**	**79.7**	**109.7**	**92.0**	**116.1**	**109.5**	**75.4**	**98.2**	**86.9**	**97.2**	**92.4**	**99.7**	**116.0**	**110.4**	**107.2**	**105.1**	**113.1**	**107.3**	**110.2**	**100.6**
	C.D. (5%)	4.89	21.84	7.00	18.90	18.91	17.66	12.57	13.54	14.92	10.87	12.36	8.36	23.21	32.73	16.20	10.25	6.79	28.76	36.49	7.27
	C.V. (%)	3.33	16.18	3.77	12.13	9.61	9.52	9.84	8.15	10.13	8.77	7.90	4.95	11.82	17.51	8.93	7.65	3.55	15.83	15.04	10.02
	F (Prob)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.10	0.44	0.04	0.00	0.00	0.01	0.79	0.00

Table No. 7 **Performance of QPM experimental hybrids at Karnal, Ludhiana, Pantnagar, Bahraich, Bhubaneshwar, Dholi, Ranchi, Varanasi, Arbhavi, Coimbatore, Kolhapur, Mandya, Vagarai, Banswara, Godhra in trial no. QPM1 &2 during rabi 2013-14.**

	GRAIN YIELD (kg/ha) AT 15% MOISTURE																																							
Sl							ZN 2											ZN 3												ZN 4								ZN 5		OV'L	
No	PEDIGREE	KARN	R	LUDH	R	PANT	R	MEAN	R	BAHR	R	BHUB	R	DHOL	R	RANC	R	VARA	R	MEAN	R	ARBH	R	COIM	R	KOLH	R	MAND	R	VAGA	R	MEAN	R	BANS	R	GODH	R	MEAN	R	MEAN	R
1	VEHQ-11-1	11582	2	11244	3	11036	3	11287	3	9217	3	5921	4	8607	1	10300	3	6233	5	8056	3	5178	2	7383	2	9533	2	7278	3	6904	2	7255	2	10230	4	13161	3	11696	4	8920	2
2	MMHQPM-6-12-13(Dholi)	11219	3	11683	1	13198	1	12033	1	11897	1	6423	2	7572	2	11364	2	7699	2	8991	1	5766	1	8125	1	10117	1	8232	2	7901	1	8028	1	9799	5	14682	1	12240	1	9712	1
3	BIO9681(F)	10677	4	10844	4	12438	2	11320	2	9872	2	6302	3	6906	4	11386	1	7525	3	8398	2	5117	3	7143	3	8425	4	6508	4	6053	3	6649	3	10802	3	13432	2	12117	2	8895	3
	CHECKS																																								
4	HQPM 1(C)	11698	1	11506	2	10478	4	11227	4	6955	4	6955	1	6698	5	10210	4	7813	1	7726	4	3819	5	5415	5	8551	3	6200	5	5851	4	5967	5	11831	1	11937	5	11884	3	8395	4
5	HQPM7 (C)	10013	5	10053	5	8193	5	9420	5	6702	5	5573	5	7286	3	8996	5	7029	4	7117	5	4748	4	6280	4	7548	5	8325	1	4925	5	6365	4	10909	2	12027	4	11468	5	7907	5
	Location Mean	**11038**		**11066**		**11068**		**11057**		**8929**		**6235**		**7414**		**10451**		**7260**		**8058**		**4926**		**6869**		**8835**		**7309**		**6327**		**6853**		**10714**		**13048**		**11881**		**8766**	
	C.D. (5%)	780		2803		2448		2010		441		426		828		1605		467		754		1338		569		2219		716		883		1145		725		563		644		1121	
	C.V. (%)	4.54		13.12		14.21		-		3.18		4.39		7.17		9.87		4.14		-		17.45		5.32		16.14		6.29		8.97		-		4.35		2.77		-		-	
	F (Prob)	0.002		0.617		0.004				0		0		0.002		0.025		0				0.061		0		0.13		0		0				0		0					
	Plot Size	12		7.2		12		-		9.6		9.6		12		5.6		9.6		-		12		9.6		12		11.2		9.6		-		9.6		9.6		-		-	
	AGRONOMY DATA																																								
	Sowing Date	23-11		22-11		17-12		-		21-11		29-11		28-11		6-12		25-11		-		11-12		7-12		23-12		27-11		28-11		-		26-11		24-11		-		-	
	Harvest Date	28-05		28-05		11-06		-		10-05		25-04		24-05		5-06		29-04		-		18-04		3-04		30-05		29-04		26-02		-		20-04		23-04		-		-	
	Irrigation Nos	8		12		6		-		6		10		5		8		3		-		8		10		-		12		10		-		6		14		-		-	
	Ferilizer Applied N	150		70		120		-		150		120		150		140		150		-		150		150		120		150		150		-		150		120		-		-	
	Ferilizer Applied P	60		24		60		-		75		60		70		60		75		-		75		75		60		75		75		-		80		50		-		-	
	Ferilizer Applied K	60		12		40		-		60		60		60		40		60		-		38		75		40		40		75		-		-		-		-		-	

Table No. 7 (Cont..)

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HQPM 1(C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	VEHQ-11-1	-	-	5.3	0.5	32.5	-	28.5	0.9	-	4.3	35.6	36.4	11.5	17.4	18	21.6	-	10.2	-	6.3
2	MMHQPM-6-12-13(Dholi)	-	1.5	26	7.2	71	-	13	11.3	-	16.4	51	50.1	18.3	32.8	35	34.5	-	23	3	15.7
3	BIO9681(F)	-	-	18.7	0.8	41.9	-	3.1	11.5	-	8.7	34	31.9	-	5	3.4	11.4	-	12.5	2	6
	CHECKS																				
4	HQPM 1(C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	HQPM7 (C)	-	-	-	-	-	-	8.8	-	-	-	24.3	16	-	34.3	-	6.7	-	0.7	-	-

Sl No	PEDIGREE	GRAIN YIELD % SUPERIORITY OVER THE HQPM7 (C)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
		KARN	LUDH	PANT	MEAN	BAHR	BHUB	DHOL	RANC	VARA	MEAN	ARBH	COIM	KOLH	MAND	VAGA	MEAN	BANS	GODH	MEAN	MEAN
1	VEHQ-11-1	15.7	11.8	34.7	19.8	37.5	6.2	18.1	14.5	-	13.2	9	17.6	26.3	-	40.2	14	-	9.4	2	12.8
2	MMHQPM-6-12-13(Dholi)	12	16.2	61.1	27.7	77.5	15.3	3.9	26.3	9.5	26.3	21.4	29.4	34	-	60.4	26.1	-	22.1	6.7	22.8
3	BIO9681(F)	6.6	7.9	51.8	20.2	47.3	13.1	-	26.6	7	18	7.8	13.8	11.6	-	22.9	4.5	-	11.7	5.7	12.5
	CHECKS																				
4	HQPM 1(C)	16.8	14.4	27.9	19.2	3.8	24.8	-	13.5	11.1	8.6	-	-	13.3	-	18.8	-	8.4	-	3.6	6.2
5	HQPM7 (C)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table No. 7 (Cont..)

		STAND AT HARVEST ('000/ha)																		
					ZN 2					ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	VEHQ-11-1	63.1	88.4	64.0	71.8	64.6	63.5	69.6	77.1	68.7	41.7	66.7	59.2	60.9	47.7	55.2	57.8	63.8	60.8	63.4
2	MMHQPM-6-12-13(Dholi)	62.3	82.4	66.0	70.2	66.7	63.5	67.4	74.0	67.9	44.6	66.7	62.5	57.6	62.2	58.7	59.9	74.5	67.2	65.0
3	BIO9681(F)	62.7	79.2	66.7	69.5	66.4	64.2	70.1	71.1	67.9	39.6	66.1	44.8	58.5	44.0	50.6	59.9	57.3	58.6	60.7
	CHECKS																			
4	HQPM 1(C)	64.0	86.1	65.8	72.0	67.7	65.4	72.3	74.7	70.0	36.7	65.6	51.7	49.1	47.4	50.1	60.7	63.5	62.1	62.2
5	HQPM7 (C)	61.3	53.7	53.5	56.2	67.2	62.1	61.6	59.4	62.6	31.0	66.7	40.8	56.7	45.6	48.2	59.9	57.3	58.6	55.5
	Loc. Mean	**62.7**	**78.0**	**63.2**	**67.9**	**66.5**	**63.8**	**68.2**	**71.3**	**67.4**	**38.7**	**66.4**	**51.8**	**56.6**	**49.4**	**52.6**	**59.6**	**63.3**	**61.5**	**61.4**
	C.D. (5%)	0.70	16.44	3.82	12.92	3.17	2.79	5.47	6.95	5.30	6.66	0.41	6.64	4.55	10.74	6.45	1.59	10.47	14.02	3.91
	C.V. (%)	0.73	11.20	3.93	10.10	3.09	2.84	5.21	6.33	5.10	11.17	0.41	8.33	5.22	14.12	9.15	1.73	10.74	8.21	8.39
	F (Prob)	0.00	0.01	0.00	0.10	0.31	0.20	0.01	0.00	0.08	0.01	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.51	0.00

		MOISTURE % AT HARVEST																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	VEHQ-11-1	26.8	35.0	26.5	29.4	22.2	17.8	19.0	20.9	34.0	22.8	28.9	16.7	8.4	16.8	19.0	17.9	17.1	16.6	16.9	21.7
2	MMHQPM-6-12-13(Dholi)	26.3	28.3	22.6	25.7	20.8	17.2	19.4	19.5	30.0	21.4	22.9	15.2	8.2	14.5	17.3	15.6	17.6	15.1	16.4	19.7
3	BIO9681(F)	27.3	29.9	21.6	26.3	24.1	17.5	19.4	20.9	30.9	22.5	21.9	14.8	6.9	15.5	17.2	15.2	18.2	17.0	17.6	20.2
	CHECKS																				
4	HQPM 1(C)	24.8	36.0	23.5	28.1	25.0	17.9	20.4	19.7	34.4	23.5	26.3	13.7	8.2	15.5	17.3	16.2	18.7	17.3	18.0	21.2
5	HQPM7 (C)	27.7	36.0	24.0	29.2	21.0	17.6	19.6	20.9	33.1	22.4	23.3	17.3	8.0	16.4	16.7	16.3	18.3	16.6	17.5	21.1
	Loc. Mean	**26.5**	**33.0**	**23.6**	**27.7**	**22.6**	**17.6**	**19.5**	**20.4**	**32.5**	**22.5**	**24.7**	**15.5**	**7.9**	**15.7**	**17.5**	**16.3**	**18.0**	**16.5**	**17.2**	**20.8**
	C.D. (5%)	0.15	-	0.93	4.10	0.63	0.28	0.43	2.86	0.57	1.54	2.98	0.61	0.97	0.24	1.05	1.77	0.23	0.78	1.43	1.06
	C.V. (%)	0.37	-	2.55	7.85	1.80	1.02	1.41	9.11	1.14	5.10	7.85	2.53	7.91	0.97	3.90	8.14	0.84	3.08	2.99	6.96
	F (Prob)	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.67	0.00	0.13	0.00	0.00	0.04	0.00	0.00	0.05	0.00	0.00	0.15	0.00

Table No. 7 (Cont..)

		GRAIN SHELLING %																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	VEHQ-11-1	79.0	79.4	81.7	80.0	78.1	80.8	82.5	83.0	78.0	80.5	81.1	79.1	84.3	81.0	77.5	80.6	79.4	82.5	80.9	80.5
2	MMHQPM-6-12-13(Dholi)	76.8	71.4	81.7	76.6	80.4	80.4	79.5	82.3	76.0	79.7	80.3	81.5	84.0	82.0	79.4	81.4	78.8	79.5	79.2	79.6
3	BIO9681(F)	78.4	80.0	81.7	80.0	79.6	82.9	78.5	84.2	77.1	80.5	84.6	78.6	74.5	82.8	79.9	80.1	81.2	84.3	82.7	80.5
	CHECKS																				
4	HQPM 1(C)	77.3	80.9	81.0	79.7	75.9	83.3	80.5	83.5	78.1	80.2	83.2	81.6	81.8	74.7	77.0	79.6	79.7	82.4	81.0	80.0
5	HQPM7 (C)	77.9	82.4	79.6	80.0	77.4	79.1	80.5	81.4	77.8	79.2	80.0	80.7	80.6	82.2	78.5	80.4	79.7	81.9	80.8	80.0
	Loc. Mean	**77.9**	**78.8**	**81.1**	**79.3**	**78.3**	**81.3**	**80.3**	**82.9**	**77.4**	**80.0**	**81.8**	**80.3**	**81.0**	**80.5**	**78.4**	**80.4**	**79.7**	**82.1**	**80.9**	**80.1**
	C.D. (5%)	0.54	-	1.90	4.88	0.99	0.75	0.56	1.09	0.62	2.01	0.90	0.47	0.89	2.86	3.40	3.78	1.04	2.04	1.97	1.59
	C.V. (%)	0.45	-	1.52	3.27	0.82	0.60	0.45	0.85	0.52	1.88	0.71	0.38	0.71	2.30	2.81	3.50	0.85	1.61	0.88	2.71
	F (Prob)	0.00	-	0.15	0.47	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.35	0.89	0.00	0.00	0.05	0.75

		DAYS TO 50% POLLEN SHED																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	VEHQ-11-1	135.3	139.0	123.5	132.6	126.0	71.8	120.8	118.5	113.8	110.2	82.0	56.0	73.0	76.5	54.3	68.4	81.0	82.0	81.5	96.9
2	MMHQPM-6-12-13(Dholi)	129.5	135.0	119.0	127.8	123.0	68.5	120.3	117.5	108.5	107.6	81.3	56.5	75.0	71.8	52.8	67.5	78.3	79.0	78.6	94.4
3	BIO9681(F)	133.0	134.0	117.8	128.3	121.5	66.3	122.3	116.8	110.8	107.5	77.5	54.5	75.0	69.0	51.3	65.5	82.0	77.0	79.5	93.9
	CHECKS																				
4	HQPM 1(C)	134.3	141.0	121.0	132.1	127.0	69.5	123.8	118.0	113.0	110.3	84.3	57.0	77.0	73.3	52.5	68.8	86.3	69.0	77.6	96.5
5	HQPM7 (C)	131.8	140.7	122.3	131.6	125.0	72.0	121.5	119.5	113.5	110.3	80.5	56.8	77.0	70.3	55.0	67.9	86.8	79.0	82.9	96.8
	Loc. Mean	**132.8**	**137.9**	**120.7**	**130.5**	**124.5**	**69.6**	**121.7**	**118.1**	**111.9**	**109.2**	**81.1**	**56.2**	**75.4**	**72.2**	**53.2**	**67.6**	**82.9**	**77.2**	**80.0**	**95.7**
	C.D. (5%)	0.83	3.93	2.10	3.24	1.49	0.92	2.57	0.97	1.52	1.86	2.84	0.66	-	2.77	1.63	2.33	0.90	3.18	14.71	1.60
	C.V. (%)	0.41	1.51	1.13	1.32	0.78	0.86	1.37	0.54	0.88	1.27	2.28	0.76	-	2.49	2.00	2.57	0.71	2.68	6.62	2.29
	F (Prob)	0.00	0.01	0.00	0.02	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.06	0.00	0.00	0.85	0.00

Table No. 7 (Cont..)

		DAYS TO 50% SILKING																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	VEHQ-11-1	137.3	142.3	126.5	135.4	128.0	74.8	123.0	122.8	117.8	113.3	84.5	58.0	74.0	78.3	58.5	70.7	84.3	84.0	84.1	99.6
2	MMHQPM-6-12-13(Dholi)	131.5	136.7	122.0	130.1	125.0	71.3	122.3	122.3	113.5	110.9	84.5	58.5	76.0	74.0	56.0	69.8	83.0	81.0	82.0	97.2
3	BIO9681(F)	135.3	135.0	120.8	130.3	123.5	68.5	124.5	120.8	114.3	110.3	79.3	56.5	76.0	72.8	54.0	67.7	85.3	79.3	82.3	96.4
	CHECKS																				
4	HQPM 1(C)	136.3	141.3	124.0	133.9	129.0	72.5	125.8	122.3	117.3	113.4	85.5	59.0	78.0	76.0	56.3	71.0	89.5	71.0	80.3	98.9
5	HQPM7 (C)	133.8	141.0	125.3	133.3	127.0	74.5	123.5	123.5	117.5	113.2	82.0	58.8	78.0	71.3	58.0	69.6	90.0	81.0	85.5	99.0
	Loc. Mean	**134.8**	**139.3**	**123.7**	**132.6**	**126.5**	**72.3**	**123.8**	**122.3**	**116.1**	**112.2**	**83.2**	**58.2**	**76.4**	**74.5**	**56.6**	**69.7**	**86.4**	**79.3**	**82.8**	**98.2**
	C.D. (5%)	0.69	4.05	2.10	2.96	1.49	0.92	2.80	1.11	1.13	1.83	1.91	0.66	-	3.55	1.84	2.40	3.12	2.60	14.15	1.59
	C.V. (%)	0.33	1.55	1.10	1.19	0.76	0.83	1.47	0.59	0.63	1.22	1.49	0.74	-	3.09	2.12	2.57	2.35	2.13	6.15	2.22
	F (Prob)	0.00	0.01	0.00	0.01	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	-	0.01	0.00	0.08	0.00	0.00	0.85	0.00

		DAYS TO 75% DRY HUSK																			
				ZN 2						ZN 3						ZN 4			ZN 5	OV'L	
S.No.	PEDIGREE	KARN	LUDH	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean	
1	VEHQ-11-1	180.3	184.3	182.3	162.0	117.0	154.5	164.5	148.8	149.4	119.8	93.3	112.8	119.0	99.5	108.9	117.0	129.0	123.0	135.8	
2	MMHQPM-6-12-13(Dholi)	180.3	183.7	182.0	158.0	105.5	154.5	166.0	147.5	146.3	120.8	93.8	113.3	115.0	90.8	106.7	110.5	129.0	119.8	133.5	
3	BIO9681(F)	176.5	179.0	177.8	155.0	104.5	156.3	164.8	148.0	145.7	119.3	92.0	113.5	114.0	91.0	106.0	116.0	128.5	122.3	132.7	
	CHECKS																				
4	HQPM 1(C)	180.3	185.7	183.0	160.0	108.5	157.0	165.3	149.0	148.0	119.0	94.3	112.5	118.3	101.3	109.1	116.5	126.0	121.3	135.2	
5	HQPM7 (C)	171.3	184.3	177.8	163.0	118.5	155.3	164.8	151.5	150.6	119.3	93.8	112.3	118.0	98.0	108.3	123.3	128.5	125.9	135.8	
	Loc. Mean	**177.7**	**183.4**	**180.6**	**159.6**	**110.8**	**155.5**	**165.1**	**149.0**	**148.0**	**119.6**	**93.4**	**112.9**	**116.9**	**96.1**	**107.8**	**116.7**	**128.2**	**122.4**	**134.6**	
	C.D. (5%)	0.95	5.13	8.37	1.95	1.91	2.17	1.53	1.39	4.02	1.65	0.72	1.13	3.04	1.45	3.08	1.48	0.63	9.48	2.13	
	C.V. (%)	0.35	1.49	1.67	0.79	1.12	0.90	0.60	0.61	2.03	0.90	0.50	0.65	1.69	0.98	2.13	0.82	0.32	2.79	2.09	
	F (Prob)	0.00	0.11	0.36	0.00	0.00	0.10	0.28	0.00	0.10	0.22	0.00	0.16	0.01	0.00	0.18	0.00	0.00	0.54	0.01	

Table No. 7 (Cont..)

		PLANT HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	VEHQ-11-1	222.5	205.0	252.3	226.6	210.3	210.2	166.8	191.2	186.3	192.9	168.0	180.0	217.5	217.3	208.0	198.2	230.8	202.5	216.6	204.6
2	MMHQPM-6-12-13(Dholi)	182.5	183.3	244.0	203.3	199.8	214.3	164.3	190.6	206.3	195.0	166.0	195.5	207.5	242.0	199.0	202.0	223.0	210.8	216.9	201.9
3	BIO9681(F)	212.5	181.7	229.3	207.8	221.5	213.2	162.0	196.0	185.0	195.5	161.0	182.0	210.0	219.8	185.5	191.6	243.3	213.3	228.3	201.1
	CHECKS																				
4	HQPM 1(C)	193.8	196.7	233.5	208.0	193.3	210.3	147.3	190.6	178.8	184.0	145.0	182.0	203.8	210.3	193.3	186.8	258.3	196.3	227.3	195.5
5	HQPM7 (C)	175.0	190.0	241.0	202.0	186.8	192.6	143.0	183.9	183.8	178.0	148.5	181.9	208.8	229.3	178.1	189.3	241.0	191.3	216.1	191.6
	Loc. Mean	**197.3**	**191.3**	**240.0**	**209.5**	**202.3**	**208.1**	**156.7**	**190.4**	**188.0**	**189.1**	**157.7**	**184.3**	**209.5**	**223.7**	**192.8**	**193.6**	**239.3**	**202.8**	**221.0**	**198.9**
	C.D. (5%)	3.44	23.88	6.97	22.26	30.49	13.92	18.31	13.62	27.54	9.84	6.50	12.52	12.68	15.29	18.69	10.81	6.09	22.74	38.32	7.32
	C.V. (%)	1.13	6.63	1.88	5.64	9.78	4.34	7.59	4.64	9.51	3.88	2.68	4.41	3.93	4.44	6.29	4.17	1.65	7.28	6.24	5.03
	F (Prob)	0.00	0.23	0.00	0.17	0.17	0.03	0.05	0.47	0.29	0.01	0.00	0.11	0.26	0.01	0.04	0.05	0.00	0.24	0.80	0.01

		EAR HEIGHT(cm)																			
					ZN 2						ZN 3						ZN 4			ZN 5	OV'L
S.No.	PEDIGREE	KARN	LUDH	PANT	Mean	BAHR	BHUB	DHOL	RANC	VARA	Mean	ARBH	COIM	KOLH	MAND	VAGA	Mean	BANS	GODH	Mean	Mean
1	VEHQ-11-1	108.8	108.3	118.0	111.7	116.0	108.0	85.0	105.9	96.3	98.8	85.5	98.6	118.8	125.8	111.6	108.0	109.5	109.3	109.4	106.4
2	MMHQPM-6-12-13(Dholi)	115.0	98.3	111.5	108.3	112.3	114.2	80.3	110.7	105.0	102.5	78.5	102.3	118.8	143.8	107.4	110.1	108.0	107.5	107.8	107.2
3	BIO9681(F)	102.5	76.7	89.5	89.6	100.0	97.0	74.8	97.0	80.0	87.2	72.0	92.5	106.3	115.3	90.6	95.3	110.3	95.0	102.6	92.8
	CHECKS																				
4	HQPM 1(C)	92.5	93.3	99.5	95.1	97.0	102.8	66.5	99.4	85.0	88.4	61.0	91.6	98.8	104.5	95.2	90.2	115.8	103.3	109.5	93.5
5	HQPM7 (C)	98.8	101.7	107.0	102.5	121.5	91.2	68.3	97.0	90.0	86.6	71.5	92.2	108.8	125.3	88.5	97.2	110.5	90.8	100.6	95.8
	Loc. Mean	**103.5**	**95.7**	**105.1**	**101.4**	**109.4**	**102.6**	**75.0**	**102.0**	**91.3**	**92.7**	**73.7**	**95.4**	**110.3**	**122.9**	**98.6**	**100.2**	**110.8**	**101.2**	**106.0**	**99.1**
	C.D. (5%)	6.17	15.33	7.09	12.58	45.42	9.37	12.38	6.86	13.31	6.62	6.99	6.89	23.87	14.20	8.95	7.66	7.86	12.47	17.38	4.62
	C.V. (%)	3.87	8.51	4.38	6.59	26.96	5.92	10.72	4.37	9.46	4.63	6.16	4.68	14.05	7.50	5.89	5.70	4.61	8.00	5.91	6.14
	F (Prob)	0.00	0.01	0.00	0.02	0.73	0.00	0.03	0.00	0.01	0.00	0.00	0.02	0.35	0.00	0.00	0.00	0.32	0.03	0.56	0.00

Locations Rejected due to High C.V.(i.e.> 20%) : BAHRAICH 27.0%

AGRONOMY

Maize Agronomy trials (*Rabi* 2013-14)

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Summary Results-Agronomy

The salient findings of AICRP on maize agronomic trials conducted during *rabi*, 2013-14 at different centres are summarized here. These trials were mainly focused on pre released genotypic response to nutrient (NPK) levels, nutrient and tillage practices on maize-wheat-greengram,/mungbean, rice-maize, maize-chickpea, and maize-mustard cropping system.

Genotypic response to nutrient levels:

The pre release late maturing genotypes were evaluated under different nutrient levels of (150:65:65, 200:80:80 and 250:95:95 N:P_2O_5:K_2O kg/ha) in zone II (Pantnagar, and Ludhiana), zone III (Bahraich and Dholi), zone IV (Arbhavi, Karimnagar and Vagarai) and zone V (Banswara). In Zone II (Pantnagar and Ludhiana) and Zone III (Dholi) none of hybrids found significantly superior over best checks. However, at Arbhavi (Zone III) KMH-7148 found significantly superior over best check 'Buland'. In Zone IV at Arbhavi; 'A 7501, at Karimnagar; Bio 237, KMH-7148, NMH-1247 and PRO-385 genotypes significantly out yielded than best check (Seed tech 2324) and other genotypes.

The pre release medium maturing genotypes were evaluated under the different nutrient levels of (150:65:65,200:80:80 and 250:95:95 N:P_2O_5:K_2O kg/ha) in zone III and V. In both the Zones none of hybrids found significantly superior over best checks. While pre release Germplasm of QPM group were also evaluated under the different nutrient levels of (150:65:65,200:80:80 and 250:95:95 N:P_2O_5:K_2O kg/ha) in zone II, IV and V. In all the Zones none of hybrids found significantly superior over best checks.

In all the zones (III, IV and V) except Zone II (Responded upto 200:80:80) of the country, it was observed that pre released genotypes of late maturing group responded up to the highest dose *i.e*. 250:95:95 N:P_2O_5:K_2O kg/ha. Similarly the medium maturing genotypes also responded up to highest dose i e. (250:95:95 N:P_2O_5:K_2O kg/ha) in zone IV and V. While pre released QOM genotypes responded up to highest dose in Zone III and Zone IV while in Zone II and Zone V it responded up to medium dose of 200:80:80 N:P_2O_5:K_2O kg/ha.

Tillage and site specific nutrient management (SSNM)

At Banswara, zero tillage with SSNM resulted significantly higher yield of succeeding wheat in maize system. In contrast to this, at Pantnagar conventional tillage with 100% RDF resulted in maximum wheat yield. In rice-maize system at Dholi, the maximum yield was obtained with the permanent beds planted maize with 150:50:40 kg N:P_2O_5:K_2O application. At Hyderabad, maximum maize yield was obtained in conventional till rice-zero till maize system with 100% RDF application. While in maize-mustard relay cropping system at Chhindwara, significantly higher seed yield of mustard was found in zero tillage with 140:37:71 kg N:P_2O_5:K_2O application.

Genotype and SSNM

The experiment on genotypic response to SSNM was conducted at Banswara which showed that the maximum wheat productivity was obtained in SSNM with PMH 1 maize hybrid in maize-wheat cropping sequence.

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

$N:P_2O_5:K_2O$ (kg/ha) level	Germplasm	Grain yield (kg/ha)		Cob yield (kg/ha)	Plants ('000/ha)		Cobs ('000/ha)	
		Pantnagar	Ludhiana	Pantnagar	Pantnagar	Ludhiana	Pantnagar	Ludhiana
150:65:65	Bio 237	6675	10458	8889	59.8	84.3	59.8	84.3
	Bisco X 5141	5932	10481	7692	58.1	84.3	60.7	86.1
	KMH-7148	7444	10560	9573	62.4	85.2	62.4	85.6
	NMH-1247	6547	11657	8590	58.1	84.3	58.1	87.5
	X35B349	7128	11829	9402	63.2	84.7	66.7	85.6
	Buland (C)	5684	11537	7265	60.7	83.8	59.8	84.3
	Seed Tech2324 (C)	6658	10995	8590	63.2	85.2	64.1	88.0
	Bio 9681 (C)	8120	9806	10470	61.5	87.0	64.1	88.4
200:80:80	Bio 237	6906	10579	9026	63.2	84.3	66.7	84.3
	Bisco X 5141	6427	11093	8350	63.2	82.4	60.7	82.9
	KMH-7148	9043	12699	11487	59.0	85.6	60.7	85.2
	NMH-1247	7470	12870	9701	62.4	84.7	65.0	86.1
	X35B349	7444	13343	9966	61.5	90.3	60.7	92.1
	Buland (C)	6111	11856	8171	62.4	85.2	63.2	85.6
	Seed Tech2324 (C)	7538	11065	9615	61.5	85.6	62.4	86.1
	Bio 9681 (C)	9513	10162	12479	60.7	85.2	61.5	85.2
250:95:95	Bio 237	7342	10819	9359	61.5	85.2	65.0	84.7
	Bisco X 5141	8265	10648	10940	61.5	87.0	61.5	87.5
	KMH-7148	6615	13940	8462	59.0	87.0	62.4	86.6
	NMH-1247	8530	12759	11111	57.3	85.2	57.3	86.6
	X35B349	8205	12556	10641	60.7	85.2	65.0	86.1
	Buland (C)	7761	12097	9915	64.1	85.6	61.5	88.4
	Seed Tech2324 (C)	7761	12315	10000	64.1	83.8	64.1	86.6
	Bio 9681 (C)	9111	10245	11667	65.0	84.3	65.8	86.1
Location mean		7426.3	11515.4	9640.0	61.4	85.2	62.5	86.2
C.D.(5%) AiBj-AiBk		1220.7	1616.8	1468.1	6.2	5.4	7.3	8.3
C.D.(5%) AiBk-AjBk		1299.9	1593.0	1554.1	6.3	5.3	7.9	8.0
F(5%)		s	n.s.	s	n.s.	n.s.	n.s.	n.s.
150:65:65		6774	10916	8809	60.9	84.8	62.0	86.2
200:80:80		7557	11708	9849	61.8	85.4	62.6	85.9
250:95:95		7949	11922	10262	61.6	85.4	62.8	86.6
C.D. (5%) Ai-Aj		642.0	519.0	752.1	2.6	1.6	4.0	2.0
C.V. (%) Error A		10.8	5.6	9.7	5.4	2.3	8.0	2.9
F (5%)		s	s	s	n.s.	n.s.	n.s.	n.s.
Bio 237		6974	10619	9091	61.5	84.6	63.8	84.4
Bisco X 5141		6875	10741	8994	61.0	84.6	61.0	85.5
KMH-7148		7701	12400	9840	60.1	86.0	61.8	85.8
NMH-1247		7516	12429	9801	59.3	84.7	60.1	86.7
X35B349		7593	12576	10003	61.8	86.7	64.1	88.0
Buland (C)		6519	11830	8450	62.4	84.9	61.5	86.1
Seed Tech2324 (C)		7319	11458	9402	63.0	84.9	63.5	86.9
Bio 9681 (C)		8915	10071	11538	62.4	85.5	63.8	86.6
C.D. (5%) Bi-Bj		704.8	933.4	847.6	3.6	3.1	4.2	4.8
C.V. (%) ErrorB		10.0	8.5	9.2	6.1	3.8	7.1	5.8
F (5%)		s	s	s	n.s.	n.s.	n.s.	n.s.

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$N:P_2O_5:K_2O$ (kg/ha) level	Germplasm	Plant height (cm)		Days to 50% tasseling		Days to 50% silking	
		Pantnagar	Ludhiana	Pantnagar	Ludhiana	Pantnagar	Ludhiana
150:65:65	Bio 237	217.7	198.0	123.0	141.7	126.0	143.3
	Bisco X 5141	206.0	194.3	121.3	137.0	124.7	138.3
	KMH-7148	204.7	196.7	123.3	139.0	126.7	140.3
	NMH-1247	192.7	199.7	123.3	137.7	126.3	141.0
	X35B349	200.7	212.0	125.7	140.0	129.7	142.0
	Buland (C)	209.7	215.0	127.0	141.0	130.7	143.0
	Seed Tech2324 (C)	193.3	181.3	122.0	138.0	125.7	139.7
	Bio 9681 (C)	197.3	191.7	121.0	136.3	124.0	138.3
200:80:80	Bio 237	224.0	214.0	123.3	139.3	126.0	141.7
	Bisco X 5141	210.3	204.3	123.0	135.7	125.7	138.0
	KMH-7148	210.7	212.7	122.7	138.0	125.3	140.3
	NMH-1247	210.3	205.7	124.0	137.3	126.7	140.7
	X35B349	213.7	219.0	124.3	139.7	128.0	141.0
	Buland (C)	215.3	223.0	126.3	139.7	130.3	141.7
	Seed Tech2324 (C)	198.7	195.3	123.3	136.0	126.0	138.0
	Bio 9681 (C)	200.7	202.0	122.0	136.0	124.7	137.7
250:95:95	Bio 237	226.0	216.0	123.0	139.0	125.7	140.3
	Bisco X 5141	211.3	208.3	121.7	135.3	124.7	137.3
	KMH-7148	210.7	213.3	122.7	137.0	125.3	140.0
	NMH-1247	213.0	207.7	123.3	137.0	125.7	140.3
	X35B349	217.0	218.7	125.0	137.7	128.3	139.7
	Buland (C)	215.0	224.3	127.0	139.3	130.7	141.7
	Seed Tech2324 (C)	202.7	200.7	122.0	136.0	125.0	137.7
	Bio 9681 (C)	205.0	210.0	121.0	135.3	123.7	137.0
Location mean		208.6	206.8	123.4	137.9	126.5	140.0
C.D.(5%) AiBj-AiBk		15.3	13.1	1.7	2.9	2.3	2.7
C.D.(5%) AiBk-AjBk		16.3	15.5	1.8	3.0	2.2	2.8
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
150:65:65		202.8	198.6	123.3	138.8	126.7	140.8
200:80:80		210.5	209.5	123.6	137.7	126.6	139.9
250:95:95		212.6	212.4	123.2	137.1	126.1	139.3
C.D. (5%) Ai-Aj		8.0	9.8	1.0	1.4	0.7	1.3
C.V. (%) Error A		4.8	5.9	1.0	1.2	0.7	1.2
F (5%)		n.s.	s	n.s.	n.s.	n.s.	n.s.
Bio 237		222.6	209.3	123.1	140.0	125.9	141.8
Bisco X 5141		209.2	202.3	122.0	136.0	125.0	137.9
KMH-7148		208.7	207.6	122.9	138.0	125.8	140.2
NMH-1247		205.3	204.3	123.6	137.3	126.2	140.7
X35B349		210.4	216.6	125.0	139.1	128.7	140.9
Buland (C)		213.3	220.8	126.8	140.0	130.6	142.1
Seed Tech2324 (C)		198.2	192.4	122.4	136.7	125.6	138.4
Bio 9681 (C)		201.0	201.2	121.3	135.9	124.1	137.7
C.D. (5%) Bi-Bj		8.9	7.6	1.0	1.7	1.3	1.5
C.V. (%) ErrorB		4.5	3.8	0.8	1.3	1.1	1.2
F (5%)		s	s	s	s	s	s

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$N:P_2O_5:K_2O$ (kg/ha) level	Germplasm	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Pantnagar	Pantnagar	Pantnagar	Pantnagar
150:65:65	Bio 237	37331	87510	50179	1.34
	Bisco X 5141	37331	77698	40367	1.08
	KMH-7148	37331	97531	60200	1.62
	NMH-1247	37331	85687	48356	1.29
	X35B349	37331	93393	56062	1.50
	Buland (C)	37331	74561	37230	1.00
	Seed Tech2324 (C)	37331	87260	49929	1.34
	Bio 9681 (C)	37331	106306	68975	1.85
200:80:80	Bio 237	39130	90503	51373	1.31
	Bisco X 5141	39130	84179	45049	1.15
	KMH-7148	39130	118483	79353	2.03
	NMH-1247	39130	97815	58685	1.50
	X35B349	39130	97444	58314	1.49
	Buland (C)	39130	80054	40924	1.05
	Seed Tech2324 (C)	39130	98666	59536	1.52
	Bio 9681 (C)	39130	124619	85489	2.18
250:95:95	Bio 237	40929	96209	55280	1.35
	Bisco X 5141	40929	108245	67316	1.65
	KMH-7148	40929	86658	45729	1.12
	NMH-1247	40929	111760	70831	1.73
	X35B349	40929	107443	66514	1.63
	Buland (C)	40929	101618	60689	1.48
	Seed Tech2324 (C)	40929	101662	60733	1.48
	Bio 9681 (C)	40929	119365	78436	1.92
Location mean		39130.0	97277.9	58147.9	1.48
C.D.(5%) AiBj-AiBk		0.3	16054.2	16054.2	0.41
C.D.(5%) AiBk-AjBk		0.4	17061.9	17061.9	0.44
F(5%)		n.s.	s	s	s
150:65:65		37331.0	88743.3	51412.3	1.38
200:80:80		39130.0	98970.3	59840.3	1.53
250:95:95		40929.0	104120.2	63191.2	1.54
C.D. (5%) Ai-Aj		0.2	8370.3	8370.3	0.22
C.V. (%) Error A		0.0	10.7	18.0	18.43
F (5%)		s	s	s	n.s.
Bio 237		39130	91407	52277	1.34
Bisco X 5141		39130	90041	50911	1.29
KMH-7148		39130	100891	61761	1.59
NMH-1247		39130	98421	59291	1.51
X35B349		39130	99427	60297	1.54
Buland (C)		39130	85411	46281	1.17
Seed Tech2324 (C)		39130	95862	56732	1.45
Bio 9681 (C)		39130	116763	77633	1.98
C.D. (5%) Bi-Bj		0.2	9268.9	9268.9	0.24
C.V. (%) ErrorB		0.0	10.0	16.7	16.66
F (5%)		n.s.	s	s	s

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

N:P_2O_5:K_2O (kg/ha) level	Germplasm	Grain yield (kg/ha)		Cob yield (kg/ha)		Plants (000/ha)		Cobs (000/ha)	
		Bahraich	Dholi	Bahraich	Dholi	Bahraich	Dholi	Bahraich	Dholi
150:65:65	Bio 237	6597	6640	8472	8333	82.6	49.6	84.0	48.2
	Bisco X 5141	6694	5695	8563	7267	81.9	51.6	86.1	51.8
	KMH-7148	6736	5104	8493	6956	83.3	48.9	82.6	48.9
	NMH-1247	6194	7087	7917	9000	81.3	46.9	82.6	46.4
	X35B349	6451	6449	8306	8400	81.9	54.4	81.9	54.0
	Buland (C)	6611	6239	8451	8000	81.3	44.2	85.4	44.2
	Seed Tech2324 (C)	6208	7288	7840	9222	82.6	39.6	84.7	39.6
	Bio 9681 (C)	6389	6621	8194	8289	80.6	46.0	83.3	45.6
200:80:80	Bio 237	8049	7257	10069	9511	82.6	52.7	86.8	53.3
	Bisco X 5141	8028	6026	10063	7689	83.3	51.8	84.7	53.8
	KMH-7148	8118	6193	10035	7911	80.6	50.4	87.5	53.1
	NMH-1247	8146	8215	10146	10444	82.6	52.9	84.0	54.4
	X35B349	7854	8176	9868	10333	80.6	54.2	84.7	56.4
	Buland (C)	8083	8121	9986	10844	82.6	50.2	86.8	50.9
	Seed Tech2324 (C)	7729	8109	9715	10200	81.9	41.8	79.9	43.3
	Bio 9681 (C)	7854	7517	9750	9467	83.3	52.4	82.6	52.4
250:95:95	Bio 237	8465	8752	10299	11022	83.3	51.1	86.1	55.6
	Bisco X 5141	8785	7072	10729	8822	82.6	52.9	85.4	54.0
	KMH-7148	8868	7353	10868	9733	81.3	45.8	86.1	45.8
	NMH-1247	8639	8792	10542	10956	83.3	53.6	82.6	54.4
	X35B349	8688	8936	10826	11267	81.9	47.6	79.9	48.2
	Buland (C)	8535	7769	10375	9867	81.9	54.2	85.4	54.2
	Seed Tech2324 (C)	8438	8670	10431	11267	82.6	52.7	83.3	52.9
	Bio 9681 (C)	8458	9245	10486	11533	83.3	52.0	86.1	53.1
Location mean		7692.4	7388.5	9601.0	9430.6	82.2	49.9	84.3	50.6
C.D.(5%) AiBj-AiBk		170.0	424.1	213.2	541.2	2.2	3.1	2.6	3.1
C.D.(5%) AiBk-AjBk		357.4	468.9	421.1	595.4	2.1	3.2	3.2	3.4
F(5%)		s	s	s	s	n.s.	s	s	s
150:65:65		6485	6390	8280	8183	81.9	47.6	83.9	47.3
200:80:80		7983	7452	9954	9550	82.2	50.8	84.6	52.2
250:95:95		8609	8324	10569	10558	82.6	51.2	84.4	52.3
C.D. (5%) Ai-Aj		323.9	258.0	375.8	323.5	0.4	1.3	2.1	1.8
C.V. (%) Error A		5.3	4.4	4.9	4.3	0.6	3.3	3.1	4.4
F (5%)		s	s	s	s	s	s	n.s.	s
Bio 237		7704	7550	9613	9622	82.9	51.1	85.6	52.4
Bisco X 5141		7836	6264	9785	7926	82.6	52.1	85.4	53.2
KMH-7148		7907	6217	9799	8200	81.7	48.4	85.4	49.3
NMH-1247		7660	8031	9535	10133	82.4	51.1	83.1	51.8
X35B349		7664	7853	9667	10000	81.5	52.1	82.2	52.9
Buland (C)		7743	7376	9604	9570	81.9	49.6	85.9	49.8
Seed Tech2324 (C)		7458	8022	9329	10230	82.4	44.7	82.6	45.3
Bio 9681 (C)		7567	7794	9477	9763	82.4	50.1	84.0	50.4
C.D. (5%) Bi-Bj		98.1	244.9	123.1	312.5	1.3	1.8	1.5	1.8
C.V. (%) ErrorB		1.3	3.5	1.3	3.5	1.6	3.8	1.9	3.8
F (5%)		s	s	s	s	n.s.	s	s	s

N:P_2O_5:K_2O (kg/ha) level	Germplasm	Plant height (cm)	Days of 50% tasseling	Days to 50% silking		Nitrogen uptake (kg/ha)	Phosphorus uptake (kg/ha)	Potash uptake (kg/ha)
		Bahraich	Dholi	Bahraich	Dholi	Bahraich	Bahraich	Bahraich
150:65:65	Bio 237	171.0	121.0	111.0	124.7	170.5	25.8	48.9
	Bisco X 5141	173.7	122.0	109.3	126.0	169.3	25.8	48.8
	KMH-7148	169.0	120.3	113.7	124.7	168.4	26.1	48.7
	NMH-1247	172.0	121.3	111.7	125.3	157.4	24.3	45.0
	X35B349	175.3	122.7	109.7	127.0	161.8	24.9	46.8
	Buland (C)	173.7	126.0	111.0	130.3	159.5	25.8	47.1
	Seed Tech2324 (C)	174.7	122.7	112.0	126.7	159.0	23.8	46.1
	Bio 9681 (C)	173.0	118.3	110.0	123.0	167.0	25.2	47.7
200:80:80	Bio 237	175.7	121.0	107.3	125.0	211.5	32.3	60.7
	Bisco X 5141	175.7	121.0	106.3	125.3	210.6	32.4	61.6
	KMH-7148	173.0	122.0	109.7	126.0	218.2	32.3	60.5
	NMH-1247	175.3	120.0	108.3	124.0	219.3	32.3	61.8
	X35B349	178.3	124.0	106.3	128.0	207.9	31.5	61.3
	Buland (C)	177.3	124.0	105.0	128.7	215.4	32.7	62.4
	Seed Tech2324 (C)	178.0	121.0	106.3	125.0	205.9	30.9	58.4
	Bio 9681 (C)	174.7	119.3	104.7	123.3	210.0	31.9	60.7
250:95:95	Bio 237	178.0	124.0	104.3	127.7	225.5	34.4	65.2
	Bisco X 5141	180.0	122.3	102.7	126.3	240.6	35.2	66.3
	KMH-7148	176.0	120.7	105.3	124.7	239.0	36.2	68.4
	NMH-1247	178.7	121.0	105.0	125.0	235.7	35.1	66.4
	X35B349	182.0	124.3	103.7	129.0	234.1	34.9	64.9
	Buland (C)	180.7	125.0	103.0	130.0	231.0	34.6	66.6
	Seed Tech2324 (C)	180.7	121.0	102.3	125.0	227.6	33.7	65.0
	Bio 9681 (C)	180.3	121.3	101.7	125.3	224.8	34.3	65.6
Location mean		176.1	121.9	107.1	126.1	202.9	30.7	58.1
C.D.(5%) AiBj-AiBk		1.3	1.6	1.1	1.6	1.5	0.3	0.8
C.D.(5%) AiBk-AjBk		1.3	1.6	1.2	1.6	2.1	0.3	0.9
F(5%)		n.s.	s	s	s	s	s	s
150:65:65		172.8	121.8	111.0	126.0	164.1	25.2	47.4
200:80:80		176.0	121.5	106.8	125.7	212.4	32.0	60.9
250:95:95		179.5	122.5	103.5	126.6	232.3	34.8	66.0
C.D. (5%) Ai-Aj		0.5	0.6	0.7	0.6	1.5	0.1	0.6
C.V. (%) Error A		0.4	0.6	0.8	0.6	0.9	0.5	1.3
F (5%)		s	s	s	s	s	s	s
Bio 237		174.9	122.0	107.6	125.8	202.5	30.8	58.2
Bisco X 5141		176.4	121.8	106.1	125.9	206.8	31.1	58.9
KMH-7148		172.7	121.0	109.6	125.1	208.5	31.5	59.2
NMH-1247		175.3	120.8	108.3	124.8	204.2	30.6	57.7
X35B349		178.6	123.7	106.6	128.0	201.3	30.4	57.6
Buland (C)		177.2	125.0	106.3	129.7	202.0	31.0	58.7
Seed Tech2324 (C)		177.8	121.6	106.9	125.6	197.5	29.4	56.5
Bio 9681 (C)		176.0	119.7	105.4	123.9	200.6	30.4	58.0
C.D. (5%) Bi-Bj		0.7	0.9	0.7	0.9	0.9	0.2	0.5
C.V. (%) ErrorB		0.4	0.8	0.6	0.8	0.5	0.6	0.8
F (5%)		s	s	s	s	s	s	s

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

N:P_2O_5:K_2O (kg/ha) level	Germplasm	Grain yield (kg/ha)			Cob yield (kg/ha)		
		Arbhavi	Karimnagar	Vagarai	Arbhavi	Karimnagar	Vagarai
150:65:65	A 7501	5821	10545	8862	7500	12599	10275
	Bio 237	3718	11329	9432	4444	14014	11186
	Bisco X 5141	3970	10081	9469	4722	13224	11146
	KMH-7148	1179	12787	10654	1611	14555	12963
	NMH-1247	6060	12136	9611	7222	14259	11243
	PRO-385	4413	11918	10172	5889	14831	12246
	X35B349	5881	10842	9605	7472	12744	11502
	Buland (C)	3310	8493	7959	4444	10464	9837
	Seed Tech2324 (C)	6021	10480	9881	7389	13120	11818
	Bio 9681 (C)	3201	9076	6024	3889	11445	7616
200:80:80	A 7501	7753	11818	9637	9500	13418	11133
	Bio 237	3277	12372	10097	3944	14294	11784
	Bisco X 5141	4466	11890	10043	5306	13819	11691
	KMH-7148	1114	13210	11318	1444	14664	13373
	NMH-1247	6945	13202	9814	8139	14759	11526
	PRO-385	5755	12180	10553	7833	14947	12560
	X35B349	7688	11927	9869	10306	14276	11817
	Buland (C)	4332	8862	8394	5500	11653	10361
	Seed Tech2324 (C)	5905	10608	10051	7833	13128	12043
	Bio 9681 (C)	4081	9300	6810	4778	12563	8124
250:95:95	A 7501	7505	12371	9949	9250	14998	11412
	Bio 237	3439	12930	10376	3972	14734	11881
	Bisco X 5141	4601	12321	10400	5417	15815	12031
	KMH-7148	1735	13421	11541	2250	14511	13571
	NMH-1247	7670	13520	10189	9056	16189	11732
	PRO-385	5154	13510	10909	6528	15658	12678
	X35B349	6955	11958	10371	9000	14507	12145
	Buland (C)	4410	9692	8807	5639	12672	10746
	Seed Tech2324 (C)	8101	12059	10567	9750	14319	12356
	Bio 9681 (C)	4327	10258	7032	5167	12577	8378
Location mean		4959.5	11503.2	9613.2	6173.1	13825.2	11372.5
C.D.(5%) AiBj-AiBk		1014.0	1416.2	561.6	1228.7	1291.0	410.9
C.D.(5%) AiBk-AjBk		1119.9	1708.9	549.3	1323.0	1601.2	408.6
F(5%)		s	n.s.	n.s.	s	n.s.	n.s.
150:65:65		4357	10769	9167	5458	13125	10983
200:80:80		5131	11537	9659	6458	13752	11441
250:95:95		5390	12204	10014	6603	14598	11693
C.D. (5%) Ai-Aj		592.6	1087.6	138.7	647.7	1061.1	126.9
C.V. (%) Error A		16.7	13.2	2.0	14.6	10.7	1.6
F (5%)		s	n.s.	s	s	s	s
A 7501		7026	11578	9483	8750	13672	10940
Bio 237		3478	12210	9968	4120	14347	11617
Bisco X 5141		4346	11431	9970	5148	14286	11622
KMH-7148		1343	13139	11171	1769	14577	13302
NMH-1247		6892	12953	9871	8139	15069	11500
PRO-385		5107	12536	10545	6750	15145	12494
X35B349		6841	11576	9948	8926	13842	11821
Buland (C)		4017	9015	8387	5194	11596	10315
Seed Tech2324 (C)		6676	11049	10166	8324	13522	12073
Bio 9681 (C)		3869	9545	6622	4611	12195	8039
C.D. (5%) Bi-Bj		585.5	817.6	324.3	709.4	745.4	237.2
C.V. (%) ErrorB		12.5	7.5	3.6	12.1	5.7	2.2
F (5%)		s	s	s	s	s	s

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$N:P_2O_5:K_2O$ (kg/ha) level	Germplasm	Stover yield (kg/ha)		Plants ('000/ha)		Cobs ('000/ha)	
		Arbhavi	Vagarai	Arbhavi	Vagarai	Arbhavi	Vagarai
150:65:65	A 7501	4889	7833	49.2	65.3	47.8	63.1
	Bio 237	3444	8196	53.3	63.6	50.0	61.7
	Bisco X 5141	4306	8185	64.7	64.7	59.7	61.7
	KMH-7148	3000	10075	23.1	66.4	22.5	64.2
	NMH-1247	4028	8011	52.8	64.7	54.7	63.1
	PRO-385	3556	9512	58.1	65.0	50.6	63.3
	X35B349	3528	9908	53.9	64.2	51.9	62.5
	Buland (C)	2778	7000	49.7	64.2	45.3	62.5
	Seed Tech2324 (C)	3806	9911	53.1	62.8	50.6	60.8
	Bio 9681 (C)	3000	6750	41.7	53.6	36.4	50.6
200:80:80	A 7501	5500	8016	51.4	64.7	50.0	62.8
	Bio 237	2639	8075	47.8	64.4	44.4	61.7
	Bisco X 5141	3611	6755	61.4	65.0	58.9	62.8
	KMH-7148	2611	9270	19.2	65.6	16.1	63.6
	NMH-1247	5472	7408	58.1	63.6	57.2	63.1
	PRO-385	4833	8600	58.6	64.7	56.9	63.1
	X35B349	6167	9320	53.6	64.7	54.2	62.5
	Buland (C)	4278	7348	50.3	65.0	48.1	62.8
	Seed Tech2324 (C)	5056	8884	56.7	63.6	54.2	60.8
	Bio 9681 (C)	3222	5790	48.3	54.2	42.2	51.7
250:95:95	A 7501	6222	7985	51.1	64.2	49.7	63.5
	Bio 237	3306	8750	45.6	64.2	43.6	63.1
	Bisco X 5141	3833	7041	59.7	64.2	55.6	62.2
	KMH-7148	3722	9091	21.7	65.0	20.8	63.6
	NMH-1247	4944	7675	58.1	64.4	56.9	63.1
	PRO-385	5333	8803	63.3	63.6	56.7	62.8
	X35B349	5139	9483	60.8	64.2	58.3	62.2
	Buland (C)	4111	7975	57.5	63.9	51.9	62.5
	Seed Tech2324 (C)	5778	9050	62.5	63.3	59.4	61.9
	Bio 9681 (C)	2750	6016	47.8	54.2	44.4	52.5
Location mean		4162.0	8223.8	51.1	63.4	48.3	61.5
C.D.(5%) AiBj-AiBk		1570.5	807.3	7.9	2.2	6.6	2.3
C.D.(5%) AiBk-AjBk		1545.8	776.0	7.9	2.2	6.8	2.3
F(5%)		n.s.	s	n.s.	n.s.	n.s.	n.s.
150:65:65		3633	8538	49.9	63.4	46.9	61.3
200:80:80		4339	7946	50.5	63.6	48.2	61.5
250:95:95		4514	8187	52.8	63.1	49.8	61.7
C.D. (5%) Ai-Aj		428.1	130.0	2.5	0.8	2.7	0.7
C.V. (%) Error A		14.4	2.2	6.7	1.8	7.9	1.6
F (5%)		s	s	n.s.	n.s.	n.s.	n.s.
A 7501		5537	7945	50.6	64.7	49.2	63.1
Bio 237		3130	8340	48.9	64.1	46.0	62.1
Bisco X 5141		3917	7327	61.9	64.6	58.1	62.2
KMH-7148		3111	9479	21.3	65.6	19.8	63.8
NMH-1247		4815	7698	56.3	64.3	56.3	63.1
PRO-385		4574	8972	60.0	64.4	54.7	63.1
X35B349		4944	9570	56.1	64.4	54.8	62.4
Buland (C)		3722	7441	52.5	64.4	48.4	62.6
Seed Tech2324 (C)		4880	9282	57.4	63.2	54.7	61.2
Bio 9681 (C)		2991	6185	45.9	54.0	41.0	51.6
C.D. (5%) Bi-Bj		906.7	466.1	4.6	1.2	3.8	1.3
C.V. (%) ErrorB		23.0	6.0	9.4	2.1	8.3	2.3
F (5%)		s	s	s	s	s	s

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$N:P_2O_5:K_2O$ (kg/ha) level	Germplasm	Plant height (cm)			Days to 50% tasseling		Days to 50% flowering
		Arbhavi	Karimnagar	Vagarai	Karimnagar	Vagarai	Arbhavi
150:65:65	A 7501	139.6	240.5	175.3	64.3	55.3	78.0
	Bio 237	164.3	280.3	207.9	63.0	55.3	78.0
	Bisco X 5141	157.5	246.2	203.0	61.3	55.0	77.0
	KMH-7148	138.5	281.8	193.1	62.0	56.7	78.3
	NMH-1247	161.2	273.2	195.1	62.7	56.0	78.0
	PRO-385	144.4	275.2	182.1	66.0	55.0	78.0
	X35B349	150.5	270.8	197.8	66.3	57.0	83.0
	Buland (C)	157.2	280.3	229.9	69.3	57.7	83.0
	Seed Tech2324 (C)	142.4	250.5	186.4	62.7	55.7	78.0
	Bio 9681 (C)	150.0	255.2	187.2	61.3	51.7	75.0
200:80:80	A 7501	150.5	245.8	178.8	64.3	56.7	78.0
	Bio 237	157.2	288.8	210.9	62.7	56.7	77.0
	Bisco X 5141	157.7	274.8	206.7	61.0	54.0	76.0
	KMH-7148	149.9	288.0	212.7	62.0	56.0	78.0
	NMH-1247	171.3	277.7	195.8	62.0	55.7	77.0
	PRO-385	154.4	279.8	202.0	65.0	55.3	77.0
	X35B349	168.9	275.3	199.9	64.0	57.3	79.7
	Buland (C)	175.5	292.3	233.8	68.0	57.7	81.7
	Seed Tech2324 (C)	151.1	254.0	193.1	62.3	55.3	77.0
	Bio 9681 (C)	158.7	257.8	192.8	61.0	52.7	77.0
250:95:95	A 7501	155.3	254.8	184.3	62.7	58.0	77.3
	Bio 237	172.5	299.8	212.3	62.3	56.3	76.7
	Bisco X 5141	168.2	288.5	207.5	61.0	53.3	76.3
	KMH-7148	158.1	289.2	215.8	62.0	56.3	77.3
	NMH-1247	157.7	278.8	197.6	62.0	56.0	78.0
	PRO-385	163.0	289.5	204.9	64.3	54.3	77.3
	X35B349	171.9	288.5	201.9	63.7	57.3	81.3
	Buland (C)	179.0	315.5	238.5	67.7	58.0	81.7
	Seed Tech2324 (C)	162.5	258.2	195.3	61.7	55.0	77.3
	Bio 9681 (C)	166.6	262.2	196.6	61.0	52.7	76.7
Location mean		158.5	273.8	201.3	63.3	55.7	78.2
C.D.(5%) AiBj-AiBk		12.0	26.3	2.7	2.1	1.3	1.9
C.D.(5%) AiBk-AjBk		13.6	27.5	3.4	2.2	1.3	2.3
F(5%)		n.s.	n.s.	s	n.s.	s	n.s.
150:65:65		150.6	265.4	195.8	63.9	55.5	78.6
200:80:80		159.5	273.5	202.6	63.2	55.7	77.8
250:95:95		165.5	282.5	205.5	62.8	55.7	78.0
C.D. (5%) Ai-Aj		7.7	11.9	2.3	1.0	0.5	1.5
C.V. (%) Error A		6.8	6.1	1.6	2.1	1.3	2.6
F (5%)		s	s	s	n.s.	n.s.	n.s.
A 7501		148.4	247.1	179.4	63.8	56.7	77.8
Bio 237		164.7	289.7	210.4	62.7	56.1	77.2
Bisco X 5141		161.1	269.8	205.7	61.1	54.1	76.4
KMH-7148		148.8	286.3	207.2	62.0	56.3	77.9
NMH-1247		163.4	276.6	196.2	62.2	55.9	77.7
PRO-385		153.9	281.5	196.3	65.1	54.9	77.4
X35B349		163.8	278.2	199.9	64.7	57.2	81.3
Buland (C)		170.6	296.1	234.1	68.3	57.8	82.1
Seed Tech2324 (C)		152.0	254.2	191.6	62.2	55.3	77.4
Bio 9681 (C)		158.4	258.4	192.2	61.1	52.3	76.2
C.D. (5%) Bi-Bj		6.9	15.2	1.5	1.2	0.7	1.1
C.V. (%) ErrorB		4.6	5.9	0.8	2.0	1.4	1.5
F (5%)		s	s	s	s	s	s

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$N:P_2O_5:K_2O$ (kg/ha) level	Germplasm	Days to 50% silking			1000 grain weight (g)	
		Arbhavi	Karimnagar	Vagarai	Karimnagar	Vagarai
150:65:65	A 7501	83.0	67.3	58.7	339.3	330.0
	Bio 237	77.3	65.7	59.0	322.7	336.7
	Bisco X 5141	77.3	64.0	56.3	348.0	326.7
	KMH-7148	83.3	64.3	59.3	377.3	346.7
	NMH-1247	78.0	65.0	58.0	350.7	336.7
	PRO-385	83.0	68.7	58.0	324.0	340.0
	X35B349	83.3	69.3	59.3	290.0	340.0
	Buland (C)	84.0	72.0	60.0	340.0	340.0
	Seed Tech2324 (C)	78.7	65.0	58.0	365.3	360.0
	Bio 9681 (C)	78.7	64.0	54.0	338.7	343.3
200:80:80	A 7501	80.0	67.3	59.0	353.3	340.0
	Bio 237	79.7	65.3	59.0	324.7	340.0
	Bisco X 5141	78.3	63.7	56.0	355.3	333.3
	KMH-7148	81.7	64.3	58.3	378.7	356.7
	NMH-1247	76.0	64.7	58.0	370.0	343.3
	PRO-385	81.7	68.0	58.3	333.3	343.3
	X35B349	80.0	66.7	59.7	328.0	356.7
	Buland (C)	83.0	71.0	59.7	353.3	340.0
	Seed Tech2324 (C)	78.0	65.0	57.7	368.7	366.7
	Bio 9681 (C)	77.0	63.0	54.3	364.0	350.0
250:95:95	A 7501	80.0	65.3	60.3	356.0	346.7
	Bio 237	77.3	64.7	58.3	348.0	340.0
	Bisco X 5141	77.3	63.3	55.7	361.3	336.7
	KMH-7148	81.3	64.3	58.3	383.3	356.7
	NMH-1247	78.0	64.0	58.0	388.7	350.0
	PRO-385	83.0	66.7	56.0	341.3	350.0
	X35B349	83.0	66.3	59.7	338.7	356.7
	Buland (C)	83.0	70.7	61.0	368.7	343.3
	Seed Tech2324 (C)	77.3	64.0	57.3	368.7	366.7
	Bio 9681 (C)	76.7	63.0	55.7	388.7	350.0
Location mean		80.0	65.9	58.0	352.3	345.6
C.D.(5%) AiBj-AiBk		2.6	2.4	1.6	34.8	14.1
C.D.(5%) AiBk-AjBk		2.5	2.5	1.7	35.8	13.9
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.
150:65:65		80.7	66.5	58.1	339.6	340.0
200:80:80		79.5	65.9	58.0	352.9	347.0
250:95:95		79.7	65.2	58.0	364.3	349.7
C.D. (5%) Ai-Aj		0.6	1.3	0.8	14.4	4.0
C.V. (%) Error A		1.1	2.6	2.0	5.7	1.6
F (5%)		s	n.s.	n.s.	s	s
A 7501		81.0	66.7	59.3	349.6	338.9
Bio 237		78.1	65.2	58.8	331.8	338.9
Bisco X 5141		77.7	63.7	56.0	354.9	332.2
KMH-7148		82.1	64.3	58.7	379.8	353.3
NMH-1247		77.3	64.6	58.0	369.8	343.3
PRO-385		82.6	67.8	57.4	332.9	344.4
X35B349		82.1	67.4	59.6	318.9	351.1
Buland (C)		83.3	71.2	60.2	354.0	341.1
Seed Tech2324 (C)		78.0	64.7	57.7	367.6	364.4
Bio 9681 (C)		77.4	63.3	54.7	363.8	347.8
C.D. (5%) Bi-Bj		1.5	1.4	0.9	20.1	8.1
C.V. (%) ErrorB		2.0	2.2	1.7	6.0	2.5
F (5%)		s	s	s	s	s

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

N:P2O5:K2O (Kg/ha)	Germplasm	Grain yield (kg/ha)	Cob Yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Days to 50% Silking	Plant height (cm)
		Banswara					
150:65:65	Bio 237	11156	14044	62.4	103.6	95.0	280.0
	Bisco X 5141	12000	15022	57.3	105.8	90.7	280.0
	KMH-7148	11000	14400	65.3	105.6	94.0	291.7
	NMH-1247	11289	13889	64.4	101.6	92.0	291.7
	X35B349	12133	15444	65.3	110.0	96.0	290.0
	Buland (C)	11000	13844	59.6	101.1	90.3	296.7
	Seed Tech2324 (C)	12000	15422	60.2	112.9	95.0	278.3
	Bio 9681 (C)	9956	12156	57.8	88.7	91.7	281.7
200:80:80	Bio 237	12378	15956	62.4	117.3	95.3	290.0
	Bisco X 5141	12444	16022	57.3	118.2	92.3	295.0
	KMH-7148	11400	15444	65.3	112.2	94.7	301.7
	NMH-1247	12400	15533	64.4	114.7	93.0	298.3
	X35B349	12822	16422	65.3	118.9	96.3	298.3
	Buland (C)	12133	16444	59.6	121.3	91.7	301.7
	Seed Tech2324 (C)	12178	16044	60.2	116.7	95.0	285.0
	Bio 9681 (C)	11333	14689	56.7	104.4	91.7	285.0
250:95:95	Bio 237	12667	16111	62.4	118.7	95.3	303.3
	Bisco X 5141	12511	16267	57.3	119.1	91.3	296.7
	KMH-7148	11622	15756	65.3	114.4	95.0	302.3
	NMH-1247	12489	15667	64.4	115.6	93.0	299.3
	X35B349	12889	16533	65.3	121.6	96.0	320.0
	Buland (C)	12756	16311	59.6	120.9	92.3	303.3
	Seed Tech2324 (C)	12422	15778	60.2	116.4	95.3	291.7
	Bio 9681 (C)	11911	15422	56.7	111.1	92.3	292.7
Location mean		11953.7	15359.3	61.5	112.1	93.6	293.9
C.D.(5%) AiBj-AiBk		1026.2	1365.9	4.2	9.7	1.3	16.1
C.D.(5%) AiBk-AjBk		1077.9	1356.5	3.9	9.7	1.4	15.7
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
150:65:65		11317	14278	61.6	103.6	93.1	286.3
200:80:80		12136	15819	61.4	115.5	93.8	294.4
250:95:95		12408	15981	61.4	117.2	93.8	301.2
C.D.(5%) Ai-Aj		506.9	472.5	0.3	3.6	0.8	4.5
C.V.(%) Error A		5.3	3.8	0.6	4.0	1.1	1.9
F(5%)		s	s	n.s.	s	n.s.	s
Bio 237		12067	15370	62.4	113.2	95.2	291.1
Bisco X 5141		12319	15770	57.3	114.4	91.4	290.6
KMH-7148		11341	15200	65.3	110.7	94.6	298.6
NMH-1247		12059	15030	64.4	110.6	92.7	296.4
X35B349		12615	16133	65.3	116.8	96.1	302.8
Buland (C)		11963	15533	59.6	114.4	91.4	300.6
Seed Tech2324 (C)		12200	15748	60.2	115.3	95.1	285.0
Bio 9681 (C)		11067	14089	57.0	101.4	91.9	286.4
C.D.(5%)Bi-Bj		592.5	788.6	2.4	5.6	0.8	9.3
C.V.(%)ErrorB		5.2	5.4	4.1	5.3	0.9	3.3
F(5%)		s	s	s	s	s	s

Table 5: Relative performance of pre-release medium maturing hybrids at different NPK levels in Zone IV.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)		Cob yield (kg/ha)		Stover yield (kg/ha)	Plants (000/ha)	Cobs (000/ ha)
		Karimnagar	Vagarai	Karimnagar	Vagarai	Vagarai	Vagarai	Vagarai
150:65:65	VEH 11-1	9534	6986	11384	8547	5836	38.4	36.3
	BIO 9637 (C)	9695	8689	11956	10789	5979	64.6	63.2
200:80:80	VEH 11-1	9925	7511	12133	9115	6375	49.5	47.9
	BIO 9637 (C)	9814	9336	11975	11300	6671	64.4	63.7
250:95:95	VEH 11-1	11144	7792	13669	9608	6639	50.0	48.8
	BIO 9637 (C)	9948	9700	12237	11713	7181	64.1	63.2
Location mean		10010.2	8335.7	12225.7	10178.5	6446.8	55.2	53.9
C.D.(5%) AiBj-AiBk		1260.7	312.8	1517.5	391.2	592.7	5.8	6.5
C.D.(5%) AiBk-AjBk		1445.9	287.5	1442.3	429.2	472.3	6.7	6.8
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	s	s
150:65:65		9615	7837	11670	9668	5907	51.5	49.8
200:80:80		9870	8424	12054	10207	6523	56.9	55.8
250:95:95		10546	8746	12953	10660	6910	57.1	56.0
C.D.(5%) Ai-Aj		1142.0	184.6	967.9	329.2	218.9	5.3	5.0
C.V.(%) Error A		7.1	1.4	4.9	2.0	2.1	6.0	5.8
F(5%)		n.s.	s	s	s	s	n.s.	s
VEH 11-1		10201	7430	12395	9090	6283	46.0	44.4
BIO 9637 (C)		9819	9242	12056	11267	6610	64.4	63.3
C.D.(5%)Bi-Bj		727.8	180.6	876.2	225.9	342.2	3.3	3.7
C.V.(%)ErrorB		6.3	1.9	6.2	1.9	4.6	5.2	6.0
F(5%)		n.s.	s	n.s.	s	n.s.	s	s

Cont….

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Plant height (cm)		Days to 50% tasseling		Days to 50% silking		1000 grain weight (g)	
		Karim*	Vagarai	Karim*	Vagarai	Karim*	Vagarai	Karim*	Vagarai
150:65:65	VEH 11-1	249.2	183.5	63.7	57.3	65.7	60.3	327.3	330.0
	BIO 9637 (C)	269.5	186.5	61.0	54.7	64.0	57.0	359.3	356.7
200:80:80	VEH 11-1	249.3	186.5	63.0	56.3	65.7	59.0	327.3	343.3
	BIO 9637 (C)	276.7	190.0	60.7	54.3	63.7	57.0	374.0	360.0
250:95:95	VEH 11-1	262.8	189.4	61.7	56.3	61.7	59.3	328.7	353.3
	BIO 9637 (C)	278.0	193.6	60.3	55.0	60.3	57.0	400.7	360.0
Location mean		264.3	188.3	61.7	55.7	63.5	58.3	352.9	350.6
C.D.(5%) AiBj-AiBk		8.9	1.2	2.3	1.1	1.8	1.3	46.6	16.3
C.D.(5%) AiBk-AjBk		18.5	3.3	1.8	1.2	1.6	1.6	46.5	15.2
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
150:65:65		259.3	185.0	62.3	56.0	64.8	58.7	343.3	343.3
200:80:80		263.0	188.3	61.8	55.3	64.7	58.0	350.7	351.7
250:95:95		270.4	191.5	61.0	55.7	61.0	58.2	364.7	356.7
C.D.(5%) Ai-Aj		17.4	3.1	0.8	0.9	1.0	1.3	32.9	10.0
C.V.(%) Error A		4.1	1.0	0.8	1.0	1.0	1.4	5.8	1.8
F(5%)		n.s.	s	s	n.s.	s	n.s.	n.s.	s
VEH 11-1		253.8	186.5	62.8	56.7	64.3	59.6	327.8	342.2
BIO 9637 (C)		274.7	190.1	60.7	54.7	62.7	57.0	378.0	358.9
C.D.(5%)Bi-Bj		5.2	0.7	1.3	0.6	1.0	0.8	26.9	9.4
C.V.(%)ErrorB		1.7	0.3	1.9	0.9	1.4	1.1	6.6	2.3
F(5%)		s	s	s	s	s	s	s	s

****Karim* = Karimnagar**

Table 6: Relative performance of pre-release medium maturing hybrids at different NPK levels in Zone V.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Grain yield (kg/ha)	Cob Yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Days to 50% Silking	Plant height (cm)
		Banswara					
150:65:65	VEH 11-1	9489	12356	64.4	73.3	89.3	260.0
	BIO 9637 (C)	9222	11933	65.3	70.0	87.3	283.3
200:80:80	VEH 11-1	10333	13178	65.8	80.0	90.0	287.0
	BIO 9637 (C)	9867	12533	66.2	76.4	88.0	298.3
250:95:95	VEH 11-1	10667	13533	65.3	85.3	90.3	281.7
	BIO 9637 (C)	10267	13644	65.3	87.3	88.3	285.0
Location mean		9974.1	12863.0	65.4	78.7	88.9	282.6
C.D.(5%) AiBj-AiBk		1083.5	840.7	2.8	3.8	0.8	12.7
C.D.(5%) AiBk-AjBk		1149.2	1614.4	3.3	10.3	1.5	23.2
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
150:65:65		9356	12144	64.9	71.7	88.3	271.7
200:80:80		10100	12856	66.0	78.2	89.0	292.7
250:95:95		10467	13589	65.3	86.3	89.3	283.3
C.D.(5%) Ai-Aj		859.6	1502.8	2.6	9.9	1.4	21.4
C.V.(%) Error A		5.4	7.3	2.5	7.9	1.0	4.7
F(5%)		n.s.	n.s.	n.s.	s	n.s.	n.s.
VEH 11-1		10163	13022	65.2	79.6	89.9	276.2
BIO 9637 (C)		9785	12704	65.6	77.9	87.9	288.9
C.D.(5%)Bi-Bj		625.5	485.4	1.6	2.2	0.5	7.3
C.V.(%)ErrorB		5.4	3.3	2.1	2.4	0.5	2.2
F(5%)		n.s.	n.s.	n.s.	n.s.	s	s

Table 7: Evaluation of pre-release germplasm of QPM group against different nutrient levels in Zone II.

$N:P_2O_5:K_2O$ (kg/ha) level	Germplasm	Grain yield (kg/ha)		Cob yield (kg/ha)	Plants ('000/ha)		Cobs ('000/ha)	
		Pantnagar	Ludhiana	Pantnagar	Pantnagar	Ludhiana	Pantnagar	Ludhiana
150:65:65	VEHQ-11-1	5419	10556	8376	62.4	81.5	65.0	82.4
	HQPM 1(C)	5803	10245	8718	59.8	85.2	66.7	85.6
	HQPM7 (C)	5564	9514	8547	60.7	85.2	64.1	85.2
200:80:80	VEHQ-11-1	5598	10792	8675	62.4	84.3	65.8	86.6
	HQPM 1(C)	7068	11245	10342	58.1	83.3	61.5	84.7
	HQPM7 (C)	5402	10495	7906	61.5	84.7	70.1	85.6
250:95:95	VEHQ-11-1	4564	11523	6709	59.8	85.6	65.0	88.0
	HQPM 1(C)	6368	11310	9573	58.1	82.4	63.2	85.2
	HQPM7 (C)	7479	10713	10769	63.2	83.8	68.4	84.7
Location mean		5918.3	10710.4	8846.2	60.7	84.0	65.5	85.3
C.D.(5%) AiBj-AiBk		914.9	805.5	1305.9	7.7	3.2	5.5	3.7
C.D.(5%) AiBk-AjBk		1190.2	947.0	1252.6	9.9	3.5	12.1	4.1
F(5%)		s	n.s.	s	n.s.	n.s.	n.s.	n.s.
150:65:65		5595	10105	8547	61.0	84.0	65.2	84.4
200:80:80		6023	10844	8974	60.7	84.1	65.8	85.6
250:95:95		6137	11182	9017	60.4	84.0	65.5	86.0
C.D. (5%) Ai-Aj		937.6	691.0	669.9	7.7	2.4	11.2	2.8
C.V. (%) Error A		12.1	4.9	5.8	9.7	2.2	13.1	2.5
F (5%)		n.s.	s	n.s.	n.s.	n.s.	n.s.	n.s.
VEHQ-11-1		5194	10957	7920	61.5	83.8	65.2	85.6
HQPM 1(C)		6413	10934	9544	58.7	83.6	63.8	85.2
HQPM7 (C)		6148	10241	9074	61.8	84.6	67.5	85.2
C.D. (5%) Bi-Bj		528.2	465.1	754.0	4.4	1.8	3.2	2.1
C.V. (%) ErrorB		8.7	4.2	8.3	7.1	2.1	4.7	2.4
F (5%)		s	s	s	n.s.	n.s.	n.s.	n.s.

Cont….

N:P_2O_5:K_2O (kg/ha) level	Germplasm	Plant height (cm)		Days to 50% tasseling		Days to 50% silking	
		Pantnagar	Ludhiana	Pantnagar	Ludhiana	Pantnagar	Ludhiana
150:65:65	VEHQ-11-1	187.0	184.7	123.7	140.0	127.7	141.7
	HQPM 1(C)	176.7	183.3	124.3	140.0	127.0	141.7
	HQPM7 (C)	168.0	174.0	125.0	139.0	127.7	141.3
200:80:80	VEHQ-11-1	190.7	191.7	125.0	139.3	129.7	140.7
	HQPM 1(C)	179.7	194.7	122.7	139.7	125.3	141.3
	HQPM7 (C)	176.3	184.3	123.3	139.0	125.7	141.0
250:95:95	VEHQ-11-1	192.0	196.0	124.3	138.7	128.3	140.3
	HQPM 1(C)	182.3	195.3	122.7	138.7	126.0	140.7
	HQPM7 (C)	177.0	190.0	124.7	138.3	127.0	140.7
Location mean		181.1	188.2	124.0	139.2	127.1	141.0
C.D.(5%) AiBj-AiBk		11.3	11.2	1.8	2.5	2.0	3.2
C.D.(5%) AiBk-AjBk		13.3	11.2	1.9	2.3	2.4	3.0
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
150:65:65		177.2	180.7	124.3	139.7	127.4	141.6
200:80:80		182.2	190.2	123.7	139.3	126.9	141.0
250:95:95		183.8	193.8	123.9	138.6	127.1	140.6
C.D. (5%) Ai-Aj		9.8	6.6	1.3	1.1	1.8	1.4
C.V. (%) Error A		4.1	2.7	0.8	0.6	1.1	0.8
F (5%)		n.s.	s	n.s.	n.s.	n.s.	n.s.
VEHQ-11-1		189.9	190.8	124.3	139.3	128.6	140.9
HQPM 1(C)		179.6	191.1	123.2	139.4	126.1	141.2
HQPM7 (C)		173.8	182.8	124.3	138.8	126.8	141.0
C.D. (5%) Bi-Bj		6.5	6.5	1.0	1.5	1.2	1.9
C.V. (%) ErrorB		3.5	3.4	0.8	1.0	0.9	1.3
F (5%)		s	s	n.s.	n.s.	s	n.s.

Cont….

N:P_2O_5:K_2O (kg/ha) level	Germplasm	Cost of cultivation (Rs./ha)	Gross return (Rs./ha)	Net return (Rs./ha)	B:C ratio
		Pantnagar			
150:65:65	VEHQ-11-1	37331	71010	33679	0.90
	HQPM 1(C)	37331	76014	38683	1.04
	HQPM7 (C)	37331	72816	35485	0.95
200:80:80	VEHQ-11-1	39130	73311	34181	0.87
	HQPM 1(C)	39130	92585	53455	1.36
	HQPM7 (C)	39130	70779	31649	0.81
250:95:95	VEHQ-11-1	40929	59914	18985	0.46
	HQPM 1(C)	40929	83431	42502	1.04
	HQPM7 (C)	40929	98065	57136	1.40
Location mean		39130.0	77547.2	38417.2	0.98
C.D.(5%) AiBj-AiBk		0.6	11964.5	11964.5	0.31
C.D.(5%) AiBk-AjBk		0.6	15638.5	15638.5	0.41
F(5%)		n.s.	s	s	s
150:65:65		37331	73280	35949	0.96
200:80:80		39130	78892	39762	1.01
250:95:95		40929	80470	39541	0.97
C.D. (5%) Ai-Aj		0.4	12356.7	12356.7	0.32
C.V. (%) Error A		0.0	12.2	24.6	24.77
F (5%)		s	n.s.	n.s.	n.s.
VEHQ-11-1		39130	68078	28948	0.75
HQPM 1(C)		39130	84010	44880	1.15
HQPM7 (C)		39130	80554	41424	1.05
C.D. (5%) Bi-Bj		0.3	6907.7	6907.7	0.18
C.V. (%) ErrorB		0.0	8.7	17.5	17.91
F (5%)		n.s.	s	s	s

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

N:P_2O_5:K_2O (kg/ha) level	Germplasm	Grain yield (kg/ha)		Cob yield (kg/ha)		Stover yield (kg/ha)	Plants (000/ha)	
		Bahraich	Dholi	Bahraich	Dholi	Bahraich	Bahraich	Dholi
150:50:40	VEHQ-11-1	5528	7605	7104	9400	8005	83.3	54.0
	HQPM 1(C)	5583	7673	7313	9289	8093	82.6	53.6
	HQPM7 (C)	5944	8458	7639	10333	8259	82.6	53.1
200:65:65	VEHQ-11-1	6326	7930	7917	9667	9456	83.3	53.1
	HQPM 1(C)	6333	8838	8049	10911	9555	81.9	53.6
	HQPM7 (C)	6604	8622	8125	10644	9665	82.6	53.3
250:80:80	VEHQ-11-1	6840	8820	8354	10978	10056	83.3	53.3
	HQPM 1(C)	7222	8897	8924	10844	10242	82.6	53.1
	HQPM7 (C)	7708	8910	9417	11000	10762	81.9	53.3
Location mean		6454.5	8417.0	8093.4	10340.7	9343.6	82.7	53.4
C.D.(5%) AiBj-AiBk		79.8	649.3	95.7	798.1	121.9	1.9	1.0
C.D.(5%) AiBk-AjBk		110.8	659.0	102.6	806.7	164.3	1.9	1.0
F(5%)		s	n.s.	s	s	s	n.s.	n.s.
150:50:40		5685	7912	7352	9674	8119	82.9	53.6
200:65:65		6421	8463	8030	10407	9559	82.6	53.3
250:80:80		7257	8876	8898	10941	10353	82.6	53.3
C.D. (5%) Ai-Aj		90.6	398.3	67.6	484.0	132.2	1.0	0.5
C.V. (%) Error A		1.1	3.6	0.6	3.6	1.1	1.0	0.7
F (5%)		s	s	s	s	s	n.s.	n.s.
VEHQ-11-1		6231	8119	7792	10015	9172	83.3	53.5
HQPM 1(C)		6380	8469	8095	10348	9297	82.4	53.4
HQPM7 (C)		6752	8663	8394	10659	9562	82.4	53.3
C.D. (5%) Bi-Bj		46.0	374.9	55.3	460.8	70.4	1.1	0.6
C.V. (%) ErrorB		0.7	4.3	0.7	4.3	0.7	1.3	1.1
F (5%)		s	s	s	s	s	n.s.	n.s.

Cont….

N:P_2O_5:K_2O (kg/ha) level	Germplasm	Cobs (000/ha)		Plant height (cm)		Days of 50% tasseling	Days to 50% silking	
		Bahraich	Dholi	Bahraich	Dholi	Dholi	Bahraich	Dholi
150:50:40	VEHQ-11-1	87.5	56.2	174.7	131.2	125.0	112.3	128.0
	HQPM 1(C)	84.7	55.3	176.7	140.2	124.0	110.3	127.0
	HQPM7 (C)	87.5	55.6	175.0	146.9	122.0	112.3	125.7
200:65:65	VEHQ-11-1	88.2	56.0	181.3	145.0	125.0	107.0	128.0
	HQPM 1(C)	88.2	56.2	182.0	141.7	124.0	105.3	127.3
	HQPM7 (C)	89.6	55.8	180.3	145.0	122.0	106.7	125.3
250:80:80	VEHQ-11-1	88.2	56.0	185.0	161.3	126.3	106.3	129.3
	HQPM 1(C)	88.2	55.1	184.7	148.5	125.7	104.3	129.0
	HQPM7 (C)	88.9	55.6	183.0	157.0	124.7	104.7	127.7
Location mean		87.9	55.8	180.3	146.3	124.3	107.7	127.5
C.D.(5%) AiBj-AiBk		2.8	0.7	1.5	10.6	1.5	1.0	1.7
C.D.(5%) AiBk-AjBk		2.5	1.1	1.5	9.9	2.2	1.3	2.0
F(5%)		n.s.	n.s.	n.s.	s	n.s.	n.s.	n.s.
150:50:40		86.6	55.7	175.4	139.4	123.7	111.7	126.9
200:65:65		88.7	56.0	181.2	143.9	123.7	106.3	126.9
250:80:80		88.4	55.6	184.2	155.6	125.6	105.1	128.7
C.D. (5%) Ai-Aj		1.0	1.0	1.0	5.0	1.8	1.1	1.4
C.V. (%) Error A		0.9	1.3	0.4	2.6	1.1	0.7	0.8
F (5%)		s	n.s.	s	s	n.s.	s	s
VEHQ-11-1		88.0	56.1	180.3	145.9	125.4	108.6	128.4
HQPM 1(C)		87.0	55.6	181.1	143.4	124.6	106.7	127.8
HQPM7 (C)		88.7	55.6	179.4	149.6	122.9	107.9	126.2
C.D. (5%) Bi-Bj		1.6	0.4	0.8	6.1	0.9	0.6	1.0
C.V. (%) ErrorB		1.8	0.7	0.5	4.1	0.7	0.5	0.8
F (5%)		n.s.	s	s	n.s.	s	s	s

Cont….

N:P_2O_5:K_2O (kg/ha) level	Germplasm	1000 grain weight	Nitrogen uptake (kg/ha)	Phosphorus uptake (kg/ha)	Potash uptake (kg/ha)
		Dholi	Bahraich	Bahraich	Bahraich
150:50:40	VEHQ-11-1	230.0	124.8	27.8	69.3
	HQPM 1(C)	226.7	120.8	28.8	70.5
	HQPM7 (C)	260.0	130.9	30.2	70.7
200:65:65	VEHQ-11-1	223.3	143.8	31.7	72.9
	HQPM 1(C)	260.0	144.5	32.7	74.3
	HQPM7 (C)	250.0	148.5	32.9	74.9
250:80:80	VEHQ-11-1	243.3	169.7	37.1	82.3
	HQPM 1(C)	216.7	159.0	39.5	84.9
	HQPM7 (C)	250.0	175.3	39.7	85.2
Location mean		240.0	146.4	33.4	76.1
C.D.(5%) AiBj-AiBk		19.4	2.2	0.7	1.1
C.D.(5%) AiBk-AjBk		25.7	2.9	0.8	1.4
F(5%)		s	s	s	n.s.
150:50:40		238.9	125.5	28.9	70.2
200:65:65		244.4	145.6	32.4	74.0
250:80:80		236.7	168.0	38.8	84.1
C.D. (5%) Ai-Aj		20.5	2.3	0.6	1.0
C.V. (%) Error A		6.5	1.2	1.4	1.0
F (5%)		n.s.	s	s	s
VEHQ-11-1		232.2	146.1	32.2	74.8
HQPM 1(C)		234.4	141.4	33.7	76.6
HQPM7 (C)		253.3	151.6	34.3	76.9
C.D. (5%) Bi-Bj		11.2	1.3	0.4	0.7
C.V. (%) ErrorB		4.5	0.9	1.3	0.8
F (5%)		s	s	s	s

Table 9: Evaluation of pre-release germplasm of QPM group against different nutrient levels in Zone IV.

N:P_2O_5:K_2O (kg/ha) level	Germplasm	Grain yield (kg/ha)			Cob yield (kg/ha)			Fodder yield (kg/ha)	Stover yield (kg/ha)
		Arbhavi	Karimnagar	Vagarai	Arbhavi	Karimnagar	Vagarai	Arbhavi	Vagarai
150:65:65	VEHQ-11-1	4410	11063	7406	5722	13343	9197	2944	8420
	HQPM 1(C)	3661	10287	6055	4472	12780	7339	3000	6325
	HQPM7 (C)	3871	9897	5639	5333	12364	6854	4333	8479
200:80:80	VEHQ-11-1	5519	10571	8711	7333	13025	10669	4944	9451
	HQPM 1(C)	4555	10948	6898	6000	13217	8443	4278	7453
	HQPM7 (C)	4617	9922	5668	6167	12781	6963	5833	8706
250:95:95	VEHQ-11-1	5697	11800	9071	7667	14205	11097	4944	11192
	HQPM 1(C)	4498	11411	7195	5833	13438	8780	4500	7713
	HQPM7 (C)	4669	11059	5878	6250	13697	7163	6667	9053
Location mean		4610.7	10773.0	6946.9	6086.4	13205.6	8500.6	4604.9	8532.4
C.D.(5%) AiBj-AiBk		1045.2	1223.2	230.7	1394.6	1287.3	292.0	1162.2	1003.6
C.D.(5%) AiBk-AjBk		1230.4	1802.0	227.7	1700.3	1581.9	286.0	1788.0	889.3
F(5%)		n.s.	n.s.	s	n.s.	n.s.	s	n.s.	s
150:65:65		3981	10416	6367	5176	12829	7797	3426	7741
200:80:80		4897	10480	7092	6500	13008	8692	5019	8537
250:95:95		4955	11423	7382	6583	13780	9013	5370	9319
C.D. (5%) Ai-Aj		898.8	1514.5	130.2	1279.4	1197.8	160.9	1529.0	352.9
C.V. (%) Error A		14.9	10.7	1.4	16.1	6.9	1.4	25.4	3.2
F (5%)		n.s.	n.s.	s	n.s.	n.s.	s	s	s
VEHQ-11-1		5209	11144	8396	6907	13524	10321	4278	9688
HQPM 1(C)		4238	10882	6716	5435	13145	8187	3926	7163
HQPM7 (C)		4386	10293	5729	5917	12947	6993	5611	8746
C.D. (5%) Bi-Bj		603.5	706.2	133.2	805.2	743.2	168.6	671.0	579.4
C.V. (%) ErrorB		12.7	6.4	1.9	12.9	5.5	1.9	14.2	6.6
F (5%)		s	n.s.	s	s	n.s.	s	s	s

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N:P_2O_5:K_2O (kg/ha) level	Germplasm	Plants ('000/ha)		Cobs ('000/ha)		Plant height (cm)		
		Arbhavi	Vagarai	Arbhavi	Vagarai	Arbhavi	Karimnagar	Vagarai
150:65:65	VEHQ-11-1	49.2	63.9	46.9	63.7	154.0	282.5	188.6
	HQPM 1(C)	46.4	63.7	44.2	62.5	149.3	264.0	177.9
	HQPM7 (C)	38.3	36.3	39.7	35.4	149.7	265.2	184.9
200:80:80	VEHQ-11-1	53.1	65.0	53.3	64.4	156.0	283.8	191.4
	HQPM 1(C)	55.6	64.6	51.9	63.0	144.3	266.0	179.5
	HQPM7 (C)	40.3	37.7	39.2	36.1	153.7	269.8	188.4
250:95:95	VEHQ-11-1	59.2	65.0	55.6	64.4	169.3	285.5	191.7
	HQPM 1(C)	49.4	64.8	46.9	63.2	150.3	272.2	180.9
	HQPM7 (C)	41.4	37.0	43.1	36.6	155.7	270.5	189.3
Location mean		48.1	55.3	46.8	54.3	153.6	273.3	185.8
C.D.(5%) AiBj-AiBk		6.3	3.1	6.4	2.2	8.7	13.7	4.5
C.D.(5%) AiBk-AjBk		6.3	3.2	6.5	2.2	9.9	15.1	5.0
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
150:65:65		44.6	54.6	43.6	53.9	151.0	270.6	183.8
200:80:80		49.6	55.8	48.1	54.5	151.3	273.2	186.4
250:95:95		50.0	55.6	48.5	54.7	158.4	276.1	187.3
C.D. (5%) Ai-Aj		3.8	1.9	3.9	1.2	7.0	10.2	3.5
C.V. (%) Error A		6.1	2.7	6.4	1.7	3.5	2.9	1.4
F (5%)		s	n.s.	s	n.s.	n.s.	n.s.	n.s.
VEHQ-11-1		53.8	64.7	51.9	64.1	159.8	283.9	190.6
HQPM 1(C)		50.5	64.4	47.7	62.9	148.0	267.4	179.4
HQPM7 (C)		40.0	37.0	40.6	36.0	153.0	268.5	187.5
C.D. (5%) Bi-Bj		3.6	1.8	3.7	1.3	5.0	7.9	2.6
C.V. (%) ErrorB		7.3	3.1	7.7	2.3	3.2	2.8	1.4
F (5%)		s	s	s	s	s	s	s

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N:P_2O_5:K_2O (kg/ha) level	Germplasm	Days to 50% flowering	Days to 50% tasseling		Days to 50% silking			1000 grain weight (g)
		Arbhavi	Karimnagar	Vagarai	Arbhavi	Karimnagar	Vagarai	Vagarai
150:65:65	VEHQ-11-1	77.7	65.7	57.7	81.7	69.0	59.7	350.0
	HQPM 1(C)	78.0	64.0	57.7	83.3	66.7	60.3	323.3
	HQPM7 (C)	79.7	63.7	58.0	80.0	66.7	60.7	343.3
200:80:80	VEHQ-11-1	76.7	65.7	58.3	79.7	68.7	60.7	353.3
	HQPM 1(C)	79.0	63.0	58.0	81.7	66.0	61.0	330.0
	HQPM7 (C)	76.7	63.7	59.0	77.3	66.3	61.0	346.7
250:95:95	VEHQ-11-1	77.3	65.7	57.3	79.3	68.3	60.3	353.3
	HQPM 1(C)	76.7	62.7	58.3	78.3	65.7	60.7	330.0
	HQPM7 (C)	77.7	62.0	58.0	80.3	65.0	60.3	346.7
Location mean		77.7	64.0	58.0	80.2	66.9	60.5	341.9
C.D.(5%) AiBj-AiBk		2.7	1.7	0.8	4.5	1.6	1.1	12.3
C.D.(5%) AiBk-AjBk		4.1	2.3	0.8	4.6	2.0	1.0	13.1
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
150:65:65		78.4	64.4	57.8	81.7	67.4	60.2	338.9
200:80:80		77.4	64.1	58.4	79.6	67.0	60.9	343.3
250:95:95		77.2	63.4	57.9	79.3	66.3	60.4	343.3
C.D. (5%) Ai-Aj		3.5	1.8	0.5	2.8	1.5	0.5	8.5
C.V. (%) Error A		3.5	2.2	0.7	2.6	1.7	0.6	1.9
F (5%)		n.s.	n.s.	s	n.s.	n.s.	s	n.s.
VEHQ-11-1		77.2	65.7	57.8	80.2	68.7	60.2	352.2
HQPM 1(C)		77.9	63.2	58.0	81.1	66.1	60.7	327.8
HQPM7 (C)		78.0	63.1	58.3	79.2	66.0	60.7	345.6
C.D. (5%) Bi-Bj		1.5	1.0	0.5	2.6	0.9	0.6	7.1
C.V. (%) ErrorB		1.9	1.5	0.8	3.2	1.3	1.0	2.0
F (5%)		n.s.	s	n.s.	n.s.	s	n.s.	s

Table 10: Evaluation of pre-release germplasm of QPM group against different nutrient levels in Zone V.

N:P2O5:K2O (Kg/ha)	Germplasm	Grain yield (kg/ha)	Cob Yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Days to 50% Silking	Plant height (cm)
		Banswara					
150:65:65	VEHQ-11-1	7133	9222	65.1	71.8	90.3	275.0
	HQPM 1(C)	8289	10311	65.8	78.9	90.0	294.0
	HQPM7 (C)	5711	8422	65.1	66.4	90.7	271.7
200:80:80	VEHQ-11-1	8067	9867	65.8	77.3	92.0	281.7
	HQPM 1(C)	10022	12867	65.6	97.1	90.0	300.0
	HQPM7 (C)	6956	9667	65.6	71.3	90.0	281.7
250:95:95	VEHQ-11-1	8311	10956	65.3	83.8	92.0	295.0
	HQPM 1(C)	10200	13267	66.2	103.1	90.0	301.7
	HQPM7 (C)	7222	9733	65.8	75.3	90.0	283.3
Location mean		7990.1	10479.0	65.6	80.6	90.6	287.1
C.D.(5%) AiBj-AiBk		1100.9	1466.9	1.9	11.3	1.1	13.6
C.D.(5%) AiBk-AjBk		1053.3	1474.7	1.6	11.2	1.0	12.1
F(5%)		n.s.	n.s.	n.s.	n.s.	s	n.s.
150:65:65		7044	9319	65.3	72.4	90.3	280.2
200:80:80		8348	10800	65.6	81.9	90.7	287.8
250:95:95		8578	11319	65.8	87.4	90.7	293.3
C.D.(5%) Ai-Aj		559.6	875.7	0.4	6.5	0.4	4.9
C.V.(%) Error A		5.4	6.4	0.5	6.1	0.4	1.3
F(5%)		s	s	n.s.	s	n.s.	s
VEHQ-11-1		7837	10015	65.4	77.6	91.4	283.9
HQPM 1(C)		9504	12148	65.9	93.0	90.0	298.6
HQPM7 (C)		6630	9274	65.5	71.0	90.2	278.9
C.D.(5%)Bi-Bj		635.6	846.9	1.1	6.5	0.6	7.9
C.V.(%)ErrorB		7.7	7.9	1.6	7.9	0.7	2.7
F(5%)		s	s	n.s.	s	s	s

Table 11: Effect of tillage practices and nutrient management on wheat crop in maize-wheat-green gram cropping systems at Pantnagar.

Tillage practices	Fertility level	Grain yield (kg/ha)	Stover yield (kg/ha)	Tillers/ m^2	Plant height (cm)	100 grain weight (g)	Cost of cultivation (Rs/ha)	Gross returns (Rs/ha)*	Net returns (Rs/ha)	B:C ratio
Zero tillage	50% RDF	2611	3989	203.3	77.4	3.9	19625	35250	15625	0.8
	SSNM	3044	4828	306.7	84.6	4.0	20543	41100	20557	1.0
	100% RDF	3100	4889	331.7	86.9	4.0	22642	41850	19208	0.9
Conventional tillage	50% RDF	3628	4922	296.7	86.5	4.0	23905	48900	24995	1.0
	SSNM	4961	6983	385.0	90.1	4.1	24823	66938	42115	1.7
	100% RDF	4933	7428	456.7	92.9	4.2	26922	66600	39678	1.5
Permanent Beds	50% RDF	3222	4389	250.0	83.2	4.0	24400	43500	19100	0.8
	SSNM	4206	6460	371.7	90.3	4.1	25318	56737	31419	1.2
	100% RDF	4357	6508	384.3	89.8	4.1	27417	58809	31392	1.1
Location mean		3784.8	5599.6	331.8	86.9	4.0	23955.0	51076.1	27121.1	1.1
C.D.(5%) AiBj-AiBk		500.1	824.4	59.0	5.5	0.2	0.6	6793.2	6793.2	0.3
C.D.(5%) AiBk-AjBk		791.7	1357.6	60.8	6.1	0.2	0.6	10734.1	10734.1	0.4
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Zero tillage		2919	4569	280.6	82.9	4.0	20937	39400	18463	0.9
Conventional tillage		4507	6444	379.4	89.9	4.1	25217	60813	35596	1.4
Permanent Beds		3929	5786	335.3	87.8	4.1	25712	53016	27304	1.1
C.D. (5%) Ai-Aj		684.1	1188.4	37.7	4.3	0.2	0.4	9269.1	9269.1	0.4
C.V. (%) Error A		13.8	16.2	8.7	3.7	3.0	0.0	13.9	26.1	25.5
F (5%)		s	s	s	s	n.s.	s	s	s	s
50% RDF		3154	4433	250.0	82.4	4.0	22643	42550	19907	0.9
SSNM		4071	6090	354.4	88.3	4.1	23561	54925	31364	1.3
100% RDF		4130	6275	390.9	89.9	4.1	25660	55753	30093	1.2
C.D. (5%) Bi-Bj		288.7	476.0	34.1	3.2	0.1	0.3	3922.0	3922.0	0.2
C.V. (%) ErrorB		7.4	8.3	10.0	3.5	2.3	0.0	7.5	14.1	15.4
F (5%)		s	s	s	s	n.s.	s	s	s	s

Treatment details:

Main plot: Tillage practices	**Sub plot: Fertility levels (N-P_2O_5-K_2O /ha)**
T_1: Zero tillage (ZT)	N_1: 50% RDF
T_2: Conventional tillage (CT)	N_2: SSNM based on nutrient expert (110:15:64)
T_3: Permanent Beds (PB)	N_3: 100% RDF (150:60:40 kg)

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Tillage practices	Fertility level	N uptake by grain (kg/ha)	N uptake by stover (kg/ha)	Total N uptake (kg/ha)	P uptake by grain (kg/ha)	P uptake by stover (kg/ha)	Total P uptake (kg/ha)	K uptake by grain (kg/ha)	K uptake by stover (kg/ha)	Total K uptake (kg/ha)
Zero tillage	50% RDF	36.5	12.4	48.9	5.8	4.3	10.1	24.8	45.4	70.2
	SSNM	42.7	15.4	58.1	6.8	5.1	11.9	30.9	58.7	89.6
	100% RDF	44.3	15.7	60.0	7.0	5.8	12.8	31.0	58.3	89.4
Conventional tillage	50% RDF	52.8	15.8	68.6	8.4	5.6	14.1	36.8	59.2	96.0
	SSNM	74.5	24.2	98.7	11.3	7.8	19.2	52.9	91.7	144.6
	100% RDF	75.9	27.8	103.7	12.1	9.2	21.3	51.3	95.3	146.6
Permanent Beds	50% RDF	47.8	13.7	61.4	7.4	4.9	12.2	32.0	51.1	83.1
	SSNM	63.8	22.1	85.9	9.4	7.1	16.6	42.8	80.4	123.2
	100% RDF	67.7	22.6	90.3	10.3	7.8	18.0	44.0	80.0	123.9
Location mean		56.2	18.8	75.1	8.7	6.4	15.1	38.5	68.9	107.4
C.D.(5%) AiBj-AiBk		10.6	4.7	11.9	1.2	1.1	1.6	5.6	9.8	11.2
C.D.(5%) AiBk-AjBk		12.1	6.2	14.8	1.9	1.7	2.9	11.1	15.5	21.9
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	s	n.s.	s	s
Zero tillage		41.2	14.5	55.7	6.5	5.1	11.6	28.9	54.2	83.1
Conventional tillage		67.7	22.6	90.3	10.6	7.5	18.2	47.0	82.1	129.1
Permanent Beds		59.7	19.5	79.2	9.0	6.6	15.6	39.6	70.5	110.1
C.D. (5%) Ai-Aj		8.5	5.0	11.3	1.6	1.4	2.6	10.2	13.4	20.0
C.V. (%) Error A		11.5	20.2	11.5	14.2	16.9	13.0	20.2	14.9	14.3
F (5%)		s	s	s	s	s	s	s	s	s
50% RDF		45.7	14.0	59.7	7.2	4.9	12.1	31.2	51.9	83.1
SSNM		60.3	20.6	80.9	9.2	6.7	15.9	42.2	76.9	119.1
100% RDF		62.6	22.0	84.7	9.8	7.6	17.4	42.1	77.9	120.0
C.D. (5%) Bi-Bj		6.1	2.7	6.8	0.7	0.6	1.0	3.2	5.7	6.5
C.V. (%) ErrorB		10.6	14.0	8.9	8.0	9.6	6.1	8.2	8.0	5.9
F (5%)		s	s	s	s	s	s	s	s	s

Table 12: Effect of tillage practices and nutrient management on green gram in maize-wheat-green gram cropping systems at Pantnagar.

Tillage practices	Fertility level	Grain yield (gm/plot)	Stover yield (gm/plot)	Plants/ plot	Plant height (cm)	100 grain weight (g)	Cost of cultivation (Rs/ha)	Gross returns (Rs/ha)*	Net returns (Rs/ha)	B:C ratio
Zero tillage	50% RDF	72.2	1330.6	239.3	59.2	3.0	19184	3250	-15934	-0.8
	SSNM	75.0	1355.6	266.0	61.7	3.0	19184	3375	-15809	-0.8
	100% RDF	77.8	1336.1	268.7	61.3	3.1	19184	3500	-15684	-0.8
Conventional tillage	50% RDF	86.1	1452.8	239.7	63.3	3.1	22714	3875	-18839	-0.8
	SSNM	94.4	1577.8	254.0	67.2	3.0	22714	4250	-18464	-0.8
	100% RDF	100.0	1444.4	254.7	66.9	3.0	22714	4500	-18214	-0.8
Permanent Beds	50% RDF	111.1	1488.1	220.7	59.7	2.9	21734	5000	-16734	-0.8
	SSNM	127.0	1686.5	200.3	61.9	3.0	21734	5714	-16020	-0.7
	100% RDF	119.0	1611.1	199.3	62.3	3.1	21734	5357	-16377	-0.8
Location mean		95.9	1475.9	238.1	62.6	3.0	21210.7	4313.5	-16897.1	-0.8
C.D.(5%) AiBj-AiBk		27.8	420.1	42.0	12.6	0.4	0.6	1250.3	1250.4	0.1
C.D.(5%) AiBk-AjBk		25.9	370.3	46.7	14.5	0.4	0.6	1166.3	1166.5	0.1
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Zero tillage		75.0	1340.7	258.0	60.7	3.0	19184	3375	-15809	-0.8
Conventional tillage		93.5	1491.7	249.4	65.8	3.0	22714	4208	-18506	-0.8
Permanent Beds		119.0	1595.2	206.8	61.3	3.0	21734	5357	-16377	-0.8
C.D. (5%) Ai-Aj		12.8	142.6	32.1	10.4	0.3	0.4	575.3	575.5	0.0
C.V. (%) Error A		10.2	7.4	10.3	12.7	6.7	0.0	10.2	-2.6	-2.9
F (5%)		s	s	s	n.s.	n.s.	s	s	s	s
50% RDF		89.8	1423.8	233.2	60.7	3.0	21211	4042	-17169	-0.8
SSNM		98.8	1539.9	240.1	63.6	3.0	21211	4446	-16764	-0.8
100% RDF		98.9	1463.9	240.9	63.5	3.1	21211	4452	-16758	-0.8
C.D. (5%) Bi-Bj		16.0	242.5	24.3	7.3	0.2	0.3	721.9	721.9	0.0
C.V. (%) ErrorB		16.3	16.0	9.9	11.3	6.8	0.0	16.3	-4.2	-4.1
F (5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

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Tillage practices	Fertility level	Maize equivalent yield of maize-wheat-green gram cropping system (kg/ha)	Cost of cultivation of maize-wheat-green gram cropping system (Rs./ha)	Gross returns of (Rs./ha) maize-wheat-green gram cropping system *	Net returns of maize-wheat-green gram cropping system (Rs./ha)	B:C ratio of maize-wheat-green gram cropping system	N uptake by grain (kg/ha)	N uptake by stover (kg/ha)	Total N uptake (kg/ha)
Zero tillage	50% RDF	6954	50347	91094	40747	0.8	2.2	13.1	15.2
	SSNM	8497	51866	111306	59440	1.1	2.3	13.4	15.6
	100% RDF	8904	56735	116646	59911	1.1	2.3	13.3	15.6
Conventional tillage	50% RDF	8903	65841	116635	50794	0.8	2.6	14.9	17.5
	SSNM	11408	67360	149439	82079	1.2	2.9	16.3	19.2
	100% RDF	11710	72229	153408	81179	1.1	3.1	14.8	17.9
Permanent Beds	50% RDF	8004	59422	104853	45431	0.8	3.4	15.2	18.6
	SSNM	10118	60941	132540	71599	1.2	3.9	17.3	21.2
	100% RDF	10238	65810	134124	68314	1.0	3.6	16.7	20.3
Location mean		9415.2	61172.3	123338.4	62166.0	1.0	2.9	15.0	17.9
C.D.(5%) AiBj-AiBk		909.6	0.6	11915.1	11915.1	0.2	0.8	3.9	3.8
C.D.(5%) AiBk-AjBk		978.7	0.6	12820.8	12820.8	0.2	0.7	3.2	3.1
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Zero tillage		8118	52983	106349	53366	1.0	2.3	13.2	15.5
Conventional tillage		10674	68477	139827	71351	1.0	2.9	15.3	18.2
Permanent Beds		9453	62058	123839	61782	1.0	3.6	16.4	20.0
C.D. (5%) Ai-Aj		647.7	0.4	8484.9	8484.9	0.2	0.4	0.4	0.3
C.V. (%) Error A		5.3	0.0	5.3	10.4	12.2	9.4	2.1	1.4
F (5%)		s	s	s	s	n.s.	s	s	s
50% RDF		7954	58537	104194	45657	0.8	2.7	14.4	17.1
SSNM		10007	60056	131095	71039	1.2	3.0	15.7	18.7
100% RDF		10284	64925	134726	69801	1.1	3.0	14.9	17.9
C.D. (5%) Bi-Bj		525.2	0.3	6879.2	6879.2	0.1	0.5	2.3	2.2
C.V. (%) ErrorB		5.4	0.0	5.4	10.8	11.0	15.5	14.6	11.9
F (5%)		s	s	s	s	s	n.s.	n.s.	n.s.

Table 13: Effect of tillage and nutrient management on soil residual nutrient after completion of one year maize-wheat-mungbean cropping system at Pantnagar during 2014.

Tillage practices	Fertility level	Residual soil organic carbon (%) after completion of one year cropping sequence	Residual soil available N (kg/ha) after completion of one year cropping sequence	Residual soil available P (kg/ha) after completion of one year cropping sequence	Residual soil available K (kg/ha)after completion of one year cropping sequence
Zero tillage	50% RDF	0.72	231.00	17.80	223.00
	SSNM	0.86	258.00	17.40	264.00
	100% RDF	0.84	268.00	21.20	255.00
Conventional tillage	50% RDF	0.63	181.00	15.70	215.00
	SSNM	0.74	214.00	16.50	253.00
	100% RDF	0.72	225.00	20.40	255.00
Permanent Beds	50% RDF	0.69	223.00	17.50	229.00
	SSNM	0.85	274.00	17.80	264.00
	100% RDF	0.85	263.00	21.50	262.00
Location mean		0.77	237.44	18.42	246.67
C.D.(5%) AiBj-AiBk		0.07	53.16	5.01	53.20
C.D.(5%) AiBk-AjBk		0.08	53.63	4.18	56.46
F(5%)		n.s.	n.s.	n.s.	n.s.
Zero tillage		0.81	252.33	18.80	247.33
Conventional tillage		0.70	206.67	17.53	241.00
Permanent Beds		0.80	253.33	18.93	251.67
C.D. (5%) Ai-Aj		0.06	32.06	0.89	36.67
C.V. (%) Error A		5.75	10.32	3.67	11.36
F (5%)		s	s	s	n.s.
50% RDF		0.68	211.67	17.00	222.33
SSNM		0.82	248.67	17.23	260.33
100% RDF		0.80	252.00	21.03	257.33
C.D. (5%) Bi-Bj		0.04	30.69	2.89	30.71
C.V. (%) ErrorB		5.34	12.58	15.28	12.12
F (5%)		s	s	s	s

Table 14: Effect of tillage and nutrient management on soil pH and bulk density after completion of one year maize-wheat- mungbean cropping system at Pantnagar during 2014.

Tillage practices	Fertility level	Soil pH after completion of one year cropping sequence	Soil Bulk density (Mg/m^3) at 0-15 cm depth after completion of one year cropping sequence
Zero tillage	50% RDF	7.00	1.41
	SSNM	7.07	1.39
	100% RDF	7.10	1.42
Conventional tillage	50% RDF	7.10	1.36
	SSNM	7.10	1.38
	100% RDF	7.03	1.37
Permanent Beds	50% RDF	7.23	1.39
	SSNM	7.17	1.40
	100% RDF	7.10	1.41
Location mean		7.10	1.39
C.D.(5%) AiBj-AiBk		0.27	0.05
C.D.(5%) AiBk-AjBk		0.39	0.08
F(5%)		n.s.	n.s.
Zero tillage		7.06	1.41
Conventional tillage		7.08	1.37
Permanent Beds		7.17	1.40
C.D. (5%) Ai-Aj		0.33	0.07
C.V. (%) Error A		3.51	4.00
F (5%)		n.s.	n.s.
50% RDF		7.11	1.39
SSNM		7.11	1.39
100% RDF		7.08	1.40
C.D. (5%) Bi-Bj		0.15	0.03
C.V. (%) ErrorB		2.11	1.99
F (5%)		n.s.	n.s.

Table 15: Nutrient requirement of different maize genotype under maize-wheat cropping system at Pantnagar.

Fertility levels	Hybrids	Grain yield (Wheat) (kg/ha)	Straw yield (Wheat) (kg/ha)	Plant height (cm)	No. of tillers/hill	Spike length (cm)	Effective tillers/m^2
50% RDF	DHM-117	3978	6111	90.1	8.7	9.2	320.0
	HQPM-1	3994	6271	92.1	8.8	8.8	373.3
	PMH-1	4419	6178	91.1	8.1	7.9	383.3
	PMH-3	4315	6384	91.2	8.0	8.3	376.7
	HM-5	4289	5978	89.1	9.0	8.0	355.0
SSNM	DHM-117	4779	7223	93.4	8.7	8.4	325.0
	HQPM-1	4512	6780	94.9	8.2	8.1	330.0
	PMH-1	4556	6936	90.9	9.0	8.7	310.0
	PMH-3	4558	6827	93.1	8.6	8.8	340.0
	HM-5	4512	6536	92.0	8.7	8.7	333.3
100% RDF	DHM-117	4422	6754	93.5	8.9	8.7	318.3
	HQPM-1	3890	6114	94.6	8.6	8.3	356.7
	PMH-1	4208	5671	95.5	8.4	8.3	330.0
	PMH-3	4076	6869	94.4	8.3	8.6	343.3
	HM-5	4872	5983	93.5	8.3	8.2	331.7
Location mean		4358.6	6441.0	92.6	8.6	8.5	341.8
C.D.(5%) AiBj-AiBk		268.1	478.7	4.2	1.4	1.1	42.7
C.D.(5%) AiBk-AjBk		498.7	749.2	7.1	1.3	1.3	49.7
F(5%)		s	s	n.s.	n.s.	n.s.	n.s.
50% RDF		4199	6184	90.7	8.5	8.5	361.7
SSNM		4583	6861	92.9	8.6	8.5	327.7
100% RDF		4294	6278	94.3	8.5	8.4	336.0
C.D. (5%) Ai-Aj		442.4	624.2	6.1	0.4	0.9	32.6
C.V. (%) Error A		10.0	9.6	6.5	4.5	11.0	9.4
F (5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
DHM-117		4393	6696	92.3	8.7	8.8	321.1
HQPM-1		4132	6388	93.9	8.5	8.4	353.3
PMH-1		4395	6262	92.5	8.5	8.3	341.1
PMH-3		4316	6693	92.9	8.3	8.6	353.3
HM-5		4558	6166	91.5	8.7	8.3	340.0
C.D. (5%) Bi-Bj		154.8	276.4	2.4	0.8	0.6	24.6
C.V. (%) ErrorB		3.7	4.4	2.7	9.5	7.4	7.4
F (5%)		s	s	n.s.	n.s.	n.s.	n.s.

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Fertility levels	Hybrids	Maize equivalent yield of wheat (kg/ha)	Cost of cultivation of wheat (Rs./ha)	Gross return of wheat (Rs./ha)	Net return of wheat (Rs./ha)	B:C ratio of wheat
50% RDF	DHM-117	4251	26830	55689	28859	1.1
	HQPM-1	4268	26830	55910	29080	1.1
	PMH-1	4723	26830	61869	35039	1.3
	PMH-3	4611	26830	60412	33582	1.3
	HM-5	4584	26830	60049	33219	1.2
SSNM	DHM-117	5107	26830	66900	40070	1.5
	HQPM-1	4822	26830	63164	36334	1.4
	PMH-1	4869	26830	63790	36960	1.4
	PMH-3	4871	26830	63817	36987	1.4
	HM-5	4822	26830	63164	36334	1.4
100% RDF	DHM-117	4726	26830	61912	35082	1.3
	HQPM-1	4157	26830	54462	27632	1.0
	PMH-1	4497	26830	58912	32082	1.2
	PMH-3	4356	26830	57064	30234	1.1
	HM-5	5206	26830	68203	41373	1.5
Location mean		4658.1	26830.0	61021.1	34191.1	1.3
C.D.(5%) AiBj-AiBk		286.3	0.4	3752.4	3752.4	0.1
C.D.(5%) AiBk-AjBk		533.1	0.5	6983.0	6983.0	0.3
F(5%)		s	n.s.	s	s	s
50% RDF		4487	26830	58786	31956	1.2
SSNM		4898	26830	64167	37337	1.4
100% RDF		4589	26830	60111	33281	1.2
C.D. (5%) Ai-Aj		473.0	0.3	6194.7	6194.7	0.2
C.V. (%) Error A		10.0	0.0	10.0	17.9	17.9
F (5%)		n.s.	n.s.	n.s.	n.s.	n.s.
DHM-117		4695	26830	61500	34670	1.3
HQPM-1		4416	26830	57845	31015	1.2
PMH-1		4697	26830	61524	34694	1.3
PMH-3		4613	26830	60431	33601	1.3
HM-5		4871	26830	63805	36975	1.4
C.D. (5%) Bi-Bj		165.3	0.3	2166.4	2166.4	0.1
C.V. (%) ErrorB		3.6	0.0	3.6	6.5	6.5
F (5%)		s	n.s.	s	s	s

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Fertility levels	Hybrids	At maize harvest 2013/At wheat sowing 2013			At wheat harvest 2013-14 or maize sowing 2014		
		Available N (kg/ha)	Available P (kg/ha)	Available K (kg/ha)	Available N (kg/ha)	Available P (kg/ha)	Available K (kg/ha)
50% RDF	DHM-117	194.2	30.0	144.9	192.5	31.2	144.5
	HQPM-1	191.2	27.4	143.6	190.4	28.1	143.7
	PMH-1	191.1	29.8	144.7	187.0	29.5	146.1
	PMH-3	194.1	30.0	142.1	188.1	30.3	142.0
	HM-5	191.5	28.8	142.2	188.0	29.7	144.7
SSNM	DHM-117	204.4	29.0	151.6	197.2	30.6	145.6
	HQPM-1	209.3	31.6	152.3	201.6	32.1	148.5
	PMH-1	206.1	32.1	152.1	199.3	32.7	150.1
	PMH-3	205.8	31.4	152.6	202.0	31.6	145.9
	HM-5	209.5	31.4	153.3	196.5	31.6	150.4
100% RDF	DHM-117	217.7	27.2	153.0	200.5	28.0	149.0
	HQPM-1	217.1	28.9	151.5	206.2	29.4	151.4
	PMH-1	207.3	28.7	147.5	209.2	30.2	146.5
	PMH-3	214.5	28.8	147.9	202.4	29.4	146.0
	HM-5	213.1	28.0	149.0	207.6	27.5	145.2
Location mean		204.5	29.5	148.6	197.9	30.1	146.6
C.D.(5%) AiBj-AiBk		7.3	3.3	4.1	9.4	3.8	7.8
C.D.(5%) AiBk-AjBk		7.7	3.3	3.9	10.6	3.7	8.5
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
50% RDF		192.4	29.2	143.5	189.2	29.8	144.2
SSNM		207.0	31.1	152.4	199.3	31.7	148.1
100% RDF		213.9	28.3	149.8	205.2	28.9	147.6
C.D. (5%) Ai-Aj		4.2	1.7	1.4	6.6	1.5	4.9
C.V. (%) Error A		2.0	5.5	1.0	3.3	5.0	3.3
F (5%)		s	s	s	s	s	n.s.
DHM-117		205.4	28.7	149.8	196.7	30.0	146.4
HQPM-1		205.9	29.3	149.1	199.4	29.9	147.9
PMH-1		201.5	30.2	148.1	198.5	30.8	147.6
PMH-3		204.8	30.1	147.6	197.5	30.4	144.6
HM-5		204.7	29.4	148.2	197.4	29.6	146.8
C.D. (5%) Bi-Bj		4.2	1.9	2.4	5.4	2.2	4.5
C.V. (%) ErrorB		2.1	6.5	1.6	2.8	7.4	3.2
F (5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

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Fertility levels	Hybrids	At maize harvest 2013/At wheat sowing 2013				At wheat harvest 2013-14/At maize sowing 2014			
		pH	EC (d Sm/m)	Org. C (%)	Bulk density (g/cm^3) at maize harvest	pH	EC (d Sm/m)	Org. C (%)	Bulk density (g/cm^3) at wheat harvest
50% RDF	DHM-117	7.0	0.3	0.8	1.4	7.1	0.3	0.8	1.4
	HQPM-1	7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
	PMH-1	7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
	PMH-3	7.1	0.3	0.8	1.4	7.0	0.3	0.8	1.4
	HM-5	7.2	0.3	0.8	1.4	7.0	0.3	0.8	1.4
SSNM	DHM-117	7.0	0.3	0.8	1.4	7.0	0.3	0.9	1.4
	HQPM-1	7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.3
	PMH-1	7.1	0.3	0.8	1.4	7.2	0.3	0.8	1.3
	PMH-3	7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
	HM-5	7.2	0.3	0.8	1.4	7.2	0.3	0.8	1.4
100% RDF	DHM-117	7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
	HQPM-1	7.0	0.3	0.8	1.3	7.1	0.3	0.9	1.4
	PMH-1	7.0	0.3	0.8	1.4	7.0	0.3	0.8	1.4
	PMH-3	7.0	0.3	0.8	1.4	7.1	0.3	0.8	1.4
	HM-5	7.2	0.3	0.8	1.4	7.2	0.3	0.8	1.4
Location mean		7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
C.D.(5%) AiBj-AiBk		0.3	0.0	0.1	0.1	0.2	0.0	0.1	0.1
C.D.(5%) AiBk-AjBk		0.3	0.0	0.1	0.1	0.2	0.0	0.1	0.1
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
50% RDF		7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
SSNM		7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
100% RDF		7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
C.D. (5%) Ai-Aj		0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0
C.V. (%) Error A		2.7	6.5	2.8	0.9	1.2	6.3	2.9	1.0
F (5%)		n.s.	n.s.	n.s.	s	n.s.	n.s.	s	n.s.
DHM-117		7.0	0.3	0.8	1.4	7.1	0.3	0.8	1.4
HQPM-1		7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
PMH-1		7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
PMH-3		7.1	0.3	0.8	1.4	7.1	0.3	0.8	1.4
HM-5		7.2	0.3	0.8	1.4	7.1	0.3	0.8	1.4
C.D. (5%) Bi-Bj		0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
C.V. (%) ErrorB		2.1	6.8	5.6	2.6	1.4	5.7	5.3	2.5
F (5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

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Fertility levels	Hybrids	Available N (kg/ha)		Available P (kg/ha)		Available K (kg/ha)	
		At maize harvest 2013 or At wheat sowing 2013	At wheat harvest 2013-14 or at maize sowing 2014	At maize harvest 2013 or At wheat sowing 2013	At wheat harvest 2013-14 or at maize sowing 2014	At maize harvest 2013 or At wheat sowing 2013	At wheat harvest 2013-14 or at maize sowing 2014
50% RDF	DHM-117	194.2	192.5	30.0	31.2	144.9	144.5
	HQPM-1	191.2	190.4	27.4	28.1	143.6	143.7
	PMH-1	191.1	187.0	29.8	29.5	144.7	146.1
	PMH-3	194.1	188.1	30.0	30.3	142.1	142.0
	HM-5	191.5	188.0	28.8	29.7	142.2	144.7
SSNM	DHM-117	204.4	197.2	29.0	30.6	151.6	145.6
	HQPM-1	209.3	201.6	31.6	32.1	152.3	148.5
	PMH-1	206.1	199.3	32.1	32.7	152.1	150.1
	PMH-3	205.8	202.0	31.4	31.6	152.6	145.9
	HM-5	209.5	196.5	31.4	31.6	153.3	150.4
100% RDF	DHM-117	217.7	200.5	27.2	28.0	153.0	149.0
	HQPM-1	217.1	206.2	28.9	29.4	151.5	151.4
	PMH-1	207.3	209.2	28.7	30.2	147.5	146.5
	PMH-3	214.5	202.4	28.8	29.4	147.9	146.0
	HM-5	213.1	207.6	28.0	27.5	149.0	145.2
Location mean		204.5	197.9	29.5	30.1	148.6	146.6
C.D.(5%) AiBj-AiBk		7.3	9.4	3.3	3.8	4.1	7.8
C.D.(5%) AiBk-AjBk		7.7	10.6	3.3	3.7	3.9	8.5
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
50% RDF		192.4	189.2	29.2	29.8	143.5	144.2
SSNM		207.0	199.3	31.1	31.7	152.4	148.1
100% RDF		213.9	205.2	28.3	28.9	149.8	147.6
C.D. (5%) Ai-Aj		4.2	6.6	1.7	1.5	1.4	4.9
C.V. (%) Error A		2.0	3.3	5.5	5.0	1.0	3.3
F (5%)		s	s	s	s	s	n.s.
DHM-117		205.4	196.7	28.7	30.0	149.8	146.4
HQPM-1		205.9	199.4	29.3	29.9	149.1	147.9
PMH-1		201.5	198.5	30.2	30.8	148.1	147.6
PMH-3		204.8	197.5	30.1	30.4	147.6	144.6
HM-5		204.7	197.4	29.4	29.6	148.2	146.8
C.D. (5%) Bi-Bj		4.2	5.4	1.9	2.2	2.4	4.5
C.V. (%) ErrorB		2.1	2.8	6.5	7.4	1.6	3.2
F (5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.

Cont….

Fertility levels	Hybrids	N uptake wheat (kg/ha)		P uptake wheat (kg/ha)		K uptake wheat (kg/ha)	
		Grain	Straw	Grain	Straw	Grain	Straw
50% RDF	DHM-117	47.8	24.9	9.6	3.3	12.7	93.4
	HQPM-1	47.6	23.2	10.5	3.8	12.8	91.9
	PMH-1	56.1	24.0	12.9	2.7	14.1	90.0
	PMH-3	53.5	25.9	10.4	3.0	14.0	93.5
	HM-5	55.5	23.1	11.1	4.0	13.8	90.1
SSNM	DHM-117	63.7	40.2	17.5	5.3	20.1	124.2
	HQPM-1	66.0	36.4	16.9	5.2	19.5	116.0
	PMH-1	64.9	39.3	16.9	6.2	20.1	118.6
	PMH-3	62.0	37.8	17.6	4.8	20.2	118.6
	HM-5	62.6	37.2	17.6	5.3	21.0	111.7
100% RDF	DHM-117	67.7	41.4	7.8	2.0	23.3	128.4
	HQPM-1	62.0	38.8	8.3	1.8	20.9	116.3
	PMH-1	68.3	37.9	7.4	1.9	22.3	108.2
	PMH-3	63.7	45.1	7.9	3.2	20.1	128.4
	HM-5	76.0	37.0	9.4	2.6	25.0	112.1
Location mean		61.2	34.1	12.1	3.7	18.7	109.4
C.D.(5%) AiBj-AiBk		6.1	4.7	2.5	1.7	2.7	8.5
C.D.(5%) AiBk-AjBk		8.2	5.5	4.0	1.7	4.3	13.3
F(5%)		s	n.s.	n.s.	n.s.	n.s.	s
50% RDF		52.1	24.2	10.9	3.3	13.5	91.8
SSNM		63.8	38.2	17.3	5.4	20.2	117.8
100% RDF		67.6	40.1	8.1	2.3	22.3	118.7
C.D. (5%) Ai-Aj		6.2	3.7	3.4	0.7	3.6	11.0
C.V. (%) Error A		10.1	10.8	27.5	18.5	19.2	10.0
F (5%)		s	s	s	s	s	s
DHM-117		59.8	35.5	11.6	3.5	18.7	115.4
HQPM-1		58.5	32.8	11.9	3.6	17.7	108.1
PMH-1		63.1	33.7	12.4	3.6	18.8	105.6
PMH-3		59.7	36.2	12.0	3.7	18.1	113.5
HM-5		64.7	32.4	12.7	4.0	19.9	104.6
C.D. (5%) Bi-Bj		3.5	2.7	1.4	1.0	1.6	4.9
C.V. (%) ErrorB		5.9	8.1	12.3	27.3	8.7	4.6
F (5%)		s	s	n.s.	n.s.	n.s.	s

Table 16: Nutrient management in rice-maize cropping system under different tillage practices at Dholi.

Tillage practices	Fertility levels	Grain yield (kg/ha)	Cob yield (kg/ha)	Plants ('000/ha)	Cobs ('000/ha)	Days of 50% tasseling	Days of 50% silking
Permanente Bed	120:60:40	6819	8557	71.0	72.0	126.3	131.0
	150:50:40	8656	11045	71.0	74.6	126.3	132.3
	50:30:30	5106	6547	70.6	70.4	125.7	130.3
Zero Tillage	120:60:40	6629	8418	71.6	74.2	126.0	130.7
	150:50:40	7929	10328	71.4	75.8	127.3	131.7
	50:30:30	4585	6249	71.0	70.4	125.7	130.7
Conventional Tillage	120:60:40	5787	7323	71.4	74.0	127.7	133.0
	150:50:40	7614	9532	71.8	75.8	129.3	134.3
	50:30:30	3553	5552	71.4	69.9	128.3	133.3
Mean of location		6297.6	8172.5	71.3	73.0	127.0	131.9
C.D. at 5 (%)		414.9	531.0	0.9	2.0	1.5	1.7
F (5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Permanent bed		6860	8716	70.9	72.4	126.1	131.2
Zero tillage		6381	8332	71.4	73.5	126.3	131.0
Conventional tillage		5651	7469	71.6	73.2	128.4	133.6
C.D. at 5 (%)		239.5	306.6	0.5	1.1	0.9	1.0
F (5%)		s	s	s	n.s.	s	s
120:60:40		6412	8100	71.4	73.4	126.7	131.6
150:50:40		8066	10302	71.4	75.4	127.7	132.8
50:30:30		4415	6116	71.0	70.2	126.6	131.4
C.D. at 5 (%)		239.5	306.6	0.5	1.1	0.9	1.0
C.V. (%)		3.8	3.8	0.7	1.6	0.7	0.7
F (5%)		s	s	n.s.	s	s	s

Table 17: Tillage management in maize based cropping sequences (wheat-maize) at Dholi.

Tillage practices	Fertility levels	Grain yield (kg/ha)	Grain weight (kg/ha)	Plants /m²	No. of spicklets	Plant height (cm)	Spike length (cm)	Days of flowering	Days of maturity	1000 grain wt (gm)
Permanente Bed	120:60:40	3797	1353	408.3	42.0	93.2	11.0	82.0	121.0	44.4
	150:50:40	3909	1393	420.0	44.0	96.1	11.5	84.0	123.3	45.7
	50:30:30	3741	1333	409.3	40.7	92.7	11.3	82.0	124.3	43.7
Zero Tillage	120:60:40	3295	1174	464.3	44.0	93.7	11.5	82.3	124.0	44.9
	150:50:40	3406	1214	469.0	45.3	97.0	11.9	85.0	124.3	45.8
	50:30:30	3015	1075	461.0	41.3	95.0	11.4	84.0	123.0	43.5
Conventional Tillage	120:60:40	2848	1015	390.0	45.3	97.7	11.5	83.3	124.3	45.7
	150:50:40	3071	1095	455.0	45.3	99.5	12.0	85.3	124.3	46.4
	50:30:30	2624	935	447.0	42.7	97.0	11.8	82.7	124.7	43.5
Mean of location		3300.7	1176.3	436.0	43.4	95.8	11.5	83.4	123.7	44.8
C.D. at 5 (%)		694.0	247.4	35.7	2.7	1.9	0.6	1.8	1.2	0.8
F (5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	s	n.s.
Permanent bed		3816	1360	412.6	42.2	94.0	11.3	82.7	122.9	44.6
Zero tillage		3239	1154	464.8	43.6	95.2	11.6	83.8	123.8	44.7
Conventional tillage		2848	1015	430.7	44.4	98.0	11.8	83.8	124.4	45.2
C.D. at 5 (%)		400.7	142.8	20.6	1.6	1.1	0.3	1.0	0.7	0.4
F (5%)		s	s	s	s	s	s	n.s.	s	s
120:60:40		3313	1181	420.9	43.8	94.9	11.3	82.6	123.1	45.0
150:50:40		3462	1234	448.0	44.9	97.5	11.8	84.8	124.0	45.9
50:30:30		3127	1114	439.1	41.6	94.9	11.5	82.9	124.0	43.6
C.D. at 5 (%)		400.7	142.8	20.6	1.6	1.1	0.3	1.0	0.7	0.4
C.V. (%)		12.1	12.2	4.7	3.6	1.1	2.8	1.3	0.6	1.0
F (5%)		n.s.	n.s.	s	s	s	s	s	s	s

Table 18: Nutrient management in rice-maize cropping systems under different tillage practices at Hyderabad.

Tillage practices	Nutrient management	Rice grain yield (kg/ha)	Rice fodder yield (kg ha)	Tillers/m²	Panicles/m²	Plant height (cm)
Conventional tillage	100% RDF	6252	7323	291.0	238.3	105.8
	SSNM	5895	6848	230.3	226.3	106.8
	50% RDF	4233	5168	174.5	173.3	84.3
Conventional tillage	100% RDF	6329	7290	290.8	237.5	116.3
	SSNM	5783	7005	231.3	228.5	111.0
	50% RDF	4899	5303	176.8	172.3	81.0
Zero Tillage	100% RDF	5328	5355	232.0	232.0	93.5
	SSNM	4786	5125	228.5	226.5	88.0
	50% RDF	3981	4148	164.3	163.3	75.8
Location mean		5275.8	5951.4	224.4	210.9	95.8
C.D.(5%) AiBj-AiBk		343.8	476.7	21.5	7.8	11.3
C.D.(5%) AiBk-AjBk		358.3	430.6	23.4	12.0	10.1
F(5%)		S	n.s.	s	n.s.	n.s.
Conventional tillage		5460	6446	231.9	212.6	98.9
Conventional tillage		5670	6533	232.9	212.8	102.8
Zero Tillage		4698	4876	208.3	207.3	85.8
C.D. (5%) Ai-Aj		224.2	185.8	15.5	10.2	4.2
C.V. (%) Error A		4.3	3.1	6.9	4.8	4.4
F (5%)		S	s	s	n.s.	s
100% RDF		5969	6656	271.3	235.9	105.2
SSNM		5488	6326	230.0	227.1	101.9
50% RDF		4371	4873	171.8	169.6	80.3
C.D. (5%) Bi-Bj		198.5	275.2	12.4	4.5	6.5
C.V. (%) ErrorB		4.4	5.4	6.5	2.5	7.9
F (5%)		S	s	s	s	s

Table 19: Nutrient management in rice-maize cropping systems under different tillage practices at Hyderabad.

Tillage practices	Nutrient management	Maize grain yield (kg/ha)	Maize fodder yield (kg ha)	Plants ('000 ha)	Cobs ('000 ha)	Plant height (cm)	Days to 50% Silking
Conventional tillage	100% RDF	7205	7640	65.3	59.7	235.0	66.3
	SSNM	6723	7232	63.2	59.6	220.0	63.7
	50% RDF	5410	5967	58.0	53.6	169.8	60.1
Conventional tillage	100% RDF	7423	8037	66.1	63.8	236.5	67.7
	SSNM	6950	7280	65.0	61.6	218.8	64.0
	50% RDF	5603	5775	57.3	55.0	165.0	60.4
Zero Tillage	100% RDF	6620	6998	63.2	59.9	210.8	65.4
	SSNM	6163	6785	63.2	56.5	201.5	63.4
	50% RDF	5115	5945	54.0	52.5	161.3	58.4
Location mean		6356.7	6851.1	61.7	58.0	202.1	63.2
C.D.(5%) AiBj-AiBk		629.4	660.9	1.9	2.5	10.4	1.9
C.D.(5%) AiBk-AjBk		547.8	641.5	2.7	2.5	10.3	1.9
F(5%)		n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Conventional tillage		6446	6947	62.2	57.6	208.3	63.3
Conventional tillage		6658	7031	62.8	60.1	206.8	64.0
Zero Tillage		5966	6576	60.1	56.3	191.2	62.4
C.D. (5%) Ai-Aj		191.5	349.5	2.2	1.5	5.9	1.0
C.V. (%) Error A		3.0	5.1	3.6	2.5	2.9	1.6
F (5%)		s	S	n.s.	s	s	s
100% RDF		7083	7558	64.9	61.1	227.4	66.4
SSNM		6612	7099	63.8	59.2	213.4	63.7
50% RDF		5376	5896	56.4	53.7	165.3	59.6
C.D. (5%) Bi-Bj		363.4	381.6	1.1	1.4	6.0	1.1
C.V. (%) ErrorB		6.7	6.5	2.1	2.9	3.5	2.0
F (5%)		s	S	s	s	s	s

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Tillage practices	Nutrient management	Cob length (cm)	Cob girth (cm)	Grain rows/cob	Grains/row	100 Seed weight (g)	System productivity (kg/ha)
Conventional tillage	100% RDF	17.7	15.6	16.3	33.5	30.8	13456.5
	SSNM	16.5	14.8	14.5	30.0	30.1	12617.5
	50% RDF	13.7	13.2	13.0	24.0	20.6	9642.5
Conventional tillage	100% RDF	19.1	16.0	15.5	32.5	29.9	13751.3
	SSNM	17.1	15.7	14.5	29.0	29.1	12732.5
	50% RDF	13.6	13.2	12.5	21.0	19.3	10501.3
Zero Tillage	100% RDF	16.3	14.8	14.0	26.0	26.1	11947.5
	SSNM	15.6	14.7	14.5	24.5	23.5	10948.0
	50% RDF	12.7	12.4	12.0	20.0	17.3	9095.5
Location mean		15.8	14.5	14.1	26.7	25.2	11632.5
C.D.(5%) AiBj-AiBk		1.0	0.5	1.8	1.8	2.5	636.1
C.D.(5%) AiBk-AjBk		0.9	0.7	1.7	2.6	2.7	643.6
F(5%)		n.s.	n.s.	n.s.	s	n.s.	n.s.
Conventional tillage		16.0	14.5	14.6	29.2	27.2	11905.5
Conventional tillage		16.6	15.0	14.2	27.5	26.1	12328.3
Zero Tillage		14.9	14.0	13.5	23.5	22.3	10663.7
C.D. (5%) Ai-Aj		0.5	0.6	0.9	2.2	1.7	382.8
C.V. (%) Error A		3.1	4.0	6.2	8.2	7.0	3.3
F (5%)		s	s	n.s.	s	s	s
100% RDF		17.7	15.5	15.3	30.7	28.9	13051.8
SSNM		16.4	15.1	14.5	27.8	27.5	12099.3
50% RDF		13.4	12.9	12.5	21.7	19.1	9746.4
C.D. (5%) Bi-Bj		0.6	0.3	1.0	1.1	1.5	367.3
C.V. (%) ErrorB		4.2	2.4	8.5	4.6	6.7	3.7
F (5%)		s	s	s	s	s	s

Table 20: Nutrient management in maize-wheat-greengram cropping system under different tillage practices at Banswara.

Tillage	Fertility levels	Wheat grain yield (kg/ha)	Green gram seed yield (kg/ha)
Zero tillage	50% RDF	2781	532.4
	SSNM	5534	1013.9
	100% RDF	5129	851.9
Conventional tillage	50% RDF	2180	444.4
	SSNM	4284	750.0
	100% RDF	3671	597.2
Permanent bed	50% RDF	2602	522.2
	SSNM	4919	861.1
	100% RDF	4478	704.2
Location mean		3953.2	697.5
C.D.(5%) AiBj-AiBk		423.8	96.0
C.D.(5%) AiBk-AjBk		420.8	113.0
F(5%)		n.s.	n.s.
Zero tillage		4481	799.4
Conventional tillage		3378	597.2
Permanent bed		4000	695.8
C.D.(5%) Ai-Aj		243.8	82.6
C.V.(%) Error A		4.7	9.0
F(5%)		s	s
50% RDF		2521	499.7
SSNM		4912	875.0
100% RDF		4426	717.7
C.D.(5%)Bi-Bj		244.7	55.4
C.V.(%)ErrorB		6.0	7.7
F(5%)		s	s

Treatment details:

Main Plot: Tillage practices

T_1 Zero tillage

T_2 Conventional tillage

T_3 Permanent bed

Sub Plot: Fertility Levels ($N:P_2O_5:K_2O$ kg/ha)

F_1 50% of RDF

F_2 SSNM based on nutrient expert

F_3 100% RDF

Table 21: Nutrient management in maize-chickpea cropping system under different tillage practices at Banswara.

Tillage	Fertility levels	Chickpea grain yield (kg/ha)
Zero tillage	50% RDF	819
	SSNM	1783
	100% RDF	1418
Conventional tillage	50% RDF	685
	SSNM	1421
	100% RDF	1042
Permanent bed	50% RDF	779
	SSNM	1633
	100% RDF	1378

Location mean	1217.5
C.D.(5%) AiBj-AiBk	178.3
C.D.(5%) AiBk-AjBk	185.5
F(5%)	n.s.

Zero tillage	1340
Conventional tillage	1049
Permanent bed	1263

C.D.(5%) Ai-Aj	116.9
C.V.(%) Error A	7.3
F(5%)	s

50% RDF	761
SSNM	1612
100% RDF	1279

C.D.(5%)Bi-Bj	102.9
C.V.(%)ErrorB	8.2
F(5%)	s

Treatment details:

Main plot: Tillage practices

T_1 Zero tillage

T_2 Conventional tillage

T_3 Permanent bed

Sub plot: Fertility Levels ($N:P_2O_5:K_2O$ kg/ha)

F_1 50% of RDF

F_2 SSNM based on nutrient expert

F_3 100% RDF

Table 22: Nutrient requirement of maize genotypes under maize-wheat cropping system at Banswara.

Nutrient levels	Hybrid	Grain yield of maize (kg/ha)	Grain yield of wheat (kg/ha)
100% RDF	PMH 1	5111	4089
	PMH 3	4111	4067
	HQPM 1	4000	4067
	CMH-08-350	6000	4067
	CMH-08-292	5489	4044
SSNM based on nutrient expert	PMH 1	5178	4600
	PMH 3	4233	4600
	HQPM 1	4093	4533
	CMH-08-350	6213	4533
	CMH-08-292	5533	4533
50% RDF	PMH 1	2578	2689
	PMH 3	2178	2667
	HQPM 1	2111	2644
	CMH-08-350	3311	2733
	CMH-08-292	2878	2600

Location mean	4201.2	3764.4
C.D.(5%) AiBj-AiBk	1275.2	310.6
C.D.(5%) AiBk-AjBk	1173.4	310.7
F(5%)	n.s.	n.s.

50% RDF	4942	4067
SSNM based on nutrient expert	5050	4560
100% RDF	2611	2667

C.D.(5%) Ai-Aj	285.2	143.4
C.V.(%) Error A	6.7	3.8
F(5%)	s	s

PMH 1	4289	3793
PMH 3	3508	3778
HQPM 1	3401	3748
CMH-08-350	5175	3778
CMH-08-292	4633	3726

C.D.(5%)Bi-Bj	736.2	179.3
C.V.(%)ErrorB	18.0	4.9
F(5%)	s	n.s.

Table 23: Nutrient management Site-Specific nutrient management (SSNM) in maize- maize-mustard relay cropping system under different tillage practices (maize-mustard relay cropping system) at Chhindwara.

Fertility levels	Tillage practices	Mustard seed yield (kg/ha)	Mustard plants ('000/ha)
60:30:20	Conventional tillage	764	241.1
	Bed planting	796	238.9
	Zero tillage	857	242.6
120:60:40	Conventional tillage	929	238.9
	Bed planting	961	251.5
	Zero tillage	1010	251.5
140:34:71	Conventional tillage	999	247.4
	Bed planting	1008	243.0
	Zero tillage	1043	241.1
Mean of location		929.6	244.0
C.D. at 5 (%)		82.4	6.5
F (5%)		n.s.	s
60:30:20		806	240.9
120:60:40		967	247.3
140:34:71		1016	243.8
C.D. at 5 (%)		47.6	3.7
F (5%)		s	s
Conventional tillage		897	242.5
Bed planting		922	244.4
Zero tillage		970	245.1
C.D. at 5 (%)		47.6	3.7
C.V. (%)		5.1	1.5
F (5%)		s	n.s.

Table 24: Nutrient requirements (Site-Specific nutrient management) of maize genotypes maize-mustard relay cropping system under different cropping systems at Chhindwara.

Fertility level	Hybrids	Mustard seed yield (kg/ha)	Mustard plants ('000/ha)
60:30:20	PMH-1	804	241.5
	HQPM-1	796	238.9
	PMH-3	790	237.4
	H-216	808	242.6
	DHM-117	793	238.1
120:60:40	PMH-1	910	240.0
	HQPM-1	871	239.3
	PMH-3	914	240.0
	H-216	911	240.4
	DHM-117	928	235.2
140:34:71	PMH-1	1019	239.3
	HQPM-1	1038	237.8
	PMH-3	1026	240.0
	H-216	1016	238.5
	DHM-117	1033	243.0
Mean of location		910.5	239.5
C.D. at 5 (%)		42.5	6.3
F (5%)		n.s.	n.s.
60:30:20		798	239.7
120:60:40		907	239.0
140:34:71		1026	239.7
C.D. at 5 (%)		19.0	2.8
F (5%)		s	n.s.
PMH-1		911	240.2
HQPM-1		901	238.6
PMH-3		910	239.1
H-216		912	240.5
DHM-117		918	238.8
C.D. at 5 (%)		24.5	3.6
C.V. (%)		2.8	1.6
F (5%)		n.s.	n.s.

Table 25: Relative performance of pre-release medium maturity maize germplasm - mustard relay cropping system at different nitrogen levels at Chhindwara.

N:P_2O_5:K_2O (Kg/ha)	Germplasm	Mustard seed yield (kg/ha)	Mustard plants ('000/ha)
150:50:60	EH-1974	934	238.9
	PMH 4 (C)	941	242.2
	BIO 9637 (C)	970	214.8
	JM-216	997	208.1
200:65:80	EH-1974	1257	240.4
	PMH 4 (C)	1273	256.7
	BIO 9637 (C)	1291	254.1
	JM-216	1259	238.5
250:80:100	EH-1974	1394	241.1
	PMH 4 (C)	1447	267.4
	BIO 9637 (C)	1350	251.1
	JM-216	1373	247.8
Mean of location		1207.2	241.8
C.D. at 5 (%)		124.1	32.9
F (5%)		n.s.	n.s.
150:50:60		961	226.0
200:65:80		1270	247.4
250:80:100		1391	251.9
C.D. at 5 (%)		62.1	16.5
F (5%)		s	s
EH-1974		1195	240.1
PMH 4 (C)		1220	255.4
BIO 9637 (C)		1204	240.0
JM-216		1210	231.5
C.D. at 5 (%)		71.6	19.0
C.V. (%)		6.1	8.0
F (5%)		n.s.	n.s.

Table 26: Relative performance of pre-release early maturity maize germplasm - mustard relay cropping system at different nitrogen levels at Chhindwara.

$N:P_2O_5:K_2O$ (Kg/ha)	Germplasm	Mustard seed yield (kg/ha)	Mustard plants ('000/ha)
150:50:60	K-21	944	237.8
	DAS-MH-501	956	287.0
	Bisco 2238	961	288.5
	EHL 162508	973	292.2
	JH 31485	929	278.9
	Prakash (C)	851	255.6
	PMH 5 (C)	861	258.5
	J M-216	882	264.8
200:65:80	K-21	1221	255.6
	DAS-MH-501	1221	254.8
	Bisco 2238	1131	228.5
	EHL 162508	1219	254.8
	JH 31485	1204	254.1
	Prakash (C)	1215	240.0
	PMH 5 (C)	1207	251.5
	J M-216	1215	258.1
250:80:100	K-21	1377	302.6
	DAS-MH-501	1399	308.9
	Bisco 2238	1353	295.2
	EHL 162508	1274	271.5
	JH 31485	1355	288.1
	Prakash (C)	1353	296.3
	PMH 5 (C)	1391	306.7
	J M-216	1382	273.0
Mean of location		1161.4	271.0
C.D. at 5 (%)		109.0	31.2
F (5%)		n.s.	s
150:50:60		919.5	270.4
200:65:80		1204.1	249.7
250:80:100		1360.6	292.8
C.D. at 5 (%)		38.5	11.0
F (5%)		s	s
K-21		1181	265.3
DAS-MH-501		1192	283.6
Bisco 2238		1148	270.7
EHL 162508		1155	272.8
JH 31485		1163	273.7
Prakash (C)		1140	264.0
PMH 5 (C)		1153	272.2
J M-216		1160	265.3
C.D. at 5 (%)		62.9	18.0
C.V. (%)		5.7	7.0
F (5%)		n.s.	n.s.

PATHOLOGY

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Summary Results- Pathology

A total of 96 various maize genotypes were evaluated against major diseases of maize under artificially created epiphytotics at various hot spot locations i.e. sorghum downey mildew (SDM) at Coimbatore and Mandya, charcoal rot (C. Rot) at Arabhavi, Ludhiana and Hyderabad, banded leaf and sheath blight (BLSB) at Midnapur and turcicum leaf blight (TLB) at Dholi. Out of them 24 genotypes (A 7501, NMH-1247, PRO-385, X35B349, GK 3149, Venus, Megan-G, PMH-189, X35C537, DADA, CP-999, GK 3118, IM 8222, CSM1, KMH-4210, Bio 9662, DMRH1302, AH1315, NMH-51, IM 8013, IL 8033, IH-061, DMRH1304, AH1313) were resistant against TLB. Four genotypes (A 7501, X35B349, GK 3150, NMH-51) were resistant against SDM and 61 genotypes (A 7501, Bisco X 5141, NMH-1247, PRO-385, X35B349, Bisco X 6573, X-1228, KH-K25 Gold, II 8212, DKC 9120, IL 8534, X35C537, P3533, TH22, CP-838, CP-999, CP-111, GK 3118, GK 3155, HTMH 5108, HTMH 5202, KH-2192, KMH-1411, IM 8226, Rasi 393, Rasi 950, VEH 13-1, CSM1, JH 248, DMRH1308, , KH-K26, IJ 8521, IL 8536, IL 8537, IJ8214, BL 798, BL 900, KH-517, IM 8303, VaMH 08015, CSM2, DMRH1301, DMRH1302, DMRH1306, DMRH1307, AH1314, AH1315, B-52, IM 8013, IL 8033, IL 8235, IH-072, IH-061, IHQ-091, DMRH1303, DMRH1304, DMRH1305, AH1312, AH1313, QPM-3, MMHQPM-6-12-13) were moderately resistant against charcoal rot. Three genotypes (A 7501, X35B349, NMH-51) showed multiple disease resistance to TLB, SDM and C. Rot.

Table 1: Evaluation of maize genotypes in AET and IET Late maturity for various maize diseases during Rabi 2014

Sl. No	Genotype	TLB DHOL	SDM COIM	MAND	C. ROT ARBH	LUDH	HYDE	BLSB MIDN
AVTII-LATE								
1	A 7501	1.5	0.0	6.8	3.8	4.9	3.9	2.2
2	Bio 237	3.0	0.0	16.7	7.8	4.8	4.7	2.6
3	Bisco X 5141	3.5	0.0	25.2	5.3	5.0	2.4	2.5
4	KMH-7148	3.5	0.0	35.2	8.5	4.4	5.5	2.3
5	NMH-1247	1.5	0.0	38.7	6.0	5.5	3.1	2.6
6	PRO-385	1.0	9.0	28.0	4.8	4.6	2.1	2.4
7	X35B349	2.0	0.0	7.9	3.3	5.2	3.5	2.1
AVTI-LATE								
8	Bisco X 6573	2.5	0.0	98.4	3.0	3.6	4.7	2.1
9	GK 3149	2.0	8.6	13.6	4.3	6.4	4.7	2.3
10	GK 3150	2.5	6.8	7.1	7.0	4.8	4.2	2.8
11	X-1228	3.0	0.0	96.8	3.0	6.2	2.6	2.6
12	KH-K25 Gold	3.0	0.0	48.7	3.0	4.9	3.9	2.6
13	KMH-2589	3.5	0.0	57.0	5.8	6.2	4.4	3.1
14	II 8212	3.0	0.0	55.8	3.0	4.2	3.1	2.5
15	DKC 9120	3.0	0.0	70.7	6.0	5.4	3.4	2.5
16	IL 8534	2.5	0.0	75.7	3.3	3.8	4.5	2.2
17	Venus	1.0	0.0	73.8	8.0	6.2	5.6	3.1
18	PMH-2277	3.0	0.0	88.1	6.3	4.8	5.7	2.2
19	Ivory	2.5	0.0	78.4	7.0	5.2	4.7	2.6
20	Megan-G	1.5	8.9	94.6	7.5	4.6	4.0	2.5
21	PMH-189	1.5	0.0	95.3	8.0	6.2	6.1	2.7
22	Rasi-750	3.0	0.0	34.7	6.0	6.2	4.9	3.5
23	X35C537	1.5	0.0	39.0	7.0	4.5	3.1	2.2
24	P3533	2.5	0.0	33.9	4.3	4.6	5.0	3.0
25	DADA	1.0	0.0	94.4	7.0	4.6	4.8	3.5
26	TH2	2.5	0.0	56.3	7.5	3.5	5.4	2.2
27	TH22	3.0	11.4	66.6	7.3	3.8	3.6	2.0
IVT-LATE								
28	CP-808	3.5	0.0	56.9	7.5	3.8	4.5	2.5
29	CP-838	3.0	0.0	79.1	6.0	3.9	3.7	2.5
30	CP-999	1.5	0.0	39.0	3.5	3.3	4.7	2.5
31	CP-111	2.5	0.0	52.0	5.0	4.1	4.2	3.2
32	CP-333	3.0	0.0	20.2	8.5	4.3	3.7	3.5
33	GK 3118	1.5	0.0	22.5	6.0	3.3	4.9	3.4
34	GK 3155	2.5	7.4	31.4	5.3	3.8	4.0	3.0
35	HTMH 5108	3.0	9.2	28.1	7.0	3.3	4.1	3.6
36	HTMH 5202	3.0	0.0	50.8	7.0	3.5	2.7	3.0
37	KH-2192	2.0	0.0	58.6	3.3	3.5	5.7	3.0
38	KH-3021	3.5	0.0	53.9	6.5	4.3	4.5	3.8
39	KMH-1411	2.5	0.0	56.5	6.5	3.3	4.7	3.2
40	IM 8222	1.5	0.0	68.6	7.3	3.3	5.1	3.2

Sl.No	Genotype	TLB DHOL	SDM COIM	MAND	C. ROT ARBH	LUDH	HYDE	BLSB MIDN
41	IM 8226	2.5	0.0	43.3	2.5	3.0	4.9	3.6
42	X35F880	2.5	0.0	74.0	7.0	4.0	5.2	3.4
43	Rasi 864	3.0	0.0	51.6	8.0	3.9	3.4	3.9
44	Rasi 393	2.5	6.8	70.2	3.8	2.9	3.9	3.8
45	Rasi 950	3.0	0.0	75.5	4.0	4.8	4.2	3.5
46	VEH 13-1	3.0	0.0	39.3	6.5	4.1	4.5	3.8
47	CSM1	1.5	0.0	41.1	3.3	5.1	5.6	3.2
48	JH 248	3.5	0.0	76.6	3.0	4.9	3.9	3.8
49	JH 358	2.0	0.0	63.2	7.0	4.0	4.2	3.4
50	JH 412	3.0	0.0	68.1	5.0	5.5	5.1	3.4
51	DMRH1308	2.5	4.9	43.7	5.3	6.5	3.2	3.7
CHECK VARIETIES -LATE								
52	Buland (C)	3.5	0.0	61.2	8.5	5.6	4.5	3.0
53	Seed Tech2324 (C)	2.5	0.0	24.7	5.0	5.3	3.8	3.5
54	Bio 9681 (C)	3.0	0.0	61.9	6.3	6.0	5.3	3.4
AVTII-MEDIUM								
55	VEH 11-1	3.0	0.0	82.3	7.5	5.9	5.5	2.3
AVTI-MEDIUM								
56	KH-K26	3.5	0.0	41.3	2.3	5.8	4.6	2.5
57	KMH-4210	1.0	0.0	73.9	5.0	6.1	4.3	2.1
58	IJ 8521	2.5	0.0	92.0	4.5	6.7	3.9	3.1
59	IL 8536	3.0	7.0	73.7	2.0	3.9	4.1	2.0
60	IL 8537	2.5	0.0	82.9	2.8	5.9	3.5	3.1
61	IJ8214	2.0	0.0	66.3	4.5	5.0	3.4	3.5
62	PMH-2246	3.5	0.0	60.8	5.0	6.4	4.2	3.1
IVT-MEDIUM								
63	Bio 9662	1.5	0.0	38.3	6.8	7.1	4.6	2.2
64	BL 798	2.5	0.0	94.4	3.0	6.4	3.0	2.1
65	BL 900	2.0	0.0	12.1	3.5	4.5	3.5	2.0
66	BL 147	3.0	0.0	57.8	8.3	6.4	5.6	2.6
67	KH-517	2.5	6.6	51.6	3.5	6.5	3.8	3.2
68	IM 8303	3.5	0.0	73.9	2.8	4.6	3.8	3.5
69	IM 8189	3.5	0.0	90.0	7.5	6.3	2.5	2.5
70	MMH11-12-13	2.0	0.0	92.3	8.0	6.1	3.9	3.4
71	MMH12-12-13	2.5	7.3	96.6	5.8	6.2	4.8	2.6
72	MMH-13-12-13	2.5	0.0	88.6	3.0	6.1	5.9	3.3
73	MMH-14-12-13	2.5	0.0	86.1	3.8	6.8	5.6	2.4
74	MMH-15-12-13	2.0	0.0	88.9	7.5	6.7	4.5	3.8
75	VaMH 08015	2.5	0.0	40.1	4.8	5.5	3.6	3.4
76	GPS Maina	3.0	4.8	81.7	7.0	4.1	4.3	3.8
77	GPS Sarayu	2.5	0.0	93.3	7.5	7.0	3.4	3.1
78	CSM2	2.5	0.0	53.2	4.8	5.8	4.1	2.8
79	DMRH1301	2.5	0.0	58.7	5.0	4.0	3.3	2.4
80	DMRH1302	1.5	4.7	41.3	5.3	4.6	4.6	2.4
81	DMRH1306	3.5	0.0	48.9	4.5	4.3	2.8	2.6

Sl.No	Genotype	TLB DHOL	SDM COIM	MAND	C. ROT ARBH	LUDH	HYDE	BLSB MIDN
82	DMRH1307	2.5	0.0	100.0	3.5	6.5	2.8	3.6
83	AH1314	3.0	6.9	72.3	3.0	6.9	1.5	3.8
84	AH1315	1.0	6.7	80.4	3.3	6.7	3.0	3.1
CHECK VARIETIES -MEDIUM								
85	Bio9637 (C)	2.5	0.0	61.5	3.0	6.8	4.6	3.0
86	KH-K25	2.0	0.0	36.4	7.0	6.5	3.1	3.7
IVT -EARLY								
87	B-52	2.5	0.0	15.2	2.5	6.2	2.8	3.4
88	NMH-51	2.5	0.0	6.7	4.8	5.3	5.2	3.0
89	IM 8013	1.5	0.0	73.7	5.0	4.6	3.2	3.5
90	IL 8033	1.5	0.0	64.7	2.8	5.0	4.0	3.4
91	IL 8235	3.5	5.1	93.9	2.5	4.6	5.2	2.5
92	IH-072	3.0	0.0	83.5	3.8	6.4	4.7	2.4
93	IH-061	1.5	0.0	85.7	5.5	4.2	3.3	2.0
94	IHQ-091	2.5	0.0	11.1	2.8	5.2	2.1	3.7
95	DMRH1303	3.0	0.0	67.5	5.3	5.5	2.0	3.4
96	DMRH1304	1.5	0.0	71.6	6.5	5.4	1.8	3.4
97	DMRH1305	2.5	0.0	90.0	3.5	4.8	1.8	3.8
98	AH1312	2.5	0.0	75.0	2.5	6.4	1.8	3.6
99	AH1313	1.5	0.0	90.2	3.0	4.4	2.2	3.0
CHECK VARIETIES -EARLY								
100	Prakash (C)	1.5	0.0	96.0	7.5	6.9	5.2	3.7
QPM ENTRIES								
101	QPM-3	2.5	4.6	93.6	4.5	4.8	3.5	3.4
102	MMHQPM-6-12-13	3.5	0.0	76.7	3.8	5.1	2.8	3.6
CHECK VARIETIES QPM								
103	HQPM 1(C)	1.5	4.6	77.1	3.3	5.1	3.2	2.6
104	HQPM7 (C)	1.5	0.0	81.5	2.5	4.9	2.0	3.7
105	RC	-	0.0	0.00	-	-	2.2	-
106	SC	3.5	-	84.1	-	6.8	6.1	-
107	Local Check	-	16.6	-	-	-	-	-

RESISTANT CHECK-SDM: MANDYA (NAH 1137), COIMBATORE (COH6)

SUSCEPTIBLE CHECK- **TLB** : DHOLI (CML 186), **SDM:** MANDYA (CM 500),

CHARCOAL ROT: LUDHIANA (WINPOP-1)

Table 2: survey and surveillance of maize diseases

Season : Rabi 2013-14
State : Tamil Nadu
Zone : Southern zone
Altitude : 411.48 m
Latitude : 11.0 N

Sl No.	Place	Date	No. field surveyed	Crop stage/ variety		Disease intensity/severity (Tr., Mod, Serv)												Remarks
						Foliar Diseases								PFSR				
				Knee high	Grn. Fillg.	SDM (%)	MLB	TLB	BSDM	BLSB	Rust	BS	Others.	PFSR	CSR	LW	ESR	
1	Karur	22-11-2013	4	☑	☑	0	0	0	0	0	Tr.	0	0	0	0	0	0	
3	Dharapuram	29-11-2013	5	☑	☑	0	0	Tr.	0	0	0	0	0	0	0	0	0	
4	Dindukkal	13-12-2013	4	☑		0	0	0	0	0	Tr.	0	0	Tr.	0	0	0	
5	Palani	13-01-2014	3		☑	0	0	Tr.	0	0	0	0	0	0	0	0	0	
6	Ottanchathiram	15-01-2014	5	☑	☑	0	0	0	0	0	0	0	0	0	0	0	0	
8	Udumalpet	18-02-2014	4		☑	Tr.	0	Tr.	0	0	0	0	0	Tr.	0	0	0	

Table: 3 Meteorological data (Monthly average) *Rabi* 2014

S.N	Station Name	Month	Temperature		Rainfall of month (mm)	R.H Min (in %)	R.H Max (in %)	Sunshine Hrs.
			Min (^{o}C)	Max (^{o}C)				
1.	Mandya	October	18.5	29.8	116.0	54.5	90.1	10.5
		November	16.6	29.1	56.4	56.2	89.6	7.0
		December	12.5	27.9	1.4	49.4	88.4	8.1
		January	29.0	13.0	0.0	49.0	88.8	8.6
		February	31.0	16.0	0.8	36.0	85.8	7.9
2.	Coimbatore	October	19.8	29.2	24.8	51		6.6
		January	19.7	30.1	0.0	42		7.8
		February	20.4	32.4	0.2	39		7.9
		March	22.3	34.5	0.0	35		8.7
		April	24.9	36.3	17.4	39		7.6
		May	24.4	34.3	125.8	52		7.2

ENTOMOLOGY

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EXECUTIVE SUMMARY

Out of 44 maize germplasm screened under artificial infestation against *S. inference* and *Chilo partellus* at Hyderabad and Kolhapur respectively, entries A 7501, Bio 237 and X35B349 were found to have LIR less against *Sesamia inferens* and A 7501, Bisco X 5141, KMH-7148 and NMH-1247against *Chilo partellus* than check in AVT II Late.

In AVT I-Late, entries GK 3149, GK 3150, X-1228, KH-K25 Gold, KMH-2589, IL 8534, Megan-G, Rasi-750, DADA and TH-2 against *S. inferens* and Bisco X 6573, GK 3149, X-1228, KH-K25 Gold, II8212, IL 8534, Ivory, Megan G, Rasi 750, P 3533, DADA and TH 22 against *C. partellus* were found to have LIR less than check.

In AVT II and AVT I Medium all the entries were found to have LIR against *S. inferens* less than that of check and against C. partellus, KH-K26 and KMH-4210 were having less LIR than check.

In AVT I-Early, KH-K25 was selected against *C. partellus,* while in QPM-3, VEHQ-11-1 was selected for both the stem borers.

Experiment details

Trial no.	11
Number of Entries:	44
Replications:	02
Agronomic details:	Row length 4m; row to row distance 0.75 m; NPK 120:60:40

Table 1: Date of sowing, germination & infestation

Location	Date of sowing	Date of germination	Date of infestation
Hyderabad	17/12/2013	Not available	02/01/2013
Kolhapur	16/12/2013	24/12/2013	05/01/2014

Table 2: Leaf injury rating of *Sesamia inferens* and *Chilo partellus*

Sr. No	Entries	Mean LIR *Sesamia inferens* Hyderabad	Mean LIR *Chilo partellus* Kolhapur
AVT II-LATE			
1	A 7501	3.5	4.00
2	Bio 237	3.3	5.10
3	Bisco X 5141	5.8	3.30
4	KMH-7148	4.4	3.80
5	NMH-1247	5.4	2.30
6	PRO-385	6.1	5.80
7	X35B349	3.5	6.40
AVT I-LATE			
8	Bisco X 6573	5.0	3.80
9	GK 3149	2.7	4.20
10	GK 3150	2.0	4.70
11	X-1228	2.4	3.80
12	KH-K25 Gold	2.0	4.50
13	KMH-2589	2.2	5.00
14	II 8212	5.5	3.30
15	DKC 9120	4.9	5.00
16	IL 8534	2.9	3.10

17	Venus	9.0	4.80
18	PMH-2277	8.0	5.00
19	Ivory	7.4	4.30
20	Megan-G	2.8	4.50
21	PMH-189	4.5	5.00
22	Rasi-750	3.8	4.60
23	X35C537	5.4	6.40
24	P3533	4.2	4.00
25	DADA	3.8	4.00
26	TH2	3.0	7.00
27	TH22	4.4	4.00
Checks Late			
28	Buland (C)	3.6	3.00
29	Seed Tech2324 (C)	6.1	5.00
30	Bio 9681 (C)	2.6	5.90
AVT II-MEDIUM			
31	VEH 11-1	2.4	5.90
AVT I-MEDIUM			
32	KH-K26	2.5	4.40
33	KMH-4210	3.8	4.30
34	IJ 8521	4.2	5.90
35	IL 8536	3.8	4.80
36	IL 8537	4.8	5.30
37	IJ8214	3.8	5.30
38	PMH-2246	4.2	5.00

Check Variety-Medium			
39	Bio9637 (C)	7.5	4.40
AVT I-Early			
40	KH-K25	5.7	3.30
Check Early			
41	Parkash (C)	2.3	5.10
QPM-3			
42	VEHQ-11-1	2.2	4.70
Checks-QPM			
43	HQPM 1(C)	3.6	5.60
44	HQPM7 (C)	3.3	5.00

Appendix-A

Maize area, production and yield statistics in Indian states from 2011-12 to 2013-14

State/ UT	Season	Area ('000 Hectares)			Production ('000 Tonnes)			Yield (Kg/ha)		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
Andhra Pradesh	Kharif	531.0	565	622.0	1493.0	2342	2168.9	2812	4145	3487
	Rabi	333.0	407	441.0	2165.0	2513	2799.0	6502	6174	6347
	Total	864.0	972	1063.0	3658.0	4855	4967.9	4234	4995	4673
Arunachal Pradesh	Kharif	40.5	*	*	58.1	*	*	1434	NA	NA
	Rabi	6.0	*	*	10.4	*	*	1736	NA	NA
	Total	46.5	*	*	68.5	*	*	1473	NA	NA
Asom	Kharif	21.3	21.3	21.0	15.3	23.7	17.0	719	1113	810
Bihar	Autumn	263.9	261	291.9	622.4	646.2	613.9	2358	2476	2103
	Rabi	411.0	424.6	459.8	988.3	1829.6	1403.8	2404	4309	3053
	Total	675.0	685.6	751.7	1610.7	2475.8	2017.7	2386	3611	2684
Chhattisgarh	Kharif	104.0	107.2	111.1	172.0	207.5	229.1	1654	1936	2062
Gujarat	Kharif	387.0	373	333.0	539.0	625	434.0	1393	1676	1303
	Rabi	129.0	85	128.0	247.0	166	258.0	1915	1953	2016
	Total	516.0	458	461.0	786.0	791	692.0	1523	1727	1501
Haryana	Kharif	9.0	9	9.0	24.0	23	27.0	2667	2556	3000
Himachal Pradesh	Kharif	294.2	294.3	292.1	715.4	657.2	679.0	2432	2233	2325
Jammu & Kashmir	Kharif	314.0	310.9	298.7	505.0	512.3	530.5	1608	1648	1776
Jharkhand	Autumn	207.4	243.4	253.4	305.6	435.8	504.5	1473	1790	1991
	Rabi	8.1	5.9	6.3	15.9	15.9	11.8	1970	2695	1873
	Total	215.5	249.3	259.7	321.5	451.7	516.2	1492	1812	1988
Karnataka	Kharif	1206.0	1162	1250.0	3644.0	2978	3590.0	3022	2563	2872
	Rabi	143.0	160	132.0	441.0	497	394.0	3084	3106	2985
	Total	1349.0	1322.0	1382.0	4085.0	3475.0	3984.0	3028	2629	2883
Madhya Pradesh	Kharif	862.8	845.4	1003.0	1287.4	1513.6	1510.2	1492	1790	1506
Maharashtra	Kharif	736.0	689	955.0	2127.0	1582	2479.2	2890	2296	2596
	rabi	145.0	133	254.0	306.0	242	596.0	2110	1820	2346
	Total	881.0	822	1209.0	2433.0	1824	3075.2	2762	2219	2544
Manipur	Kharif	20.0	*	*	35.4	*	*	1768	NA	NA
	Rabi	4.9	*	*	10.5	*	*	2165	NA	NA
	Total	24.9	*	*	45.9	*	*	1845	NA	NA
Meghalaya	Kharif	17.4	*	*	26.5	*	*	1529	NA	NA
Mizoram	Kharif	6.7	*	*	8.1	*	*	1214	NA	NA
	Rabi	0.2	*	*	0.3	*	*	1238	NA	NA
	Total	6.9	*	*	8.4	*	*	1214	NA	NA
Nagaland	Kharif	68.5	*	*	134.3	*	*	1960	NA	NA
Odisha	Kharif	98.9	90.9	91.5	202.3	217.5	253.2	2046	2393	2767
	Rabi	4.0	3.6	3.7	9.9	10	10.5	2496	2778	2838

State/ UT	Season	Area ('000 Hectares)			Production ('000 Tonnes)			Yield (Kg/ha)		
		2011-12	2012-13	2013-14	2011-12	2012-13	2013-14	2011-12	2012-13	2013-14
	Total	102.9	94.5	95.3	212.2	227.5	263.7	2063	2407	2767
Punjab	Kharif	126.0	129	130.0	502.0	475	507.0	3984	3682	3900
Rajasthan	Kharif	1039.1	978.4	916.4	1644.9	1725.2	1463.8	1583	1763	1597
	Rabi	6.5	7.8	10.3	22.2	29.9	38.4	3434	3833	3728
	Total	1045.6	986.2	926.7	1667.0	1755.1	1502.2	1594	1780	1621
Sikkim	Kharif	40.0	*	*	66.2	*	*	1657	NA	NA
Tamil Nadu	Kharif	176.3	171.3	175.2	1001.7	609	995.5	5682	3555	5682
	Rabi	104.3	119.6	125.0	693.8	337.2	640.6	6649	2819	5125
	Total	280.6	291	300.2	1695.5	946.2	1636.1	6042	3252	5450
Tripura	Kharif	3.7	*	*	5.1	*	*	1353	NA	NA
Uttar Pradesh	Kharif	745.0	698	696.0	1232.0	1154.5	1151.2	1654	1654	1654
	Rabi	42.0	38	44.0	76.0	80	85.4	1810	2105	1941
	Total	787.0	736	740.0	1308.0	1234.5	1236.6	1662	1677	1671
Uttrakhand	Kharif	28.0	27.9	25.0	41.0	40.1	35.0	1464	1437	1400
	Rabi	*	0.1		*	0.1			1000	
	Total	28.0	28	25.0	41.0	40.2	35.0	1464	1436	1400
West Bengal	Kharif	34.1	40.6	43.7	77.3	96.8	117.4	2270	2384	2686
	Rabi	63.8	65	85.0	286.8	320	405.0	4497	4923	4765
	Total	97.8	105.6	128.7	364.1	416.8	522.4	3722	3947	4059
A & N Islands	Kharif	0.2	*	*	0.3	*	*	2125	NA	NA
D & N Haveli	Kharif	0.1	*	*	0.1	*	*	1000	NA	NA
	Rabi	0.0	*	*	0.0	*	*	1000	NA	NA
	Total	0.2	*	*	0.2	*	*	1000	NA	NA
Others	Kharif	-	194.1	208.0	-	332.6	370.1	NA	1714	1779
	Rabi	-	8.7	10.7	-	23.1	28.4	NA	2655	2654
	Total	-	202.8	218.7	-	355.6		NA	1753	1822
All India	Kharif	7381.2	7214.5	7726.1	16486	16197	17677	2234	2245	2288
	Rabi	1400.7	1458.2	1699.8	5273	6064	6671	3765	4158	3925
	Total	8713.4	8672.7	9425.8	21625	22261	24347.5	2482	2567	2583

*Included in the others

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