

I
LOCATION CODES OF AICRP ON PEARL MILLET TRIALS
KHARIF/ SUMMER 2024

	Zone A₁ and A		Zone A₁ and A
Abbreviation	Locations	Abbreviation	Locations
	RAJASTHAN		JHARKHAND
MDR	Mandor	RNC	Ranchi (BAU)
JDR	Jodhpur (ICAR-CAZRI)		JAMMU & KASHMIR
BKR	Bikaner (SKRAU)	IMU	Jammu (SKUAST)
SDR	Samdari (AUJ)		
LWS	Lalawas (J K Seed)		Zone B
MSR	Molasar (Bayer)	Abbreviation	Locations
TBJ	Tabiji (SKNAU)		MAHARASHTRA
JPR	Jaipur (SKNAU)	ABD1	Aurangabad (NARP) (VNMKV)
JPR1	Jaipur (Seed Works)	ABD2	Aurangabad (Nath Biogene)
JPR2	Jaipur (Corteva)	ABD3	Aurangabad (Ajeet Seed)
ALW	Alwar (Corteva)	ABD4	Aurangabad (DevGen)
ALW1	Alwar (Seed Works)	ABD5	Aurangabad (Bayer)
ALW2	Alwar (BioSeed)	ABD6	Aurangabad (Crystal)
ALW 3	Alwar (JK)	ABD7	Aurangabad (Seed works)
ALW4	Alwar (Rallis)	ABD 8	Aurangabad (GK)
ALW5	Alwar (GK)	PTN	Paithan (Nath Biogene)
ALW6	Alwar (Kaveri)	DHL	Dhule (MPKV)
BHP	Bharatpur(Nuzividdu)	NPD	Niphad (MPKV)
BHR	Behror (Bayer)	JLN	Jalna (Mahodaya Seed)
BSR	Bansur (Spriha)	JLN1	Jalna (Mahyco)
JLR	Jalore (AUJ)	JLG	Jalgaon (JK Seeds)
JSR	Jaisalmer (ICAR-CAZRI)	GDG	Godegaon (Pioneer)
MKR	Malakhera (Hytech)	PCR	Pachora (Nirmal Seed)
JBR	Jobner (SKNAU)	GNG	Gangapur (Ganga Kaveri)
FTR	Fatehpur Shekhawati (SKNAU)	BUL	Buldana (PDKV)
NGR	Nagaur (AUJ)	GNW	Ganewadi (Krishidhan Seed)
DAS	Dausa (Rasi)	MPR	Malkapur (Ankur Seed)
TJR	Tijara (Rallis)		KARNATAKA
PTA	Pavta (Limagrain)	VYP	Vijayapur (UAS, Dharwad)
	GUJARAT	MYS	Mysore (UOM)
KTR	Kothara (SDAU)	MLR	Malnoor (UAS, Raichur)
SKN	S.K. Nagar (Dessa) (SDAU)	DHR	Dharwad (UAS, Dharwad)
AND	Anand (AAU)	DHR 1	Dharwad (KSSCL)
JMR	Jamnagar (JAU)		ANDHRA PRADESH
TLJ	Talaja (JAU)	APR	Ananthapuram (ANGRAU)
AHD	Ahmedabad (Biostadt)	PMP	Perumallapalle (ANGRAU)
NSD	Narsanda (Navbharat)	VZN	Vizianagaram (ANGRAU)
PNR1	Palanpur (Pioneer)		TELANGANA
PNR2	Palanpur (Ajeet)	MBD	Manoharabad (Zuari Seed)
DNR	Dhanera (JK Seeds)	MBD1	Manoharabad (Crystal)
DEG	Dehgam (Metahelix)	PLM	Palem (PJ TSAU)
DEG1	Dehgam (Kaveri)	HBD1	Hyderabad (BISCO)
DSA1	Deesa (Bioseed)	HBD2	Hyderabad (Nuziveedu)
DSA2	Deesa (Ajeet)	HBD3	Hyderabad (Kaveri Seed)
DSA3	Deesa (JK)	HBD4	Hyderabad (Nu Gene)
DER	Deodar (Bayer)	PTR	Patancheru
TKR	Thakarwara (Hytech)	MDC 1	Medchal (Ganga Kaveri)
KHD	Kheda (Shakti Vardhak)	MDC 2	Medchal (Godrej)
VSN	Visnagar (Apex Seed)	RLK1	Ravalkol (Spriha)
	UTTAR PRADESH	RLK2	Ravalkol (Hytech)
KLI	Kalai	WRL	Wargal (Kaveri)
ELS	Eglas (Bioseeds)	TPN	Toopran, Madak (Nu Genes)
AGR	Agra (Krishna)		TAMIL NADU
AGR1	Agra (Kartik Seed)	CBE	Coimbatore (TNAU)
AGR2	Agra (Mahindra Seed)		ODISHA
HTR	Hathras (Ganga Kaveri)	SMG	Semiliguda (OUAT)
ALR	Aligarh (Hytech)		
JNS	Jhansi (RLBCAU)		
BCR	Bichpuri (Kaveri)		
MTR	Mathura (Kamadgiri)		
	HARYANA		
HSR	Hisar (CCSHAU)		
BWL	Bawal (CCSHAU)		
SPR	Shikohpur (ICAR-IARI-KVK)		
SHN	Sohana (Nuziveedu)		
ANR	Arya Nagar (Shakti Vardhak)		
GUG	Gurugram (Tierra)		
	MADHYA PRADESH		
GLR	Gwalior (RVSKVV)		
MRN	Morena (RVSKVV)		
	PUNJAB		
LDA	Ludhiana (PAU)		
	DELHI		
NDL	New Delhi (ICAR-IARI)		

CHAPTER I

PLANT BREEDING

BREEDING

Based on climatic conditions, production constraints and differential requirement of various crop growing regions, the pearl millet cultivation in the country is divided in three major zones – A₁, A and B and is used for effective evaluation of the pearl millet breeding materials. The details of pearl millet growing states included in these zones are given below:

Zone(s)	Area (m.ha)* (2020-21)	State(s)
Zone A ₁ : less than 400 mm rainfall	3.78	Western Rajasthan and drier parts of Gujarat and Haryana
Zone A: North - Western zone	2.85	Rajasthan, Gujarat, Haryana, plains of Uttar Pradesh, New Delhi, Madhya Pradesh (Bhind, Morena, Gwalior and adjoining areas) Punjab, Jharkhand and Jammu & Kashmir
Zone B: South - Central zone	1.02	Maharashtra, Andhra Pradesh, Telangana, Karnataka, Tamil Nadu and Odisha
Summer	0.41	Gujarat and Uttar Pradesh

*(<https://des.agri.gov.in>)

The coordinated hybrid/ varietal trials under ICAR-All India Coordinated Research Project on Pearl Millet (ICAR-AICRP on Pearl Millet) were conducted during summer and kharif 2024 as per details given below:

Coordinated trials	Mode of operation
Initial Hybrid Trial (Early) - IHT (E)	Zone A ₁ with early hybrids
Initial Hybrid Trial (Medium) - IHT (M)	Zone A and B with common hybrids
Initial Hybrid Trial (Late) - IHT (L)	Zone A and B with common hybrids
Advanced Hybrid Trial (Medium) - AHT (M)	Zone B with different advanced hybrids
Advanced Hybrid Trial (Late) - AHT (L)	Zone A and B with different advanced hybrids
Population Trial - PT	Zone A and B with common initial and different advanced populations
Advanced Hybrid and Population Trial (Early) - AHPT (E)	Zone A ₁ with early hybrids and populations
Released Hybrids and Varieties Trial - RHVT	Zone A and B with released entries of respective zone
Summer Hybrid Trial - SHT	Summer areas of zone A and B with common initial and advanced hybrids

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The bases of non-inclusion of test location to work out zonal means are:

- 1) Coefficient of variation (C.V.) - More than 30%
- 2) The average grain yield of test location is less than the state average yield except in Zone A₁ trials.

The average grain yield based on the ten years data (2012-13 to 2021-22) in different states is as follows:

	States	Average grain yield
i)	Rajasthan	970 kg/ha
ii)	Karnataka	1095 kg/ha
iii)	Maharashtra	786 kg/ha
iv)	Andhra Pradesh	1772 kg/ha
v)	Telangana	936 kg/ha
vi)	Gujarat (Kharif)	1386 kg/ha
vii)	Gujarat (Summer)	2664 kg/ha
viii)	Madhya Pradesh	2166 kg/ha
ix)	Haryana	1992 kg/ha
x)	Tamil Nadu	2388 kg/ha
xi)	Uttar Pradesh	2008 kg/ha
xii)	Delhi	2236 kg/ha
xiii)	Punjab	824 kg/ha
xiv)	Jammu & Kashmir	595 kg/ha
xv)	Odisha	616 kg/ha
xvi)	Jharkhand	581 kg/ha

Coordinated Trials and Test centres

The ICAR-AICRP on Pearl Millet hybrids/populations yield evaluation trials were organized during kharif /summer 2024 at 12 test locations in Zone A₁, 33 in Zone A and 19 in Zone B. Status of test centres where trials were conducted successfully and trials conducted but failed are given in Table I.1. Key to experimental hybrids and varieties included in various trials are given in Tables I.2 to I.5. The data on grain yield, quality and ancillary characters are given in Tables I.6 to I.213. The weather data of the test locations are given in Appendix I. State-wise positions for successful conduct of trials are given below:

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Zone	State	Trials x Location Combinations		
		Allotted	Successfully conducted	Percent success
Zone A₁	Rajasthan	26	22	85
	Gujarat	3	0	0
	Haryana	3	3	100
	Total	32	25	78
Zone A	Rajasthan	18	18	100
	Gujarat	23	19	83
	Uttar Pradesh	12	10	83
	Haryana	7	7	100
	Madhya Pradesh	7	7	100
	Punjab	5	5	100
	Delhi	2	2	100
	Jharkhand	1	1	100
	Total	75	69	92
Zone B	Maharashtra	31	29	93
	Karnataka	11	11	100
	Andhra Pradesh	12	12	100
	Telangana	6	6	100
	Tamil Nadu	7	7	100
	Odisha	3	3	100
	Total	70	68	97
	G. Total	177	162	91

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Table I.1 Details of Centres and Trials Conducted During Kharif 2024/Summer 2024 in Zone A₁ and A

LOCATIONS	IHT (E)	IHT (M)	IHT (L)	AHPT (E)	AHT (L)	PT	RHVT	SHT
ZONE A₁								
RAJASTHAN								
Mandor (ICAR-AICRP)	*	*F		*				*
Mandor (ARS AU Jodhpur)						*	*	
Jodhpur (ICAR-CAZRI)	*			*				
Bikaner (SKRAU)	*	*		*		*	*	
Fathehpur Shekhawati (SKNAU)	*			*				
Samdari (AU Jodhpur)	*			*				
ARS, Jalore (AU Jodhpur)	*			*				
Nagaur (AU Jodhpur)	*			*				
Jobner (COA SKNAU)	*						*	
Gudhamalani (ICAR-IIMR)	*F			*F			*F	
GUJARAT								
Kothara (SDAU)	*F	*F		*F				
HARYANA								
Bawal (CCSHAU)	*	*		*				
Total Trials Zone A₁	11	4	0	10	0	2	4	1
ZONE A								
RAJASTHAN								
Jaipur (SKNAU)		*	*		*	*	*	
Jaipur (Seed works)			*		*			
Jaipur (Corteva)		*						
Tabiji (SKNAU)		*						
Paota (Limagrains)			*					
Alwar (Rallis)			*					
Alwar (Ganga Kaveri)			*					
Alwar (Corteva)			*		*			
Alwar (Kaveri Seed)		*						
Dausa (Rasi Seeds)		*	*					
Bharatpur (Nuziveedu)			*					
GUJARAT								
Talaja (JAU)		*						
Anand (AAU)		*						*
Jamnagar (JAU)		*	*		*	*	*	*
Deesa (SDAU)	*	*		*				*
Ahmedabad (Nandi)			*					*
Dhanera (JK Seed)		*F	*F		*F			
Dehgam (Rallis)								*
Dehgam (Kaveri Seeds)			*		*			
Palanpur (Corteva)								*
Deesa (J.K.)								*F
UTTAR PRADESH								
Jhansi (RLBCAU)		*				*	*	
Aligarh (Hytech)			*		*			
Agra (Kartik Bio Seeds)		*F	*F					*
Agra (Mahindra)					*			
Bichpuri (Kaveri Seeds)					*			
Mathura (Kamagiri)		*	*					
HARYANA								
Hisar (CCS,HAU)	*	*	*	*	*	*	*	
MADHYA PRADESH								
Gwalior (RVSKVV)		*	*		*	*	*	
Morena (RVSKVV)						*	*	
PUNJAB								
Ludhiana (PAU)		*	*		*	*		*
DELHI								
New Delhi (ICAR-IARI)		*				*		
JHARKHAND								
Ranchi (BAU)							*	
Total Trials Zone A	2	17	18	2	12	8	7	9

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Table I.1 Details of Centres and Trials Conducted During Kharif 2024/Summer 2024 in Zone B

LOCATIONS	IHT (M)	IHT (L)	AHT (M)	AHT (L)	PT	RHVT	SHT
MAHARASHTRA							
Aurangabad (NARP)	*	*	*	*	*	*	*
Aurangabad (Ajeet Seed)		*		*			
Aurangabad (Seed works)		*		*			*
Paithan (Nath BioGenes)	*	*					
Niphad (MPKV)			*	*	*		
Dhule (MPKV)	*	*	*	*	*	*	*
Jalna (Mahyco)		*F					*
Pachora (Nirmal Seed)	*	*	*				*F
Gangapur (Ganga Kaveri)		*					
KARNATAKA							
Vijayapur (UAS Dharwad)	*	*	*	*	*	*	
Malnoor (UAS, Raichur)	*		*		*	*	
Dharwad (KSSC Ltd)	*						
ANDHRA PRADESH							
Ananthapuram (ANGRAU)	*	*	*	*	*	*	
Perumallapalle (ANGRAU)	*				*		*
Vizianagaram (ANGRAU)			*		*	*	
TELANGANA							
Palem (PJ TSAU)	*		*		*	*	*
Toopran, Medak (NU Genes)		*					
TAMIL NADU							
Coimbatore	*	*	*	*	*	*	*
ODISHA							
Semiliguda (OUAT)	*				*	*	
Total Trials Zone B	12	12	10	8	11	9	8

*=Conducted successful, *F=Conducted but failed

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Table I.2: Key to Pearl Millet Hybrids (Kharif 2024)

Test Code	Project No.	Identity	Pedigree	Origin
Entries completed one year of testing				
IHT 101	MH 2811	Pusa Hybrid Bajra 2401	411A x PPMI 1321	ICAR-IARI, New Delhi
IHT 102	MH 2812	DHBH-24152	DHLB-14A x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 104	MH 2813	DHBH-24154	DHLB-36A x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 105	MH 2814	NBBH 2215	NB 21001A1 x NBBR-294	Nath Bio Genes (I) Ltd, Hyderabad
IHT 106	MH 2815	RVBH-2363	ICMA 96222 x RBR-225	ICAR-AICRP-PM, RVSKVV, Gwalior
IHT 107	MH 2816	RVBH-2364	ICMA 97111 x RBR-220	ICAR-AICRP-PM, RVSKVV, Gwalior
IHT 108	MH 2817	BHB 2401	ICMA 93333 x BIB 100386	ICAR-AICRP-PM, SKRAU, Bikaner
IHT 109	MH 2818	BHB 2402	ICMA 843-22 x BIB 100385	ICAR-AICRP-PM, SKRAU, Bikaner
IHT 111	MH 2819	CZH 272	ICMA 15222 x CZI 2021/3	ICAR-CAZRI, Jodhpur
IHT 112	MH 2820	CZH 273	ICMA 04999 x CZI 2020/9	ICAR-CAZRI, Jodhpur
IHT 113	MH 2821	BHB 2403	ICMA 98222 x BIB 23894	ICAR-AICRP-PM, SKRAU, Bikaner
IHT 114	MH 2822	BHB 2404	ICMA 98222 x BIB 23	ICAR-AICRP-PM, SKRAU, Bikaner
IHT 115	MH 2823	BHB 2405	ICMA 843-22 x BIB 441446	ICAR-AICRP-PM, SKRAU, Bikaner
IHT 117	MH 2824	CZH 274	ICMA 843-22 x CZI 2020/2	ICAR-CAZRI, Jodhpur
IHT 118	MH 2825	CZH 275	ICMA 843-22 x CZI 2021/3	ICAR-CAZRI, Jodhpur
IHT 119	MH 2826	CZH 276	CZ-ICMA 19222 x CZI 2019/17	ICAR-CAZRI, Jodhpur
IHT 121	MH 2827	RHB-277	ICMA 93333 x RIB 15177	ICAR-AICRP-PM, SKNAU, Jaipur
IHT 122	MH 2828	RHB-278	ICMA 04888 x RIB 15177	ICAR-AICRP-PM, SKNAU, Jaipur
IHT 123	MH 2829	RHB-279	ICMA 02333 x RIB 3135-18	ICAR-AICRP-PM, SKNAU, Jaipur
IHT 124	MH 2830	GHB 1350	JMSA1 20208 x J-2643	ICAR-AICRP-PM, JAU, Jamnagar
IHT 125	MH 2831	MPMH 48	ICMA 04999 x MIR 710	ICAR-AICRP-PM, PC Unit, Jodhpur
IHT 126	MH 2832	MPMH 49	ICMA 96333 x MIR 710	ICAR-AICRP-PM, PC Unit, Jodhpur
IHT 127	MH 2833	MPMH 50	ICMA 04999 x MIR 915	ICAR-AICRP-PM, PC Unit, Jodhpur
IHT 201	MH 2834	US7512	SWM05A x SWM51R	Seed Works Int. Pvt. Ltd., Hyderabad
IHT 202	MH 2835	Pusa Hybrid Bajra 2402	PPMA 991 x PPMI 1320	ICAR-IARI, New Delhi
IHT 203	MH 2836	DHBH-24151	DHLB-34A x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 204	MH 2837	DHBH-24158	DHLB-32A x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 205	MH 2838	DHBH-24162	ICMA 98222 x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 206	MH 2839	DHBH-21075	DHLB-23A x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 207	MH 2840	NBBH 2311	NB 2201A x NB-19098R-1	Nath Bio Gene (S) Int. Ltd., Hyderabad
IHT 208	MH 2841	9050D761-01	9PTMT78 x 9PDEV20R	Corteva Agriscience, Hyderabad
IHT 210	MH 2842	9057D741-01	9PKUP14A x M477R	Corteva Agriscience, Hyderabad
IHT 211	MH 2843	MBH-2401	MBJ-2A x MBJ-9R	MSSCL, Akola
IHT 212	MH 2844	IIMR PH10	269A x 1458R	ICAR-IIMR, Hyderabad
IHT 213	MH 2845	IIMR PH9	ICMA 04999 x 1012R	ICAR-IIMR, Hyderabad
IHT 214	MH 2846	PBH-2403	ICMA 1508 x PBR 542	PJTSAU, Palem
IHT 216	MH 2847	PBH-2404	ICMA 04999 x PBR 598	PJTSAU, Palem
IHT 217	MH 2848	Pusa Hybrid Bajra 2403	PPMA 086 x PPMI 1320	ICAR-IARI, New Delhi
IHT 218	MH 2849	Pusa Hybrid Bajra 2404	PPMA 142 x PPMI 1221	ICAR-IARI, New Delhi

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Test Code	Project No.	Identity	Pedigree	Origin
IHT 219	MH 2850	RHB 280	ICMA 96666 x RIB15177	ICAR-AICRP-PM, SKNAU, Jaipur
IHT 221	MH 2851	RHB 281	ICMA 00444 x RIB192	ICAR-AICRP-PM, SKNAU, Jaipur
IHT 222	MH 2852	RHB 282	ICMA 1508 x RIB 15188	ICAR-AICRP-PM, SKNAU, Jaipur
IHT 223	MH 2853	RHB 283	ICMA 1508 x RIB 15189	ICAR-AICRP-PM, SKNAU, Jaipur
IHT 224	MH 2854	KPH6112	KP22SA044 x KP22SR045	Kaveri Seeds Co. Ltd., Secunderabad
IHT 225	MH 2855	HHB 348	ICMA 04999 x HR-1023	ICAR-AICRP-PM, CCSHAU, Hisar
IHT 226	MH 2856	HHB 349	ICMA 02333 x HR-1037	ICAR-AICRP-PM, CCSHAU, Hisar
IHT 228	MH 2857	AHB-1717	ICMA 98222 x AUBI 2006	ICAR-AICRP-PM, NARP, Aurangabad
IHT 229	MH 2858	AHB-1813	ICMA 98222 x AUBI 2005	ICAR-AICRP-PM, NARP, Aurangabad
IHT 230	MH 2859	AHB-1980	ICMA 1508 x AUBI 2007	ICAR-AICRP-PM, NARP, Aurangabad
IHT 231	MH 2860	TNBH 2118	ICMA 04111 x PT 6679	ICAR-AICRP-PM, TNAU, Coimbatore
IHT 232	MH 2861	VPMH-24	ICMA 96666 x PRLN-229	ICAR-AICRP-PM, Vijayapur
IHT 233	MH 2862	VPMH-25	ICMA 03999 x PRLN 221	ICAR-AICRP-PM, Vijayapur
IHT 234	MH 2863	KGBH-2853	KGA-2001 x KR-7722	Kamadgiri Crop Sci. Pvt. Ltd.,Agra
IHT 301	MH 2864	SUPER-75	ICMA 96222 x 20105R	Super Seeds Pvt. Ltd., Hisar
IHT 302	MH 2865	SUPER-80	SPMS-18 x 15883R	Super Seeds Pvt. Ltd., Hisar
IHT 303	MH 2866	NPH-6685	NPA-378 x NPR-1547	Nirmal Seeds Pvt. Ltd., Pachora
IHT 304	MH 2867	HT 424316	PM0174A x PM0412R	Hytech Seed India Pvt. Ltd., Medchal
IHT 305	MH 2868	DHBH-24156	DHLB-30A x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 307	MH 2869	DHBH-24157	DHLB-31A x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 308	MH 2870	DHBH-24159	DHLB-33A x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 310	MH 2871	DHBH-24161	DHLB-37A x DHLBI-1825	ICAR-ICAR-AICRP-PM, Dhule
IHT 311	MH 2872	PHB 3821	PB 605 A x PIB 616	ICAR-AICRP-PM, PAU, Ludhiana
IHT 312	MH 2873	VNR-110	VNRF-97 x VNRBB-1563	VNR Seeds Pvt., Ltd., Hyderabad
IHT 314	MH 2874	VNR-3233	VNRF-106 x VNRBB-1370	VNR Seeds Pvt., Ltd., Hyderabad
IHT 315	MH 2875	9056D750-01	9PQGP98A x M164R	Corteva Agriscience, Hyderabad
IHT 316	MH 2876	ADV20-0526	APH105A x APH105R	Adventa Enterprises Ltd., Hyderabad
IHT 317	MH 2877	BLPMH 114	BLPMA002 x BLPMR3034	Limagrains India Pvt. Ltd., Hyderabad
IHT 318	MH 2878	NBH 6048	NB107A x NB227R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
IHT 319	MH 2879	NBH 6061	NB1121A x NB2214R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
IHT 321	MH 2880	IIMR PH12	291A x 23S62	ICAR-IIMR, Hyderabad
IHT 322	MH 2881	IIMR PH13	269A x 23S62	ICAR-IIMR, Hyderabad
IHT 323	MH 2882	IIMR PH11	269A x 1449R	ICAR-IIMR, Hyderabad
IHT 324	MH 2883	MP7290	MP18P069A x PM23S0105R	Rallis India Ltd., Hyderabad
IHT 325	MH 2884	HHB 350	HMS 74A x HR-1013	ICAR-AICRP-PM, CCSHAU, Hisar
IHT 326	MH 2885	GHB 1384	JMSA1 20209 x J-2584	ICAR-AICRP-PM, JAU, Jamnagar
IHT 327	MH 2886	GHB 1398	ICMA1 15666 x J-2652	ICAR-AICRP-PM, JAU, Jamnagar
CHECKS				
		PB 1756 (2018)	PSP91 x PP107	Crystal Crop Protection Ltd., Hyderabad
		RHB 223 (2018)	ICMA 96666 x RIB 3135-18	ICAR-AICRP-PM, SKNAU, Jaipur
		HHB 67 (Imp.) (2005)	ICMA 843-22 x H 77/833-2-202	ICAR-AICRP-PM, CCSHAU, Hisar
		MPMH 35 (2022)	ICMA1 94555 x MIR 1252	ICAR-AICRP-PM,PC Unit, Jodhpur

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Test Code	Project No.	Identity	Pedigree	Origin
		86M94 (2022)	9PHGF39A x M444R	Pioneer Overseas Corp., Hyderabad
		PB1852 (2019)	PSP 95 x PP 110	Crystal Crop Protection Ltd., Hyderabad
		DHBH 1397 (2019)	DHLB 16A x DHLBI 1035	ICAR-ICAR-AICRP-PM, Dhule
		AHB 1269 (2019)	ICMA 98222A1 x AUBI 1105	ICAR-AICRP-PM, NARP, Aurangabad
		86M01 (2015)	M096F x M149R	Pioneer Overseas Corp., Hyderabad
		Pratap (2012)	NB 101A x NB 152R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
		MP 7878 (2018)	MP14P030A x MP15P038R	Metahelix Life Science Ltd., Bangalore
		86M84 (2016)	M162F x M172R	Pioneer Overseas Corp., Hyderabad
		KBH 108 (2014)	KMPS-74A x KPR-9288R	Krishna Seeds Pvt. Ltd., Agra
		NBH 4903 (2018)	NB 105A x NB 98R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
		Kaveri S. Boss (2012)	KBMS 329 x KBR 621	Kaveri Seed Co. Ltd., Hyderabad
		86M86 (2012)	M128F x M138R	Pioneer Overseas Corp., Hyderabad
		AHB 1200 (2018)	ICMA 98222 A1 x AUBI 1101	ICAR-AICRP-PM, NARP, Aurangabad
Entries completed two years of testing				
AHPT 807	MH 2743	MPMH 45	ICMA 97111 x MIR 2001	ICAR-AICRP-PM,PC Unit, Jodhpur
AHPT 808	MH 2744	MPMH 46	ICMA 92777 x MIR 525	ICAR-AICRP-PM,PC Unit, Jodhpur
AHPT 809	MH 2746	CZH 269	ICMA 07555 x CZI 2000/13	ICAR-CAZRI, Jodhpur
AHPT 810	MH 2747	CZH 270	ICMA 08333 x CZI 2020/2	ICAR-CAZRI, Jodhpur
AHPT 812	MH 2748	CZH 271	ICMA 15222 x CZI 2020/9	ICAR-CAZRI, Jodhpur
AHPT 813	MH 2749	IIMRPH4	843-22A x 129R	ICAR-IIMR, Hyderabad
AHPT 814	MH 2754	BHB 2303	ICMA 88004 x BIB-63	ICAR-AICRP-PM, SKRAU, Bikaner
AHPT 816	MH 2758	HHB 347	ICMA 93333 x HR-22-23	ICAR-AICRP-PM, CCSHAU, Hisar
AHT 404 B	MH 2767	Shalimar (9818)	SGB 902 A x SGB 981 R	Sona Genetic Pvt. Ltd., Ahmedabad
AHT 405 B	MH 2773	PB1988	PSP137 x PP110	Crystal Crop protection Pvt. Ltd., Aurangabad
AHT 406 B	MH 2775	NPH-6358	NPA-378 x NPR-1740	Nirmal Seeds Pvt. Ltd., Pachora
AHT 408 B	MH 2777	DHBH-21002 (R)	DHLB-32A x DHLBI-1035	ICAR-ICAR-AICRP-PM, Dhule
AHT 409 B	MH 2784	PB1937	PSP99 x PP110	Crystal Crop protection Pvt. Ltd., Aurangabad
AHT 505 A	MH 2796	HT 423158	PM0140A x PM0410R	Hytech Seed India Pvt. Ltd., Medchal
AHT 507 A	MH 2797	APH-44	APA-2283 x APR-1038	Ajeet Seeds Pvt. Ltd., Hyderabad
AHT 508 A	MH 2798	US7722	SWM05A x SWM11R	Seed Works Int. Pvt. Ltd., Hyderabad
AHT 510 A	MH 2801	BLPMH 113	BLPMA223 x BLPMP1519	Limagrain India Pvt. Ltd., Hyderabad
AHT 512 A	MH 2806	KPH6288	KP19SA001 x KP20SR025	Kaveri Seeds Co. Ltd., Secunderabad
AHT 514 A	MH 2808	PB1987®	PSP137 x PP123	Crystal Crop Protection Ltd., Aurangabad
AHT 503 B	MH 2795	VNR-109	VNRF-105 x VNRBB-1459	VNR Seeds Pvt., Ltd., Hyderabad
AHT 505 B	MH 2798	US7722	SWM05A x SWM11R	Seed Works Int. Pvt. Ltd., Hyderabad
AHT 507 B	MH 2808	PB1987®	PSP137 x PP123	Crystal Crop Protection Ltd., Aurangabad
Entries completed three years of testing				
AHPT 802	MH 2672	CZH 267	CZ-ICMA 19111 x CZI 2019/16	ICAR-CAZRI, Jodhpur
AHPT 803	MH 2673	RHB-273	RMS 30A x RIB 3135-18	ICAR-AICRP-PM, SKNAU, Jaipur
AHPT 804	MH 2675	GHB 1305	ICMA1 15777 x J-2571	ICAR-AICRP-PM, JAU, Jamnagar
AHPT 806	MH 2678	HHB 344	ICMA 93333 x HR-21-166	ICAR-AICRP-PM, CCSHAU, Hisar

Contd.

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Test Code	Project No.	Identity	Pedigree	Origin
AHT 402 B	MH 2682	APHB-126	ICMA 92333 x 4115	ICAR-AICRP-PM, ANGRAU, Anantapuram
AHT 501 A	MH 2709	MP7173	PM21S1087A x MP16P050R	Rallis India Ltd., Hyderabad
AHT 502 A	MH 2712	VNR-106	VNRF-12 x VNRBB-1368	VNR Seeds Pvt., Ltd., Hyderabad
AHT 503 A	MH 2717	US7773	SWM03A x SWM11R	Seed Works Int. Pvt. Ltd., Hyderabad
AHT 501 B	MH 2717	US7773	SWM03A x SWM11R	Seed Works Int. Pvt. Ltd., Hyderabad
		CHECKS		
		PB 1756 (2018)	PSP91 x PP107	Crystal Crop Protection Ltd., Hyderabad
		RHB 223 (2018)	ICMA 96666 x RIB 3135-18	ICAR-AICRP-PM, SKNAU, Jaipur
		HHB 67 (Imp.) (2005)	ICMA 843-22 x H 77/833-2-202	ICAR-AICRP-PM, CCSHAU, Hisar
		MPMH 35 (2022)	ICMA1 94555 x MIR 1252	ICAR-AICRP-PM, PC Unit, Jodhpur
		86M86 (2012)	M128F x M138R	Pioneer Overseas Corp., Hyderabad
		86M84 (2016)	M162F x M172R	Pioneer Overseas Corp., Hyderabad
		KBH 108 (2014)	KMPS-74A x KPR-9288R	Krishna Seeds Pvt. Ltd., Agra
		MP 7878 (2018)	MP14P030A x MP15P038R	Metahelix Life Science Ltd., Bangalore
		AHB 1269 (2019)	ICMA 98222A1 x AUBI 1105	ICAR-AICRP-PM, NARP, Aurangabad
		86M01 (2015)	M096F x M149R	Pioneer Overseas Corp., Hyderabad
		Pratap (2012)	NB 101A x NB 152R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
		Kaveri S. Boss (2012)	KBMS 329 x KBR 621	Kaveri Seed Co. Ltd., Hyderabad
		NBH 4903 (2018)	NB 105A x NB 98R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
		AHB 1200 (2018)	ICMA 98222 A1 x AUBI 1101	ICAR-AICRP-PM, NARP, Aurangabad

Contd.

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Table I.3: Key to Pearl Millet Hybrids (Summer 2024)

Test Code	Project No.	Identity	Pedigree	Origin
Entries completed one year of testing				
SHT 104	MSH 414	KPH 6311	KP19SA017 x KP22SR039	Kaveri Seeds Co. Ltd., Secunderabad
SHT 105	MSH 415	AHB 1200	ICMA 98222 x AUBI-1101	ICAR-AICRP-PM, NARP, Aurangabad
SHT 106	MSH 416	9055D732-01	9PFBA07A x 9PHQE75R	Corteva Agriscience, Hyderabad
SHT 108	MSH 417	9058D405-01	M286F x 9PUGL83R	Corteva Agriscience, Hyderabad
SHT 109	MSH 418	GHB 1353	ICMA1 14222 x J-2645	ICAR-AICRP-PM, JAU, Jamnagar
SHT 110	MSH 419	GHB 1379	ICMA1 14222 x J-2651	ICAR-AICRP-PM, JAU, Jamnagar
SHT 112	MSH 420	MP7104	MP13P025A x MP20P082R	Metahelix Life Science Ltd., Hyderabad
SHT 113	MSH 421	NBBH-1016	NB224 A x NBR 111	Navbharat Seeds Pvt. Ltd., Hyderabad
SHT 114	MSH 422	NBH 5933	NB1122A x NB2042R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
SHT 115	MSH 423	DHBH 1774	DHLB 30A x DHLBI 1035	ICAR-AICRP-PM, MPKV, Dhule
SHT 117	MSH 424	DHBH 1925	DHLB 23A x DHLBI 1035	ICAR-AICRP-PM, MPKV, Dhule
SHT 118	MSH 425	DHBH 22117	DHLB 23A x DHLBI 1603	ICAR-AICRP-PM, MPKV, Dhule
SHT 119	MSH 426	DHBH 22119	DHLB 31A x DHLBI 1603	ICAR-AICRP-PM, MPKV, Dhule
SHT 120	MSH 427	DHBH 22122	DHLB 37A x DHLBI 1603	ICAR-AICRP-PM, MPKV, Dhule
SHT 121	MSH 428	US 7370	SWM04A x SWM52R	Seed Works Intern. Pvt. Ltd., Ahmedabad
Entries completed two years of testing				
SHT 101	MSH 406	US7307	SWM03A x SWM10R	Seed Works Intern. Pvt. Ltd., Hyderabad
SHT 102	MSH 407	NBH 5922	NB 107 A x NB 2123 R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
Entries completed three years of testing				
Nil				
CHECKS				
		86M22 (2024)	M461F x M458R	Pioneer Overseas Corp., Hyderabad
		Proagro 9444 (2004)	PSP 41 x PP 29	Bayer Biosciences Pvt. Ltd., Hyderabad
		86M64 (2011)	M096F x M117R	Pioneer Overseas Corp., Hyderabad
		Nandi 75 (2013)	NMS 24 A x NMP 95	New Nandi Seeds Corp., Ahmedabad
		MP 7366 (2021)	MP14P028A x MP15P035R	Metahelix Life Science Ltd., Hyderabad

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Table I.4: Key to Pearl Millet Varieties (Kharif 2024)

Test Code	Project No.	Identity	Origin
Entries completed one year of testing			
PT 601 A	MP 640	GBL 10	ICAR-AICRP-PM, PAU, Ludhiana
PT 602 A	MP 641	BCB 2401	ICAR-AICRP-PM, SKRAU, Bikaner
PT 603 A	MP 642	ABV 08	ICAR-AICRP-PM, ANGRAU, Anantapuram
PT 606 A	MP 643	JPP 2024-1	ICAR-AICRP-PM, JAU, Jamnagar
PT 608 A	MP 644	JPP 2024-2	ICAR-AICRP-PM, JAU, Jamnagar
PT 609 A	MP 645	JPP 2024-3	ICAR-AICRP-PM, JAU, Jamnagar
PT 611 A	MP 646	VPMV-20	ICAR-AICRP-PM, Vijyapur
PT 612 A	MP 647	VPMV-21	ICAR-AICRP-PM, Vijyapur
PT 613 A	MP 648	VPMV-22	ICAR-AICRP-PM, Vijyapur
PT 614 A	MP 649	Pusa Composite 735	ICAR-IARI, New Delhi
PT 616 A	MP 650	Pusa Composite 736	ICAR-IARI, New Delhi
PT 618 A	MP 651	Pusa Composite 737	ICAR-IARI, New Delhi
PT 601 B	MP 640	GBL 10	ICAR-AICRP-PM, PAU, Ludhiana
PT 602 B	MP 641	BCB 2401	ICAR-AICRP-PM, SKRAU, Bikaner
PT 603 B	MP 642	ABV 08	ICAR-AICRP-PM, ANGRAU, Anantapuram
PT 604 B	MP 643	JPP 2024-1	ICAR-AICRP-PM, JAU, Jamnagar
PT 606 B	MP 644	JPP 2024-2	ICAR-AICRP-PM, JAU, Jamnagar
PT 607 B	MP 645	JPP 2024-3	ICAR-AICRP-PM, JAU, Jamnagar
PT 609 B	MP 646	VPMV-20	ICAR-AICRP-PM, Vijyapur
PT 612 B	MP 647	VPMV-21	ICAR-AICRP-PM, Vijyapur
PT 613 B	MP 648	VPMV-22	ICAR-AICRP-PM, Vijyapur
PT 614 B	MP 649	Pusa Composite 735	ICAR-IARI, New Delhi
PT 615 B	MP 650	Pusa Composite 736	ICAR-IARI, New Delhi
PT 617 B	MP 651	Pusa Composite 737	ICAR-IARI, New Delhi
Entries completed two years of testing			
PT 605 A	MP 637	Pusa Composite 732	ICAR-IARI, New Delhi
CHECKS			
		ICMV 221 (1993)	ICRISAT, Patancheru
		Pusa Comp. 701 (2016)	ICAR-IARI, New Delhi
		Dhanshakti (2014)	ICRISAT, Patancheru
		Pusa Comp. 383 (2001)	ICAR-IARI, New Delhi
		JBV 2 (1999)	ICAR-AICRP-PM, RVSKV, Gwalior
		Raj 171 (1992)	ICAR-AICRP-PM, SKNAU, Jaipur
		ABV 04 (2019)	ICAR-AICRP-PM, ANGRAU, Ananthapuram
		Pusa Comp. 612 (2011)	ICAR-IARI, New Delhi
		ICMV 155 (1991)	ICRISAT, Patancheru

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Table I.5: Key to Pearl Millet Released Hybrids and Varieties (Kharif 2024)

S. No.	Name of entry.	Year of release	Pedigree	Origin
Hybrids				
1	MPMH 42	2024	ICMA 92777 x MIR 519-1	
2	MPMH 35	2022	ICMA 94555 x MIR 1252	ICAR-AICRP-PM, Jodhpur
3	RHB 223	2018	ICMA 96666 x RIB 3135-18	ICAR-AICRP-PM, SKNAU, Jaipur
4	PB 1756	2018	PSP91 x PP107	Bayer Bio Science Hyderabad
5	HHB 272	2016	HMS 47A x AC 04/13	ICAR-AICRP-PM, CCS HAU, Hisar
6	GHB 719	2007	ICMA 95222 x J 2454	ICAR-AICRP-PM, JAU, Jamnagar
7	GHB 538	2005	ICMA 95444 x J-2340	ICAR-AICRP-PM JAU, Jamnagar
8	HHB 67 Improved	2005	ICMA 843-22 x H 77/833-2-202	ICAR-AICRP-PM, CCS HAU, Hisar
9	86M94	2022	9PHGF39A x M444R	Pioneer Overseas Corp., Hyderabad
10	DHBH 1397	2019	DHLB 16A x DHLBI 1035	ICAR-ICAR-AICRP-PM, Dhule
11	PB 1852	2019	PSP 95 x PP 110	Bayer Bio Science, Hyderabad
12	86M01	2015	M096F x M149R	Pioneer Overseas Corp., Hyderabad
13	GHB 905	2013	ICMA 04999 x J- 2454	ICAR-AICRP-PM JAU, Jamnagar
14	RHB 173	2011	ICMA 93333 x RIB 192S/99	ICAR-AICRP-PM, SKNAU, Jaipur
15	GHB 732	2008	ICMA 96222 x J 2340	ICAR-AICRP-PM, JAU, Jamnagar
16	GHB 744	2008	ICMA 98444 x J 2340	ICAR-AICRP-PM, JAU, Jamnagar
17	86M80	2022	M461F x M513R	Pioneer Overseas Corp., Hyderabad
18	MP 7878	2018	MP14P030A x MP15P038R	Metahelix Life Science Ltd.
19	86M84	2016	M162F x M172R	Pioneer Overseas Corp., Hyderabad
20	KBH 108	2014	KMPS-74A x KPR-9288R	Krishna Seeds Pvt. Ltd., Agra
21	Kaveri Super Boss	2012	KBMS 329 x KBR 621	Kaveri Seed Co. Ltd., Hyderabad
22	86M86	2012	M128F x M138R	Pioneer Overseas Corp., Hyderabad
23	RHB 233	2019	ICMA 99444 x RIB 15176	ICAR-AICRP-PM, SKNAU, Jaipur
24	RHB 234	2019	ICMA 02333 x RIB 15177	ICAR-AICRP-PM, SKNAU, Jaipur
25	AHB 1269	2019	ICMA 98222A ₁ x AUBI 1105	ICAR-AICRP-PM, NARP, Aurangabad
26	AHB 1200	2018	ICMA 98222 A ₁ x AUBI 1101	ICAR-AICRP-PM, NARP, Aurangabad
27	HHB 299	2018	ICMA 04888 x H 13/0001	ICAR-AICRP-PM, CCS HAU, Hisar
28	Mahabeej-1005	2017	MBJ-2A x MBJ-1R	MSSCL, Akola
29	Pratap (MH 1642)	2012	NB 101A x NB 152R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
30	NBH 4903	2018	NB 105A x NB 98R	Nuziveedu Seeds Pvt. Ltd., Hyderabad
Varieties				
28	Dhanshakti	2014	-	ICAR-AICRP-PM, MPKV, Dhule
29	ICMV 221	1993	-	ICRISAT, Patancheru
30	Pusa Comp. 701	2016	-	ICAR-IARI, New Delhi
31	Pusa Comp. 383	2001	-	ICAR-IARI, New Delhi
32	JBV 2	1999	-	ICAR-AICRP-PM, RVSKVV, Gwalior
33	RAJ 171	1992	-	ICAR-AICRP-PM, SKNAU, Jaipur
34	Pusa Comp. 612	2011	-	ICAR-IARI, New Delhi

Summary results of successfully conducted trials in Zones A₁, A and B**A. ICAR-AICRP on Pearl Millet Hybrid Trials****1. Initial Hybrid Trial (Early): IHT (E) ZONE A₁**

Initial Hybrid Trial (Early) was conducted at 11 locations in Zone A₁ i.e. eight in Rajasthan, two in Haryana and one in Gujarat in which 23 experimental hybrids along with five checks viz. RHB 223, PB 1756, MPMH 35, HHB 67 Imp and AHB 1200 (only for Fe and Zn comparison) were evaluated. Experimental hybrids showed differences in their performance within zone. Mean performance of experimental hybrids along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.6. Location-wise performance for grain yield and other ancillary characters are presented in Tables I.19 to I.32.

The mean grain yield of test hybrids ranged from 1490 kg/ha to 2325 kg/ha. Three hybrids, MH 2814 (2325 kg/ha), MH 2827 (2303 kg/ha) and MH 2829 (2244 kg/ha) recorded higher grain yield over the best check MPMH 35 (2157 kg/ha). Dry fodder yield ranged from 4769 kg/ha to 7114 kg/ha.

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Table I.6: MEAN PERFORMANCE: INITIAL HYBRID TRIAL (Early) KHARIF 2024 ZONE A₁

S.No.	Name of Entry	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MH 2814	2325	6740	50	79	0.9	2.3	0.0	0.8	0.0	45	37
2	MH 2827	2303	7114	49	80	2.9	1.3	0.0	5.5	0.0	50	38
3	MH 2829	2244	6320	45	76	1.3	3.5	0.0	8.0	0.0	47	37
4	MPMH 35 (C)	2157	6658	46	76	3.3	1.9	2.0	1.5	2.0	44	38
5	MH 2826	2131	6140	46	75	0.9	2.0	1.0	3.3	0.0	43	37
6	MH 2813	2118	6572	47	79	0.5	2.2	0.0	10.0	0.0	44	41
7	MH 2832	2116	6722	46	76	1.2	2.5	0.0	1.1	6.8	44	38
8	MH 2812	2109	6312	47	78	1.2	2.4	0.0	4.4	3.5	42	34
9	MH 2820	2095	6525	47	77	1.3	2.6	5.0	0.5	0.0	46	38
10	MH 2819	2075	5939	45	74	5.7	2.6	0.0	0.8	0.0	53	40
11	MH 2811	2040	5810	45	76	1.2	2.2	0.0	0.0	3.8	43	37
12	MH 2831	2039	6076	47	77	2.4	2.1	0.0	0.5	9.3		
13	MH 2833	2025	6016	48	78	0.0	2.3	1.0	0.5	8.3		
14	MH 2817	2006	5995	45	76	0.8	3.2	0.0	0.3	0.0		
15	MH 2830	1905	6152	45	76	1.2	2.9	0.0	0.1	0.0		
16	MH 2825	1901	5765	44	75	7.0	2.3	1.0	1.3	0.0		
17	MH 2816	1866	6453	47	79	1.0	3.2	0.0	1.3	0.0		
18	RHB 223 (C)	1863	5539	46	76	3.9	1.5	0.0	1.0	0.0	43	37
19	MH 2822	1857	5694	47	77	1.6	3.0	1.0	12.3	0.0		
20	MH 2818	1849	5380	47	76	2.5	3.3	0.0	2.3	0.0		
21	PB 1756 (C)	1801	5150	45	76	0.0	1.5	1.0	1.5	0.0	46	38
22	MH 2815	1797	5356	48	79	3.7	2.9	0.0	0.0	0.0		
23	MH 2821	1717	5521	46	77	1.6	2.9	0.0	6.0	0.0		
24	MH 2828	1714	5584	49	80	6.6	1.8	0.0	4.5	0.0		
25	MH 2824	1634	4769	44	74	1.6	2.8	0.0	3.8	0.0		
26	AHB 1200 (C)	1619	5165	47	78	0.5	2.8	0.0	1.3	0.0	48	39
27	MH 2823	1533	4887	44	76	8.0	2.9	0.0	2.8	0.0		
28	HHB 67 Imp. (C)	1490	5099	43	75	0.0	2.5	1.0	2.8	0.0	43	37
LOC. MEAN		1940	5909	46	77							

Promotion criteria as per 52nd Annual group meet : Grain yield =higher than best check or 10% higher over relevant check, Days to 50% flowering ≤ 45 days, A grace of one day in days to 50% flowering may be given to hybrids yielding grains 15% higher over HHB 67 Improved, Disease (Across all zones): Downy Mildew (60 DAS): ≤ 5%, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): ≤ 20%, Smut (% severity): ≤ 20%, Rust (% leaf area): ≤ 20%, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

2. Initial Hybrid Trial (Medium): IHT (M) ZONE A & B

Initial Hybrid Trial (Medium) was conducted at 17 locations in which 30 experimental hybrids were evaluated along with four checks viz., PB 1852, 86M94, DHBH 1397 and AHB 1200 (only for Fe and Zn comparison) in Zone A and at 12 locations with same test entries along with four checks viz. 86M01, Pratap, AHB 1269 and AHB 1200 (only for Fe and Zn comparison) in Zone B. Experimental hybrids showed differences in their performance between and within zones. The zone-wise results are given below:

Zone A

In Zone A, IHT (Medium) was conducted successfully at 17 locations i.e. six in Rajasthan, four in Gujarat, two each in Uttar Pradesh and Haryana and one each in Madhya Pradesh, Punjab and Delhi. Mean performance of experimental hybrids along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.7. Location-wise performance for grain yield and other ancillary characters are presented in Tables I.33 to I.46. The mean grain yield of test hybrids

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ranged from 2366 kg/ha to 3884 kg/ha. Three hybrids, MH 2863 (3884 kg/ha), MH 2842 (3798 kg/ha) and MH 2840 (3688 kg/ha) recorded higher grain yield over the best check 86M94 (3614 kg/ha). Dry fodder yield of test hybrids ranged from 6666 kg/ha to 10634 kg/ha.

Table I.7: MEAN PERFORMANCE: INITIAL HYBRID TRIAL (Medium) KHARIF 2024 ZONE A

S.No.	Name of Entry	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MH 2863	3884	10500	55	86	0.6	1.2	0.0	5.6	0.0	54	40
2	MH 2842	3798	10634	53	84	1.3	2.2	0.0	0.0	0.0	49	33
3	MH 2840	3688	10209	55	85	0.3	1.7	4.2	18.8	0.0	47	36
4	86M94 (C)	3614	9163	50	82	0.0	2.2	0.8	1.3	0.0	47	36
5	PB 1852 (C)	3533	9936	53	83	0.2	2.1	0.8	3.8	0.0	52	38
6	MH 2854	3524	9637	51	82	0.3	1.6	0.3	15.3	0.0		
7	MH 2841	3516	9200	48	81	1.3	2.2	0.0	0.0	0.0		
8	MH 2834	3455	8675	51	82	0.6	2.0	2.5	0.0	0.0		
9	MH 2839	3367	8682	55	87	0.0	2.0	3.3	11.8	0.0		
10	MH 2848	3367	10083	53	84	3.0	1.7	2.5	9.8	0.0		
11	DHBH 1397 (C)	3358	8925	47	80	1.4	2.6	0.3	6.0	0.0	53	41
12	MH 2838	3315	8634	49	81	1.2	1.7	0.0	22.5	0.0		
13	MH 2852	3300	9616	56	86	1.7	1.6	0.0	8.9	0.0		
14	MH 2846	3271	8706	56	86	0.6	1.6	0.8	5.9	0.0		
15	MH 2856	3218	8170	51	83	0.7	2.6	0.0	6.1	0.0		
16	MH 2844	3207	8023	52	85	0.9	1.7	0.0	1.5	0.0		
17	MH 2836	3166	7883	48	81	0.7	1.9	2.2	12.2	0.0		
18	MH 2851	3117	9631	46	78	3.2	2.1	0.0	6.9	0.0		
19	MH 2849	3064	8614	51	83	3.1	2.5	0.8	7.3	0.0		
20	MH 2850	3018	8459	48	80	1.1	3.2	0.3	13.4	0.0		
21	MH 2859	2956	8470	57	87	3.5	1.5	0.0	5.0	0.0		
22	MH 2847	2936	7903	51	82	0.7	2.0	1.7	2.1	0.0		
23	MH 2843	2913	9671	56	86	0.9	3.7	0.0	4.3	0.0		
24	MH 2837	2905	7459	49	82	1.5	1.9	4.5	23.5	0.0		
25	MH 2860	2897	7952	51	82	1.6	2.8	0.3	4.0	0.0		
26	MH 2853	2893	8582	53	83	0.5	1.6	0.3	6.3	0.0		
27	MH 2862	2833	8073	53	84	1.7	2.1	0.0	3.9	0.0		
28	MH 2857	2767	8906	48	80	0.6	3.1	0.7	7.1	0.0		
29	MH 2845	2695	8134	50	82	0.8	3.6	4.2	3.9	0.0		
30	MH 2835	2554	6666	50	83	1.5	1.5	0.0	1.8	2.5		
31	AHB 1200 (C)	2528	6982	47	78	0.3	3.6	0.0	0.6	0.0	67	39
32	MH 2858	2524	8745	49	80	2.8	3.7	0.0	6.6	0.0		
33	MH 2861	2421	6740	48	79	1.2	3.8	0.3	15.1	0.0		
34	MH 2855	2366	7067	54	84	0.5	1.2	2.3	1.9	0.0		
LOC. MEAN		3117	8669	51	83							

Promotion criteria as per 52nd Annual group meet: Grain yield = higher than best check or 10% higher over relevant check, Days to 50% flowering ≤ 50 days, A grace of one day in days to 50% flowering may be given to hybrids yielding grains 15% higher over relevant checks, Disease (Across all zones): Downy Mildew (60 DAS): ≤ 5%, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): ≤ 20%, Smut (% severity): ≤ 20%, Rust (% leaf area): ≤ 20%, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

Zone B

In Zone B, IHT (Medium) was conducted successfully at 12 locations viz. four in Maharashtra, three in Karnataka, two in Andhra Pradesh and one each in Telangana, Tamil Nadu and Odisha. Mean performance of experimental hybrids along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.8. Location-wise performance for grain yield and other ancillary characters are presented in Tables I.47 to I.60. Mean grain yield of test hybrids ranged from 2009 kg/ha to 4118 kg/ha. Six hybrids viz. MH 2842 (4118 kg/ha), MH 2840 (3853 kg/ha), MH 2863 (3791 kg/ha), MH 2852 (3707 kg/ha), MH 2859 (3496 kg/ha) and MH 2846 (3492 kg/ha) recorded

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higher grain yield over best check 86M01 (3438 kg/ha) with medium flowering (up to 50 days) except MH 2863 and MH 2846 (51 days). One hybrid MH 2840 having 52 days of flowering. Dry fodder yield of test entries ranged from 5223 kg/ha to 8858 kg/ha.

Table I.8: MEAN PERFORMANCE: INITIAL HYBRID TRIAL (Medium) KHARIF 2024 ZONE B

S.No.	Name of Entry	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MH 2842	4118	8018	50	84	1.0	0.6	0.8	0.0	7.3	44	32
2	MH 2840	3853	7596	52	86	0.5	0.0	0.5	0.0	1.6	46	33
3	MH 2863	3791	7879	51	84	0.8	1.3	2.0	0.0	8.1	56	36
4	MH 2852	3707	7179	49	84	2.1	0.9	0.0	0.0	5.6	56	37
5	MH 2859	3496	8606	50	85	2.1	1.8	0.0	0.0	5.6	55	36
6	MH 2846	3492	8858	51	85	1.4	0.9	1.0	0.0	5.9	65	40
7	86M01 (C)	3438	7213	47	81	1.3	3.4	2.0	0.0	3.3	52	35
8	MH 2843	3425	7928	50	85	1.9	2.5	2.1	0.0	7.3	53	39
9	MH 2853	3402	7199	49	83	1.5	1.1	0.9	0.0	9.1	58	34
10	MH 2847	3284	7384	49	84	1.6	2.5	1.3	0.0	4.9		
11	MH 2841	3226	7182	46	82	1.2	1.3	0.8	0.0	4.6		
12	MH 2837	3195	6700	47	83	2.7	1.4	0.3	0.3	9.1		
13	MH 2849	3137	7417	50	85	2.0	2.0	0.0	0.0	5.8		
14	MH 2854	3127	7511	46	80	1.0	0.9	0.0	0.0	6.6		
15	MH 2848	3038	7172	47	82	1.8	1.9	1.9	0.0	6.6		
16	MH 2839	2930	6677	49	85	0.8	1.9	1.3	0.0	8.6		
17	MH 2838	2918	6400	46	81	1.6	1.8	0.0	0.0	6.9		
18	MH 2836	2871	6292	48	83	2.7	1.5	2.8	0.3	8.3		
19	MH 2834	2839	6749	47	82	1.1	0.9	0.3	0.0	9.5		
20	MH 2844	2833	6416	48	82	1.6	0.8	0.9	0.0	6.5		
21	MH 2860	2810	6557	48	83	2.0	2.8	0.0	0.0	9.4		
22	MH 2856	2728	6720	47	82	2.7	2.0	0.0	0.0	9.1		
23	MH 2845	2684	6797	48	82	1.8	2.5	1.8	0.0	7.5		
24	MH 2858	2684	7351	47	82	10.4	2.5	2.0	0.0	10.3		
25	MH 2850	2633	7083	46	81	2.5	1.5	0.0	0.0	9.9		
26	AHB 1269 (C)	2594	6697	47	83	1.2	3.9	1.9	0.0	14.3	57	36
27	AHB 1200 (C)	2460	6228	46	81	2.3	4.0	0.0	0.0	12.4	67	40
28	MH 2857	2444	6782	47	81	5.1	2.4	0.0	0.0	8.4		
29	MH 2861	2409	6290	47	82	2.3	4.4	3.0	0.0	6.3		
30	MH 2862	2408	6548	48	83	2.7	3.0	0.0	0.0	4.8		
31	MH 2835	2391	5473	49	83	1.0	1.0	0.5	0.0	5.8		
32	MH 2855	2291	5476	50	84	1.1	1.1	0.8	0.0	0.0		
33	Pratap (C)	2115	5223	46	80	3.2	4.9	1.0	0.0	10.3	54	38
34	MH 2851	2009	5566	45	79	2.2	2.3	0.0	1.9	11.9		
LOC. MEAN		2964	6917	48	83							

Promotion criteria as per 52nd Annual group meet: Grain yield =higher than best check or 10% higher over relevant check, Days to 50% flowering ≤ 50 days, A grace of one day in days to 50% flowering may be given to hybrids yielding grains 15% higher over relevant checks, Disease (Across all zones): Downy Mildew (60 DAS): ≤ 5%, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): ≤ 20%, Smut (% severity): ≤ 20%, Rust (% leaf area): ≤ 20%, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

3. Initial Hybrid Trial (Late): IHT (L) ZONE A & B

In Initial Hybrid Trial (Late) 23 experimental hybrids were evaluated at 16 locations along with four checks viz., MP 7878, 86M84, KBH 108 and AHB 1200 (only for Fe and Zn comparison) in zone A and same entries at 11 locations along with four checks viz., NBH 4903, 86M86, Kaveri Super Boss and AHB 1200 (only for Fe and Zn comparison) in zone B. Experimental hybrids showed differences in their performance between and within zones. The zone-wise results are given below:

Zone A

In Zone A, Initial Hybrid Trial (Late) was conducted successfully at 16 locations i.e. eight in Rajasthan, two in Uttar Pradesh, three in Gujarat and one each in Haryana, Madhya Pradesh and Punjab. Mean performance of experimental hybrids along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.9. Location-wise performance for grain yield and other ancillary characters are presented in Tables I.61 to I.74. The mean grain yield of test hybrids ranged from 2284 kg/ha to 4323 kg/ha. Only one hybrid MH 2878 (4323 kg/ha) recorded higher grain yield over the best check MP 7878 (4125 kg/ha). Dry fodder yield of test hybrids ranged from 8156 kg/ha to 13405 kg/ha.

Table I.9: MEAN PERFORMANCE: INITIAL HYBRID TRIAL (Late) KHARIF 2024 ZONE A

S.No.	Name of Entry	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MH 2878	4323	13405	59	88	0.7	2.1	0.8	0.0	0.0		
2	MP 7878 (C)	4125	12038	56	86	1.8	3.3	0.0	0.0	0.0		
3	MH 2875	4028	11227	56	86	0.3	1.1	0.0	0.0	0.0		
4	86M84 (C)	3956	11750	58	87	0.4	2.6	0.8	4.4	0.0		
5	MH 2876	3881	11177	62	90	0.2	1.6	0.0	1.3	0.0		
6	MH 2866	3828	12894	62	90	1.2	2.2	2.8	8.8	0.0		
7	MH 2874	3747	11169	56	85	0.0	1.5	0.3	3.8	0.0		
8	MH 2879	3730	11828	60	90	1.4	1.7	0.8	0.0	0.0		
9	MH 2883	3687	12049	54	83	0.4	1.7	0.0	2.4	0.0		
10	MH 2871	3677	10014	57	86	1.2	1.8	0.7	11.4	0.0		
11	MH 2867	3675	10789	55	84	1.3	1.3	0.8	15.6	0.0		
12	MH 2864	3603	10474	55	84	0.3	1.4	0.3	9.5	0.0		
13	MH 2880	3568	10370	57	86	1.1	1.2	0.3	0.9	0.0		
14	MH 2873	3565	11370	60	89	0.8	1.1	0.0	6.3	0.0		
15	MH 2885	3515	10996	58	87	0.3	2.5	0.8	3.6	0.0		
16	MH 2868	3443	9198	54	82	0.4	2.6	0.5	18.6	0.0		
17	MH 2881	3417	10074	62	91	1.0	1.2	0.3	0.1	0.0		
18	MH 2886	3404	9604	57	87	0.3	3.1	0.8	4.8	0.0		
19	MH 2877	3377	9446	57	86	0.5	2.1	0.0	5.1	0.0		
20	MH 2870	3320	8403	53	81	0.9	2.5	1.7	6.4	0.0		
21	MH 2869	3266	8442	52	81	1.8	3.2	0.3	10.5	0.0		
22	KBH 108 (C)	3266	10745	59	89	1.2	2.7	0.8	0.6	0.0		
23	MH 2882	3069	10226	57	86	0.4	1.6	0.8	0.6	0.0		
24	MH 2865	2983	8583	50	80	0.2	3.1	0.0	18.5	0.0		
25	MH 2884	2948	8156	60	89	1.6	2.9	0.8	2.0	0.0		
26	AHB 1200 (C)	2879	8222	51	80	0.3	3.6	0.0	0.6	0.0		
27	MH 2872	2284	11942	63	92	4.9	1.3	4.2	5.3	0.0		
LOC. MEAN		3502	10540	57	86							

Promotion criteria as per 52nd Annual group meet: Grain yield = higher than best check or 5% higher over relevant check, Disease (Across all zones): Downy Mildew (60 DAS): ≤ 5%, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): ≤ 20%, Smut (% severity): ≤ 20%, Rust (% leaf area): ≤ 20%, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

Zone B

In Zone B, Initial Hybrid Trial (Late) was conducted successfully at 11 locations viz. seven in Maharashtra and one each in Karnataka, Andhra Pradesh, Telangana and Tamil Nadu. Mean performance of experimental hybrids along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.10. Location-wise performance for grain yield and other ancillary characters are presented in Tables I.75 to I.88. Mean grain yield of test hybrids ranged

from 2445 kg/ha to 4040 kg/ha. Two hybrids namely, MH 2875 (4040 kg/ha) and MH 2876 (3804 kg/ha) recorded higher grain yield over the best check NBH 4903 (3750 kg/ha). Dry fodder yield of test hybrids ranged from 6070 kg/ha to 8827 kg/ha.

Table I.10: MEAN PERFORMANCE: INITIAL HYBRID TRIAL (Late) KHARIF 2024 ZONE B

S.No.	Name of Entry	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MH 2875	4040	8450	54	87	0.7	0.0	0.6	0.0	6.1	45	35
2	MH 2876	3804	8164	56	89	0.8	1.0	0.4	0.0	0.3	51	37
3	NBH 4903 (C)	3750	8265	55	88	2.5	3.3	0.6	0.0	9.8	47	39
4	Kaveri S Boss (C)	3721	7985	56	89	0.8	1.5	0.1	0.0	6.4	45	32
5	MH 2878	3718	8827	54	87	1.0	1.0	1.3	0.0	5.5		
6	MH 2866	3680	8365	55	87	1.4	1.1	0.0	0.0	5.5		
7	MH 2879	3645	8806	56	88	3.0	1.6	0.8	0.0	8.9		
8	MH 2881	3614	7136	54	87	0.8	0.8	0.0	0.0	7.4		
9	MH 2874	3598	8399	54	86	0.3	0.9	0.0	0.0	0.9		
10	MH 2880	3555	7914	54	86	1.9	0.5	0.5	0.0	5.8		
11	MH 2864	3503	6947	53	86	1.9	1.3	0.0	0.0	9.5		
12	MH 2867	3422	7410	53	86	0.8	1.9	0.0	0.3	5.6		
13	MH 2877	3371	7382	53	86	0.5	2.5	1.4	0.0	8.4		
14	MH 2886	3315	6797	53	86	0.5	2.4	0.3	0.0	5.9		
15	MH 2873	3187	7949	55	88	0.5	0.9	0.8	0.9	6.4		
16	MH 2885	3180	7879	53	86	1.7	1.8	0.0	0.0	4.1		
17	MH 2869	3173	6489	50	83	1.4	1.9	0.8	0.0	9.4		
18	MH 2882	3165	7257	54	86	0.8	2.1	0.0	0.0	6.5		
19	86M86 (C)	3147	6117	54	87	2.3	1.0	3.3	0.0	8.3	56	38
20	MH 2868	3126	6609	50	83	1.2	1.5	1.0	1.5	6.9		
21	MH 2883	3033	7214	50	83	0.5	2.0	0.0	0.0	6.0		
22	MH 2871	3023	6135	51	84	1.9	0.5	0.0	0.0	7.4		
23	MH 2870	2898	6789	51	84	1.0	2.1	1.5	0.0	9.9		
24	MH 2872	2673	8267	57	89	1.5	0.9	0.0	0.0	3.8		
25	MH 2865	2637	6487	47	81	1.8	1.8	0.4	0.9	6.5		
26	AHB 1200 (C)	2610	6070	50	82	2.3	4.0	0.0	0.0	12.4	74	40
27	MH 2884	2445	6115	56	88	1.1	3.9	1.0	0.0	5.9		
LOC. MEAN		3298	7416	53	86							

Promotion criteria as per 52nd Annual group meet: Grain yield =higher than best check or 5% higher over relevant check, Disease (Across all zones): Downy Mildew (60 DAS): $\leq 5\%$, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): $\leq 20\%$, Smut (% severity): $\leq 20\%$, Rust (% leaf area): $\leq 20\%$, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

4. Advanced Hybrid Trial (Medium): AHT (M) ZONE B

In Advanced Hybrid Trial (Medium), 06 experimental hybrids along with four checks viz., Pratap, AHB 1269, 86M01 and AHB 1200 (only for Fe and Zn comparison) were evaluated at 10 locations in Zone B. Experimental hybrids showed differences in their performance between and within zones. The zone-wise results are given below:

Zone B

In Zone B, AHT (Medium) was conducted successfully at 10 locations viz., four in Maharashtra, two each in Karnataka and Andhra Pradesh and one each in Telangana and Tamil Nadu. Mean performance of experimental hybrids along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.11. Location-wise performance of grain yield, grain quality and other ancillary characters are presented in Tables I.89 to I.102. The mean grain yield of hybrids tested

ranged from 2320 kg/ha to 3050 kg/ha. Six hybrids namely, MH 2775 (3050 kg/ha), MH 2682 (3017 kg/ha), MH 2773 (2986 kg/ha), MH 2767 (2966 kg/ha), MH 2784 (2931 kg/ha) and MH 2777 (2808 kg/ha) recorded higher grain yield over best check 86M01 (2639 kg/ha). Dry fodder yield of test hybrids ranged from 4762 kg/ha to 6869 kg/ha.

Table I.11: MEAN PERFORMANCE: ADVANCED HYBRID TRIAL (Medium) KHARIF 2024 ZONE B

S.No.	Name of Entry (Years of testing)	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MH 2775 (2 nd)	3050	5877	48	82	0.4	2.0	2.0	0.0	8.4	56	33
2	MH 2682 (3 rd)	3017	5970	48	83	1.4	1.1	0.0	0.0	4.5	49	33
3	MH 2773 (2 nd)	2986	6157	50	85	0.5	1.1	0.2	0.5	6.7	49	32
4	MH 2767 (2 nd)	2966	6869	51	87	1.0	1.3	0.2	0.0	8.9	43	32
5	MH 2784 (2 nd)	2931	5913	50	85	0.4	1.5	0.5	0.0	6.5	48	32
6	MH 2777 (2 nd)	2808	5957	48	83	0.6	2.2	0.8	0.0	7.9	51	33
7	86M01 (C)	2639	5586	47	82	2.2	3.7	1.0	0.0	4.2	48	34
8	AHB 1200 (C)	2469	5298	47	81	2.4	3.3	0.5	0.2	9.8	70	36
9	AHB 1269 (C)	2462	5153	46	79	1.0	3.3	0.5	0.0	8.0	64	39
10	Pratap (C)	2320	4762	46	80	3.2	4.9	1.5	0.0	3.8	49	36
LOC. MEAN		2765	5754	48	83							

Promotion criteria as per 52nd Annual group meet: Grain yield = higher than best check or 10% higher over relevant check, Days to 50% flowering ≤ 50 days, A grace of one day in days to 50% flowering may be given to hybrids yielding grains 15% higher over relevant checks, Disease (Across all zones): Downy Mildew (60 DAS): ≤ 5%, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): ≤ 20%, Smut (% severity): ≤ 20%, Rust (% leaf area): ≤ 20%, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

5. Advanced Hybrid Trial (Late): AHT (L) ZONE A & B

In Advanced Hybrid Trial (Late), nine experimental hybrids along with five checks viz. KBH 108, 86M86, 86M84, MP 7878 and AHB 1200 (only for Fe and Zn comparison) were evaluated at 11 locations in Zone A and four experimental hybrids along with four checks viz. Kaveri Super Boss, NBH 4903, 86M86 and AHB 1200 (only for Fe and Zn comparison) were evaluated at 8 locations in Zone B. Experimental hybrids showed differences in their performance between and within zones. The zone-wise results are given below:

Zone A

In Zone A, Advanced Hybrid Trial (Late) was conducted successfully at 11 locations viz., three each in Rajasthan and U.P., two in Gujarat and one each in Haryana, Madhya Pradesh and Punjab. Mean performance of experimental hybrids along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.12. Location-wise performance of grain yield, grain quality and other ancillary characters are presented in Tables I.103 to I.117. The mean grain yield of hybrids tested ranged from 2173 kg/ha to 3912 kg/ha. Seven experimental hybrids viz., MH 2806 (3912 kg/ha), MH 2798 (3819 kg/ha), MH 2717 (3785 kg/ha) MH 2709 (3745 kg/ha), MH 2796 (3637 kg/ha), MH 2808 (3476 kg/ha) and MH 2797 (3441 kg/ha) recorded higher grain yield over the best check MP 7878 (3441 kg/ha). Dry fodder yield of test hybrids ranged from 7393 kg/ha to 12082 kg/ha.

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Table I.12: MEAN PERFORMANCE: ADVANCED HYBRID TRIAL (Late) KHARIF 2024 ZONE A

S.No.	Name of Entry (Year of testing)	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MH 2806 (2 nd)	3912	10989	55	86	1.0	2.5	0.8	1.9	0.0	43	32
2	MH 2798 (2 nd)	3819	11434	56	86	0.9	0.8	0.0	0.0	0.0	45	36
3	MH 2717 (3 rd)	3785	11688	54	85	0.3	2.3	0.0	0.0	0.0	49	37
4	MH 2709 (3 rd)	3745	10499	54	85	1.7	1.9	0.8	4.1	0.0	54	39
5	MH 2796 (2 nd)	3637	11449	55	86	0.0	1.4	0.0	5.1	0.0	53	36
6	MH 2808 (2 nd)	3476	10853	59	90	0.8	1.5	0.8	6.9	0.0	45	35
7	MH 2797 (2 nd)	3441	10925	57	88	2.8	1.8	4.2	8.8	0.0	43	34
8	MP 7878 (C)	3441	11736	56	87	0.5	1.9	0.8	0.1	0.0	54	41
9	86M84 (C)	3402	10480	57	87	0.3	2.6	1.7	0.0	0.0	51	36
10	MH 2712 (3 rd)	3305	10708	58	88	0.8	1.1	3.5	6.9	0.0	59	41
11	MH 2801 (2 nd)	3215	12082	59	90	1.1	0.8	3.3	1.3	0.0	59	38
12	86M86 (C)	3040	9665	56	86	0.8	2.5	0.0	0.8	0.0	61	40
13	KBH 108 (C)	2796	9647	57	89	1.3	3.1	0.0	0.0	0.0	46	32
14	AHB 1200 (C)	2173	7393	51	82	4.3	3.3	0.0	7.5	0.0	70	41
LOC. MEAN		3370	10682	56	87							

Promotion criteria as per 52nd Annual group meet: Grain yield =higher than best check or 5% higher over relevant check, Disease (Across all zones): Downy Mildew (60 DAS): ≤ 5%, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): ≤ 20%, Smut (% severity): ≤ 20%, Rust (% leaf area): ≤ 20%, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

Zone B

In Zone B, Advanced Hybrid Trial (Late) was conducted successfully at 8 locations viz. five in Maharashtra, one each in Andhra Pradesh, Karnataka and Tamil Nadu. Mean performance of experimental hybrids along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.13. Location-wise performance of grain yield, grain quality and other ancillary characters are presented in Tables I.118 to I.131. The mean grain yield of hybrids tested ranged from 2327 kg/ha to 3517 kg/ha. Hybrid MH 2798 (3517 kg/ha) recorded higher grain yield over the best check NBH 4903 (3356 kg/ha). Dry fodder yield of test hybrids ranged from 5455 kg/ha to 7943 kg/ha.

Table I.13: MEAN PERFORMANCE: ADVANCED HYBRID TRIAL (Late) KHARIF 2024 ZONE B

S.No.	Name of Entry (Year of testing)	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MH 2798 (2 nd)	3517	7481	53	87	0.4	1.7	0.5	0.0	12.1	44	38
2	NBH 4903 (C)	3356	7810	54	89	1.8	2.3	0.0	0.0	7.6	49	40
3	MH 2808 (2 nd)	3278	7943	56	91	0.4	1.8	0.0	0.0	7.3	47	34
4	MH 2717 (3 rd)	3230	7454	53	87	0.3	2.5	0.8	0.2	10.8	44	35
5	Kaveri S Boss (C)	2992	7082	56	90	1.2	2.2	0.0	0.0	6.9	45	33
6	MH 2795 (2 nd)	2892	7195	54	87	0.3	1.0	0.0	0.0	8.8	56	39
7	86M86 (C)	2614	5836	55	89	0.5	2.1	0.2	0.0	7.1	60	41
8	AHB 1200 (C)	2327	5455	49	84	2.4	3.3	0.5	0.2	9.8	73	41
LOC. MEAN		3026	7032	54	88							

Promotion criteria as per 52nd Annual group meet: Grain yield = higher than best check or 5% higher over relevant check, Disease (Across all zones): Downy Mildew (60 DAS): $\leq 5\%$, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): $\leq 20\%$, Smut (% severity): $\leq 20\%$, Rust (% leaf area): $\leq 20\%$, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

B. ICAR-AICRP on Pearl Millet Varietal (Population) Trials

1. Population Trial: PT ZONE A & B

Population trial comprising of common initial entries of first year testing and advanced entries of second year testing was conducted in zone A and zone B separately. Population trial in zone A consisting of 13 experimental populations along with six checks viz. JBV 2, Pusa Composite 701, Pusa Composite 383, ICMV 221, Raj 171 and Dhanshakti was conducted at 10 locations while Population trial in zone B consisting of 12 experimental populations along with six checks viz. ABV 04, Pusa Composite 612, ICMV 221, Raj 171, ICMV 155 and Dhanshakti was conducted at 11 locations. Test entries showed differences in their performance between and within zones. The zone-wise results are given below:

Zone A

In zone A, Population Trial was conducted successfully at 10 locations viz. three in Rajasthan, two in Madhya Pradesh and one each in Gujarat, Punjab, Haryana, U.P and Delhi. Mean performance of experimental populations along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.14. Location-wise performance for grain yield, grain quality and other ancillary characters are presented in Tables I.132 to I.145. The mean grain yield of test varieties ranged from 1526 kg/ha to 2641 kg/ha. None of the population recorded higher grain yield over best check Pusa Comp. 701 (2641 kg/ha). Dry fodder yield of test entries ranged from 5517 kg/ha to 8460 kg/ha.

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Table I.14: MEAN PERFORMANCE: POPULATION TRIAL - KHARIF 2024 ZONE A

S.No.	Name of Entry (Year of testing)	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	Pusa Comp. 701 (C)	2641	8460	52	86	2.3	2.4	0.0	6.4	0.0	49	43
2	MP 649	2479	7984	52	84	2.7	3.3	1.2	4.6	0.0	53	44
3	MP 640	2384	7730	54	87	0.0	2.4	0.0	2.5	0.0	50	41
4	JBV 2 (C)	2357	7986	54	85	2.2	2.6	1.5	3.4	0.0	53	43
5	MP 641	2341	8134	52	86	2.1	3.0	0.0	1.6	0.0		
6	MP 637 (2 nd)	2283	7483	53	87	1.6	2.5	1.7	4.4	0.0	53	43
7	MP 647	2259	6971	55	88	1.3	2.5	0.3	3.8	0.0		
8	MP 648	2212	6891	53	87	1.5	2.1	1.7	2.0	0.0		
9	Pusa Comp. 383 (C)	2178	7153	53	87	1.5	2.6	1.3	3.4	0.0	58	44
10	MP 651	2143	7336	55	87	0.9	1.4	1.5	8.6	0.0		
11	Raj 171 (C)	2133	6873	50	84	2.1	3.0	0.0	4.2	0.0	50	44
12	MP 650	2113	7460	53	86	2.7	2.0	1.7	5.0	0.0		
13	MP 646	2032	8204	57	89	2.0	2.4	1.2	7.1	0.0		
14	Dhanshakti (C)	1876	6276	47	83	2.5	3.4	0.8	2.6	0.0	69	44
15	ICMV 221 (C)	1728	6660	45	82	1.5	3.5	0.4	2.8	0.0	68	48
16	MP 642	1607	6309	58	89	1.3	2.9	0.8	1.9	0.0		
17	MP 643	1592	5517	56	89	2.1	3.1	0.0	2.4	0.0		
18	MP 645	1530	6229	57	89	1.9	1.8	0.8	3.5	0.0		
19	MP 644	1526	6053	58	89	2.2	2.0	0.8	4.0	0.0		
LOC. MEAN		2074	7143	53	87							

Zone B

In Zone B, Population Trial was conducted successfully at 11 locations i.e. three each in Maharashtra and Andhra Pradesh and two in Karnataka and one each in Telangana, Tamil Nadu and Odisha. Mean performance of experimental populations along with checks for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.15. Location-wise performance for grain yield and other ancillary characters are presented in Tables I.146 to I.158. Mean grain yield of test populations ranged from 1576 kg/ha to 2712 kg/ha. Three populations viz., MP 647 (2712 kg/ha), MP 640 (2711 kg/ha) and MP 648 (2655 kg/ha) recorded higher grain yield over the best check Pusa Composite 612 (2438 kg/ha). Fodder yield of test populations ranged from 3642 kg/ha to 6106 kg/ha.

Table I.15: MEAN PERFORMANCE: POPULATION TRIAL - KHARIF 2024 ZONE B

S.No.	Name of Entry (Year of testing)	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MP 647	2712	6106	48	82	2.9	2.4	1.1	0.0	7.1	62	38
2	MP 640	2711	5497	50	84	0.5	2.0	0.4	0.0	9.6	53	34
3	MP 648	2655	5946	48	83	4.1	2.5	0.9	0.0	6.5	58	40
4	Pusa Comp. 612 (C)	2438	5152	47	81	1.6	2.4	2.8	0.0	10.3	50	36
5	ABV 04 (C)	2379	5043	51	84	1.0	1.9	1.0	0.0	4.5	50	36
6	MP 646	2369	5529	51	86	4.0	2.4	2.8	0.0	6.6		
7	MP 650	2319	5715	48	81	2.4	2.5	1.1	0.0	10.5		
8	MP 651	2318	5060	48	83	1.6	2.1	1.0	0.3	9.1		
9	Raj 171 (C)	2283	5324	48	81	2.2	2.0	2.5	0.0	9.5	51	39
10	MP 642	2266	5863	52	85	1.0	1.8	0.9	0.0	5.4		
11	MP 649	2251	5403	47	82	3.5	1.9	1.0	0.0	12.9		
12	MP 641	2212	4848	47	81	2.1	2.6	0.9	0.0	7.6		
13	ICMV 221 (C)	2163	5549	45	80	1.0	3.8	2.1	0.0	16.9	65	41
14	MP 645	2145	5549	50	84	12.7	2.1	1.1	0.0	10.6		
15	MP 643	1947	4752	52	86	1.8	2.6	0.8	1.3	7.6		
16	MP 644	1941	4905	50	84	3.6	1.8	1.0	0.6	8.0		
17	Dhanshakti (C)	1754	5312	44	79	2.0	3.5	1.3	0.0	8.3	71	43
18	ICMV 155 (C)	1576	3642	46	80	2.2	3.1	0.1	0.9	2.5	47	35
LOC. MEAN		2247	5289	48	83							

C. ICAR-AICRP on Pearl Millet Hybrid and Population Trials:**Advanced Hybrid and Population Trial: AHPT ZONE A₁**

AHPT was constituted comprising entries promoted from IHT (Early) and early populations of Population Trial Zone A based on mean of locations from A₁ Zone comprising of low rainfall areas (<400 mm) of western-Rajasthan, drier parts of Haryana and Gujarat. The trial was conducted successfully at 10 locations viz., seven in Rajasthan, two in Haryana and one in Gujarat. In this trial, 17 test entries including 12 experimental hybrids along with four early maturing hybrid checks viz., RHB 223, PB 1756, HHB 67 Improved, MPMH 35 and one high Fe & Zn hybrid check viz., AHB 1200 were evaluated. Mean performance of experimental hybrids and varieties for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.16. Location-wise performance for grain yield, grain quality and other ancillary characters are given in Tables I.159 to I.173. Nine early maturing hybrids viz. MH 2673 (2493 kg/ha) MH 2744 (2376 kg/ha), MH 2678 (2358 kg/ha), MH 2743 (2352 kg/ha), MH 2672 (2319 kg/ha), MH 2758 (2222 kg/ha), MH 2747 (2155 kg/ha), MH 2675 (2114 kg/ha) and MH 2754 (2003 kg/ha) recorded higher grain yield over the best check MPMH 35 (1958 kg/ha). Hybrid MH 2744 recorded highest dry fodder yield (6298 kg/ha).

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Table I.16: MEAN PERFORMANCE: ADVANCED HYBRID AND POPULATION TRIAL (Early) KHARIF 2024 ZONE A₁

S.No.	Name of Entry (Year of testing)	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MH 2673 (3 rd)	2493	5989	44	76	0.0	2.1	0.0	0.0	0.0	45	38
2	MH 2744 (2 nd)	2376	6298	44	76	0.0	2.2	2.5	1.3	0.0	43	38
3	MH 2678 (3 rd)	2358	5238	44	76	0.0	1.9	1.5	2.0	0.0	44	39
4	MH 2743 (2 nd)	2352	5576	45	76	1.5	1.8	4.0	0.0	0.0	44	36
5	MH 2672 (3 rd)	2319	5870	44	76	1.6	2.4	3.0	0.0	0.0	44	38
6	MH 2758 (2 nd)	2222	5611	45	76	0.7	2.3	0.0	0.0	0.0	45	37
7	MH 2747 (2 nd)	2155	5439	45	77	2.1	2.5	7.5	8.3	0.0	43	37
8	MH 2675 (3 rd)	2114	5897	45	77	0.5	1.7	2.5	2.5	0.0	47	38
9	MH 2754 (2 nd)	2003	5331	45	75	0.8	3.3	2.5	1.3	0.0	50	43
10	MPMH 35 (C)	1958	5601	45	76	1.3	2.2	0.0	0.0	0.0	44	37
11	PB 1756 (C)	1914	5295	44	77	0.6	2.6	0.0	0.0	0.0	45	38
12	MH 2748 (2 nd)	1911	5124	44	74	1.3	2.5	6.5	0.0	0.0	57	40
13	RHB 223 (C)	1888	4969	47	78	2.3	2.2	0.0	0.0	0.0	46	37
14	MH 2749 (2 nd)	1877	5465	45	77	1.1	2.3	0.0	0.8	0.8	48	40
15	AHB 1200 (C)	1771	5060	47	77	0.9	2.8	0.0	1.3	0.0	61	40
16	MH 2746 (2 nd)	1761	4435	45	76	0.0	2.5	6.5	4.3	0.0	53	38
17	HHB 67 Imp. (C)	1569	4865	44	76	0.6	2.8	4.0	1.5	0.0	47	41
LOC MEAN		2061	5415	45	76							

Promotion criteria as per 52nd Annual group meet : Grain yield =higher than best check or 10% higher over relevant check, Days to 50% flowering ≤ 45 days, A grace of one day in days to 50% flowering may be given to hybrids yielding grains 15% higher over HHB 67 Improved, Disease (Across all zones): Downy Mildew (60 DAS): ≤ 5%, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): ≤ 20%, Smut (% severity): ≤ 20%, Rust (% leaf area): ≤ 20%, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

D. Released Hybrids and Varieties Trial: RHVT ZONE A₁, A and B

In addition to evaluation of experimental hybrids in coordinated trials, the Released Hybrids and Varieties Trial was conducted in both the zones. New hybrids and varieties released specifically for respective zones were evaluated in this trial. The zone-wise results are given below:

Zones A₁ and A

Twenty seven hybrids and six populations released for zone A₁ and A were tested at ten locations viz. four in Rajasthan, two in Madhya Pradesh and one each in Gujarat, Haryana, U.P and Jharkhand. Mean performance of released hybrids and populations for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.17. Location-wise data on grain yield and other ancillary characters are presented in Tables I.174 to I.186. Among hybrids, MPMH 35 (2431 kg/ha), DHBH-1397 (2994 kg/ha), Kaveri Super Boss (2877 kg/ha) and AHB 1269 (2432 kg/ha) recorded maximum grain yield in early, medium, late maturity and high Fe & Zn group, respectively. Among populations JBV 2 recorded maximum grain yield (2169 kg/ha) as compared to other populations. Among the hybrids, 86M80 (8447 kg/ha) and among the populations Pusa Composite 701 (7238 kg/ha) were found superior in fodder yield over other cultivars.

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Table I.17: MEAN PERFORMANCE: RELEASED HYBRIDS AND VARIETIES TRIAL KHARIF 2024 ZONE A₁ and A

S.No.	Name of Entry (Year of release)	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)
Early										
1	MPMH 35 (2022) E	2431	6545	44	76	1.2	1.5	1.5	12.5	0.0
2	GHB 719 (2007) E	2430	5964	48	80	2.9	2.0	1.3	7.0	0.0
3	MPMH 42 (2024) E	2384	5837	45	77	0.7	1.8	0.0	2.0	0.0
4	PB 1756 (2018) E	2218	5635	45	78	0.0	1.7	1.3	2.5	0.0
5	HGB 272 (2016) E	2158	5891	45	76	0.0	2.3	1.3	10.0	0.0
6	RHB 223 (2018) E	1877	5028	47	77	5.3	2.2	0.0	13.4	0.0
7	HGB 67 Imp. (2005) E	1847	5459	43	75	2.3	3.7	1.3	4.2	0.0
8	GHB 538 (2005) E	1727	4957	47	79	2.3	3.1	4.5	5.1	0.0
Medium										
9	DHBH 1397 (2019) M	2994	7217	50	81	0.3	1.7	0.0	7.3	0.0
10	86M94 (2022) M	2958	6748	52	82	0.0	2.5	0.0	0.6	0.2
11	PB 1852 (2019) M	2874	7860	55	84	1.0	2.7	0.0	5.3	0.0
12	86M01 (2015) M	2773	7545	52	82	2.3	3.4	1.0	0.0	0.0
13	GHB 732 (2008) M	2573	6695	50	82	2.7	2.2	0.0	13.4	0.0
14	GHB 905 (2013) M	2313	6927	47	79	1.2	2.6	0.5	7.0	0.0
15	GHB 744 (2008) M	2264	6265	50	83	0.3	2.0	0.0	5.5	0.0
16	RHB 173 (2011) M	729	2624	50	79	2.6	2.3	0.0	5.1	0.0
Late										
17	Kaveri Super Boss (2012) L	2877	7431	55	85	2.1	2.6	0.0	1.0	0.0
18	MP 7878 (2018) L	2639	6491	55	85	0.8	2.5	0.0	0.0	0.0
19	86M84 (2016) L	2411	7787	55	83	0.3	2.0	0.0	0.0	2.2
20	86M80 (2022) L	2283	8447	56	86	0.3	2.0	0.0	0.9	0.0
21	KBH 108 (2014) L	2113	6968	54	84	0.7	2.5	0.0	0.0	0.0
22	86M86 (2012) L	2051	6451	53	83	1.1	2.5	0.0	0.6	0.0
High Iron & Zinc										
23	AHB 1269 (2019) M - FeZn	2432	6741	48	80	3.7	3.4	3.0	7.9	0.0
24	AHB 1200 (2018) M - FeZn	2182	5743	48	80	1.0	3.0	1.0	10.0	0.0
25	HGB 299 (2018) M - FeZn	1968	5818	49	81	0.3	1.9	0.5	7.9	0.0
26	RHB 234 (2019) M - FeZn	1870	4487	49	83	1.7	2.3	1.0	13.5	0.0
27	RHB 233 (2019) M - FeZn	1716	5328	48	81	0.2	2.0	1.8	4.0	0.0
Populations										
28	JBV 2 (1999) M	2169	6283	50	79	2.6	2.4	0.5	6.6	0.0
29	Pusa Composite 383 (2001) M	2069	6270	50	81	1.9	2.2	0.5	10.3	0.0
30	Pusa Composite 701 (2016) M	2058	7238	49	81	5.6	3.0	0.0	3.5	0.8
31	Raj 171 (1992) L	1642	5219	47	78	3.9	2.8	1.3	21.5	0.0
32	Dhanshakti (2014) E	1460	5139	45	78	1.3	3.8	0.5	2.9	0.0
33	ICMV 221 (1993) E	1327	5179	45	77	2.4	3.2	0.0	7.1	0.0
LOC. MEAN		2218	6298	49	80					

Zone B

Eleven hybrids and four populations released for Zone B were evaluated at nine locations viz. two each in Maharashtra, Karnataka and Andhra Pradesh and one each in Telangana, Tamil Nadu and Odisha. Mean performance of released hybrids and populations for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Table I.18. Location-wise mean performance of grain yield and other ancillary characters are presented in Tables I.187 to I.198. Hybrids HHB 299 (2901 kg/ha), 86M01 (3071 kg/ha) and NBH 4903 (3771 kg/ha) observed to be superior over all other hybrids in high Fe & Zn, medium and late maturity group, respectively. Among the populations, Pusa Composite 612 (2193 kg/ha) recorded maximum grain yield. Highest dry fodder yield was recorded Kaveri Super Boss (6176 kg/ha) and Pusa Comp. 612 (4884 kg/ha) among all hybrids and populations, respectively.

Table I.18: MEAN PERFORMANCE: RELEASED HYBRIDS AND VARIETIES TRIAL KHARIF 2024 ZONE B

S.No.	Name of Entry (Year of release)	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)
High Fe & Zn hybrids										
1	HHB 299 (2018) M FeZn	2901	5134	47	83	0.3	1.1	0.0	1.3	9.9
2	AHB 1200 (2018) M FeZn	2629	4833	46	82	2.8	2.6	0.1	0.0	9.1
3	RHB 233 (2019) M FeZn	2524	4838	47	83	1.3	1.0	0.0	0.0	9.6
4	AHB 1269 (2019) M FeZn	2518	5199	47	82	2.6	3.3	1.3	0.0	4.9
5	RHB 234 (2019) M FeZn	2284	4340	49	85	1.6	2.3	0.0	0.0	4.5
Medium hybrids										
6	86M01 (2015) M	3071	5746	49	85	1.6	2.9	1.6	0.0	4.3
7	Mahabeej 1005 (2017) M	2772	4983	48	84	0.9	3.5	1.3	0.0	4.8
8	Pratap (MH 1642) (2012) M	2610	4782	46	82	2.6	4.3	1.9	0.0	5.1
Late hybrids										
9	NBH 4903 (2018) L	3771	6068	50	86	2.1	2.0	0.0	0.0	3.4
10	Kaveri Super Boss (2012) L	3439	6176	52	87	1.2	1.3	0.0	0.0	4.9
11	86M86 (2012) L	2906	5414	50	86	0.8	1.0	0.0	0.0	7.0
Populations										
12	Pusa Comp. 612 (2011) M	2193	4884	47	82	2.5	2.5	0.6	0.0	13.5
13	ICMV 221 (1993) E	1983	4171	44	81	2.6	2.6	0.8	0.0	10.8
14	Raj 171 (1992) L	1967	4396	46	81	2.8	1.3	0.0	0.0	14.4
15	Dhanshakti (2014) E	1828	4083	44	80	3.3	3.1	1.0	0.0	7.4
LOC. MEAN		2626	5003	47	83					

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Table I.19: INITIAL HYBRID TRIAL (Early) KHARIF 2024 EXPERIMENTAL DETAILS ZONE A₁

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizers			Insecticide
							N	P	K	
RAJASTHAN										
Mandor (ICAR- AICRP)	SL	8.2	19.7.24	17.10.24	09.8.24	Nil	40	20	0	Nil
Jodhpur (CAZRI)	SL	7.6	-	-	-	Nil	40	20	0	Nil
Bikaner (SKRAU)	S	8.0	8.7.24	25.10.24	10.8.24	25.9.24	40	20	0	Nil
Fathehpur (SKNAU)	SL	8.0	15.7.24	As Per Maturity	As Per Pop	Nil	As Per Pop	As Per Pop	As Per Pop	Nil
Samdari (ARSS, AU Jodhpur)	SL	8.3	9.7.24	15.10.24	6.8.24	Nil	40	20	0	Nil
ARS, Jalore (AU, Jodhpur)	-	-	22.7.24	As Per Maturity	-	Nil	-	-	-	Nil
Nagaur (AU, Jodhpur)	SL	7.9	16.7.24	As Per Maturity	10.8.24	1	40	20	0	Nil
Jobner (SKNAU)	-	-	11.7.24	As Per Maturity	-	Nil	-	-	-	Nil
GUJARAT										
Deesa (SDAU)	SL	-	30.6.24	4.10.24	26.7.24	Nil	80	40	0	Nil
HARYANA										
Bawal (CCSHAU)	LS	8.2	10.7.24	As Per Maturity	6.8.24	Nil	40	20	30	Atrazine
Hisar (CCSHAU)	SL	-	11.7.24	25.10.24	-	28.8.24	40	20	0	Nil

SL = Sandy Loam, S = Sandy, LS = Loamy Sand.

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Table I.20: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	JBR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	1273	2000	1806	1160	639	2524	1463	1898	1595	2203	4079	3392	3735	2040	11
2	IHT 102	MH 2812	1366	2644	1481	1456	713	3354	1741	1620	1797	1647	3574	3609	3591	2109	8
3	IHT 103	PB 1756 (Check)	1037	1236	1250	1415	856	2569	1593	1574	1441	2319	3475	2488	2981	1801	21
4	IHT 104	MH 2813	1241	1560	2106	1305	375	2454	2130	2315	1686	2245	4037	3528	3782	2118	6
5	IHT 105	MH 2814	1273	2435	1551	1350	310	3310	1944	2222	1799	2864	4299	4014	4157	2325	1
6	IHT 106	MH 2815	1343	1056	1273	1208	380	2353	1296	1991	1362	1962	3250	3654	3452	1797	22
7	IHT 107	MH 2816	1134	1569	1690	1358	208	2843	1204	1991	1500	1899	3159	3473	3316	1866	17
8	IHT 108	MH 2817	1250	1593	1620	2141	319	2685	1556	2269	1679	1636	3382	3609	3496	2006	14
9	IHT 109	MH 2818	1250	1565	1574	1318	509	2444	1537	2083	1535	1647	2758	3656	3207	1849	20
10	IHT 110	RHB 223 (Check)	1042	1810	1782	1037	769	1715	1056	2130	1417	1490	3942	3723	3832	1863	18
11	IHT 111	MH 2819	1134	2250	1944	1009	829	2345	2216	2222	1744	1500	3410	3970	3690	2075	10
12	IHT 112	MH 2820	1620	2028	1921	880	699	2467	1889	2037	1693	2098	3785	3624	3705	2095	9
13	IHT 113	MH 2821	1296	1481	1574	1576	755	1268	1111	2269	1416	1490	3371	2695	3033	1717	23
14	IHT 114	MH 2822	954	1917	2014	1500	796	1356	1574	2130	1530	1752	3458	2981	3219	1857	19
15	IHT 115	MH 2823	1250	1815	1319	1025	565	1500	1074	1991	1317	1605	2271	2449	2360	1533	27
16	IHT 116	HHB 67 Imp. (Check)	1042	1208	1227	1028	431	1639	1093	2176	1230	1657	2514	2371	2443	1490	28
17	IHT 117	MH 2824	1065	866	2014	1544	509	1944	1074	1991	1376	1563	2793	2616	2705	1634	25
18	IHT 118	MH 2825	995	1611	1829	1305	468	2710	1944	1528	1549	1657	3112	3750	3431	1901	16
19	IHT 119	MH 2826	1352	1356	2431	1598	671	2778	1685	2315	1773	1878	3633	3745	3689	2131	5
20	IHT 120	AHB 1200 (Check)	1134	713	1042	1157	694	2201	2370	1528	1355	1563	2919	2491	2705	1619	26
21	IHT 121	MH 2827	1157	1750	2338	1308	884	2657	1093	2361	1694	3043	4442	4301	4371	2303	2
22	IHT 122	MH 2828	1389	1384	1134	1079	384	2685	1074	2176	1413	1380	3240	2931	3085	1714	24
23	IHT 123	MH 2829	1310	2148	2639	1711	1093	2883	2000	1944	1966	1521	3711	3719	3715	2244	3
24	IHT 124	MH 2830	1255	1384	1597	1488	509	2718	1648	2269	1608	2119	3096	2872	2984	1905	15
25	IHT 125	MH 2831	1574	1833	2037	1163	708	2850	1241	2407	1727	2151	3087	3383	3235	2039	12
26	IHT 126	MH 2832	1296	1935	1759	1231	667	3635	1074	2222	1727	1993	3614	3854	3734	2116	7
27	IHT 127	MH 2833	1852	2060	1852	1553	583	3057	1074	2361	1799	1487	2499	3897	3198	2025	13
28	IHT 128	MPMH 35 (Check)	1157	1597	2153	1567	750	3118	1870	2315	1816	1819	3453	3931	3692	2157	4
		LOC. MEAN	1251	1672	1749	1338	610	2502	1522	2083	1591	1864	3370	3383	3377	1940	
		C.D. (5%)	443	514	334	254	136	1183	189	383	337	378	381	834	747	304	
		C.D. (1%)	590	684	445	338	181	1576	251	510	445	504	507	1111	1009	400	
		C.V. (%)	21.6	18.8	11.7	11.6	13.6	28.9	7.6	11.2	21.5	12.4	6.9	15.1	10.8	18.6	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	
		PLOT SIZE (m ²)	7.20	7.20	7.20	7.20	7.20	7.20	5.40	7.20	-	5.40	7.20	7.20	-	-	

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Table I.21: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	JBR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	2685	4730	7722	4676	3750	5741	3867	4018	4649	6179	8508	12037	10272	5810	16
2	IHT 102	MH 2812	2569	7343	7417	4630	3704	9259	4652	3438	5377	8216	8023	10185	9104	6312	9
3	IHT 103	PB 1756 (Check)	2639	3214	6111	4861	5000	5556	3932	3346	4332	5228	8433	8333	8383	5150	25
4	IHT 104	MH 2813	2722	4139	9259	5231	2917	5833	5901	4904	5113	7123	11304	12963	12134	6572	5
5	IHT 105	MH 2814	2940	6719	6898	4861	2593	8102	5341	4730	5273	8556	10904	12500	11702	6740	2
6	IHT 106	MH 2815	3148	3111	7176	5046	2546	4861	2914	4240	4130	5364	8931	11574	10253	5356	23
7	IHT 107	MH 2816	2708	4673	7639	5926	3870	6167	3040	4216	4780	10926	8855	12963	10909	6453	7
8	IHT 108	MH 2817	3102	4387	7222	4676	2546	5417	4085	4829	4533	8080	9106	12500	10803	5995	14
9	IHT 109	MH 2818	2963	3902	5509	3796	3009	5185	4144	4440	4119	7401	7715	11111	9413	5380	22
10	IHT 110	RHB 223 (Check)	2315	5700	5648	3333	3472	4537	2738	4517	4032	5062	10645	12963	11804	5539	20
11	IHT 111	MH 2819	2801	6212	6435	3889	2685	5093	6230	4724	4759	4481	9080	13704	11392	5939	15
12	IHT 112	MH 2820	3472	5114	6528	4722	4042	5532	5570	4307	4911	9846	8288	14352	11320	6525	6
13	IHT 113	MH 2821	3194	4121	5139	2931	3704	5139	3059	4842	4016	9475	8898	10231	9565	5521	21
14	IHT 114	MH 2822	2870	5128	5278	4722	3056	4907	4407	4517	4361	8623	8478	10648	9563	5694	18
15	IHT 115	MH 2823	2755	4772	5370	5139	2917	3241	3083	4240	3939	6790	6197	9259	7728	4887	27
16	IHT 116	HHB 67 Imp. (Check)	3241	3488	5185	4722	2083	3671	2816	4614	3728	7944	6282	12037	9160	5099	26
17	IHT 117	MH 2824	2593	2497	5741	4583	3241	4259	2604	4221	3717	4346	7544	10833	9188	4769	28
18	IHT 118	MH 2825	2523	4499	6296	4537	3009	5741	5427	3244	4409	7062	9276	11806	10541	5765	17
19	IHT 119	MH 2826	3426	3795	7963	6481	3241	7269	4743	4928	5231	6111	8932	10648	9790	6140	11
20	IHT 120	AHB 1200 (Check)	2731	2072	5556	3426	1944	4907	5998	3258	3737	7673	7673	11574	9624	5165	24
21	IHT 121	MH 2827	3241	4856	8843	7222	5093	5972	2865	5025	5389	10710	10075	14352	12213	7114	1
22	IHT 122	MH 2828	3009	4242	6343	3287	4167	6204	2645	4623	4315	4698	7859	14352	11106	5584	19
23	IHT 123	MH 2829	3495	5694	6296	4861	2546	6681	5512	4119	4901	6994	9896	13426	11661	6320	8
24	IHT 124	MH 2830	3611	3759	5463	6019	4167	6852	4337	4818	4878	6722	8039	13889	10964	6152	10
25	IHT 125	MH 2831	3264	5422	6806	4398	3009	6389	3023	5117	4678	9710	8122	11574	9848	6076	12
26	IHT 126	MH 2832	3380	5394	6157	6620	3009	8241	2743	4724	5034	7130	10343	16204	13273	6722	3
27	IHT 127	MH 2833	4005	5144	7269	5972	3102	6806	2694	4715	4963	8488	7338	10648	8993	6016	13
28	IHT 128	MPMH 35 (Check)	3315	4243	7685	6111	2870	6713	5130	4943	5126	7741	9675	14815	12245	6658	4
		LOC. MEAN	3026	4585	6605	4881	3260	5867	4054	4416	4587	7381	8729	12196	10463	5909	
		C.D. (5%)	820	1700	1188	527	942	2524	653	811	903	1328	1021	3825	2362	922	
		C.D. (1%)	1092	2265	1582	702	1254	3362	870	1081	1191	1769	1360	5094	3189	1214	
		C.V. (%)	16.6	22.7	11.0	6.6	17.6	26.3	9.9	11.2	20.0	11.0	7.2	19.2	11.0	18.6	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	
		PLOT SIZE (m ²)	7.20	7.20	7.20	7.20	7.20	7.20	5.40	7.20	-	5.40	7.20	7.20	-	-	

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Table I.22: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR*	FTR	SDR	JLR	JBR*	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	45	45	45	49	43	45	51	50	46	40	42	46	44	45	20
2	IHT 102	MH 2812	46	46	54	49	44	50	57	44	46	48	50	51	51	47	6
3	IHT 103	PB 1756 (Check)	44	46	46	48	42	50	52	44	46	43	44	43	44	45	21
4	IHT 104	MH 2813	46	46	53	47	43	48	53	46	46	48	52	48	50	47	8
5	IHT 105	MH 2814	46	46	57	54	46	45	50	56	49	50	55	54	55	50	1
6	IHT 106	MH 2815	45	45	53	52	44	45	55	47	46	52	52	51	51	48	4
7	IHT 107	MH 2816	46	46	55	51	45	44	56	42	46	49	52	51	51	47	7
8	IHT 108	MH 2817	45	46	45	47	46	42	51	48	46	42	43	46	44	45	19
9	IHT 109	MH 2818	45	46	45	50	46	45	49	50	47	45	45	47	46	47	13
10	IHT 110	RHB 223 (Check)	45	47	51	44	46	43	50	45	45	48	47	49	48	46	16
11	IHT 111	MH 2819	44	47	46	48	44	43	43	53	47	40	39	42	41	45	23
12	IHT 112	MH 2820	44	46	51	51	46	44	54	55	48	43	46	46	46	47	10
13	IHT 113	MH 2821	45	46	45	47	47	45	52	50	47	42	46	46	46	46	17
14	IHT 114	MH 2822	46	47	45	43	44	45	51	51	46	47	47	48	48	47	12
15	IHT 115	MH 2823	44	46	45	42	45	45	48	44	44	42	43	46	44	44	25
16	IHT 116	HHB 67 Imp. (Check)	44	45	46	42	44	45	51	42	43	43	41	43	42	43	27
17	IHT 117	MH 2824	45	46	46	45	46	43	46	43	45	43	40	44	42	44	26
18	IHT 118	MH 2825	44	44	48	46	43	47	47	44	45	44	42	44	43	44	24
19	IHT 119	MH 2826	45	46	48	47	44	44	48	56	47	45	44	45	44	46	15
20	IHT 120	AHB 1200 (Check)	46	47	54	49	47	44	54	41	46	51	51	47	49	47	9
21	IHT 121	MH 2827	46	46	57	52	45	46	56	44	46	51	54	55	55	49	3
22	IHT 122	MH 2828	45	46	57	52	45	44	57	48	47	54	55	52	54	49	2
23	IHT 123	MH 2829	46	46	45	48	45	44	49	46	46	38	44	45	45	45	22
24	IHT 124	MH 2830	45	47	53	46	42	45	54	43	45	45	46	45	45	45	21
25	IHT 125	MH 2831	45	46	50	49	44	45	52	57	48	43	45	46	46	47	11
26	IHT 126	MH 2832	45	46	48	47	45	43	48	55	47	41	43	46	45	46	18
27	IHT 127	MH 2833	45	46	50	48	46	44	55	55	47	45	49	50	50	48	5
28	IHT 128	MPMH 35 (Check)	45	46	47	50	44	43	45	52	47	43	46	48	47	46	14
		LOC. MEAN	45	46	50	48	45	45	51	48	46	45	46	47	47	46	
		C.D. (5%)	1.0	1.0	3.0	4.0	3.0	2.0	3.0	2.0	3.0	4.0	2.0	2.0	3.0	3.0	
		C.D. (1%)	2.0	2.0	3.0	5.0	4.0	3.0	4.0	3.0	4.0	5.0	3.0	2.0	4.0	3.0	
		C.V. (%)	1.8	2.0	3.2	4.6	4.0	3.3	3.6	2.7	5.5	5.5	3.2	2.4	3.3	6.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.183	0.000	0.000	0.000	0.000	0.000	

*LOCATION REJECTED DUE TO DELAYED FLOWERING IN CHECKS

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Table I.23: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 DAYS TO MATURITY ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	BKR	FTR	SDR	JLR	JBR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	76	74	76	75	72	77	82	76	75	72	76	74	76	19
2	IHT 102	MH 2812	77	81	74	76	74	83	80	78	75	82	80	81	78	8
3	IHT 103	PB 1756 (Check)	76	76	74	75	74	79	85	77	71	76	73	75	76	15
4	IHT 104	MH 2813	77	82	74	77	76	80	81	78	72	83	81	82	79	5
5	IHT 105	MH 2814	78	85	81	76	71	79	80	79	75	86	84	85	79	3
6	IHT 106	MH 2815	78	82	79	76	70	84	76	78	76	83	80	82	79	5
7	IHT 107	MH 2816	77	84	78	76	76	84	75	79	72	83	82	83	79	4
8	IHT 108	MH 2817	76	79	74	77	73	82	76	77	69	73	77	75	76	16
9	IHT 109	MH 2818	77	78	77	75	80	75	77	77	73	75	77	76	76	13
10	IHT 110	RHB 223 (Check)	75	81	71	75	68	80	75	75	73	78	81	79	76	19
11	IHT 111	MH 2819	75	76	75	78	68	75	78	75	68	70	74	72	74	25
12	IHT 112	MH 2820	75	80	78	75	72	86	74	77	72	76	77	77	77	12
13	IHT 113	MH 2821	76	80	74	76	74	84	75	77	75	77	78	77	77	9
14	IHT 114	MH 2822	75	80	70	76	74	82	78	76	75	77	81	79	77	10
15	IHT 115	MH 2823	75	77	73	78	76	78	81	77	70	73	76	75	76	17
16	IHT 116	HHB 67 Imp. (Check)	75	76	71	74	71	80	81	75	72	72	74	73	75	24
17	IHT 117	MH 2824	75	76	73	75	70	75	75	74	70	72	76	74	74	26
18	IHT 118	MH 2825	75	77	73	76	76	77	74	75	75	73	77	75	75	22
19	IHT 119	MH 2826	76	78	74	76	73	76	75	75	71	75	76	76	75	23
20	IHT 120	AHB 1200 (Check)	78	81	76	76	80	82	72	78	77	82	80	81	78	6
21	IHT 121	MH 2827	78	84	79	75	78	85	82	80	71	85	87	86	80	1
22	IHT 122	MH 2828	77	83	79	75	76	87	81	80	73	86	82	84	80	2
23	IHT 123	MH 2829	78	76	75	76	75	79	77	77	72	75	74	74	76	21
24	IHT 124	MH 2830	77	81	73	75	72	83	75	76	69	76	76	76	76	20
25	IHT 125	MH 2831	77	80	76	75	69	81	84	77	73	77	77	77	77	11
26	IHT 126	MH 2832	76	78	74	75	71	78	81	76	74	74	76	75	76	18
27	IHT 127	MH 2833	76	80	75	76	70	85	84	78	76	80	80	80	78	7
28	IHT 128	MPMH 35 (Check)	77	77	77	77	73	77	75	76	76	76	77	76	76	14
		LOC. MEAN	76	79	75	76	73	80	78	77	73	77	78	78	77	
		C.D. (5%)	2.0	3.0	4.0	2.0	2.0	3.0	2.0	3.0	3.0	3.0	4.0	6.0	2.0	
		C.D. (1%)	3.0	3.0	6.0	3.0	2.0	4.0	3.0	3.0	4.0	4.0	6.0	9.0	3.0	
		C.V. (%)	1.6	2.0	3.6	1.8	1.3	2.5	1.9	3.0	2.2	2.1	3.3	4.2	3.5	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.071	0.000	

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Table I.24: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 PLANT HEIGHT (cm) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	JBR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	187	205	219	188	151	182	130	180	180	167	197	236	216	186	6
2	IHT 102	MH 2812	179	178	192	187	134	179	154	171	172	140	216	221	219	177	16
3	IHT 103	PB 1756 (Check)	183	186	201	178	141	169	151	175	173	183	208	237	223	183	10
4	IHT 104	MH 2813	175	198	211	195	133	187	151	181	179	181	193	245	219	186	5
5	IHT 105	MH 2814	185	187	201	185	137	193	156	165	176	195	223	272	248	191	2
6	IHT 106	MH 2815	180	207	209	192	139	176	143	184	179	177	211	249	230	188	4
7	IHT 107	MH 2816	172	231	205	191	133	183	142	181	180	172	207	256	231	188	3
8	IHT 108	MH 2817	171	198	194	174	131	166	137	172	168	149	190	209	200	172	25
9	IHT 109	MH 2818	166	198	190	179	144	146	150	179	169	146	199	219	209	174	21
10	IHT 110	RHB 223 (Check)	176	204	188	158	158	188	149	183	175	149	201	245	223	182	11
11	IHT 111	MH 2819	153	164	182	157	128	149	131	164	154	129	181	225	203	160	28
12	IHT 112	MH 2820	169	186	182	166	148	148	154	177	166	151	194	227	211	173	24
13	IHT 113	MH 2821	182	199	181	178	138	175	147	185	173	171	194	217	206	179	15
14	IHT 114	MH 2822	180	203	197	182	158	182	144	166	177	169	207	240	224	184	9
15	IHT 115	MH 2823	180	178	192	176	137	183	132	200	172	182	201	237	219	182	12
16	IHT 116	HHB 67 Imp. (Check)	173	192	198	163	144	176	122	156	166	153	204	246	225	175	20
17	IHT 117	MH 2824	168	172	193	152	142	188	137	197	169	151	186	218	202	173	22
18	IHT 118	MH 2825	177	180	191	167	136	193	152	179	172	146	170	243	207	176	18
19	IHT 119	MH 2826	187	197	211	174	137	164	158	183	176	153	198	229	214	181	13
20	IHT 120	AHB 1200 (Check)	163	164	179	159	120	171	151	164	159	167	188	201	194	166	27
21	IHT 121	MH 2827	184	205	210	191	140	157	182	174	180	187	230	271	250	194	1
22	IHT 122	MH 2828	165	171	194	174	124	155	137	185	163	164	192	220	206	171	26
23	IHT 123	MH 2829	164	162	189	175	140	170	122	199	165	153	195	233	214	173	23
24	IHT 124	MH 2830	178	182	188	176	148	177	155	179	173	169	200	231	216	180	14
25	IHT 125	MH 2831	180	165	197	181	146	170	146	177	170	163	194	229	212	177	17
26	IHT 126	MH 2832	173	166	201	174	140	171	153	165	168	161	193	233	213	176	19
27	IHT 127	MH 2833	181	184	213	196	131	164	142	171	173	180	207	268	238	185	7
28	IHT 128	MPMH 35 (Check)	176	184	203	180	143	187	144	176	174	169	210	261	235	185	8
		LOC. MEAN	175	187	197	177	139	173	145	177	171	163	200	236	218	179	
		C.D. (5%)	14.0	19.0	12.0	23.0	20.0	25.0	19.0	4.0	10.0	6.0	17.0	28.0	21.0	9.0	
		C.D. (1%)	18.0	25.0	17.0	30.0	27.0	33.0	26.0	6.0	14.0	8.0	22.0	38.0	28.0	12.0	
		C.V. (%)	4.8	6.2	3.9	7.9	8.9	8.8	8.1	1.5	6.2	2.1	5.2	7.3	4.6	6.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	

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Table I.25: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	JBR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	1.8	3.3	1.3	3.8	1.4	1.7	2.0	3.7	2.4	1.7	2.1	3.7	2.9	2.4	12
2	IHT 102	MH 2812	1.4	2.7	1.2	2.7	1.7	1.7	1.1	3.6	2.0	2.0	1.5	3.5	2.5	2.1	25
3	IHT 103	PB 1756 (Check)	1.5	3.0	1.2	2.8	1.5	1.4	1.1	4.1	2.1	1.5	1.7	2.8	2.2	2.1	27
4	IHT 104	MH 2813	1.3	3.7	1.2	3.2	1.9	2.1	1.2	4.7	2.4	1.7	1.8	3.2	2.5	2.4	17
5	IHT 105	MH 2814	1.3	3.7	1.2	2.7	1.8	2.5	1.4	4.2	2.3	1.6	2.2	3.2	2.7	2.3	19
6	IHT 106	MH 2815	1.3	2.7	1.3	3.2	1.6	2.5	1.0	3.5	2.1	1.5	1.9	3.2	2.6	2.2	24
7	IHT 107	MH 2816	1.2	3.0	1.2	2.7	1.9	2.5	1.1	4.4	2.3	1.7	2.0	4.3	3.1	2.4	16
8	IHT 108	MH 2817	1.7	3.7	1.4	3.2	1.8	2.4	1.5	3.3	2.4	1.6	2.5	2.8	2.6	2.3	19
9	IHT 109	MH 2818	1.9	3.0	1.5	2.8	1.9	2.3	1.8	3.4	2.3	1.9	2.0	4.2	3.1	2.4	11
10	IHT 110	RHB 223 (Check)	1.5	2.7	1.3	3.3	2.3	2.4	1.4	4.3	2.4	2.1	2.7	3.3	3.0	2.5	8
11	IHT 111	MH 2819	1.9	2.7	1.7	2.7	2.3	2.3	2.0	3.5	2.4	1.5	2.6	4.0	3.3	2.5	9
12	IHT 112	MH 2820	2.1	3.0	1.6	2.3	1.7	2.5	2.2	2.5	2.2	1.7	2.2	3.2	2.7	2.3	21
13	IHT 113	MH 2821	1.4	3.3	1.3	2.7	1.5	2.2	2.3	4.3	2.4	1.5	1.8	3.5	2.7	2.3	18
14	IHT 114	MH 2822	1.6	3.0	1.3	4.2	1.9	2.1	1.4	3.7	2.4	2.0	2.3	2.7	2.5	2.4	15
15	IHT 115	MH 2823	1.5	2.7	1.4	3.3	1.6	2.2	1.9	3.6	2.3	1.7	2.2	2.9	2.6	2.3	22
16	IHT 116	HHB 67 Imp. (Check)	1.6	3.3	1.4	3.2	1.5	2.3	2.3	3.5	2.4	1.9	2.9	3.6	3.2	2.5	7
17	IHT 117	MH 2824	1.9	3.0	1.5	2.8	2.0	2.1	1.9	3.0	2.3	2.0	2.3	3.8	3.0	2.4	13
18	IHT 118	MH 2825	1.9	2.3	1.4	4.3	2.2	2.3	2.3	3.5	2.5	2.3	2.4	4.0	3.2	2.6	3
19	IHT 119	MH 2826	2.1	3.3	1.5	4.7	2.1	2.2	1.7	4.3	2.7	2.5	2.9	3.3	3.1	2.8	1
20	IHT 120	AHB 1200 (Check)	1.2	3.0	1.2	3.5	1.8	2.5	1.5	2.4	2.1	1.5	1.5	2.7	2.1	2.1	26
21	IHT 121	MH 2827	1.5	3.0	1.4	3.8	2.1	2.3	1.1	3.5	2.3	1.9	2.5	3.8	3.2	2.5	10
22	IHT 122	MH 2828	1.3	3.3	1.3	2.8	2.1	2.2	1.3	4.0	2.3	1.5	2.8	2.7	2.7	2.3	20
23	IHT 123	MH 2829	1.7	3.0	1.4	3.3	1.7	2.8	1.9	3.9	2.5	1.5	2.3	4.0	3.2	2.5	6
24	IHT 124	MH 2830	1.4	2.7	1.3	4.3	1.4	2.4	1.1	2.7	2.2	1.7	1.8	3.4	2.6	2.2	23
25	IHT 125	MH 2831	2.2	3.0	1.4	4.2	2.2	2.3	2.3	3.4	2.6	2.3	2.7	3.8	3.2	2.7	2
26	IHT 126	MH 2832	1.8	3.3	1.4	4.8	1.9	2.3	1.9	2.7	2.5	1.5	2.2	4.1	3.2	2.5	5
27	IHT 127	MH 2833	1.9	2.7	1.3	4.0	1.7	2.3	1.3	3.4	2.3	1.5	2.3	3.9	3.1	2.4	14
28	IHT 128	MPMH 35 (Check)	1.7	3.3	1.2	3.8	1.9	2.5	1.7	4.4	2.6	1.9	2.1	3.4	2.8	2.5	4
		LOC. MEAN	1.6	3.0	1.3	3.4	1.8	2.3	1.6	3.6	2.3	1.8	2.2	3.5	2.8	2.4	
		C.D. (5%)	0.3	0.9	0.2	0.6	0.5	0.6	0.3	0.4	0.4	0.3	0.5	0.8	0.9	0.3	
		C.D. (1%)	0.4	1.2	0.3	0.8	0.6	0.8	0.4	0.5	0.5	0.4	0.6	1.0	1.2	0.4	
		C.V. (%)	11.4	17.9	8.9	11.4	16.1	17.1	10.0	6.6	17.5	10.2	12.7	13.8	14.7	16.4	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.217	0.000	0.000	0.000	0.275	0.001	

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Table I.26: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 PANICLE LENGTH (cm) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	JBR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	24	26	25	23	24	25	19	27	24	23	24	24	24	24	4
2	IHT 102	MH 2812	22	26	25	24	20	25	21	29	24	24	24	23	24	24	3
3	IHT 103	PB 1756 (Check)	26	26	26	24	22	25	20	23	24	21	26	23	25	24	7
4	IHT 104	MH 2813	22	25	27	24	24	25	20	23	24	24	26	25	25	24	5
5	IHT 105	MH 2814	26	24	23	29	22	24	24	22	24	24	26	26	26	25	1
6	IHT 106	MH 2815	23	26	25	23	23	26	22	23	24	23	27	23	25	24	2
7	IHT 107	MH 2816	19	28	24	24	22	25	18	23	23	22	24	25	25	23	12
8	IHT 108	MH 2817	20	21	22	21	21	24	17	26	22	20	21	23	22	21	24
9	IHT 109	MH 2818	20	26	24	20	23	22	18	20	22	20	23	24	24	22	22
10	IHT 110	RHB 223 (Check)	24	28	25	23	25	22	20	25	24	22	24	25	24	24	6
11	IHT 111	MH 2819	20	20	22	23	21	22	17	20	21	20	20	22	21	21	27
12	IHT 112	MH 2820	22	23	23	22	24	22	21	20	22	21	23	23	23	22	18
13	IHT 113	MH 2821	19	22	20	22	22	22	20	22	21	20	20	24	22	21	25
14	IHT 114	MH 2822	23	26	26	26	24	22	21	20	24	21	24	25	25	24	8
15	IHT 115	MH 2823	21	26	25	25	22	23	18	24	23	21	24	24	24	23	13
16	IHT 116	HHB 67 Imp. (Check)	21	22	24	23	23	23	17	29	23	18	21	24	22	22	20
17	IHT 117	MH 2824	19	23	21	20	22	22	16	26	21	18	21	23	22	21	26
18	IHT 118	MH 2825	19	20	23	19	20	23	14	24	20	19	20	22	21	20	28
19	IHT 119	MH 2826	20	22	22	22	23	22	18	29	22	19	21	23	22	22	21
20	IHT 120	AHB 1200 (Check)	22	24	22	24	23	24	19	28	23	23	24	25	25	24	9
21	IHT 121	MH 2827	22	22	23	24	23	25	20	25	23	21	24	24	24	23	14
22	IHT 122	MH 2828	20	22	24	19	22	22	21	24	22	24	23	23	23	22	16
23	IHT 123	MH 2829	21	19	22	22	20	24	15	29	22	21	21	23	22	22	23
24	IHT 124	MH 2830	21	20	24	23	23	24	18	25	22	19	24	24	24	22	17
25	IHT 125	MH 2831	22	20	23	24	24	25	20	28	23	23	23	23	23	23	11
26	IHT 126	MH 2832	21	22	23	22	23	24	19	24	22	19	23	24	24	22	19
27	IHT 127	MH 2833	22	24	23	23	23	24	22	28	24	22	23	24	23	23	10
28	IHT 128	MPMH 35 (Check)	19	23	24	22	23	24	18	26	22	20	23	26	25	23	15
		LOC. MEAN	21	24	24	23	23	23	19	25	23	21	23	24	23	23	
		C.D. (5%)	3.0	3.0	2.0	2.0	3.0	2.0	2.0	2.0	2.0	4.0	3.0	2.0	3.0	1.0	
		C.D. (1%)	3.0	4.0	3.0	3.0	4.0	3.0	3.0	2.0	2.0	5.0	3.0	3.0	3.0	2.0	
		C.V. (%)	7.3	8.1	5.6	5.5	8.0	5.7	7.3	4.6	7.9	10.6	6.8	6.0	5.2	7.2	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.017	0.000	

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Table I.27: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	JBR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	2.7	2.6	3.0	2.8	3.3	2.4	2.4	3.1	2.8	2.0	3.2	3.8	3.5	2.8	16
2	IHT 102	MH 2812	2.9	3.2	3.1	3.2	3.2	2.4	2.7	2.3	2.9	3.1	3.6	4.1	3.9	3.1	8
3	IHT 103	PB 1756 (Check)	2.7	2.7	3.0	3.1	2.9	3.2	2.8	2.3	2.8	2.6	3.3	3.7	3.5	2.9	11
4	IHT 104	MH 2813	2.9	2.5	3.2	3.3	3.4	2.4	3.4	3.6	3.1	2.8	3.9	4.1	4.0	3.2	4
5	IHT 105	MH 2814	2.8	2.9	3.1	3.6	3.2	4.3	3.4	2.4	3.2	3.0	3.6	4.2	3.9	3.3	3
6	IHT 106	MH 2815	2.6	2.2	3.0	3.2	2.9	2.4	3.0	2.6	2.7	2.7	3.2	3.8	3.5	2.9	14
7	IHT 107	MH 2816	2.8	2.6	3.2	2.5	2.8	1.9	2.6	3.3	2.7	2.7	3.5	3.8	3.7	2.9	15
8	IHT 108	MH 2817	2.4	2.2	2.7	2.5	2.8	2.4	2.6	3.1	2.6	2.3	2.7	3.5	3.1	2.7	24
9	IHT 109	MH 2818	2.4	2.4	2.8	2.5	2.9	2.9	2.5	2.5	2.6	2.0	2.8	3.7	3.3	2.7	23
10	IHT 110	RHB 223 (Check)	2.8	2.7	2.8	3.2	3.2	3.2	2.7	3.2	3.0	2.3	3.3	3.9	3.6	3.0	10
11	IHT 111	MH 2819	2.6	2.4	2.6	2.3	2.9	1.9	2.6	2.9	2.5	2.0	2.9	3.7	3.3	2.6	26
12	IHT 112	MH 2820	2.9	2.4	2.8	2.8	3.0	3.2	2.7	3.3	2.9	2.3	3.0	3.7	3.4	2.9	12
13	IHT 113	MH 2821	3.4	3.2	3.4	3.1	3.7	3.8	3.1	2.3	3.2	2.9	3.5	4.1	3.8	3.3	2
14	IHT 114	MH 2822	2.9	2.6	3.3	2.8	3.6	3.1	2.7	2.6	3.0	2.7	3.2	4.2	3.7	3.1	9
15	IHT 115	MH 2823	2.6	2.2	2.6	3.2	2.9	3.2	2.5	1.8	2.6	2.7	3.0	3.7	3.4	2.8	20
16	IHT 116	HHB 67 Imp. (Check)	3.9	2.4	2.4	2.2	2.8	3.0	2.1	2.5	2.7	2.0	2.7	3.5	3.1	2.7	22
17	IHT 117	MH 2824	2.5	2.3	2.5	2.3	3.0	2.7	2.3	2.5	2.5	2.0	2.8	4.0	3.4	2.6	25
18	IHT 118	MH 2825	2.4	2.1	2.4	2.5	2.7	2.7	2.5	2.3	2.5	2.1	2.9	3.5	3.2	2.5	28
19	IHT 119	MH 2826	2.6	2.6	2.6	3.1	3.0	3.3	2.4	2.2	2.7	2.3	3.1	3.7	3.4	2.8	18
20	IHT 120	AHB 1200 (Check)	3.1	3.3	3.4	3.7	3.4	3.4	3.2	2.8	3.3	2.6	3.8	4.2	4.0	3.4	1
21	IHT 121	MH 2827	3.1	2.6	3.1	3.1	3.2	3.1	2.9	2.7	3.0	2.8	3.5	3.7	3.6	3.1	7
22	IHT 122	MH 2828	2.7	2.9	3.1	3.1	3.2	3.1	2.8	2.7	3.0	2.9	3.6	3.8	3.7	3.1	6
23	IHT 123	MH 2829	2.6	2.8	2.9	3.1	3.1	2.6	2.7	2.5	2.8	2.5	3.4	3.7	3.6	2.9	13
24	IHT 124	MH 2830	2.9	2.7	3.1	3.2	3.5	3.4	2.7	2.4	3.0	2.8	3.6	4.0	3.8	3.1	5
25	IHT 125	MH 2831	2.5	2.4	2.7	2.7	2.9	3.7	2.5	2.7	2.8	2.5	2.9	3.5	3.2	2.8	17
26	IHT 126	MH 2832	2.6	2.2	2.7	2.5	3.2	3.0	2.5	2.5	2.7	2.1	3.1	4.0	3.6	2.8	19
27	IHT 127	MH 2833	2.5	2.1	2.4	2.6	2.8	2.1	2.6	2.7	2.5	2.3	2.7	3.9	3.3	2.6	27
28	IHT 128	MPMH 35 (Check)	2.5	2.3	2.5	2.4	2.9	3.0	2.3	3.1	2.6	2.2	2.8	3.8	3.3	2.7	21
		LOC. MEAN	2.8	2.6	2.9	2.9	3.1	2.9	2.7	2.7	2.8	2.5	3.2	3.8	3.5	2.9	
		C.D. (5%)	0.8	0.3	0.3	0.5	0.4	1.2	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.2	
		C.D. (1%)	1.1	0.5	0.4	0.6	0.5	1.7	0.4	0.4	0.4	0.5	0.4	0.5	0.6	0.3	
		C.V. (%)	18.1	8.1	6.7	9.9	7.0	26.0	7.0	6.4	11.3	9.6	5.2	6.4	5.7	9.8	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	

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Table I.28: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 1000-SEED Wt.(g) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	JBR	NGR	RAJ MEAN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	8.6	10.2	8.0	8.8	7.3	6.4	6.8	6.2	7.8	11.9	11.5	11.7	8.6	8
2	IHT 102	MH 2812	8.4	9.9	8.8	9.4	6.8	6.6	6.9	5.2	7.8	9.8	10.8	10.3	8.3	16
3	IHT 103	PB 1756 (Check)	9.2	10.1	9.3	9.8	8.7	7.3	6.5	5.0	8.2	8.7	12.9	10.8	8.8	4
4	IHT 104	MH 2813	7.7	9.9	9.7	9.7	6.1	7.3	7.2	7.3	8.1	11.6	11.7	11.6	8.8	3
5	IHT 105	MH 2814	7.0	11.1	9.2	10.2	6.7	7.0	7.0	5.8	8.0	12.4	8.8	10.6	8.5	10
6	IHT 106	MH 2815	7.5	14.0	8.7	10.3	8.0	7.2	6.8	5.5	8.5	7.7	8.6	8.1	8.4	12
7	IHT 107	MH 2816	6.9	10.2	9.4	10.3	6.1	7.5	6.9	5.1	7.8	10.5	9.7	10.1	8.3	15
8	IHT 108	MH 2817	6.6	12.0	9.4	10.4	7.0	6.7	6.7	8.3	8.4	7.8	7.8	7.8	8.3	17
9	IHT 109	MH 2818	6.7	11.8	9.7	9.3	8.6	6.9	7.1	5.7	8.2	7.1	8.9	8.0	8.2	20
10	IHT 110	RHB 223 (Check)	7.8	13.4	8.5	10.0	6.6	6.6	6.7	8.1	8.5	11.0	9.7	10.4	8.8	2
11	IHT 111	MH 2819	8.3	14.0	9.6	10.5	6.2	6.8	7.2	7.8	8.8	9.0	10.5	9.7	9.0	1
12	IHT 112	MH 2820	6.6	12.3	8.5	10.0	8.3	7.0	6.9	6.8	8.3	9.1	6.8	8.0	8.2	18
13	IHT 113	MH 2821	8.1	10.6	9.1	9.2	7.3	7.4	6.6	6.4	8.1	7.2	9.7	8.5	8.2	22
14	IHT 114	MH 2822	6.4	9.0	9.4	10.3	6.6	6.6	7.1	4.7	7.5	9.4	10.5	10.0	8.0	25
15	IHT 115	MH 2823	8.9	10.5	8.9	10.4	6.5	7.3	6.8	5.6	8.1	10.6	11.5	11.1	8.7	5
16	IHT 116	HHB 67 Imp. (Check)	7.7	8.8	7.5	10.3	6.7	7.3	7.0	6.6	7.7	9.9	9.4	9.6	8.1	24
17	IHT 117	MH 2824	8.1	9.3	10.7	10.3	7.1	6.9	7.0	5.7	8.1	8.6	11.0	9.8	8.5	11
18	IHT 118	MH 2825	8.4	10.1	9.4	9.6	7.3	7.5	7.1	4.8	8.0	8.8	11.1	10.0	8.4	13
19	IHT 119	MH 2826	6.6	9.6	9.1	9.9	6.5	7.8	7.1	5.5	7.8	8.0	7.7	7.9	7.8	27
20	IHT 120	AHB 1200 (Check)	8.3	10.1	8.7	9.9	7.7	7.2	6.8	6.8	8.2	8.7	12.3	10.5	8.7	6
21	IHT 121	MH 2827	6.8	9.8	9.0	9.1	6.8	7.0	6.8	5.8	7.6	12.7	7.8	10.3	8.2	21
22	IHT 122	MH 2828	7.9	10.4	8.4	9.7	7.8	7.4	6.8	6.7	8.1	10.5	10.8	10.6	8.6	7
23	IHT 123	MH 2829	6.2	10.9	9.6	9.7	8.8	7.4	7.2	7.1	8.4	8.0	8.0	8.0	8.3	14
24	IHT 124	MH 2830	7.5	12.0	9.1	9.6	6.5	7.8	6.9	6.1	8.2	9.2	11.0	10.1	8.6	9
25	IHT 125	MH 2831	7.2	8.3	9.0	9.8	7.0	7.9	6.7	5.3	7.6	7.5	8.5	8.0	7.7	28
26	IHT 126	MH 2832	6.5	8.8	8.8	9.7	6.9	8.0	6.8	6.4	7.8	8.2	9.0	8.6	7.9	26
27	IHT 127	MH 2833	6.9	10.7	9.5	9.7	6.2	7.2	6.9	6.1	7.9	9.9	8.8	9.4	8.2	19
28	IHT 128	MPMH 35 (Check)	7.4	10.0	7.8	9.6	7.7	7.9	7.0	4.4	7.7	10.1	9.4	9.8	8.1	23
		LOC. MEAN	7.5	10.6	9.0	9.8	7.1	7.2	6.9	6.1	8.0	9.4	9.8	9.6	8.4	
		C.D. (5%)	1.3	0.4	1.3	0.7	0.9	0.7	0.3	0.3	0.8	0.8	1.5	0.8	0.9	
		C.D. (1%)	1.7	0.5	1.7	0.9	1.2	0.9	0.5	0.5	1.1	1.0	2.1	1.0	1.2	
		C.V. (%)	10.3	2.1	8.8	4.2	7.7	5.7	3.1	3.4	10.1	5.0	9.6	5.0	11.5	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.312	0.000	0.000	0.000	0.756	

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Table I.29: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 POPULATION AT HARVEST (No./plot) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	JBR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	IHT 101	MH 2811	75	66	63	64	46	80	75	67	82	86	51	69	69	23
2	IHT 102	MH 2812	68	70	72	64	47	85	75	69	84	90	54	72	71	7
3	IHT 103	PB 1756 (Check)	74	64	74	64	51	93	73	70	82	79	53	66	71	11
4	IHT 104	MH 2813	77	67	70	64	56	84	76	71	82	84	49	67	71	5
5	IHT 105	MH 2814	70	71	63	64	48	86	74	68	86	91	52	72	71	12
6	IHT 106	MH 2815	76	64	67	64	47	86	73	68	80	82	49	66	69	24
7	IHT 107	MH 2816	71	67	69	64	47	83	74	68	83	91	54	73	70	13
8	IHT 108	MH 2817	83	65	69	64	49	72	73	68	82	90	51	71	70	21
9	IHT 109	MH 2818	87	70	75	64	48	70	75	70	85	83	52	67	71	8
10	IHT 110	RHB 223 (Check)	64	68	74	64	52	90	75	69	83	78	52	65	70	18
11	IHT 111	MH 2819	73	67	67	64	48	84	75	68	81	94	49	72	70	14
12	IHT 112	MH 2820	85	65	73	64	50	88	75	71	85	94	51	73	73	1
13	IHT 113	MH 2821	79	56	67	64	52	94	74	70	79	83	49	66	70	17
14	IHT 114	MH 2822	75	63	65	64	56	72	74	67	83	93	52	72	70	22
15	IHT 115	MH 2823	81	49	63	64	55	74	75	66	82	90	47	69	68	27
16	IHT 116	HHB 67 Imp. (Check)	78	68	66	64	51	75	75	68	80	90	51	71	70	19
17	IHT 117	MH 2824	78	68	65	64	52	80	75	69	84	90	52	71	71	9
18	IHT 118	MH 2825	73	58	69	64	50	87	75	68	80	89	52	71	70	20
19	IHT 119	MH 2826	85	66	63	64	49	91	75	70	87	97	52	74	73	2
20	IHT 120	AHB 1200 (Check)	65	54	67	64	56	87	75	67	84	78	51	64	68	26
21	IHT 121	MH 2827	72	64	65	64	51	87	74	68	86	92	50	71	71	10
22	IHT 122	MH 2828	72	68	67	64	49	81	74	68	85	76	48	62	68	25
23	IHT 123	MH 2829	78	68	65	64	48	83	75	69	82	90	48	69	70	15
24	IHT 124	MH 2830	71	69	67	63	51	91	74	70	82	93	50	71	71	4
25	IHT 125	MH 2831	78	72	62	64	55	70	76	68	89	94	50	72	71	6
26	IHT 126	MH 2832	80	64	60	64	54	86	75	69	80	90	49	70	70	14
27	IHT 127	MH 2833	83	62	65	64	54	88	75	70	82	89	53	71	71	3
28	IHT 128	MPMH 35 (Check)	77	62	62	63	46	91	76	68	82	90	51	71	70	16
		LOC. MEAN	76	65	67	64	51	84	75	69	83	88	51	69	70	
		C.D. (5%)	13.0	8.0	9.0	1.0	7.0	20.0	2.0	5.0	6.0	7.0	5.0	8.0	4.0	
		C.D. (1%)	18.0	11.0	13.0	2.0	9.0	27.0	2.0	6.0	7.0	9.0	6.0	11.0	5.0	
		C.V. (%)	10.7	7.8	8.6	1.3	8.4	14.9	1.5	6.6	4.1	4.6	5.7	4.7	6.2	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.963	0.000	0.000	0.000	0.235	0.860	

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Table I.30: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 SEED SET (%) UNDER BAG ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	JBR	RAJ MEAN	HSR	ZONE MEAN	RANK
1	IHT 101	MH 2811	65	77	43	82	63	66	68	66	21
2	IHT 102	MH 2812	69	75	53	89	66	70	88	73	4
3	IHT 103	PB 1756 (Check)	78	80	40	81	68	70	85	72	7
4	IHT 104	MH 2813	76	78	52	84	74	73	75	73	5
5	IHT 105	MH 2814	82	75	48	78	68	70	93	74	2
6	IHT 106	MH 2815	80	72	40	82	65	68	68	68	18
7	IHT 107	MH 2816	78	68	42	88	64	68	90	72	9
8	IHT 108	MH 2817	74	73	47	83	68	69	85	72	10
9	IHT 109	MH 2818	78	70	50	84	66	70	72	70	12
10	IHT 110	RHB 223 (Check)	79	67	47	83	68	69	70	69	14
11	IHT 111	MH 2819	47	73	40	80	73	63	67	63	23
12	IHT 112	MH 2820	17	72	50	90	66	59	50	57	27
13	IHT 113	MH 2821	48	75	47	78	58	61	-	61	26
14	IHT 114	MH 2822	77	80	48	87	64	71	85	74	3
15	IHT 115	MH 2823	43	77	43	84	62	62	68	63	25
16	IHT 116	HHB 67 Imp. (Check)	65	77	43	82	63	66	77	68	19
17	IHT 117	MH 2824	61	73	52	80	60	65	83	68	17
18	IHT 118	MH 2825	64	70	48	87	67	67	75	69	15
19	IHT 119	MH 2826	82	70	60	78	70	72	88	75	1
20	IHT 120	AHB 1200 (Check)	72	67	45	86	75	69	60	68	20
21	IHT 121	MH 2827	85	68	40	77	63	67	91	71	11
22	IHT 122	MH 2828	77	70	45	86	59	67	73	68	16
23	IHT 123	MH 2829	-	68	40	84	61	63	-	63	24
24	IHT 124	MH 2830	82	70	43	82	58	67	82	69	13
25	IHT 125	MH 2831	80	70	43	80	63	67	77	69	14
26	IHT 126	MH 2832	70	75	47	89	68	70	87	73	6
27	IHT 127	MH 2833	77	80	48	83	62	70	82	72	8
28	IHT 128	MPMH 35 (Check)	67	75	45	81	64	66	48	63	22
LOC. MEAN			69	73	46	83	65	67	76	69	
C.D. (5%)			14.0	8.0	11.0	7.0	4.0	12.0	20.0	12.0	
C.D. (1%)			19.0	11.0	15.0	10.0	5.0	16.0	26.0	16.0	
C.V. (%)			12.3	6.6	14.8	5.5	3.5	12.7	15.9	12.7	
F (Prob)			0.000	0.000	0.000	0.000	0.000	0.736	0.000	0.736	

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Table I.31: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 ZONE A₁
GRAIN QUALITY: IRON CONTENT (ppm)

S.No.	TEST CODE	ENTRY	MDR	JDR	FTR	NGR	SKN	BWL	HSR	ZONE MEAN	RANK
1	IHT 101	MH 2811	30	30	33	34	43	73	61	43	8
2	IHT 102	MH 2812	32	23	38	39	49	52	64	42	9
3	IHT 103	PB 1756 (Check)	29	37	40	37	56	53	72	46	5
4	IHT 104	MH 2813	29	35	39	38	56	54	58	44	7
5	IHT 105	MH 2814	33	30	48	38	61	55	51	45	6
6	IHT 110	RHB 223 (Check)	33	27	32	43	55	52	62	43	8
7	IHT 111	MH 2819	37	29	43	46	74	60	81	53	1
8	IHT 112	MH 2820	29	31	50	29	64	52	64	46	5
9	IHT 116	HHB 67 Imp. (Check)	33	28	41	38	48	45	67	43	8
10	IHT 119	MH 2826	31	39	43	36	50	46	59	43	8
11	IHT 120	AHB 1200 (Check)	34	32	31	42	64	64	71	48	3
12	IHT 121	MH 2827	36	44	43	51	54	53	67	50	2
13	IHT 123	MH 2829	31	26	42	42	70	47	72	47	4
14	IHT 126	MH 2832	29	33	47	33	49	43	74	44	7
15	IHT 128	MPMH 35 (Check)	29	36	42	40	48	42	69	44	7

Table I.32: INITIAL HYBRID TRIAL (Early) KHARIF - 2024 ZONE A₁
GRAIN QUALITY: ZINC CONTENT (ppm)

S.No.	TEST CODE	ENTRY	MDR	JDR	FTR	NGR	SKN	BWL	HSR	ZONE MEAN	RANK
1	IHT 101	MH 2811	34	41	34	34	39	32	42	37	5
2	IHT 102	MH 2812	39	32	30	34	34	30	41	34	6
3	IHT 103	PB 1756 (Check)	33	41	30	30	43	43	46	38	4
4	IHT 104	MH 2813	35	46	35	32	51	40	45	41	1
5	IHT 105	MH 2814	37	40	29	33	43	40	40	37	5
6	IHT 110	RHB 223 (Check)	40	36	26	40	42	37	39	37	5
7	IHT 111	MH 2819	37	37	43	35	45	35	49	40	2
8	IHT 112	MH 2820	36	37	38	35	45	37	37	38	4
9	IHT 116	HHB 67 Imp. (Check)	40	33	34	34	39	36	43	37	5
10	IHT 119	MH 2826	37	43	21	33	39	37	46	37	5
11	IHT 120	AHB 1200 (Check)	35	36	31	33	48	40	50	39	3
12	IHT 121	MH 2827	35	45	27	32	42	37	49	38	4
13	IHT 123	MH 2829	35	37	28	34	46	32	45	37	5
14	IHT 126	MH 2832	36	38	33	35	40	36	47	38	4
15	IHT 128	MPMH 35 (Check)	35	41	34	36	41	31	46	38	4

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Table I.33: INITIAL HYBRID TRIAL (Medium) KHARIF 2024 EXPERIMENTAL DETAILS ZONE A

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizers			Insecticide
							N	P	K	
RAJASTHAN										
Bikaner (SKRAU)	S	8.0	10.7.24	25.10.24	10.8.24	25.9.24	40	20	0	Nil
Jaipur (SKNAU)	SL	-	8.7.24	9.10.24	24.7.24	Nil	40	30	0	Nil
Jaipur (Corteva)	L	7.5	7.7.24	28.10.24	30.8.24	Life Saving	88	60	0	Dantotsu-Clothianidin, Cypermethrin
Tabiji (SKNAU)	L	8.8	2.7.24	1.10.24	5.9.24	Nil	60	30	0	Nil
Alwar (Kaveri Seed)	S	7.6	8.7.24	6.10.24	1.8.24	Nil	75	46	45	Chloropyriphos Cypermethrine
Dausa (Rasi Seeds)	SL	-	26.6.24	25.9.24	12.7.24	Nil	10	10	2	Nil
GUJARAT										
Talaja (JAU)	MB	-	20.7.24	10.10.24	16.8.24	Nil	80	40	0	Nil
Anand (AAU)	SL	-	6.7.24	22.10.24	19.7, 2.8.24	Nil	80	40	0	Emamectin, Quinalphos
Jamnagar (JAU)	MB	7.6	18.7.24	16.10.24	28.7, 2.8, 9.8, 17.8.24	Nil	80	40	0	Nil
Deesa (SDAU)	SL	-	30.6.24	4.10.24	26.7.24	Nil	80	40	0	Nil
UTTAR PRADESH										
Jhansi (RLBCAU)	R	8.0	5.7.24	27.10.24	15.8.24	25.8.24	80	40	40	Nil
Mathura (Kamadgiri)	SL	-	11.7.24	8.10.24	-	Nil	80	40	40	Chloropyriphos Cypermethrine
HARYANA										
Hisar (CCSHAU)	SL	-	11.7.24	25.10.24	-	28.8.24	100	40	0	Nil
Bawal (CCSHAU)	LS	8.2	10.7.24	As Per Maturity	6.8.24	Nil	40	20	30	Atrazine
MADHYA PRADESH										
Gwalior (RVSKVV)	SL	7.1	18.7.24	15.10.24	10.8.24	25.7.24	60	40	20	Nil
PUNJAB										
Ludhiana (PAU)	SL	-	9.7.24	15.11.24	31.7, 2.9.24	30.7, 31.8, 2.10.24	100	60	0	Nil
DELHI										
New Delhi (ICAR-IARI)	SL	7.8	2.7.24	15.10.24	-	Nil	60	40	40	Nil

SL = Sandy Loam, MB = Medium Black, S = Sandy, LS = Loamy Sand, L = Loam, R = Red.

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Table I.34: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	JPR2	TBJ	ALW6	DAS	RAJ MEAN	TLJ	AND	JMR	SKN	GUJ MEAN
1	IHT 201	MH 2834	1644	3472	6642	4206	3683	3815	3910	1994	4116	2051	2133	2574
2	IHT 202	MH 2835	1227	2094	3942	3061	2919	3720	2827	1806	2102	1329	1590	1707
3	IHT 203	MH 2836	1296	3533	4151	2850	3222	3784	3139	2711	3858	2083	1551	2551
4	IHT 204	MH 2837	1181	3367	4625	2533	3261	3932	3150	2683	2021	1954	1358	2004
5	IHT 205	MH 2838	1389	2983	5226	4500	3700	3602	3567	2728	3356	2046	1469	2400
6	IHT 206	MH 2839	1088	2822	4660	4589	3939	3892	3498	3344	3906	2588	2165	3001
7	IHT 207	MH 2840	1250	3167	6705	4711	4361	3877	4012	2317	4541	2903	2143	2976
8	IHT 208	MH 2841	1296	4028	6709	4883	3556	3735	4034	2444	2485	2667	2472	2517
9	IHT 209	86M94 (Check)	1296	3911	4756	5639	3728	3617	3824	3100	3603	3028	1993	2931
10	IHT 210	MH 2842	1319	4328	6101	2656	4039	3914	3726	3056	5679	3347	2035	3529
11	IHT 211	MH 2843	1157	3533	2447	2300	2883	3736	2676	1650	4290	2917	2074	2733
12	IHT 212	MH 2844	1250	4256	5260	4633	4083	3654	3856	2322	2954	2421	1906	2401
13	IHT 213	MH 2845	1088	3233	3075	2372	3033	3582	2731	1717	3182	2032	1831	2191
14	IHT 214	MH 2846	1088	2850	3798	3878	2950	4491	3176	2461	5509	3222	2457	3412
15	IHT 215	PB 1852 (Check)	1065	3778	4574	4172	3828	3926	3557	2244	5603	3194	3101	3536
16	IHT 216	MH 2847	903	2678	3437	2194	2944	3540	2616	3056	4862	2796	1383	3024
17	IHT 217	MH 2848	1065	2939	4542	3017	4428	3574	3261	2389	4737	2528	2543	3049
18	IHT 218	MH 2849	1181	3044	3862	4006	3600	3673	3228	1628	2509	2653	1580	2092
19	IHT 219	MH 2850	926	4150	2616	3422	3000	3596	2952	1956	5181	2144	1451	2683
20	IHT 220	DHBH 1397 (Check)	1435	3217	4977	2183	3622	3491	3154	2861	3066	2231	2249	2602
21	IHT 221	MH 2851	1458	3350	4059	3044	3689	3998	3266	2583	3762	1458	1657	2365
22	IHT 222	MH 2852	1134	3533	4315	2589	3706	4191	3245	2522	4578	3347	3063	3378
23	IHT 223	MH 2853	1111	2522	4683	2033	3711	3522	2930	2894	2060	2866	2259	2520
24	IHT 224	MH 2854	1111	3194	5604	3033	4194	4519	3609	2289	5874	1435	2568	3041
25	IHT 225	MH 2855	1157	2683	1452	2233	1806	4354	2281	1656	4468	1597	1538	2315
26	IHT 226	MH 2856	1065	3228	4623	5111	3533	4517	3680	2206	2652	1958	2267	2271
27	IHT 227	AHB 1200 (Check)	949	2922	2958	2183	2139	4213	2561	2350	2752	1755	1933	2198
28	IHT 228	MH 2857	1134	1928	3868	2456	2922	4483	2799	2350	2181	2032	1499	2016
29	IHT 229	MH 2858	1065	2567	3193	2306	2383	3609	2520	1950	2033	1824	1898	1926
30	IHT 230	MH 2859	1134	2872	3573	2983	3000	3626	2865	2072	2644	3792	2123	2658
31	IHT 231	MH 2860	1042	3194	4219	4156	2761	3679	3175	1950	2138	2407	2259	2189
32	IHT 232	MH 2861	1273	1828	2449	2106	2244	4574	2412	2317	2036	1338	2131	1955
33	IHT 233	MH 2862	1042	3183	2948	2333	2778	4370	2776	1889	3548	2282	1847	2391
34	IHT 234	MH 2863	1181	2983	5111	3411	4428	4380	3582	2756	5896	3694	1916	3565
		LOC. MEAN	1176	3158	4269	3288	3355	3917	3194	2360	3652	2409	2013	2609
		C.D. (5%)	264	926	981	583	502	370	756	357	705	487	434	972
		C.D. (1%)	350	1230	1303	774	667	491	998	475	937	646	576	1286
		C.V. (%)	13.8	18.0	14.1	10.9	9.2	5.8	20.8	9.3	11.8	12.4	13.2	26.6
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
		PLOT SIZE (m ²)	7.20	6.00	5.40	6.00	6.00	5.40	-	6.00	6.00	7.20	5.40	-

Contd..

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Table I.34: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	JNS***	MTR	UP MEAN	BWL	HSR	HAR MEAN	GLR***	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	2194	2117	2117	4016	3370	3693	1947	3541	5022	3455	8
2	IHT 202	MH 2835	1628	1133	1133	3339	3590	3465	1919	3482	2974	2554	30
3	IHT 203	MH 2836	1450	2206	2206	4400	3991	4196	2236	4763	3096	3166	17
4	IHT 204	MH 2837	1142	2061	2061	4279	4052	4166	1988	3294	2978	2905	24
5	IHT 205	MH 2838	1306	2589	2589	4440	3898	4169	2338	4548	3252	3315	12
6	IHT 206	MH 2839	1678	2217	2217	4145	3775	3960	2034	4120	3256	3367	9
7	IHT 207	MH 2840	1011	2511	2511	4986	4580	4783	2197	3299	3974	3688	3
8	IHT 208	MH 2841	1989	3006	3006	4208	3686	3947	2581	4065	3496	3516	7
9	IHT 209	86M94 (Check)	2572	2894	2894	5025	3872	4448	2075	3800	3952	3614	4
10	IHT 210	MH 2842	989	2433	2433	4966	4942	4954	2278	3864	4289	3798	2
11	IHT 211	MH 2843	1394	2228	2228	3388	3706	3547	2119	4477	2904	2913	23
12	IHT 212	MH 2844	872	1961	1961	3600	3159	3379	2333	3957	2693	3207	16
13	IHT 213	MH 2845	1772	2078	2078	4041	2658	3349	1966	3679	2830	2695	29
14	IHT 214	MH 2846	983	1761	1761	3977	3461	3719	1769	3266	3900	3271	14
15	IHT 215	PB 1852 (Check)	1261	2456	2456	3957	3377	3667	2146	3236	4485	3533	5
16	IHT 216	MH 2847	1039	2417	2417	4265	2965	3615	1812	3005	3600	2936	22
17	IHT 217	MH 2848	2028	2183	2183	4617	4055	4336	1808	4107	3781	3367	10
18	IHT 218	MH 2849	803	2239	2239	4181	3229	3705	2122	4610	3970	3064	19
19	IHT 219	MH 2850	564	2117	2117	3764	3175	3469	1883	3914	3859	3018	20
20	IHT 220	DHBH 1397 (Check)	994	2917	2917	4625	3921	4273	1418	4999	4578	3358	11
21	IHT 221	MH 2851	1381	2283	2283	3997	3829	3913	1717	4314	3274	3117	18
22	IHT 222	MH 2852	1419	2178	2178	3835	2334	3085	1794	4816	3359	3300	13
23	IHT 223	MH 2853	2506	2383	2383	3728	3606	3667	1961	3467	2548	2893	26
24	IHT 224	MH 2854	1826	2511	2511	3738	4361	4049	2053	4052	4381	3524	6
25	IHT 225	MH 2855	789	2067	2067	3356	2856	3106	1871	2883	1385	2366	34
26	IHT 226	MH 2856	1217	1900	1900	4134	3657	3896	2117	4672	2744	3218	15
27	IHT 227	AHB 1200 (Check)	1156	2011	2011	3338	2599	2969	1317	3438	2381	2528	31
28	IHT 228	MH 2857	1111	2067	2067	3760	3331	3545	2089	4356	3131	2767	28
29	IHT 229	MH 2858	267	1956	1956	3690	3184	3437	1789	3488	2722	2524	32
30	IHT 230	MH 2859	744	2444	2444	3863	3290	3576	1939	3527	3389	2956	21
31	IHT 231	MH 2860	483	2200	2200	3656	3386	3521	1778	2868	3541	2897	25
32	IHT 232	MH 2861	429	2033	2033	3627	2603	3115	1311	2819	2933	2421	33
33	IHT 233	MH 2862	464	2089	2089	3538	2664	3101	1168	3270	4719	2833	27
34	IHT 234	MH 2863	1917	3489	3489	5331	3935	4633	2674	5214	4541	3884	1
		LOC. MEAN	1276	2269	2269	4053	3503	3778	1957	3859	3469	3117	
		C.D. (5%)	322	341	341	727	943	685	319	266	552	450	
		C.D. (1%)	428	453	453	966	1253	920	424	354	733	592	
		C.V. (%)	15.5	9.2	9.2	11.0	16.5	8.9	10.0	4.2	9.8	20.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	6.00	6.00	-	7.20	6.00	-	6.00	6.00	9.00	-	

***TEST LOCATION REJECTED DUE TO LOW AVERAGE YIELD (1276 & 1957 kg/ha), THAN THE STATE AVERAGE YIELD (2008 & 2166 kg/ha) TAKEN OVER 10 YEARS

CHAPTER I: BREEDING

Table I.35: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	JPR2	TBJ	ALW6	DAS	RAJ MEAN	TLJ	AND	JMR	SKN	GUJ MEAN
1	IHT 201	MH 2834	4352	8222	9727	8050	8800	6880	7672	6111	8318	6023	5975	6607
2	IHT 202	MH 2835	4306	4667	6333	5483	5633	10741	6194	5222	4347	2894	4753	4304
3	IHT 203	MH 2836	3843	6389	6567	5733	6594	7019	6024	5722	8146	4134	8759	6690
4	IHT 204	MH 2837	4491	4889	6595	5100	7039	7235	5891	5389	5233	4208	5981	5203
5	IHT 205	MH 2838	4352	6778	8149	7067	7589	8435	7062	7500	8417	5370	6963	7063
6	IHT 206	MH 2839	4352	7556	9112	7783	9306	8383	7749	6500	7800	4694	6247	6310
7	IHT 207	MH 2840	4815	5444	14996	8283	10667	8735	8823	6833	9089	6523	8636	7770
8	IHT 208	MH 2841	4444	5111	11014	8100	10300	10302	8212	6333	5908	5083	8710	6509
9	IHT 209	86M94 (Check)	3935	7944	6820	7150	9028	10840	7619	6722	7944	5866	5926	6615
10	IHT 210	MH 2842	4907	8556	13133	8067	10961	7859	8914	5889	12024	8148	8148	8552
11	IHT 211	MH 2843	3750	4556	12962	7017	8678	11012	7996	5611	8645	6625	8691	7393
12	IHT 212	MH 2844	4815	9611	9427	6150	7889	7741	7605	4889	6353	4704	6796	5686
13	IHT 213	MH 2845	5139	8889	8644	5167	7211	10679	7622	5222	6632	5181	7284	6080
14	IHT 214	MH 2846	4537	7333	7619	8217	6083	9630	7236	7222	11609	5542	6389	7690
15	IHT 215	PB 1852 (Check)	4398	6556	13340	7800	12139	10917	9191	9611	10988	7269	8759	9157
16	IHT 216	MH 2847	4537	5556	5900	5250	7056	8701	6166	5778	9849	5380	8056	7265
17	IHT 217	MH 2848	4259	9333	9151	7000	13117	8562	8570	6278	9897	5722	8284	7545
18	IHT 218	MH 2849	4352	7000	11079	6167	8539	10438	7929	6556	6479	5870	4753	5915
19	IHT 219	MH 2850	3889	8222	6654	5983	7922	10688	7227	5333	10750	4343	4444	6218
20	IHT 220	DHBH 1397 (Check)	3843	8778	8379	4817	7717	11241	7462	5278	6544	6306	5025	5788
21	IHT 221	MH 2851	5139	6056	8849	5950	9794	9852	7607	7722	8865	4644	8506	7434
22	IHT 222	MH 2852	4861	6611	9807	5883	10044	9556	7794	6722	8917	6806	11204	8412
23	IHT 223	MH 2853	3565	6667	8206	6383	8222	8441	6914	6778	5083	5870	5309	5760
24	IHT 224	MH 2854	3611	8333	9880	5733	10983	10340	8147	8111	11127	5519	7333	8022
25	IHT 225	MH 2855	3796	4944	6488	5383	5900	7506	5670	5111	9691	3356	7605	6441
26	IHT 226	MH 2856	4259	6056	7533	8017	7511	8410	6964	4944	5479	4806	6926	5539
27	IHT 227	AHB 1200 (Check)	4537	5333	5652	5517	5372	6886	5549	6333	6000	3940	4957	5307
28	IHT 228	MH 2857	4444	4833	9241	7000	7972	10605	7349	5722	4908	5352	8272	6063
29	IHT 229	MH 2858	4537	6222	7905	5817	6672	10710	6977	5889	4919	5028	7395	5808
30	IHT 230	MH 2859	4722	4889	10230	7683	7411	8444	7230	6722	5722	6403	7741	6647
31	IHT 231	MH 2860	4120	6778	6204	6133	5639	8133	6168	5389	4529	4940	8438	5824
32	IHT 232	MH 2861	4444	7389	5775	4550	5439	7049	5774	5278	4493	3625	7593	5247
33	IHT 233	MH 2862	4259	6556	8775	6067	7078	8543	6880	6667	7672	6069	8765	7293
34	IHT 234	MH 2863	5093	4611	11026	7917	9722	11821	8365	8111	11226	6407	5500	7811
		LOC. MEAN	4374	6667	8858	6542	8236	9186	7310	6279	7753	5372	7180	6646
		C.D. (5%)	845	1369	2093	1006	1461	914	1589	890	1488	1216	1461	1895
		C.D. (1%)	1122	1818	2781	1337	1941	1215	2097	1183	1977	1616	1941	2509
		C.V. (%)	11.8	12.6	14.5	9.4	10.9	6.1	19.1	8.7	11.8	13.9	12.5	20.3
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		PLOT SIZE (m ²)	7.20	6.00	5.40	6.00	6.00	5.40	-	6.00	6.00	7.20	5.40	-

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Table I.35: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	JNS	MTR	UP MEAN	BWL	HSR	HAR MEAN	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	5294	9489	7392	10556	9444	10000	7222	9800	23219	8675	17
2	IHT 202	MH 2835	3206	5000	4103	8961	15000	11981	6944	7867	11959	6666	34
3	IHT 203	MH 2836	4361	11156	7758	11821	13944	12883	7778	11000	11043	7883	29
4	IHT 204	MH 2837	2222	10094	6158	9152	15556	12354	7500	8222	17896	7459	30
5	IHT 205	MH 2838	5244	11967	8606	10931	14222	12577	8889	10172	14733	8634	18
6	IHT 206	MH 2839	3194	9322	6258	10707	14778	12742	9444	10372	18041	8682	16
7	IHT 207	MH 2840	4117	10344	7231	14090	17222	15656	9444	11144	23170	10209	3
8	IHT 208	MH 2841	6100	11133	8617	10731	15000	12866	8333	13556	16241	9200	10
9	IHT 209	86M94 (Check)	3922	11494	7708	12023	18889	15456	9722	11517	16022	9163	11
10	IHT 210	MH 2842	6817	12333	9575	12166	20000	16083	8889	12444	20439	10634	1
11	IHT 211	MH 2843	6244	12539	9392	8594	15556	12075	6944	11972	25004	9671	6
12	IHT 212	MH 2844	2367	11606	6986	11833	12222	12028	6389	8706	14893	8023	26
13	IHT 213	MH 2845	9467	11344	10406	10255	7500	8877	6111	9328	14230	8134	24
14	IHT 214	MH 2846	3006	10994	7000	12857	12833	12845	7222	7606	19311	8706	15
15	IHT 215	PB 1852 (Check)	3956	8950	6453	10138	14444	12291	7500	11528	20622	9936	5
16	IHT 216	MH 2847	2906	10022	6464	11232	13889	12561	7778	7011	15452	7903	28
17	IHT 217	MH 2848	6294	11494	8894	12260	18667	15463	5278	13661	22148	10083	4
18	IHT 218	MH 2849	4961	10728	7844	11881	12411	12146	5556	10722	18952	8614	19
19	IHT 219	MH 2850	6033	11633	8833	12038	7778	9908	6111	13617	18365	8459	22
20	IHT 220	DHBH 1397 (Check)	6678	11150	8914	13472	17778	15625	6667	11689	16370	8925	12
21	IHT 221	MH 2851	7906	11494	9700	11346	19444	15395	6111	12411	19637	9631	8
22	IHT 222	MH 2852	8522	13067	10794	13325	7222	10274	6944	12650	21333	9616	9
23	IHT 223	MH 2853	8872	13622	11247	10185	15222	12704	6667	8261	18533	8582	20
24	IHT 224	MH 2854	7583	11117	9350	11484	15222	13353	5833	10350	21267	9637	7
25	IHT 225	MH 2855	3456	11072	7264	9120	6111	7616	5556	7261	17785	7067	31
26	IHT 226	MH 2856	4317	11744	8031	12222	14000	13111	5556	11972	15130	8170	23
27	IHT 227	AHB 1200 (Check)	5128	13072	9100	10559	10556	10557	5000	8656	11204	6982	32
28	IHT 228	MH 2857	4733	12667	8700	12169	14333	13251	6944	12433	19765	8906	13
29	IHT 229	MH 2858	4450	12639	8544	11506	19111	15308	5556	10928	19381	8745	14
30	IHT 230	MH 2859	2861	12072	7467	12685	13333	13009	6944	7906	18226	8470	21
31	IHT 231	MH 2860	2972	12294	7633	11625	14056	12840	6667	7767	19496	7952	27
32	IHT 232	MH 2861	2200	11872	7036	9815	7778	8796	5000	7578	14706	6740	33
33	IHT 233	MH 2862	3611	10511	7061	11082	11111	11097	5556	8533	16389	8073	25
34	IHT 234	MH 2863	4794	13450	9122	16845	16111	16478	11667	13667	20530	10500	2
LOC. MEAN			4935	11279	8107	11461	13845	12653	7051	10362	17985	8669	
C.D. (5%)			1273	1978	2937	2052	5250	5263	1747	970	2393	1171	
C.D. (1%)			1691	2627	3945	2727	6975	7070	2320	1289	3179	1541	
C.V. (%)			15.8	10.8	17.8	11.0	23.3	20.4	15.2	5.7	8.2	20.1	
F (Prob)			0.000	0.000	0.019	0.000	0.000	0.149	0.000	0.000	0.000	0.000	
PLOT SIZE (m ²)			6.00	6.00	-	7.20	6.00	-	6.00	6.00	9.00	-	

CHAPTER I: BREEDING

Table I.36: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE A

S.No.	TEST CODE	ENTRY	BKR*	JPR	JPR2*	TBJ	ALW6	DAS*	RAJ MEAN	TLJ	AND	JMR	SKN*	GUJ MEAN
1	IHT 201	MH 2834	61	52	54	52	53	57	52	48	42	48	56	46
2	IHT 202	MH 2835	53	52	51	50	51	56	51	49	44	49	54	47
3	IHT 203	MH 2836	60	50	55	51	50	55	50	49	45	48	56	47
4	IHT 204	MH 2837	62	51	56	52	50	58	51	50	45	48	54	48
5	IHT 205	MH 2838	54	48	50	53	52	55	51	50	42	48	54	46
6	IHT 206	MH 2839	66	54	62	58	60	63	57	49	52	52	59	51
7	IHT 207	MH 2840	64	55	61	58	58	58	57	48	54	55	57	52
8	IHT 208	MH 2841	54	46	52	50	49	55	49	48	41	47	52	45
9	IHT 209	86M94 (Check)	62	49	54	52	52	57	51	48	44	49	51	47
10	IHT 210	MH 2842	54	53	62	58	54	55	55	47	52	52	55	50
11	IHT 211	MH 2843	65	52	63	59	61	66	57	49	54	54	61	52
12	IHT 212	MH 2844	61	53	56	55	57	60	55	48	52	49	61	50
13	IHT 213	MH 2845	57	53	57	53	51	57	52	48	43	49	58	47
14	IHT 214	MH 2846	58	54	62	60	59	57	57	50	53	53	61	52
15	IHT 215	PB 1852 (Check)	61	53	60	57	52	55	54	47	52	53	58	51
16	IHT 216	MH 2847	57	47	57	53	52	57	51	49	49	48	55	48
17	IHT 217	MH 2848	61	53	56	56	57	58	55	48	52	48	55	49
18	IHT 218	MH 2849	61	49	59	57	51	55	52	47	53	52	56	51
19	IHT 219	MH 2850	59	46	49	49	50	52	49	47	42	46	55	45
20	IHT 220	DHBH 1397 (Check)	60	45	55	51	49	52	48	48	43	48	54	46
21	IHT 221	MH 2851	53	48	50	47	50	52	48	47	43	45	51	45
22	IHT 222	MH 2852	63	52	62	58	60	60	57	48	54	54	60	52
23	IHT 223	MH 2853	60	52	56	57	55	57	55	48	49	51	56	50
24	IHT 224	MH 2854	61	49	53	54	50	51	51	48	47	48	53	48
25	IHT 225	MH 2855	60	54	57	54	53	54	54	47	51	53	55	50
26	IHT 226	MH 2856	61	51	55	53	51	55	52	47	47	49	54	48
27	IHT 227	AHB 1200 (Check)	51	44	51	49	48	52	47	48	46	48	53	47
28	IHT 228	MH 2857	54	47	54	51	51	55	50	49	46	48	54	47
29	IHT 229	MH 2858	54	45	54	52	51	57	49	49	44	48	52	47
30	IHT 230	MH 2859	62	53	62	60	61	61	58	49	55	53	59	52
31	IHT 231	MH 2860	57	50	55	53	53	58	52	47	45	49	52	47
32	IHT 232	MH 2861	57	52	48	49	49	54	50	50	43	48	57	47
33	IHT 233	MH 2862	64	50	55	52	55	57	52	52	47	50	58	50
34	IHT 234	MH 2863	61	54	61	60	58	59	57	50	54	54	59	53
		LOC. MEAN	59	51	56	54	53	56	53	48	48	50	56	49
		C.D. (5%)	3.0	2.0	2.0	1.0	1.0	2.0	3.0	1.0	2.0	1.0	3.0	4.0
		C.D. (1%)	4.0	3.0	2.0	1.0	2.0	3.0	4.0	1.0	3.0	2.0	4.0	5.0
		C.V. (%)	3.2	2.3	1.8	0.8	1.4	2.5	3.5	1.2	2.4	1.6	3.3	5.0
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

*LOCATION REJECTED DUE TO DELAYED FLOWERING IN CHECKS

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Table I.36: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE A

S.No.	TEST CODE	ENTRY	JNS	MTR	UP MEAN	BWL	HSR*	HAR MEAN	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	51	50	51	53	56	53	49	58	54	51	18
2	IHT 202	MH 2835	51	50	51	54	56	54	49	44	53	50	23
3	IHT 203	MH 2836	50	45	48	51	52	51	44	47	51	48	27
4	IHT 204	MH 2837	51	49	50	51	49	51	44	45	51	49	25
5	IHT 205	MH 2838	47	47	47	51	52	51	46	50	50	49	26
6	IHT 206	MH 2839	58	52	55	58	57	58	48	57	58	55	7
7	IHT 207	MH 2840	57	53	55	56	57	56	56	54	57	55	6
8	IHT 208	MH 2841	50	47	49	50	52	50	45	50	51	48	30
9	IHT 209	86M94 (Check)	53	49	51	52	56	52	49	49	53	50	22
10	IHT 210	MH 2842	55	50	53	55	54	55	50	56	56	53	9
11	IHT 211	MH 2843	55	52	54	56	58	56	56	55	63	56	4
12	IHT 212	MH 2844	38	52	45	57	58	57	53	55	57	52	14
13	IHT 213	MH 2845	51	49	50	52	53	52	50	51	53	50	21
14	IHT 214	MH 2846	59	54	57	58	60	58	57	59	59	56	3
15	IHT 215	PB 1852 (Check)	53	49	51	52	55	52	54	56	55	53	12
16	IHT 216	MH 2847	55	48	52	52	53	52	52	50	52	51	19
17	IHT 217	MH 2848	54	49	51	56	55	56	49	52	57	53	13
18	IHT 218	MH 2849	51	49	50	52	54	52	47	50	54	51	16
19	IHT 219	MH 2850	47	50	49	50	53	50	46	51	55	48	28
20	IHT 220	DHBH 1397 (Check)	47	43	45	50	51	50	44	47	52	47	32
21	IHT 221	MH 2851	37	48	42	49	51	49	44	45	52	46	33
22	IHT 222	MH 2852	57	56	57	59	61	59	56	60	61	56	2
23	IHT 223	MH 2853	52	52	52	56	58	56	49	58	57	53	10
24	IHT 224	MH 2854	55	51	53	51	54	51	46	52	55	51	20
25	IHT 225	MH 2855	55	49	52	55	56	55	55	59	57	54	8
26	IHT 226	MH 2856	54	50	52	53	56	53	50	54	53	51	15
27	IHT 227	AHB 1200 (Check)	47	45	46	50	47	50	42	49	50	47	32
28	IHT 228	MH 2857	52	46	49	51	48	51	43	45	50	48	29
29	IHT 229	MH 2858	56	49	53	52	50	52	49	46	49	49	24
30	IHT 230	MH 2859	63	55	59	59	62	59	56	60	61	57	1
31	IHT 231	MH 2860	56	52	54	54	52	54	49	51	54	51	17
32	IHT 232	MH 2861	49	45	47	50	51	50	41	49	49	48	31
33	IHT 233	MH 2862	56	51	53	55	57	55	55	55	56	53	11
34	IHT 234	MH 2863	57	52	55	57	61	57	53	56	56	55	5
LOC. MEAN			52	50	51	53	55	53	49	52	54	51	
C.D. (5%)			7.0	2.0	7.0	2.0	2.0	2.0	1.0	1.0	2.0	2.0	
C.D. (1%)			10.0	2.0	9.0	3.0	3.0	3.0	1.0	2.0	2.0	2.0	
C.V. (%)			8.6	2.1	6.3	2.6	2.6	2.6	1.0	1.6	2.0	4.6	
F (Prob)			0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

*LOCATION REJECTED DUE TO DELAYED FLOWERING IN CHECKS

CHAPTER I: BREEDING

Table I.37: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 DAYS TO MATURITY ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	TBJ	ALW6	DAS	RAJ MEAN	TLJ	AND	JMR	SKN	GUJ MEAN
1	IHT 201	MH 2834	89	80	73	79	81	80	78	74	78	94	81
2	IHT 202	MH 2835	83	82	72	78	81	79	80	77	78	89	81
3	IHT 203	MH 2836	90	79	72	78	80	80	81	78	78	90	82
4	IHT 204	MH 2837	91	80	79	78	80	82	80	77	78	89	81
5	IHT 205	MH 2838	84	76	80	79	77	79	81	74	76	90	81
6	IHT 206	MH 2839	96	87	80	85	87	87	81	84	81	90	84
7	IHT 207	MH 2840	92	83	80	83	84	85	78	86	84	92	85
8	IHT 208	MH 2841	84	78	79	77	79	80	79	73	77	89	79
9	IHT 209	86M94 (Check)	92	78	79	79	81	82	78	76	78	89	80
10	IHT 210	MH 2842	84	85	79	80	81	82	77	84	82	90	83
11	IHT 211	MH 2843	94	80	80	85	89	86	79	86	82	90	84
12	IHT 212	MH 2844	91	85	79	82	84	84	78	84	78	91	83
13	IHT 213	MH 2845	87	86	77	78	81	82	78	75	78	90	80
14	IHT 214	MH 2846	87	84	83	85	84	85	81	85	82	90	85
15	IHT 215	PB 1852 (Check)	90	85	80	80	79	83	78	84	82	91	84
16	IHT 216	MH 2847	87	76	75	77	81	79	79	81	77	84	80
17	IHT 217	MH 2848	90	82	76	81	83	83	79	84	77	87	82
18	IHT 218	MH 2849	91	80	77	77	79	81	78	85	80	84	82
19	IHT 219	MH 2850	89	75	78	77	75	79	77	74	75	79	76
20	IHT 220	DHBH 1397 (Check)	89	77	80	77	76	80	79	75	76	80	78
21	IHT 221	MH 2851	83	75	74	77	76	77	76	75	74	81	77
22	IHT 222	MH 2852	91	86	80	85	83	85	79	86	82	88	84
23	IHT 223	MH 2853	89	86	79	80	80	83	78	81	79	84	81
24	IHT 224	MH 2854	90	79	79	76	78	81	78	79	77	87	80
25	IHT 225	MH 2855	90	81	79	78	78	81	77	83	82	85	82
26	IHT 226	MH 2856	90	81	77	79	79	81	77	79	78	87	80
27	IHT 227	AHB 1200 (Check)	81	77	78	77	74	77	78	78	77	83	79
28	IHT 228	MH 2857	84	75	79	77	76	78	79	78	77	86	80
29	IHT 229	MH 2858	84	74	77	77	76	78	79	76	77	86	80
30	IHT 230	MH 2859	90	78	81	84	83	83	80	87	82	86	84
31	IHT 231	MH 2860	87	78	77	80	81	80	77	77	78	78	78
32	IHT 232	MH 2861	86	78	76	75	76	78	80	75	78	80	78
33	IHT 233	MH 2862	90	80	79	80	81	82	82	79	79	80	80
34	IHT 234	MH 2863	91	86	81	82	84	85	80	86	83	86	84
		LOC. MEAN	88	80	78	80	80	81	79	80	79	87	81
		C.D. (5%)	3.0	1.0	0.0	2.0	2.0	3.0	1.0	3.0	1.0	1.0	3.0
		C.D. (1%)	4.0	2.0	1.0	2.0	3.0	4.0	1.0	3.0	1.0	2.0	4.0
		C.V. (%)	2.0	1.0	0.4	1.4	1.7	2.9	0.9	2.0	0.8	1.0	3.0
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CHAPTER I: BREEDING

Table I.37: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 DAYS TO MATURITY ZONE A

S.No.	TEST CODE	ENTRY	JNS	MTR	UP MEAN	BWL	HSR	HAR MEAN	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	85	77	81	84	87	86	81	94	82	82	19
2	IHT 202	MH 2835	90	77	84	86	87	87	81	105	82	83	15
3	IHT 203	MH 2836	79	72	76	83	82	83	80	96	81	81	25
4	IHT 204	MH 2837	88	77	82	84	81	83	72	94	78	82	23
5	IHT 205	MH 2838	84	74	79	84	82	83	82	95	78	81	27
6	IHT 206	MH 2839	86	80	83	90	88	89	82	101	87	87	1
7	IHT 207	MH 2840	83	80	82	89	88	89	80	96	86	85	7
8	IHT 208	MH 2841	88	74	81	83	82	83	81	92	81	81	26
9	IHT 209	86M94 (Check)	87	76	82	84	87	86	76	94	84	82	18
10	IHT 210	MH 2842	87	77	82	87	87	87	80	95	83	84	11
11	IHT 211	MH 2843	88	80	84	88	89	88	81	101	91	86	3
12	IHT 212	MH 2844	87	79	83	90	89	89	78	100	86	85	8
13	IHT 213	MH 2845	83	77	80	84	85	85	80	94	83	82	20
14	IHT 214	MH 2846	83	81	82	91	93	92	80	101	87	86	5
15	IHT 215	PB 1852 (Check)	75	76	75	85	87	86	81	101	82	83	13
16	IHT 216	MH 2847	84	76	80	85	83	84	76	101	82	82	24
17	IHT 217	MH 2848	87	78	83	89	85	87	75	100	87	84	10
18	IHT 218	MH 2849	84	77	80	85	85	85	78	99	82	83	17
19	IHT 219	MH 2850	86	77	82	82	86	84	72	99	84	80	28
20	IHT 220	DHBH 1397 (Check)	87	70	79	82	82	82	68	93	82	80	31
21	IHT 221	MH 2851	86	75	80	82	83	82	67	92	79	78	34
22	IHT 222	MH 2852	81	82	82	91	95	93	78	106	89	86	4
23	IHT 223	MH 2853	86	79	82	89	90	90	70	99	85	83	14
24	IHT 224	MH 2854	89	78	83	84	85	85	72	99	84	82	21
25	IHT 225	MH 2855	87	76	82	88	89	89	76	101	87	84	12
26	IHT 226	MH 2856	87	77	82	86	88	87	77	94	84	83	16
27	IHT 227	AHB 1200 (Check)	78	73	75	82	82	82	67	94	77	78	33
28	IHT 228	MH 2857	86	73	80	83	80	82	68	94	78	80	30
29	IHT 229	MH 2858	85	77	81	85	82	84	67	96	81	80	29
30	IHT 230	MH 2859	89	82	86	93	94	94	81	101	91	87	2
31	IHT 231	MH 2860	84	79	82	86	87	87	81	99	82	82	22
32	IHT 232	MH 2861	87	72	79	82	81	82	70	99	76	79	32
33	IHT 233	MH 2862	87	78	82	88	88	88	81	101	88	84	9
34	IHT 234	MH 2863	83	77	80	89	91	90	81	101	88	86	6
LOC. MEAN			85	77	81	86	86	86	77	98	84	83	
C.D. (5%)			9.0	2.0	8.0	3.0	5.0	2.0	1.0	2.0	2.0	2.0	
C.D. (1%)			12.0	2.0	11.0	4.0	6.0	3.0	2.0	3.0	3.0	3.0	
C.V. (%)			6.4	1.4	4.5	2.2	3.4	1.4	1.0	1.3	1.5	3.2	
F (Prob)			0.000	0.000	0.752	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.38: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PLANT HEIGHT (cm) ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	JPR2	TBJ	ALW6	DAS	RAJ MEAN	TLJ	AND	JMR	SKN	GUJ MEAN
1	IHT 201	MH 2834	192	186	205	214	238	185	203	174	185	167	150	169
2	IHT 202	MH 2835	170	192	207	175	252	232	205	180	175	160	171	171
3	IHT 203	MH 2836	173	174	203	198	238	208	199	181	196	160	168	176
4	IHT 204	MH 2837	172	197	208	211	242	233	211	189	186	166	177	180
5	IHT 205	MH 2838	175	158	208	193	255	243	206	192	185	157	159	173
6	IHT 206	MH 2839	178	183	228	198	267	232	214	189	188	171	178	182
7	IHT 207	MH 2840	180	205	238	232	275	227	226	198	216	191	178	196
8	IHT 208	MH 2841	182	195	223	227	263	225	219	201	213	173	182	192
9	IHT 209	86M94 (Check)	185	206	217	226	267	232	222	210	206	182	177	194
10	IHT 210	MH 2842	188	225	230	216	258	237	226	218	201	193	173	196
11	IHT 211	MH 2843	180	256	232	238	293	295	249	209	208	214	198	207
12	IHT 212	MH 2844	189	207	220	215	260	230	220	189	188	192	173	186
13	IHT 213	MH 2845	189	190	207	197	275	242	217	190	196	180	181	187
14	IHT 214	MH 2846	177	193	228	238	282	270	231	211	212	210	200	208
15	IHT 215	PB 1852 (Check)	192	207	235	259	268	242	234	215	218	197	200	208
16	IHT 216	MH 2847	178	167	223	216	273	240	216	208	203	178	166	189
17	IHT 217	MH 2848	178	203	238	232	290	273	236	196	209	187	179	193
18	IHT 218	MH 2849	183	184	208	210	248	235	211	190	173	162	178	176
19	IHT 219	MH 2850	188	187	203	227	263	230	217	198	207	155	171	183
20	IHT 220	DHBH 1397 (Check)	170	204	203	195	243	233	208	193	185	159	168	176
21	IHT 221	MH 2851	183	245	198	201	260	247	222	167	198	138	170	169
22	IHT 222	MH 2852	197	225	245	231	293	277	245	239	217	213	201	218
23	IHT 223	MH 2853	197	216	227	231	275	277	237	215	196	195	188	198
24	IHT 224	MH 2854	187	147	217	238	267	250	218	179	189	163	199	183
25	IHT 225	MH 2855	157	198	138	149	175	255	179	157	168	135	166	157
26	IHT 226	MH 2856	178	174	205	220	243	228	208	188	184	167	173	178
27	IHT 227	AHB 1200 (Check)	177	186	187	208	238	215	202	193	190	156	156	174
28	IHT 228	MH 2857	175	239	230	221	278	247	232	215	195	189	177	194
29	IHT 229	MH 2858	201	198	225	222	272	247	227	249	212	190	184	209
30	IHT 230	MH 2859	177	285	242	225	258	265	242	227	201	207	188	206
31	IHT 231	MH 2860	202	177	223	225	283	255	228	220	198	190	198	202
32	IHT 232	MH 2861	165	219	183	200	237	235	207	188	195	152	155	172
33	IHT 233	MH 2862	188	196	235	221	268	250	226	211	202	197	189	200
34	IHT 234	MH 2863	165	188	223	239	277	267	226	219	207	200	188	204
LOC. MEAN			181	200	216	216	261	243	220	200	197	178	178	188
C.D. (5%)			12.0	10.0	15.0	15.0	9.0	14.0	19.0	9.0	10.0	12.0	9.0	15.0
C.D. (1%)			16.0	13.0	20.0	20.0	12.0	19.0	25.0	12.0	13.0	16.0	11.0	19.0
C.V. (%)			4.2	2.9	4.2	4.3	2.2	3.5	7.6	2.9	3.1	4.2	2.9	5.5
F (Prob)			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CHAPTER I: BREEDING

Table I.38: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PLANT HEIGHT (cm) ZONE A

S.No.	TEST CODE	ENTRY	JNS	MTR	UP MEAN	BWL	HSR	HAR MEAN	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	199	214	207	189	212	200	219	170	198	194	33
2	IHT 202	MH 2835	209	219	214	189	220	205	218	178	201	197	32
3	IHT 203	MH 2836	204	222	213	211	228	220	220	190	187	198	30
4	IHT 204	MH 2837	185	236	210	206	240	223	245	190	204	205	24
5	IHT 205	MH 2838	198	248	223	193	211	202	221	218	197	201	28
6	IHT 206	MH 2839	188	239	214	212	263	237	230	227	210	211	22
7	IHT 207	MH 2840	225	259	242	228	238	233	240	205	224	221	12
8	IHT 208	MH 2841	208	243	226	229	241	235	244	193	219	215	16
9	IHT 209	86M94 (Check)	201	252	227	224	247	236	244	212	230	219	14
10	IHT 210	MH 2842	200	235	218	217	242	230	247	213	227	219	13
11	IHT 211	MH 2843	242	268	255	227	274	251	262	220	240	239	1
12	IHT 212	MH 2844	209	235	222	213	259	236	229	223	201	214	17
13	IHT 213	MH 2845	215	233	224	214	247	230	225	220	225	213	18
14	IHT 214	MH 2846	208	260	234	222	266	244	235	215	233	227	4
15	IHT 215	PB 1852 (Check)	231	250	240	223	255	239	228	197	209	225	8
16	IHT 216	MH 2847	213	246	230	218	242	230	206	223	220	213	19
17	IHT 217	MH 2848	215	253	234	199	251	225	257	232	224	225	9
18	IHT 218	MH 2849	216	227	222	217	219	218	216	188	213	204	26
19	IHT 219	MH 2850	220	258	239	210	226	218	216	217	215	211	20
20	IHT 220	DHBH 1397 (Check)	216	238	227	228	236	232	213	200	202	205	25
21	IHT 221	MH 2851	222	251	237	206	234	220	224	213	211	210	23
22	IHT 222	MH 2852	278	276	277	231	242	237	229	220	220	237	2
23	IHT 223	MH 2853	232	267	249	217	247	232	241	202	227	226	5
24	IHT 224	MH 2854	246	240	243	209	238	224	223	192	202	211	21
25	IHT 225	MH 2855	157	166	161	148	162	155	174	157	152	165	34
26	IHT 226	MH 2856	181	239	210	202	229	216	220	205	183	201	27
27	IHT 227	AHB 1200 (Check)	231	244	237	193	219	206	184	192	183	197	31
28	IHT 228	MH 2857	235	262	248	215	258	237	229	213	219	223	10
29	IHT 229	MH 2858	278	257	268	222	257	239	242	227	216	229	3
30	IHT 230	MH 2859	198	258	228	225	254	240	222	203	210	226	7
31	IHT 231	MH 2860	200	259	230	223	255	239	244	200	225	222	11
32	IHT 232	MH 2861	192	236	214	193	213	203	198	218	205	199	29
33	IHT 233	MH 2862	194	242	218	225	243	234	211	207	215	217	15
34	IHT 234	MH 2863	249	251	250	222	260	241	243	227	224	226	6
		LOC. MEAN	215	244	229	212	239	225	227	206	211	213	
		C.D. (5%)	55.0	9.0	29.0	21.0	20.0	18.0	9.0	13.0	10.0	9.0	
		C.D. (1%)	73.0	12.0	39.0	28.0	27.0	25.0	13.0	17.0	14.0	12.0	
		C.V. (%)	15.7	2.3	6.2	6.1	5.2	4.0	2.6	3.8	3.0	6.4	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

CHAPTER I: BREEDING

Table I.39: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	JPR2**	ALW6	DAS	RAJ MEAN	TLJ	AND	JMR	SKN	GUJ MEAN
1	IHT 201	MH 2834	1.5	1.9	1.3	1.2	3.0	1.9	1.7	3.3	1.7	1.8	2.1
2	IHT 202	MH 2835	1.4	1.1	1.3	1.2	2.0	1.4	2.7	3.1	1.6	1.3	2.2
3	IHT 203	MH 2836	1.4	1.9	1.3	1.3	2.0	1.7	1.7	3.3	1.6	1.3	2.0
4	IHT 204	MH 2837	1.4	1.2	1.0	1.4	2.3	1.6	1.7	3.0	1.6	1.5	2.0
5	IHT 205	MH 2838	1.4	2.0	2.7	1.3	2.3	1.7	2.3	3.1	1.6	1.3	2.1
6	IHT 206	MH 2839	1.4	1.2	1.3	1.3	2.7	1.6	1.7	3.3	1.7	1.3	2.0
7	IHT 207	MH 2840	1.4	1.1	2.0	1.2	2.3	1.5	2.3	2.9	1.5	1.3	2.0
8	IHT 208	MH 2841	1.7	1.6	2.0	1.3	2.7	1.8	2.0	2.9	1.4	1.3	1.9
9	IHT 209	86M94 (Check)	1.4	1.2	1.0	1.3	2.0	1.5	1.7	2.9	1.6	1.3	1.9
10	IHT 210	MH 2842	1.4	1.5	1.7	1.3	2.7	1.7	1.7	3.6	1.7	1.3	2.1
11	IHT 211	MH 2843	1.4	1.1	1.3	1.2	2.3	1.5	2.3	3.1	1.6	1.3	2.1
12	IHT 212	MH 2844	1.4	1.9	2.3	1.2	2.3	1.7	2.0	3.0	1.7	1.3	2.0
13	IHT 213	MH 2845	1.2	1.1	1.0	1.3	2.3	1.5	2.7	3.3	1.8	1.3	2.3
14	IHT 214	MH 2846	1.3	1.9	1.3	1.1	2.7	1.7	2.0	3.4	1.6	1.7	2.2
15	IHT 215	PB 1852 (Check)	1.4	2.7	1.7	1.4	2.3	2.0	2.3	3.5	1.5	1.4	2.2
16	IHT 216	MH 2847	1.7	2.8	1.7	1.2	2.7	2.1	2.3	2.9	2.3	1.3	2.2
17	IHT 217	MH 2848	1.6	2.2	1.3	1.4	2.3	1.9	2.3	3.3	1.5	1.4	2.1
18	IHT 218	MH 2849	1.5	3.8	2.0	1.3	2.3	2.3	3.3	3.5	1.7	1.4	2.5
19	IHT 219	MH 2850	1.4	2.1	1.3	1.5	2.3	1.8	3.3	3.8	1.9	1.3	2.6
20	IHT 220	DHBH 1397 (Check)	1.5	2.5	1.3	1.3	2.0	1.8	2.3	3.6	1.5	1.4	2.2
21	IHT 221	MH 2851	1.8	3.0	3.0	1.6	2.3	2.2	4.7	3.7	2.0	1.4	2.9
22	IHT 222	MH 2852	1.3	1.1	1.3	1.3	3.0	1.7	2.3	3.2	1.6	1.3	2.1
23	IHT 223	MH 2853	1.5	1.5	1.3	1.3	2.3	1.7	2.3	3.5	1.6	1.5	2.2
24	IHT 224	MH 2854	1.5	1.1	2.7	1.4	3.0	1.7	3.3	3.3	1.9	1.6	2.5
25	IHT 225	MH 2855	1.5	2.3	1.0	1.4	2.0	1.8	2.3	4.3	1.6	1.5	2.4
26	IHT 226	MH 2856	1.6	1.4	1.7	1.2	3.0	1.8	2.3	2.9	1.6	1.6	2.1
27	IHT 227	AHB 1200 (Check)	1.4	1.1	1.7	1.2	2.0	1.4	2.3	3.0	1.5	1.1	2.0
28	IHT 228	MH 2857	1.4	1.7	1.0	1.3	2.3	1.7	2.7	2.7	1.8	1.7	2.2
29	IHT 229	MH 2858	1.5	2.2	1.3	1.3	2.7	1.9	2.7	3.8	1.5	1.5	2.4
30	IHT 230	MH 2859	1.3	2.1	2.0	1.2	2.0	1.7	1.7	3.1	1.5	1.3	1.9
31	IHT 231	MH 2860	1.5	1.3	1.3	1.2	2.7	1.7	2.3	3.3	1.5	1.7	2.2
32	IHT 232	MH 2861	1.3	2.5	1.3	1.2	3.0	2.0	1.7	2.5	1.5	1.5	1.8
33	IHT 233	MH 2862	1.7	1.4	1.7	1.2	3.0	1.8	2.3	3.5	1.9	1.5	2.3
34	IHT 234	MH 2863	1.3	1.0	1.7	1.3	3.0	1.6	2.3	3.9	1.7	1.7	2.4
		LOC. MEAN	1.5	1.8	1.6	1.3	2.5	1.7	2.3	3.3	1.6	1.4	2.2
		C.D. (5%)	0.2	0.4	1.1	0.2	0.7	0.6	0.9	0.6	0.3	0.3	0.5
		C.D. (1%)	0.3	0.5	1.4	0.3	1.0	0.8	1.2	0.8	0.4	0.4	0.7
		C.V. (%)	9.8	12.7	41.4	9.7	18.2	24.8	23.4	10.6	11.1	13.6	15.8
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.091	0.000	0.000	0.000	0.000	0.036

**LOCATION REJECTED DUE TO HIGH C.V. (i.e. > 30%): JPR2 41.4%

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Table I.39: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE A

S.No.	TEST CODE	ENTRY	JNS	MTR	UP MEAN	BWL	HSR	HAR MEAN	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	2.2	1.1	1.7	2.4	3.4	2.9	1.8	2.2	3.0	2.1	6
2	IHT 202	MH 2835	3.1	1.4	2.3	2.8	2.6	2.7	2.1	2.3	3.0	2.1	10
3	IHT 203	MH 2836	1.7	1.1	1.4	2.1	2.1	2.1	2.0	2.2	2.9	1.9	26
4	IHT 204	MH 2837	1.5	1.1	1.3	1.9	2.3	2.1	2.1	2.3	2.8	1.9	29
5	IHT 205	MH 2838	2.3	1.2	1.7	2.4	3.0	2.7	1.8	1.6	3.0	2.0	15
6	IHT 206	MH 2839	2.6	1.2	1.9	2.1	2.7	2.4	2.0	2.4	2.8	2.0	16
7	IHT 207	MH 2840	1.3	1.1	1.2	2.0	2.8	2.4	1.7	1.2	2.9	1.8	33
8	IHT 208	MH 2841	1.4	1.2	1.3	2.0	2.3	2.2	1.9	1.5	2.8	1.9	30
9	IHT 209	86M94 (Check)	1.3	1.1	1.2	1.9	2.2	2.1	1.8	1.2	2.9	1.7	34
10	IHT 210	MH 2842	1.9	1.2	1.6	1.8	2.1	2.0	2.4	2.2	2.9	2.0	20
11	IHT 211	MH 2843	2.1	1.1	1.6	1.8	2.2	2.0	2.2	1.4	2.8	1.9	31
12	IHT 212	MH 2844	1.5	1.1	1.3	2.3	2.3	2.3	2.0	1.7	2.8	1.9	28
13	IHT 213	MH 2845	2.3	1.2	1.8	2.2	2.9	2.6	1.7	1.4	2.9	2.0	21
14	IHT 214	MH 2846	1.4	1.1	1.3	3.0	2.3	2.7	1.7	1.3	2.8	2.0	24
15	IHT 215	PB 1852 (Check)	1.2	1.2	1.2	2.9	2.5	2.7	1.8	2.2	2.7	2.1	11
16	IHT 216	MH 2847	2.1	1.2	1.6	2.2	2.4	2.3	1.7	2.3	2.8	2.1	7
17	IHT 217	MH 2848	1.6	1.2	1.4	2.8	2.2	2.5	1.9	1.6	2.7	2.0	17
18	IHT 218	MH 2849	1.3	1.2	1.3	3.2	2.6	2.9	1.9	1.6	2.8	2.2	3
19	IHT 219	MH 2850	1.2	1.2	1.2	2.9	2.4	2.7	1.9	2.2	2.8	2.2	4
20	IHT 220	DHBH 1397 (Check)	1.5	1.2	1.4	2.3	2.5	2.4	1.9	2.2	2.9	2.1	14
21	IHT 221	MH 2851	1.5	1.3	1.4	2.9	3.1	3.0	2.3	3.0	3.0	2.5	1
22	IHT 222	MH 2852	1.4	1.2	1.3	1.9	2.8	2.3	2.1	2.1	2.8	2.0	23
23	IHT 223	MH 2853	1.7	1.1	1.4	2.4	2.8	2.6	1.9	1.8	2.7	2.0	19
24	IHT 224	MH 2854	2.1	1.2	1.7	2.9	2.7	2.8	1.9	1.6	2.8	2.1	5
25	IHT 225	MH 2855	2.4	1.3	1.8	2.4	3.0	2.7	3.2	2.1	3.0	2.3	2
26	IHT 226	MH 2856	2.3	1.1	1.7	2.5	2.4	2.5	1.9	2.2	2.9	2.1	13
27	IHT 227	AHB 1200 (Check)	1.3	1.1	1.2	2.4	2.4	2.4	1.4	2.1	2.7	1.8	32
28	IHT 228	MH 2857	1.4	1.2	1.3	2.5	2.6	2.6	1.1	1.6	2.8	1.9	25
29	IHT 229	MH 2858	1.3	1.1	1.2	2.6	2.8	2.7	1.9	2.1	2.9	2.1	8
30	IHT 230	MH 2859	1.7	1.1	1.4	2.5	2.3	2.4	1.4	2.3	3.0	1.9	27
31	IHT 231	MH 2860	1.6	1.1	1.3	2.1	2.3	2.2	1.9	2.2	2.8	2.0	22
32	IHT 232	MH 2861	1.7	1.0	1.4	2.8	2.8	2.8	1.8	1.5	2.9	2.0	18
33	IHT 233	MH 2862	1.4	1.1	1.2	2.7	2.5	2.6	1.9	2.2	2.8	2.1	12
34	IHT 234	MH 2863	1.4	1.2	1.3	2.3	2.8	2.6	2.0	3.1	2.7	2.1	9
LOC. MEAN			1.7	1.2	1.4	2.4	2.6	2.5	1.9	2.0	2.9	2.0	
C.D. (5%)			0.4	0.1	0.7	0.6	0.7	0.5	0.8	0.3	0.5	0.3	
C.D. (1%)			0.6	0.2	1.0	0.8	1.0	0.7	1.0	0.4	0.6	0.3	
C.V. (%)			15.5	7.7	22.4	15.1	17.2	14.4	25.2	10.5	9.8	17.9	
F (Prob)			0.000	0.000	0.605	0.000	0.000	0.291	0.000	0.000	0.000	0.000	

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Table I.40: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PANICLE LENGTH (cm) ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	JPR2	TBJ	ALW6	DAS	RAJ MEAN	TLJ	AND	JMR	SKN	GUJ MEAN
1	IHT 201	MH 2834	25	22	23	19	23	20	22	21	22	20	20	21
2	IHT 202	MH 2835	27	18	26	20	25	24	23	24	24	23	21	23
3	IHT 203	MH 2836	26	21	23	18	21	22	22	22	23	22	19	21
4	IHT 204	MH 2837	23	22	24	18	23	24	22	23	25	22	20	23
5	IHT 205	MH 2838	26	20	25	21	25	24	24	23	24	22	19	22
6	IHT 206	MH 2839	24	21	23	18	24	26	23	23	29	23	27	26
7	IHT 207	MH 2840	24	21	26	20	25	22	23	23	26	26	23	24
8	IHT 208	MH 2841	23	21	26	20	26	23	23	24	24	23	24	24
9	IHT 209	86M94 (Check)	24	24	23	21	25	24	24	24	25	24	22	24
10	IHT 210	MH 2842	24	23	23	20	24	24	23	22	25	25	23	24
11	IHT 211	MH 2843	27	30	28	21	28	28	27	25	27	27	24	26
12	IHT 212	MH 2844	24	23	25	21	25	24	23	26	26	25	22	25
13	IHT 213	MH 2845	23	22	23	20	24	24	23	23	26	22	22	23
14	IHT 214	MH 2846	21	28	26	22	26	26	25	26	29	27	25	27
15	IHT 215	PB 1852 (Check)	22	20	22	21	23	24	22	21	28	22	23	24
16	IHT 216	MH 2847	25	24	25	20	24	24	24	22	27	24	22	24
17	IHT 217	MH 2848	25	27	26	23	26	25	25	23	26	23	21	23
18	IHT 218	MH 2849	20	22	23	18	21	25	22	20	27	20	21	22
19	IHT 219	MH 2850	27	20	22	22	25	25	24	22	27	22	23	24
20	IHT 220	DHBH 1397 (Check)	23	26	22	21	22	25	23	21	23	20	19	21
21	IHT 221	MH 2851	23	25	24	22	24	24	23	22	25	21	20	22
22	IHT 222	MH 2852	24	25	24	22	24	24	24	22	28	23	23	24
23	IHT 223	MH 2853	26	23	27	23	26	26	25	27	28	26	26	27
24	IHT 224	MH 2854	24	22	24	22	26	25	24	21	27	19	22	22
25	IHT 225	MH 2855	22	20	21	20	21	24	21	20	26	22	20	22
26	IHT 226	MH 2856	25	20	24	21	23	23	23	24	24	20	21	22
27	IHT 227	AHB 1200 (Check)	24	20	23	20	22	24	22	23	27	25	22	24
28	IHT 228	MH 2857	24	25	25	20	22	25	23	22	26	22	19	22
29	IHT 229	MH 2858	24	28	22	18	22	24	23	22	25	22	21	22
30	IHT 230	MH 2859	23	31	27	21	26	26	26	24	26	26	23	25
31	IHT 231	MH 2860	31	19	28	25	30	28	27	32	28	35	25	30
32	IHT 232	MH 2861	21	22	25	20	20	24	22	21	27	20	22	23
33	IHT 233	MH 2862	25	24	25	22	27	26	25	26	27	25	22	25
34	IHT 234	MH 2863	23	20	22	18	24	25	22	24	26	23	23	24
LOC. MEAN			24	23	24	21	24	24	23	23	26	23	22	24
C.D. (5%)			3.0	2.0	3.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	3.0	2.0
C.D. (1%)			4.0	2.0	4.0	3.0	2.0	2.0	3.0	1.0	3.0	3.0	4.0	3.0
C.V. (%)			7.8	4.3	7.3	6.1	3.8	4.3	7.6	2.5	4.9	6.4	8.0	6.5
F (Prob)			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Table I.40: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PANICLE LENGTH (cm) ZONE A

S.No.	TEST CODE	ENTRY	JNS	MTR	UP MEAN	BWL	HSR	HAR MEAN	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	25	24	25	27	26	27	25	24	24	23	27
2	IHT 202	MH 2835	29	26	28	30	27	29	26	25	28	25	9
3	IHT 203	MH 2836	24	24	24	27	27	27	25	24	24	23	26
4	IHT 204	MH 2837	25	23	24	27	27	27	27	26	26	24	20
5	IHT 205	MH 2838	24	25	24	28	28	28	26	26	27	24	15
6	IHT 206	MH 2839	24	24	24	25	27	26	25	26	27	24	13
7	IHT 207	MH 2840	23	25	24	30	27	28	23	26	29	25	11
8	IHT 208	MH 2841	24	27	25	29	28	29	25	27	25	25	10
9	IHT 209	86M94 (Check)	23	25	24	27	27	27	26	26	27	25	11
10	IHT 210	MH 2842	24	24	24	27	27	27	25	25	26	24	16
11	IHT 211	MH 2843	23	26	25	29	28	29	29	29	28	27	2
12	IHT 212	MH 2844	26	25	25	28	27	28	26	28	25	25	8
13	IHT 213	MH 2845	21	24	22	24	26	25	25	21	27	23	24
14	IHT 214	MH 2846	22	27	25	29	28	29	27	27	28	26	5
15	IHT 215	PB 1852 (Check)	23	23	23	24	26	25	24	20	23	23	28
16	IHT 216	MH 2847	23	23	23	27	27	27	26	23	24	24	17
17	IHT 217	MH 2848	23	25	24	29	26	27	27	28	25	25	7
18	IHT 218	MH 2849	20	22	21	25	27	26	21	25	24	22	32
19	IHT 219	MH 2850	23	28	25	27	26	27	24	29	24	25	12
20	IHT 220	DHBH 1397 (Check)	23	22	22	24	27	26	23	22	24	23	29
21	IHT 221	MH 2851	22	22	22	27	28	28	25	22	25	23	21
22	IHT 222	MH 2852	23	26	25	26	27	27	25	26	23	24	14
23	IHT 223	MH 2853	22	27	25	30	27	29	26	31	28	27	3
24	IHT 224	MH 2854	22	25	23	26	27	27	24	27	27	24	18
25	IHT 225	MH 2855	22	22	22	25	27	26	24	28	23	23	31
26	IHT 226	MH 2856	24	22	23	28	26	27	26	23	24	23	22
27	IHT 227	AHB 1200 (Check)	22	24	23	28	27	27	22	21	23	23	23
28	IHT 228	MH 2857	23	22	23	27	26	26	29	23	26	24	19
29	IHT 229	MH 2858	23	24	23	26	27	26	21	23	22	23	25
30	IHT 230	MH 2859	24	27	26	29	28	28	29	31	28	26	4
31	IHT 231	MH 2860	25	31	28	37	27	32	29	32	28	29	1
32	IHT 232	MH 2861	23	22	22	25	27	26	23	22	24	23	30
33	IHT 233	MH 2862	23	24	24	30	26	28	25	30	24	25	6
34	IHT 234	MH 2863	23	28	26	27	27	27	26	26	25	24	16
		LOC. MEAN	23	25	24	27	27	27	25	26	25	24	
		C.D. (5%)	4.0	1.0	3.0	3.0	2.0	3.0	2.0	2.0	2.0	1.0	
		C.D. (1%)	5.0	1.0	4.0	3.0	3.0	5.0	2.0	3.0	2.0	2.0	
		C.V. (%)	10.3	2.3	6.5	5.8	5.3	6.1	3.7	5.5	4.1	7.0	
		F (Prob)	0.000	0.000	0.058	0.000	0.000	0.259	0.000	0.000	0.000	0.000	

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Table I.41: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	JPR2	ALW6	DAS	RAJ MEAN	TLJ	AND	JMR	SKN	GUJ MEAN
1	IHT 201	MH 2834	2.9	3.3	3.6	3.5	3.3	3.3	3.7	3.8	3.0	2.3	3.2
2	IHT 202	MH 2835	2.9	2.9	3.0	3.3	3.3	3.1	3.1	3.4	2.7	2.4	2.9
3	IHT 203	MH 2836	2.9	3.3	3.3	3.2	2.9	3.1	3.4	3.0	3.1	2.2	2.9
4	IHT 204	MH 2837	2.9	3.2	3.1	3.1	3.4	3.2	3.8	2.8	2.9	2.4	3.0
5	IHT 205	MH 2838	2.8	2.7	3.2	3.3	3.4	3.1	3.4	3.6	3.0	2.3	3.1
6	IHT 206	MH 2839	3.1	3.0	3.2	3.4	3.2	3.2	3.6	3.3	3.1	3.3	3.4
7	IHT 207	MH 2840	2.8	3.3	3.4	3.3	3.2	3.2	3.3	3.5	3.2	2.8	3.2
8	IHT 208	MH 2841	2.8	3.2	3.3	3.3	3.6	3.2	3.5	3.0	3.0	3.0	3.1
9	IHT 209	86M94 (Check)	3.0	2.6	3.2	3.2	3.2	3.1	3.5	3.5	2.9	2.9	3.2
10	IHT 210	MH 2842	3.0	3.3	3.3	3.4	3.2	3.3	3.5	2.9	3.3	2.9	3.2
11	IHT 211	MH 2843	2.6	3.4	3.2	3.2	3.5	3.2	3.3	3.2	3.1	3.1	3.2
12	IHT 212	MH 2844	3.1	3.3	3.3	3.5	3.6	3.4	3.8	3.0	3.4	2.8	3.3
13	IHT 213	MH 2845	2.7	3.1	3.1	3.1	2.9	3.0	3.2	3.8	2.7	2.9	3.2
14	IHT 214	MH 2846	2.9	3.5	3.1	3.4	3.4	3.3	3.8	3.3	3.2	3.3	3.4
15	IHT 215	PB 1852 (Check)	2.7	3.2	3.4	3.2	3.0	3.1	3.6	2.8	3.1	3.2	3.2
16	IHT 216	MH 2847	2.5	2.9	2.9	3.0	3.4	2.9	2.9	3.6	2.6	3.1	3.0
17	IHT 217	MH 2848	2.8	3.2	3.1	3.3	3.0	3.1	3.3	3.4	2.7	2.9	3.1
18	IHT 218	MH 2849	2.8	2.3	3.3	3.3	3.4	3.0	3.3	3.5	3.2	2.9	3.2
19	IHT 219	MH 2850	2.8	3.3	2.9	2.9	2.9	3.0	3.2	3.1	2.4	3.3	3.0
20	IHT 220	DHBH 1397 (Check)	2.5	2.7	3.0	3.2	3.5	3.0	3.2	3.4	2.8	2.8	3.1
21	IHT 221	MH 2851	2.5	2.7	2.8	2.7	3.4	2.8	2.4	3.7	2.2	3.0	2.8
22	IHT 222	MH 2852	2.5	3.9	2.9	3.0	3.1	3.1	3.4	3.1	2.7	3.4	3.2
23	IHT 223	MH 2853	2.7	3.5	3.1	3.1	3.1	3.1	3.4	3.9	2.5	3.8	3.4
24	IHT 224	MH 2854	2.8	3.3	3.1	3.3	3.3	3.2	3.1	3.5	2.6	3.3	3.1
25	IHT 225	MH 2855	2.8	3.2	2.8	3.1	3.2	3.0	3.2	3.6	2.9	3.2	3.2
26	IHT 226	MH 2856	2.8	3.1	3.3	3.4	3.5	3.2	3.5	3.6	2.8	3.2	3.3
27	IHT 227	AHB 1200 (Check)	2.5	2.5	3.0	3.1	3.0	2.8	3.6	3.2	2.8	3.4	3.3
28	IHT 228	MH 2857	2.8	2.9	3.2	3.0	3.1	3.0	3.6	3.5	2.7	3.1	3.2
29	IHT 229	MH 2858	2.8	3.2	2.7	3.0	3.7	3.1	3.5	3.5	2.8	3.3	3.3
30	IHT 230	MH 2859	3.1	3.2	3.2	3.4	4.0	3.4	3.7	3.9	3.7	3.6	3.7
31	IHT 231	MH 2860	2.5	4.1	2.4	2.6	3.1	3.0	3.0	3.2	2.5	3.9	3.1
32	IHT 232	MH 2861	2.9	3.6	3.3	3.0	3.2	3.2	3.6	2.9	2.6	3.6	3.2
33	IHT 233	MH 2862	2.8	3.2	3.1	3.1	3.0	3.0	3.3	3.9	2.8	3.5	3.4
34	IHT 234	MH 2863	2.8	2.8	3.1	3.5	3.5	3.2	3.8	3.3	3.3	3.7	3.5
		LOC. MEAN	2.8	3.2	3.1	3.2	3.3	3.1	3.4	3.4	2.9	3.1	3.2
		C.D. (5%)	0.2	0.3	0.4	0.2	0.3	0.3	0.2	0.2	0.3	0.1	0.4
		C.D. (1%)	0.3	0.3	0.5	0.3	0.4	0.5	0.2	0.2	0.5	0.2	0.5
		C.V. (%)	4.6	5.0	8.1	4.4	5.2	8.0	2.9	3.1	7.3	2.8	8.4
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.056	0.000	0.000	0.000	0.000	0.023

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CHAPTER I: BREEDING

Table I.41: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE A

S.No.	TEST CODE	ENTRY	JNS	MTR	UP MEAN	BWL	HSR	HAR MEAN	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	2.5	3.7	3.1	3.7	4.3	4.0	3.2	3.5	3.5	3.4	7
2	IHT 202	MH 2835	2.6	3.5	3.0	3.6	4.0	3.8	2.8	3.5	3.5	3.1	25
3	IHT 203	MH 2836	2.5	3.8	3.2	3.8	4.3	4.1	3.2	3.9	3.0	3.2	16
4	IHT 204	MH 2837	2.2	3.6	2.9	3.4	4.1	3.8	3.3	3.7	3.3	3.2	21
5	IHT 205	MH 2838	2.7	3.8	3.3	3.7	4.3	4.0	3.1	3.3	3.4	3.3	15
6	IHT 206	MH 2839	2.9	3.7	3.3	3.5	4.3	3.9	3.1	3.9	3.4	3.4	5
7	IHT 207	MH 2840	2.5	3.7	3.1	3.7	4.2	4.0	2.4	3.4	3.5	3.3	14
8	IHT 208	MH 2841	2.5	3.7	3.1	3.8	4.1	3.9	3.1	3.6	3.3	3.3	11
9	IHT 209	86M94 (Check)	2.7	3.6	3.1	3.7	4.4	4.1	3.2	3.6	3.5	3.3	10
10	IHT 210	MH 2842	2.4	3.8	3.1	4.0	4.4	4.2	3.3	3.9	3.4	3.4	6
11	IHT 211	MH 2843	2.4	4.1	3.3	3.6	4.2	3.9	3.0	3.7	3.5	3.3	9
12	IHT 212	MH 2844	2.5	3.5	3.0	3.8	4.3	4.1	3.1	4.0	3.4	3.4	3
13	IHT 213	MH 2845	2.3	3.5	2.9	3.3	4.1	3.7	2.5	3.1	3.3	3.1	29
14	IHT 214	MH 2846	2.5	4.1	3.3	4.1	4.5	4.3	3.1	3.4	3.7	3.5	2
15	IHT 215	PB 1852 (Check)	2.5	3.6	3.1	3.5	4.3	3.9	2.5	3.4	3.4	3.2	19
16	IHT 216	MH 2847	2.1	3.7	2.9	3.4	3.9	3.7	2.5	3.4	3.0	3.0	31
17	IHT 217	MH 2848	2.5	3.3	2.9	3.5	4.1	3.8	2.5	3.6	3.1	3.1	28
18	IHT 218	MH 2849	2.0	3.7	2.9	3.9	4.1	4.0	2.6	3.7	3.4	3.2	20
19	IHT 219	MH 2850	2.2	3.5	2.9	3.1	3.7	3.4	2.5	3.4	2.6	3.0	32
20	IHT 220	DHBH 1397 (Check)	2.2	3.9	3.0	3.7	4.3	4.0	2.5	3.6	3.5	3.2	23
21	IHT 221	MH 2851	2.3	3.5	2.9	3.2	4.1	3.7	2.4	2.9	2.4	2.9	33
22	IHT 222	MH 2852	2.4	3.3	2.9	3.4	4.0	3.7	2.5	3.5	3.0	3.1	27
23	IHT 223	MH 2853	2.7	3.9	3.3	3.4	4.1	3.8	2.4	3.8	3.0	3.3	13
24	IHT 224	MH 2854	2.7	3.6	3.1	3.4	3.9	3.7	2.6	3.5	3.1	3.2	22
25	IHT 225	MH 2855	2.5	3.5	3.0	3.6	4.1	3.9	2.0	3.6	3.0	3.1	26
26	IHT 226	MH 2856	2.3	3.7	3.0	3.9	4.1	4.0	3.1	3.6	3.4	3.3	8
27	IHT 227	AHB 1200 (Check)	2.5	3.3	2.9	3.9	4.1	4.0	2.7	3.4	3.3	3.1	26
28	IHT 228	MH 2857	2.4	3.7	3.1	3.4	4.3	3.8	2.8	3.2	3.0	3.2	24
29	IHT 229	MH 2858	2.2	3.7	3.0	3.6	3.9	3.8	2.6	3.7	3.2	3.2	18
30	IHT 230	MH 2859	2.3	4.2	3.3	4.3	4.4	4.4	3.3	4.3	3.4	3.6	1
31	IHT 231	MH 2860	2.4	3.9	3.1	3.4	4.0	3.7	2.5	3.1	2.7	3.1	30
32	IHT 232	MH 2861	2.2	3.7	3.0	3.9	4.2	4.1	3.3	3.5	3.0	3.3	12
33	IHT 233	MH 2862	2.0	3.8	2.9	3.5	4.2	3.8	2.6	3.6	3.2	3.2	17
34	IHT 234	MH 2863	2.1	3.9	3.0	3.8	4.2	4.0	3.3	4.0	3.1	3.4	4
		LOC. MEAN	2.4	3.7	3.1	3.6	4.2	3.9	2.8	3.6	3.2	3.2	
		C.D. (5%)	0.4	0.2	0.7	0.4	0.4	0.4	0.2	0.4	0.4	0.2	
		C.D. (1%)	0.5	0.3	1.0	0.5	0.5	0.5	0.3	0.5	0.5	0.2	
		C.V. (%)	10.1	3.4	13.0	6.3	5.6	4.9	4.8	6.9	7.6	7.9	
		F (Prob)	0.000	0.000	0.796	0.000	0.000	0.005	0.000	0.000	0.000	0.000	

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Table I.42: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 1000- SEED Wt.(g) ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	JPR2	ALW6	DAS	RAJ MEAN	TLJ	JMR	GUJ MEAN
1	IHT 201	MH 2834	9.8	7.8	10.2	10.3	8.2	9.3	12.0	11.4	11.7
2	IHT 202	MH 2835	9.1	11.0	8.9	9.7	12.2	10.2	13.5	12.2	12.8
3	IHT 203	MH 2836	9.6	9.1	7.3	7.3	13.2	9.3	14.2	11.4	12.8
4	IHT 204	MH 2837	8.6	7.2	8.2	8.0	11.1	8.6	14.5	11.8	13.2
5	IHT 205	MH 2838	9.6	8.6	8.8	9.0	10.2	9.2	12.3	11.3	11.8
6	IHT 206	MH 2839	8.2	7.2	7.3	9.7	8.5	8.2	11.9	10.3	11.1
7	IHT 207	MH 2840	8.7	8.6	10.5	11.3	12.1	10.3	12.0	11.2	11.6
8	IHT 208	MH 2841	9.2	8.5	8.3	9.7	10.5	9.2	12.5	11.8	12.2
9	IHT 209	86M94 (Check)	10.0	8.7	8.2	9.0	11.4	9.5	13.1	10.9	12.0
10	IHT 210	MH 2842	9.6	8.6	10.2	9.7	9.7	9.5	12.0	10.7	11.3
11	IHT 211	MH 2843	7.9	10.4	9.9	10.0	10.1	9.7	13.1	12.2	12.7
12	IHT 212	MH 2844	9.1	7.6	9.1	10.3	9.2	9.1	12.4	10.3	11.4
13	IHT 213	MH 2845	8.7	7.8	8.2	8.7	10.3	8.7	9.9	10.0	10.0
14	IHT 214	MH 2846	7.7	9.1	7.6	10.3	10.6	9.1	12.7	11.6	12.2
15	IHT 215	PB 1852 (Check)	9.2	10.0	8.8	10.3	10.4	9.7	12.7	11.3	12.0
16	IHT 216	MH 2847	8.8	8.6	8.0	8.7	11.7	9.2	13.4	10.4	11.9
17	IHT 217	MH 2848	8.8	8.8	8.0	10.3	11.4	9.5	11.0	10.9	10.9
18	IHT 218	MH 2849	8.6	9.8	8.4	10.0	10.5	9.5	10.2	9.8	10.0
19	IHT 219	MH 2850	8.8	10.8	8.9	9.7	12.6	10.1	12.4	10.5	11.5
20	IHT 220	DHBH 1397 (Check)	9.1	8.8	9.5	8.7	12.4	9.7	12.8	10.6	11.7
21	IHT 221	MH 2851	8.8	9.3	8.6	8.0	10.1	9.0	11.7	9.0	10.4
22	IHT 222	MH 2852	8.4	8.6	8.2	9.0	9.8	8.8	11.5	10.3	10.9
23	IHT 223	MH 2853	8.5	9.8	7.2	9.7	8.3	8.7	12.0	9.4	10.7
24	IHT 224	MH 2854	9.0	9.6	9.0	9.3	9.2	9.2	10.3	9.7	10.0
25	IHT 225	MH 2855	8.4	7.1	8.0	6.7	7.6	7.6	12.4	7.6	10.0
26	IHT 226	MH 2856	8.3	7.2	8.5	7.7	8.9	8.1	10.5	9.0	9.7
27	IHT 227	AHB 1200 (Check)	9.0	7.3	7.8	8.0	11.3	8.7	12.2	10.8	11.5
28	IHT 228	MH 2857	8.9	7.0	8.3	9.0	9.8	8.6	11.7	10.2	11.0
29	IHT 229	MH 2858	8.3	6.7	8.2	8.0	9.6	8.2	11.7	9.6	10.7
30	IHT 230	MH 2859	8.8	7.6	8.5	10.7	10.4	9.2	12.4	11.6	12.0
31	IHT 231	MH 2860	8.9	6.9	7.1	8.0	8.6	7.9	11.5	10.1	10.8
32	IHT 232	MH 2861	8.5	7.6	7.5	7.3	9.6	8.1	10.6	10.1	10.4
33	IHT 233	MH 2862	8.4	7.8	8.4	8.3	11.6	8.9	10.2	10.3	10.2
34	IHT 234	MH 2863	9.8	7.0	8.9	10.3	9.8	9.2	11.2	10.4	10.8
		LOC. MEAN	8.9	8.4	8.5	9.1	10.3	9.0	12.0	10.6	11.3
		C.D. (5%)	1.4	0.7	1.3	1.0	0.3	1.2	0.5	0.9	2.0
		C.D. (1%)	1.9	0.9	1.7	1.3	0.4	1.5	0.6	1.1	2.7
		C.V. (%)	9.8	5.1	9.3	6.8	1.8	9.5	2.3	4.9	8.8
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.013

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Table I.42: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 1000- SEED Wt.(g) ZONE A

S.No.	TEST CODE	ENTRY	MTR	BWL	HSR	HAR MEAN	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	11.0	11.7	11.2	11.4	11.5	12.9	12.6	10.8	7
2	IHT 202	MH 2835	10.6	11.2	12.8	12.0	11.1	10.8	12.3	11.2	2
3	IHT 203	MH 2836	10.1	11.1	13.5	12.3	11.0	11.8	12.7	10.9	3
4	IHT 204	MH 2837	10.4	10.8	14.8	12.8	11.1	12.5	11.7	10.8	5
5	IHT 205	MH 2838	12.0	11.5	12.2	11.8	10.5	12.8	11.5	10.8	8
6	IHT 206	MH 2839	10.4	10.0	9.7	9.9	11.2	12.2	11.4	9.9	25
7	IHT 207	MH 2840	10.3	12.1	12.2	12.2	11.4	12.5	13.0	11.2	1
8	IHT 208	MH 2841	10.1	9.4	12.2	10.8	11.3	10.8	10.5	10.4	17
9	IHT 209	86M94 (Check)	11.1	12.4	12.5	12.5	11.8	11.1	10.5	10.8	6
10	IHT 210	MH 2842	10.2	12.9	11.5	12.2	11.3	11.9	10.4	10.7	14
11	IHT 211	MH 2843	9.9	9.1	11.3	10.2	11.5	13.0	11.4	10.8	11
12	IHT 212	MH 2844	9.9	9.8	10.4	10.1	11.7	13.3	9.8	10.2	20
13	IHT 213	MH 2845	10.5	11.1	9.5	10.3	11.6	8.7	11.1	9.7	30
14	IHT 214	MH 2846	10.3	10.0	12.5	11.3	12.1	13.5	11.7	10.8	9
15	IHT 215	PB 1852 (Check)	10.4	10.1	12.2	11.2	10.7	11.7	11.2	10.7	12
16	IHT 216	MH 2847	10.3	10.9	11.8	11.3	11.5	11.1	8.8	10.3	18
17	IHT 217	MH 2848	10.1	10.3	12.4	11.3	11.2	13.3	10.4	10.5	15
18	IHT 218	MH 2849	10.7	10.5	12.1	11.3	11.3	10.5	10.7	10.2	19
19	IHT 219	MH 2850	10.3	9.8	12.3	11.1	11.2	10.3	11.0	10.7	13
20	IHT 220	DHBH 1397 (Check)	10.6	9.7	12.1	10.9	11.3	13.3	12.1	10.8	4
21	IHT 221	MH 2851	11.1	9.8	9.6	9.7	11.1	10.3	8.9	9.7	28
22	IHT 222	MH 2852	10.8	10.2	11.2	10.7	11.5	9.5	9.3	9.9	23
23	IHT 223	MH 2853	10.3	10.4	11.2	10.8	12.0	9.9	9.3	9.8	26
24	IHT 224	MH 2854	10.6	9.8	10.5	10.1	12.0	11.3	10.2	10.0	22
25	IHT 225	MH 2855	10.6	9.8	10.0	9.9	11.2	8.9	9.4	9.0	34
26	IHT 226	MH 2856	10.9	8.8	10.0	9.4	11.9	10.0	8.8	9.3	33
27	IHT 227	AHB 1200 (Check)	10.5	8.7	11.8	10.2	12.0	14.0	9.2	10.2	21
28	IHT 228	MH 2857	10.3	10.0	11.2	10.6	11.0	10.1	10.6	9.9	24
29	IHT 229	MH 2858	10.0	9.8	10.7	10.3	11.5	10.6	10.6	9.6	31
30	IHT 230	MH 2859	10.6	8.8	12.8	10.8	11.7	13.4	12.7	10.8	10
31	IHT 231	MH 2860	10.7	10.6	11.7	11.1	11.7	10.9	10.6	9.8	27
32	IHT 232	MH 2861	10.3	9.1	11.8	10.4	10.9	12.3	9.4	9.6	32
33	IHT 233	MH 2862	10.4	8.4	10.9	9.7	11.2	10.4	9.9	9.7	29
34	IHT 234	MH 2863	10.6	12.2	11.5	11.9	11.7	10.6	10.8	10.4	16
LOC. MEAN			10.5	10.3	11.6	11.0	11.4	11.5	10.7	10.3	
C.D. (5%)			0.3	0.8	1.7	0.9	1.3	0.6	1.3	0.8	
C.D. (1%)			0.4	1.1	2.3	1.1	1.8	0.8	1.8	1.1	
C.V. (%)			1.9	4.8	9.2	4.9	7.1	3.0	7.7	9.1	
F (Prob)			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.43: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	JPR2	ALW6	DAS	RAJ MEAN	TLJ	AND	JMR	SKN	GUJ MEAN
1	IHT 201	MH 2834	71	85	128	78	79	88	60	70	85	86	75
2	IHT 202	MH 2835	70	34	128	70	80	77	60	71	66	86	71
3	IHT 203	MH 2836	72	58	135	77	75	83	54	67	102	85	77
4	IHT 204	MH 2837	65	80	141	76	78	88	56	71	107	86	80
5	IHT 205	MH 2838	63	75	129	80	77	85	64	70	103	81	79
6	IHT 206	MH 2839	67	64	136	79	79	85	56	67	101	83	77
7	IHT 207	MH 2840	66	82	134	79	81	88	55	69	103	89	79
8	IHT 208	MH 2841	69	79	137	77	77	88	54	73	107	86	80
9	IHT 209	86M94 (Check)	64	90	129	79	79	88	59	70	110	87	82
10	IHT 210	MH 2842	72	102	137	79	74	93	57	75	106	93	83
11	IHT 211	MH 2843	67	84	129	77	79	87	56	70	102	90	80
12	IHT 212	MH 2844	73	84	125	80	76	88	62	73	103	86	81
13	IHT 213	MH 2845	67	61	138	77	77	84	53	70	108	88	80
14	IHT 214	MH 2846	65	54	140	73	81	83	54	73	100	88	79
15	IHT 215	PB 1852 (Check)	63	78	134	80	77	86	52	67	98	81	74
16	IHT 216	MH 2847	66	55	137	78	81	84	55	72	105	87	80
17	IHT 217	MH 2848	67	74	133	76	75	85	58	70	106	88	81
18	IHT 218	MH 2849	69	71	140	80	79	88	61	71	100	85	79
19	IHT 219	MH 2850	65	78	128	72	81	85	56	71	90	86	76
20	IHT 220	DHBH 1397 (Check)	66	76	139	80	78	88	58	70	103	87	80
21	IHT 221	MH 2851	66	76	131	79	78	86	63	74	81	82	75
22	IHT 222	MH 2852	69	54	139	78	77	84	54	70	91	83	75
23	IHT 223	MH 2853	65	81	140	72	77	87	56	69	90	89	76
24	IHT 224	MH 2854	64	90	118	79	77	86	68	70	91	88	79
25	IHT 225	MH 2855	64	68	132	69	78	82	53	71	107	85	79
26	IHT 226	MH 2856	64	74	137	75	79	86	53	69	109	81	78
27	IHT 227	AHB 1200 (Check)	65	57	125	72	77	79	51	71	102	80	76
28	IHT 228	MH 2857	64	73	131	75	80	85	52	67	99	89	77
29	IHT 229	MH 2858	63	72	136	72	75	84	52	70	108	83	78
30	IHT 230	MH 2859	67	47	113	77	74	76	58	70	102	89	80
31	IHT 231	MH 2860	69	78	139	78	80	89	62	74	112	90	85
32	IHT 232	MH 2861	65	61	123	77	77	81	54	69	101	88	78
33	IHT 233	MH 2862	63	87	116	72	78	83	54	68	101	88	78
34	IHT 234	MH 2863	67	66	135	79	78	85	59	72	111	89	83
		LOC. MEAN	67	72	132	76	78	85	57	70	100	86	78
		C.D. (5%)	7.0	25.0	15.0	7.0	5.0	11.0	9.0	7.0	22.0	7.0	8.0
		C.D. (1%)	9.0	33.0	20.0	9.0	6.0	15.0	12.0	9.0	29.0	10.0	10.0
		C.V. (%)	6.1	21.3	7.1	5.3	3.7	9.1	9.6	5.8	13.2	5.3	7.2
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.222	0.000	0.000	0.000	0.000	0.788

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Table I.43: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE A

S.No.	TEST CODE	ENTRY	JNS	MTR	UP MEAN	BWL	HSR	HAR MEAN	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	57	83	70	82	48	65	59	82	85	77	14
2	IHT 202	MH 2835	52	38	45	74	53	64	16	82	79	66	30
3	IHT 203	MH 2836	59	85	72	98	50	74	53	81	81	77	19
4	IHT 204	MH 2837	55	82	69	97	47	72	59	81	78	79	8
5	IHT 205	MH 2838	69	88	79	91	49	70	70	81	81	79	5
6	IHT 206	MH 2839	41	78	60	96	50	73	70	82	76	76	22
7	IHT 207	MH 2840	57	85	71	102	50	76	74	81	71	80	2
8	IHT 208	MH 2841	61	86	74	83	47	65	82	80	71	79	6
9	IHT 209	86M94 (Check)	54	88	71	94	47	71	62	81	66	79	9
10	IHT 210	MH 2842	54	87	71	88	50	69	78	81	81	82	1
11	IHT 211	MH 2843	54	81	67	86	51	68	59	81	72	77	15
12	IHT 212	MH 2844	49	84	67	84	49	67	65	81	84	79	9
13	IHT 213	MH 2845	43	88	66	81	49	65	72	80	74	77	21
14	IHT 214	MH 2846	52	82	67	96	44	70	42	81	80	75	25
15	IHT 215	PB 1852 (Check)	61	89	75	91	47	69	64	80	71	77	17
16	IHT 216	MH 2847	55	88	71	95	49	72	67	80	71	78	12
17	IHT 217	MH 2848	40	88	64	86	49	68	58	80	81	77	18
18	IHT 218	MH 2849	51	89	70	101	47	74	75	80	75	80	4
19	IHT 219	MH 2850	46	80	63	82	49	66	57	80	83	75	26
20	IHT 220	DHBH 1397 (Check)	57	89	73	93	49	71	52	80	70	78	11
21	IHT 221	MH 2851	51	82	67	88	49	69	73	80	76	77	20
22	IHT 222	MH 2852	56	84	70	101	40	71	55	80	85	76	24
23	IHT 223	MH 2853	53	89	71	81	43	62	70	80	79	77	16
24	IHT 224	MH 2854	44	85	64	79	48	64	65	80	81	77	21
25	IHT 225	MH 2855	46	89	68	90	49	69	63	80	78	76	23
26	IHT 226	MH 2856	57	89	73	92	51	71	72	81	80	79	7
27	IHT 227	AHB 1200 (Check)	55	87	71	83	49	66	74	80	71	75	27
28	IHT 228	MH 2857	61	87	74	83	51	67	67	81	78	77	13
29	IHT 229	MH 2858	46	84	65	80	48	64	73	81	83	77	21
30	IHT 230	MH 2859	54	84	69	80	48	64	51	80	80	73	29
31	IHT 231	MH 2860	45	87	66	92	45	69	57	81	71	79	10
32	IHT 232	MH 2861	36	88	62	81	46	64	57	80	71	73	29
33	IHT 233	MH 2862	48	82	65	80	49	64	44	80	81	75	28
34	IHT 234	MH 2863	60	88	74	89	48	68	85	80	71	80	3
		LOC. MEAN	52	84	68	88	48	68	63	81	77	77	
		C.D. (5%)	12.0	7.0	12.0	6.0	7.0	13.0	16.0	1.0	5.0	5.0	
		C.D. (1%)	16.0	9.0	16.0	9.0	9.0	18.0	21.0	2.0	7.0	6.0	
		C.V. (%)	14.2	5.0	8.4	4.5	9.1	7.6	15.4	0.9	4.4	8.6	
		F (Prob)	0.000	0.000	0.792	0.000	0.000	0.023	0.000	0.000	0.000	0.000	

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Table I.44: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 SEED SET (%) UNDER BAG ZONE A

S.No.	TEST CODE	ENTRY	BKR	JPR	JPR2	ALW6	DAS	RAJ MEAN	JMR	JNS	MTR	UP MEAN
1	IHT 201	MH 2834	50	93	98	63	98	81	75	100	68	84
2	IHT 202	MH 2835	47	97	88	73	98	81	67	100	55	78
3	IHT 203	MH 2836	40	98	43	40	97	64	-	100	58	79
4	IHT 204	MH 2837	52	95	37	17	95	59	-	100	80	90
5	IHT 205	MH 2838	48	92	92	50	92	75	53	100	78	89
6	IHT 206	MH 2839	40	100	50	10	98	60	-	100	13	57
7	IHT 207	MH 2840	42	100	97	47	97	76	61	100	68	84
8	IHT 208	MH 2841	47	97	97	63	95	80	63	100	64	82
9	IHT 209	86M94 (Check)	50	93	98	60	95	79	69	100	77	88
10	IHT 210	MH 2842	47	92	99	53	95	77	73	100	77	88
11	IHT 211	MH 2843	40	97	95	57	100	78	54	100	39	70
12	IHT 212	MH 2844	50	95	100	63	95	81	69	100	58	79
13	IHT 213	MH 2845	47	100	92	60	98	79	65	100	37	68
14	IHT 214	MH 2846	48	95	91	70	93	80	65	100	68	84
15	IHT 215	PB 1852 (Check)	43	93	95	30	90	70	74	100	65	83
16	IHT 216	MH 2847	43	90	99	57	90	76	62	100	63	82
17	IHT 217	MH 2848	52	87	95	60	100	79	66	100	73	87
18	IHT 218	MH 2849	48	92	93	43	97	75	64	100	43	71
19	IHT 219	MH 2850	60	93	-	8	98	65	-	100	55	78
20	IHT 220	DHBH 1397 (Check)	45	92	83	57	98	75	29	100	68	84
21	IHT 221	MH 2851	40	87	92	60	100	76	21	93	60	77
22	IHT 222	MH 2852	45	90	97	73	95	80	75	100	58	79
23	IHT 223	MH 2853	40	92	98	57	92	76	68	100	72	86
24	IHT 224	MH 2854	43	100	98	73	100	83	69	100	79	90
25	IHT 225	MH 2855	43	78	-	-	97	73	-	100	6	53
26	IHT 226	MH 2856	43	87	92	67	95	77	67	100	68	84
27	IHT 227	AHB 1200 (Check)	53	88	73	47	98	72	39	100	57	78
28	IHT 228	MH 2857	40	83	97	60	95	75	26	100	56	78
29	IHT 229	MH 2858	52	83	73	40	88	67	34	100	57	79
30	IHT 230	MH 2859	48	92	92	63	100	79	73	100	43	71
31	IHT 231	MH 2860	40	90	100	70	98	80	69	100	48	74
32	IHT 232	MH 2861	42	77	82	57	95	70	37	100	58	79
33	IHT 233	MH 2862	48	87	93	53	70	70	63	100	76	88
34	IHT 234	MH 2863	40	100	100	67	98	81	80	100	79	90
		LOC. MEAN	46	92	88	54	95	75	60	100	60	80
		C.D. (5%)	11.0	5.0	10.0	16.0	16.0	15.0	17.0	3.0	11.0	-
		C.D. (1%)	15.0	6.0	13.0	21.0	22.0	20.0	23.0	4.0	14.0	-
		C.V. (%)	14.9	3.1	6.8	18.1	10.4	15.0	17.3	2.0	10.9	-
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	0.000

Contd..

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Table I.44: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 SEED SET (%) UNDER BAG ZONE A

S.No.	TEST CODE	ENTRY	HSR	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 201	MH 2834	96	100	73	94	84	3
2	IHT 202	MH 2835	92	100	67	91	81	8
3	IHT 203	MH 2836	23	73	75	35	62	32
4	IHT 204	MH 2837	82	90	70	58	70	29
5	IHT 205	MH 2838	92	100	72	62	77	19
6	IHT 206	MH 2839	83	100	67	43	64	31
7	IHT 207	MH 2840	85	100	70	85	79	14
8	IHT 208	MH 2841	95	100	72	78	81	10
9	IHT 209	86M94 (Check)	93	100	82	85	84	5
10	IHT 210	MH 2842	95	100	77	95	84	4
11	IHT 211	MH 2843	86	87	67	88	76	24
12	IHT 212	MH 2844	91	100	92	87	83	6
13	IHT 213	MH 2845	75	100	60	80	76	22
14	IHT 214	MH 2846	95	100	62	87	81	9
15	IHT 215	PB 1852 (Check)	82	100	63	82	76	21
16	IHT 216	MH 2847	90	100	60	87	78	16
17	IHT 217	MH 2848	88	87	72	92	81	11
18	IHT 218	MH 2849	92	100	60	80	76	23
19	IHT 219	MH 2850	28	63	65	17	59	33
20	IHT 220	DHBH 1397 (Check)	96	87	72	92	77	20
21	IHT 221	MH 2851	91	100	60	88	74	25
22	IHT 222	MH 2852	98	100	60	90	82	7
23	IHT 223	MH 2853	97	83	52	83	78	17
24	IHT 224	MH 2854	90	100	72	90	85	2
25	IHT 225	MH 2855	-	73	62	10	59	34
26	IHT 226	MH 2856	93	100	65	72	79	15
27	IHT 227	AHB 1200 (Check)	78	100	53	72	72	27
28	IHT 228	MH 2857	62	77	67	68	69	30
29	IHT 229	MH 2858	85	100	60	87	72	28
30	IHT 230	MH 2859	96	100	65	94	80	12
31	IHT 231	MH 2860	87	100	63	90	80	13
32	IHT 232	MH 2861	83	83	83	83	73	26
33	IHT 233	MH 2862	95	100	58	87	78	18
34	IHT 234	MH 2863	96	100	62	93	85	1
LOC. MEAN			85	94	67	77	76	
C.D. (5%)			19.0	7.0	5.0	12.0	8.0	
C.D. (1%)			25.0	9.0	7.0	16.0	11.0	
C.V. (%)			13.5	4.3	4.8	9.8	11.1	
F (Prob)			0.000	0.000	0.000	0.000	0.001	

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Table I.45: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 ZONE A

GRAIN QUALITY: IRON CONTENT (ppm)																		
S.No.	TEST CODE	ENTRY	JPR	JPR2	ALW6	DAS	TLJ	AND	JMR	SKN	MTR	BWL	HSR	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 207	MH 2840	33	37	43	43	54	40	40	46	55	63	58	55	36	57	47	6
2	IHT 209	86M94 (Check)	38	38	39	33	38	53	53	41	49	49	60	53	49	62	47	6
3	IHT 210	MH 2842	30	40	44	32	53	50	50	43	46	50	66	64	58	61	49	5
4	IHT 215	PB 1852 (Check)	39	45	55	41	55	46	46	48	55	57	68	63	53	59	52	4
5	IHT 220	DHBH 1397 (Check)	37	37	43	46	60	55	55	47	58	49	76	59	51	67	53	3
6	IHT 227	AHB 1200 (Check)	49	52	72	51	63	71	71	61	74	58	75	92	70	75	67	1
7	IHT 234	MH 2863	38	44	48	40	57	59	59	53	53	53	65	64	53	68	54	2

Table I.46: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 ZONE A

GRAIN QUALITY: ZINC CONTENT (ppm)																		
S.No.	TEST CODE	ENTRY	JPR	JPR2	ALW6	DAS	TLJ	AND	JMR	SKN	MTR	BWL	HSR	GLR	LDA	NDL	ZONE MEAN	RANK
1	IHT 207	MH 2840	32	35	31	24	29	54	35	39	20	37	48	40	37	39	36	5
2	IHT 209	86M94 (Check)	32	40	30	20	28	38	43	38	22	46	50	35	47	40	36	5
3	IHT 210	MH 2842	26	34	25	16	23	53	37	36	18	32	51	32	48	32	33	6
4	IHT 215	PB 1852 (Check)	32	36	34	24	30	55	40	41	20	39	56	45	43	36	38	4
5	IHT 220	DHBH 1397 (Check)	37	43	35	26	33	60	39	40	21	44	62	46	47	40	41	1
6	IHT 227	AHB 1200 (Check)	34	43	25	21	33	63	44	40	20	44	56	39	41	37	39	3
7	IHT 234	MH 2863	44	42	28	22	31	57	46	46	21	35	55	38	51	49	40	2

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Table I.47: INITIAL HYBRID TRIAL (Medium) KHARIF 2024 EXPERIMENTAL DETAILS ZONE B

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizers			Insecticide
							N	P	K	
MAHARASHTRA										
Aurangabad (NARP)	MB	7.5	13.7.24	6.11.24	Nil	Nil	60	30	30	Nil
Paithan(Nath BioGenes)	BCS	-	8.7.24	21.10.24	Nil	Nil	-	-	-	Nil
Dhule (MPKV)	MB	8.6	4.7.24	15.10.24	28.7.24	Nil	60	30	0	Nil
Pachora(Nirmal Seed)	MB	7.6	1.7.24	3.10.24	29.7.24	1.7.24	100	50	50	Nil
KARNATAKA										
VIjayapur (UAS, Dharwad)	SB	8.7	6.7.24	25.10.24	16.8.24	Nil	50	25	0	Nil
Malnoor (UAS, Raichur)	S	7.5	12.7.24	27.11.24	31.7.24	Nil	50	50	0	Emamectin Benzoate
Dharwad (KSSC Ltd)	SRS	-	18.8.24	3.12.24	Nil	Nil	100	50	25	Nil
ANDHRA PRADESH										
Ananthapuram (ANGRAU)	A	6.7	9.8.24	As Per Maturity	5.9.24	As Per Required	60	30	20	Nil
Perumallapalle (ANGRAU)	SCL	7.3	6.7.24	9.10.24	10.8.24	As Per Required	80	40	30	Nil
TELANGANA										
Palem (PJ TSAU)	RSL	7.0	9.7.24	25.10.24	27.4,12.8.24	Nil	60	40	40	Nil
TAMIL NADU										
Coimbatore(TNAU)	CL	7.8	29.6.24	6.10.24	Nil	29.6, 17.7, 12.8, 3.9, 18.9, 1.10.24	80	40	40	Nil
ODISHA										
Semiliguda (OUAT)	SL	-	3.7.24	As Per Maturity	Nil	Nil	60	30	30	Nil

SB=Shallow Black, MB=Medium Black, CL=Clay Loam, SCL=Sandy Clay Loam, SL=Sandy Loam, SRS=Shallow Red Soil, A=Alfisols, S=Shallow, BCS=Black Cotton Soil

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Table I.48: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	DHR1***	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	IHT 201	MH 2834	2466	3164	3147	3252	3007	2959	2867	743	2913	2305	2559	2432	3678	2969	1867	2839	19
2	IHT 202	MH 2835	2079	2776	2162	2087	2276	2961	1958	558	2459	2467	2462	2465	2414	3854	1078	2391	31
3	IHT 203	MH 2836	2333	4012	2035	3712	3023	3238	2284	983	2761	2459	2506	2483	3167	2596	3233	2871	18
4	IHT 204	MH 2837	2550	4665	2680	3318	3303	3305	2726	931	3015	2228	1988	2108	3239	4283	4167	3195	12
5	IHT 205	MH 2838	2767	3467	2350	3207	2948	3115	2411	969	2763	1996	2726	2361	2600	4881	2578	2918	17
6	IHT 206	MH 2839	3040	4242	2526	3727	3384	2511	1863	878	2187	2221	3367	2794	2583	3119	3033	2930	16
7	IHT 207	MH 2840	2969	6467	3586	3874	4224	3681	3191	1717	3436	2554	3576	3065	3889	4453	4144	3853	2
8	IHT 208	MH 2841	3182	4189	2706	3787	3466	3429	3042	952	3236	1812	4066	2939	3278	3883	2111	3226	11
9	IHT 209	AHB 1269 (Check)	2699	2655	1819	3219	2598	2967	2657	646	2812	1712	2972	2342	2733	3144	1956	2594	26
10	IHT 210	MH 2842	3358	6428	3881	4441	4527	2831	3341	1363	3086	2773	4751	3762	4000	3538	5956	4118	1
11	IHT 211	MH 2843	2491	4046	3145	3195	3219	2758	2830	1021	2794	2515	4376	3445	2375	3791	6156	3425	8
12	IHT 212	MH 2844	3042	3878	2450	3012	3095	2849	2843	829	2846	2063	3614	2838	2150	3567	1700	2833	20
13	IHT 213	MH 2845	2660	3341	2497	3207	2926	2618	3730	570	3174	1307	2566	1936	2244	3141	2217	2684	23
14	IHT 214	MH 2846	3192	4232	3239	4733	3849	3162	2543	677	2853	1659	3613	2636	4211	3196	4633	3492	6
15	IHT 215	86M01 (Check)	3508	3926	2885	4210	3632	2894	3737	1325	3315	2578	4006	3292	3114	3108	3856	3438	7
16	IHT 216	MH 2847	3354	2839	2926	4610	3432	3300	3643	1242	3472	2085	2268	2176	3656	2656	4789	3284	10
17	IHT 217	MH 2848	3380	3822	3077	4111	3598	2854	2841	795	2848	2142	2443	2293	3214	3054	2478	3038	15
18	IHT 218	MH 2849	3258	4154	3072	3333	3454	3188	3172	1781	3180	1926	2474	2200	3286	2753	3889	3137	13
19	IHT 219	MH 2850	2512	3036	2562	2883	2748	2630	2501	848	2565	2262	3595	2928	2583	3058	1344	2633	25
20	IHT 220	Pratap (Check)	2159	1722	1754	2012	1912	2985	2579	745	2782	2361	2382	2372	2008	2566	739	2115	33
21	IHT 221	MH 2851	2007	2314	1844	2270	2109	2472	2443	316	2458	1515	1197	1356	2031	2758	1244	2009	34
22	IHT 222	MH 2852	3025	5387	3435	4670	4129	3670	2752	1443	3211	2589	3062	2825	3903	4465	3822	3707	4
23	IHT 223	MH 2853	2758	4693	2834	3697	3495	2864	3056	1163	2960	2758	3886	3322	3019	4749	3111	3402	9
24	IHT 224	MH 2854	1994	3168	3089	3282	2884	3333	3102	921	3218	2437	3841	3139	3228	4170	2756	3127	14
25	IHT 225	MH 2855	2258	2143	1840	1754	1999	3325	3206	2312	3265	1709	1933	1821	2125	2925	1989	2291	32
26	IHT 226	MH 2856	2598	3422	2431	2763	2803	3463	2807	439	3135	1647	3055	2351	2769	2892	2167	2728	22
27	IHT 227	AHB 1200 (Check)	2146	2194	4302	2228	2718	2808	2219	150	2514	1811	2404	2107	2094	2504	2344	2460	27
28	IHT 228	MH 2857	2520	3369	1671	2682	2560	2723	2792	1505	2758	1408	2604	2006	2383	3036	1700	2444	28
29	IHT 229	MH 2858	2517	2913	1763	3057	2563	2650	2778	551	2714	1615	3655	2635	2431	3047	3100	2684	24
30	IHT 230	MH 2859	3079	4197	4050	4523	3962	3533	2500	1417	3017	1603	3184	2394	3867	4062	3856	3496	5
31	IHT 231	MH 2860	2442	3887	2981	3523	3208	2503	3036	420	2769	2604	2209	2407	2475	2968	2278	2810	21
32	IHT 232	MH 2861	2800	1808	4100	2327	2759	2440	2428	605	2434	1212	2117	1664	2203	3295	1767	2409	29
33	IHT 233	MH 2862	2750	3259	2369	2237	2654	2731	3033	1294	2882	1262	1212	1237	2172	2897	2572	2408	30
34	IHT 234	MH 2863	2846	5193	3965	4024	4007	3818	3348	2298	3583	2976	3480	3228	4025	2822	5200	3791	3
LOC. MEAN			2728	3677	2799	3323	3132	3017	2831	1012	2924	2076	2946	2511	2916	3359	2936	2964	
C.D. (5%)			398	923	692	1077	830	371	791	309	743	308	793	1082	693	500	810	516	
C.D. (1%)			529	1226	919	1431	1099	493	1050	410	998	410	1054	1453	921	665	1076	680	
C.V. (%)			9.0	15.4	15.2	19.9	18.9	7.6	17.1	18.7	12.5	9.1	16.5	21.2	14.6	9.1	16.9	20.8	
F (Prob)			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.096	0.000	0.000	0.008	0.000	0.000	0.000	0.000	
PLOT SIZE (m ²)			6.00	7.20	5.55	5.55	-	6.00	6.00	7.02	-	6.00	6.00	-	6.00	6.00	6.00	-	

***TEST LOCATION REJECTED DUE TO LOW AVERAGE YIELD (1012 kg/ha), THAN THE STATE AVERAGE YIELD (1095 kg/ha) TAKEN OVER 10 YEARS

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Table I.49: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	IHT 201	MH 2834	7944	5824	7808	8468	7511	7667	6333	7000	4157	5893	5025	8223	5174	6749	19
2	IHT 202	MH 2835	5000	5132	5826	4384	5086	8056	4111	6083	3597	7527	5562	5700	5394	5473	33
3	IHT 203	MH 2836	7889	4234	7387	8529	7010	5722	5333	5528	3907	7223	5565	7409	5284	6292	28
4	IHT 204	MH 2837	7944	4516	6787	8829	7019	6611	3667	5139	4182	10128	7155	7842	6495	6700	21
5	IHT 205	MH 2838	8056	4644	5405	7087	6298	6167	5111	5639	3587	10844	7216	6221	6881	6400	27
6	IHT 206	MH 2839	8167	5236	6486	8529	7104	6167	5111	5639	3159	10158	6659	6108	7651	6677	23
7	IHT 207	MH 2840	7944	5535	10751	9550	8445	7778	5667	6722	3846	7826	5836	9024	8036	7596	6
8	IHT 208	MH 2841	8944	6074	6306	8408	7433	5944	6000	5972	3698	10264	6981	7871	8311	7182	13
9	IHT 209	AHB 1269 (Check)	9111	5412	5646	9790	7490	6611	5667	6139	3175	8756	5966	6031	6771	6697	22
10	IHT 210	MH 2842	8000	6322	9189	12012	8881	8667	6667	7667	3042	11656	7349	9346	5284	8018	3
11	IHT 211	MH 2843	7167	8042	9489	11772	9117	7389	6444	6917	3609	14584	9097	5831	4954	7928	4
12	IHT 212	MH 2844	8333	7218	6547	7928	7506	5833	4778	5306	3557	9642	6600	5098	5229	6416	26
13	IHT 213	MH 2845	7556	5801	8348	8949	7663	6056	4889	5472	3715	11323	7519	5660	5670	6797	17
14	IHT 214	MH 2846	8167	7049	8949	13273	9359	6611	6222	6417	4672	15142	9907	10131	8367	8858	1
15	IHT 215	86M01 (Check)	9000	6120	8048	8625	7948	5889	5778	5833	3732	12808	8270	7064	5064	7213	11
16	IHT 216	MH 2847	8833	6007	6126	9369	7584	7667	4444	6056	3557	13119	8338	8773	5945	7384	9
17	IHT 217	MH 2848	8500	6734	7447	10631	8328	6611	4667	5639	3367	11447	7407	7253	5064	7172	15
18	IHT 218	MH 2849	8222	5431	8348	7327	7332	6111	5556	5833	4345	13792	9069	7334	7706	7417	8
19	IHT 219	MH 2850	7778	5690	6667	6426	6640	6444	6556	6500	3964	12632	8298	6303	8367	7083	16
20	IHT 220	Pratap (Check)	7444	3815	4925	5105	5322	5944	5778	5861	2685	6473	4579	4561	5504	5223	34
21	IHT 221	MH 2851	8111	3424	5886	7327	6187	6722	4000	5361	3944	6653	5298	4801	4789	5566	31
22	IHT 222	MH 2852	7889	6398	6366	6426	6770	9111	6889	8000	4599	8489	6544	9237	6385	7179	14
23	IHT 223	MH 2853	8056	6472	9489	3243	6815	7833	6444	7139	3962	13741	8851	7141	5614	7199	12
24	IHT 224	MH 2854	7833	5604	8168	8108	7428	6889	6000	6444	3744	13287	8516	7660	7816	7511	7
25	IHT 225	MH 2855	6889	7644	6787	4144	6366	6056	5222	5639	3803	4354	4078	5017	4844	5476	32
26	IHT 226	MH 2856	6556	5566	7327	7207	6664	6611	5667	6139	2884	13902	8393	6582	4899	6720	20
27	IHT 227	AHB 1200 (Check)	6000	5111	11532	5826	7117	5889	4778	5333	3857	8712	6284	4963	5614	6228	30
28	IHT 228	MH 2857	8611	5926	7508	8769	7703	6667	5111	5889	3985	11034	7510	5643	4568	6782	18
29	IHT 229	MH 2858	7833	6787	7928	8048	7649	7278	5222	6250	4109	12571	8340	5806	7927	7351	10
30	IHT 230	MH 2859	8389	8565	10691	13273	10229	9389	5667	7528	4016	10775	7396	8748	6551	8606	2
31	IHT 231	MH 2860	7944	5113	6667	7868	6898	6444	4222	5333	3359	12673	8016	5669	5614	6557	24
32	IHT 232	MH 2861	7722	4213	10871	6967	7443	6778	4000	5389	3167	9635	6401	4870	4678	6290	29
33	IHT 233	MH 2862	6833	5704	7327	9129	7248	7500	4444	5972	3544	8371	5958	5308	7321	6548	25
34	IHT 234	MH 2863	7167	6942	9369	8889	8092	7778	6444	7111	3441	13614	8528	9534	5614	7879	5
LOC. MEAN			7819	5832	7718	8242	7403	6908	5379	6144	3705	10560	7133	6846	6158	6917	
C.D. (5%)			1727	2398	2110	2715	1962	1013	1479	1552	491	2903	491	1874	939	1284	
C.D. (1%)			2294	3186	2803	3606	2597	1346	1964	2085	652	3856	652	2490	1247	1692	
C.V. (%)			13.6	25.2	16.8	20.2	18.9	9.0	16.9	12.4	8.1	16.9	8.1	16.8	9.4	19.8	
F (Prob)			0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.037	0.000	0.000	0.000	0.000	0.000	0.000	
PLOT SIZE (m ²)			6.00	7.20	5.55	5.55	-	6.00	6.00	-	6.00	6.00	-	6.00	6.00	-	

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Table I.50: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	DHR1*	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	IHT 201	MH 2834	51	48	51	46	49	45	49	58	47	46	42	44	41	47	49	47	21
2	IHT 202	MH 2835	50	51	50	44	49	49	50	56	50	52	49	51	43	48	49	49	12
3	IHT 203	MH 2836	55	49	49	45	50	45	50	59	48	51	45	48	43	47	48	48	14
4	IHT 204	MH 2837	46	49	50	45	48	46	52	58	49	51	47	49	43	44	47	47	17
5	IHT 205	MH 2838	48	47	48	48	48	44	49	56	47	48	45	46	38	46	45	46	30
6	IHT 206	MH 2839	48	53	52	61	53	46	52	61	49	47	48	48	43	50	45	49	8
7	IHT 207	MH 2840	58	50	51	52	53	49	52	66	51	53	52	52	47	50	53	52	1
8	IHT 208	MH 2841	44	46	49	52	48	45	46	59	46	46	42	44	43	44	49	46	29
9	IHT 209	AHB 1269 (Check)	45	49	49	52	49	44	50	57	47	45	44	45	44	45	45	47	25
10	IHT 210	MH 2842	54	55	53	49	53	48	50	65	49	41	51	46	46	49	53	50	6
11	IHT 211	MH 2843	58	59	51	44	53	48	53	59	50	43	50	47	46	52	46	50	5
12	IHT 212	MH 2844	51	49	51	51	50	45	49	56	47	41	49	45	41	46	50	48	16
13	IHT 213	MH 2845	51	50	50	45	49	48	47	59	47	51	47	49	45	46	46	48	15
14	IHT 214	MH 2846	59	56	52	44	53	50	52	61	51	51	50	50	48	51	49	51	2
15	IHT 215	86M01 (Check)	52	49	50	46	49	45	48	58	47	45	46	46	43	41	50	47	20
16	IHT 216	MH 2847	54	53	51	50	52	48	48	59	48	47	46	46	45	49	49	49	10
17	IHT 217	MH 2848	52	53	50	53	52	45	49	55	47	43	41	42	42	44	49	47	18
18	IHT 218	MH 2849	56	53	51	45	51	48	50	59	49	53	49	51	48	48	48	50	5
19	IHT 219	MH 2850	49	46	47	52	49	44	49	54	46	40	47	44	40	46	50	46	27
20	IHT 220	Pratap (Check)	47	47	48	53	49	44	50	51	47	41	45	43	42	46	48	46	26
21	IHT 221	MH 2851	45	46	46	49	46	44	48	52	46	41	40	41	40	41	51	45	32
22	IHT 222	MH 2852	52	53	51	44	50	48	50	62	49	44	52	48	48	49	46	49	11
23	IHT 223	MH 2853	55	53	52	46	52	46	49	58	48	46	51	48	46	49	49	49	9
24	IHT 224	MH 2854	48	47	48	47	48	44	47	59	46	41	43	42	44	44	55	46	28
25	IHT 225	MH 2855	52	55	51	49	52	48	52	59	50	44	49	46	48	47	50	50	7
26	IHT 226	MH 2856	47	48	52	50	49	45	50	55	48	43	45	44	43	45	48	47	22
27	IHT 227	AHB 1200 (Check)	43	47	47	46	46	44	51	55	48	46	41	44	41	47	49	46	31
28	IHT 228	MH 2857	45	50	49	47	48	46	55	58	50	41	43	42	43	45	50	47	23
29	IHT 229	MH 2858	48	51	50	47	49	47	53	57	50	42	45	43	44	45	46	47	19
30	IHT 230	MH 2859	58	57	53	44	53	48	52	67	50	51	51	51	50	44	46	50	4
31	IHT 231	MH 2860	55	49	51	45	50	46	50	57	48	46	46	46	43	45	51	48	15
32	IHT 232	MH 2861	51	47	48	46	48	44	52	55	48	41	43	42	42	43	55	47	24
33	IHT 233	MH 2862	55	52	48	49	51	47	50	60	48	45	44	45	46	49	48	48	13
34	IHT 234	MH 2863	54	54	52	59	55	47	49	59	48	44	50	47	49	47	51	51	3
LOC. MEAN			51	51	50	48	50	46	50	58	48	46	46	46	44	46	49	48	
C.D. (5%)			1.0	3.0	3.0	3.0	5.0	1.0	2.0	3.0	3.0	2.0	2.0	6.0	2.0	1.0	2.0	2.0	
C.D. (1%)			2.0	4.0	3.0	4.0	6.0	2.0	3.0	4.0	4.0	2.0	2.0	8.0	3.0	2.0	3.0	3.0	
C.V. (%)			1.5	3.7	3.1	3.7	6.5	1.8	3.0	3.2	3.3	2.2	2.1	6.4	3.1	1.8	3.1	5.7	
F (Prob)			0.000	0.000	0.000	0.000	0.010	0.000	0.000	0.000	0.067	0.000	0.000	0.017	0.000	0.000	0.000	0.000	

*LOCATION REJECTED DUE TO DELAYED FLOWERING IN CHECKS

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Table I.51: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 DAYS TO MATURITY ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	DHR1	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	IHT 201	MH 2834	87	75	88	73	81	85	83	89	86	83	82	82	72	84	82	22
2	IHT 202	MH 2835	90	78	87	72	82	89	85	89	88	87	83	85	73	85	83	12
3	IHT 203	MH 2836	93	76	86	73	82	86	87	92	88	84	83	84	74	84	83	13
4	IHT 204	MH 2837	86	76	87	73	81	87	83	90	87	86	85	85	74	81	83	17
5	IHT 205	MH 2838	85	74	85	75	80	86	85	89	87	83	83	83	67	83	81	26
6	IHT 206	MH 2839	87	80	88	85	85	86	85	95	89	84	83	84	73	87	85	4
7	IHT 207	MH 2840	96	77	88	80	85	88	84	95	89	88	84	86	76	87	86	1
8	IHT 208	MH 2841	94	73	86	80	83	85	81	90	85	82	82	82	74	81	82	18
9	IHT 209	AHB 1269 (Check)	95	76	86	79	84	85	84	90	86	81	79	80	73	82	83	16
10	IHT 210	MH 2842	91	82	89	76	85	88	83	94	88	77	82	80	77	86	84	7
11	IHT 211	MH 2843	95	86	88	71	85	88	85	90	87	79	83	81	77	89	85	5
12	IHT 212	MH 2844	88	76	87	78	82	85	82	90	86	75	82	78	71	83	82	25
13	IHT 213	MH 2845	88	77	87	72	81	88	81	91	87	86	79	83	74	83	82	19
14	IHT 214	MH 2846	97	83	89	71	85	89	85	92	89	86	80	83	77	88	85	3
15	IHT 215	86M01 (Check)	88	76	87	73	81	86	83	90	86	82	79	80	74	78	81	27
16	IHT 216	MH 2847	91	80	88	77	84	87	82	91	87	83	81	82	78	86	84	8
17	IHT 217	MH 2848	89	80	87	80	84	85	82	89	85	79	78	79	71	81	82	20
18	IHT 218	MH 2849	96	80	88	72	84	88	82	93	88	88	81	85	78	85	85	6
19	IHT 219	MH 2850	87	73	84	79	81	85	81	89	85	75	81	78	71	83	81	29
20	IHT 220	Pratap (Check)	85	74	85	77	80	85	82	87	85	76	77	77	73	83	80	31
21	IHT 221	MH 2851	84	73	83	76	79	85	81	88	85	75	76	75	69	78	79	33
22	IHT 222	MH 2852	92	80	87	71	83	88	84	94	89	80	82	81	77	86	84	9
23	IHT 223	MH 2853	93	80	89	73	84	86	83	90	86	83	81	82	74	86	83	13
24	IHT 224	MH 2854	87	74	85	74	80	85	81	90	85	76	77	76	73	81	80	32
25	IHT 225	MH 2855	88	82	88	76	84	87	84	94	88	79	80	80	76	84	84	11
26	IHT 226	MH 2856	87	75	88	77	82	85	81	94	87	78	79	78	71	82	82	24
27	IHT 227	AHB 1200 (Check)	82	74	83	77	79	86	82	91	86	82	76	79	70	84	81	30
28	IHT 228	MH 2857	84	77	86	73	80	86	88	93	89	75	77	76	72	82	81	28
29	IHT 229	MH 2858	84	78	86	74	81	86	84	90	87	78	80	79	76	82	82	23
30	IHT 230	MH 2859	96	84	89	79	87	88	84	95	89	85	80	82	78	81	85	2
31	IHT 231	MH 2860	96	76	88	80	85	87	81	88	85	82	76	79	75	82	83	15
32	IHT 232	MH 2861	96	74	84	82	84	85	82	89	86	78	77	77	72	80	82	21
33	IHT 233	MH 2862	94	79	85	77	84	87	82	90	86	80	78	79	78	86	83	14
34	IHT 234	MH 2863	90	81	88	79	85	87	80	90	86	79	80	80	81	84	84	10
LOC. MEAN			90	78	87	76	83	86	83	91	87	81	80	81	74	83	83	
C.D. (5%)			1.0	3.0	3.0	3.0	4.0	1.0	1.0	2.0	2.0	1.0	3.0	5.0	4.0	1.0	2.0	
C.D. (1%)			2.0	4.0	3.0	3.0	6.0	2.0	2.0	3.0	3.0	2.0	3.0	7.0	5.0	2.0	3.0	
C.V. (%)			0.9	2.4	1.8	2.0	3.7	1.0	1.0	1.3	1.7	1.1	2.0	3.1	3.1	1.0	3.1	
F (Prob)			0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.006	0.000	0.000	0.000	

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Table I.52: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PLANT HEIGHT (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	DHR1	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	IHT 201	MH 2834	163	182	205	188	185	176	159	130	155	126	177	151	160	156	186	167	25
2	IHT 202	MH 2835	152	175	215	183	181	168	169	119	152	115	176	146	171	170	180	166	28
3	IHT 203	MH 2836	147	179	218	196	185	176	166	116	153	121	196	159	158	178	179	169	24
4	IHT 204	MH 2837	160	185	216	181	185	175	158	117	150	115	183	149	159	173	178	167	27
5	IHT 205	MH 2838	145	166	203	181	174	171	160	117	149	121	163	142	160	172	175	161	31
6	IHT 206	MH 2839	148	200	219	197	191	168	166	120	151	138	191	165	163	176	182	172	21
7	IHT 207	MH 2840	170	211	235	212	207	191	174	141	169	127	201	164	195	173	189	185	12
8	IHT 208	MH 2841	172	191	223	206	198	185	170	129	161	125	204	164	170	183	187	179	17
9	IHT 209	AHB 1269 (Check)	185	201	238	227	213	180	170	125	158	126	201	163	176	195	182	184	13
10	IHT 210	MH 2842	198	209	231	224	215	188	181	141	170	117	201	159	200	169	215	189	9
11	IHT 211	MH 2843	187	217	256	263	231	211	200	126	179	121	218	169	214	208	267	207	2
12	IHT 212	MH 2844	157	182	224	192	189	182	172	122	159	124	187	156	150	187	179	172	22
13	IHT 213	MH 2845	173	204	221	224	205	182	179	131	164	131	210	171	184	194	215	187	10
14	IHT 214	MH 2846	212	233	249	235	232	209	205	134	183	136	219	178	203	187	246	206	3
15	IHT 215	86M01 (Check)	167	199	227	206	200	179	191	127	165	126	208	167	184	172	190	181	16
16	IHT 216	MH 2847	187	206	221	214	207	181	172	119	158	110	196	153	181	174	236	183	14
17	IHT 217	MH 2848	152	194	230	219	199	185	166	129	160	111	200	156	177	170	197	178	18
18	IHT 218	MH 2849	182	181	225	201	197	177	160	116	151	112	193	153	172	172	205	175	20
19	IHT 219	MH 2850	147	181	223	204	189	156	182	124	154	123	214	169	164	176	164	171	23
20	IHT 220	Pratap (Check)	147	166	204	204	180	159	159	106	142	124	190	157	154	171	177	163	30
21	IHT 221	MH 2851	150	165	216	184	179	153	152	117	141	112	191	152	150	159	171	160	32
22	IHT 222	MH 2852	220	230	261	249	240	214	201	139	185	138	230	184	218	213	229	212	1
23	IHT 223	MH 2853	200	214	238	196	212	200	200	136	179	126	208	167	184	202	234	195	6
24	IHT 224	MH 2854	152	183	233	200	192	173	179	120	157	123	204	164	174	171	191	175	19
25	IHT 225	MH 2855	100	128	160	169	139	141	124	107	124	102	141	121	141	135	129	131	34
26	IHT 226	MH 2856	157	176	218	197	187	182	168	117	156	107	182	145	157	161	185	167	26
27	IHT 227	AHB 1200 (Check)	147	181	208	190	181	157	157	123	146	120	190	155	164	165	187	166	29
28	IHT 228	MH 2857	148	192	218	232	198	181	173	131	162	123	223	173	195	179	197	183	15
29	IHT 229	MH 2858	147	230	248	247	218	203	180	145	176	128	214	171	181	180	223	194	7
30	IHT 230	MH 2859	192	221	248	216	219	197	183	129	170	131	214	173	174	210	240	196	5
31	IHT 231	MH 2860	172	216	237	218	211	209	182	140	177	128	207	168	195	183	231	193	8
32	IHT 232	MH 2861	117	191	212	209	182	162	145	110	139	93	176	135	129	149	180	156	33
33	IHT 233	MH 2862	197	221	236	197	213	193	170	135	166	117	227	172	206	196	273	197	4
34	IHT 234	MH 2863	167	205	241	216	207	196	183	124	168	117	206	162	198	173	214	187	11
		LOC. MEAN	165	195	225	208	198	181	172	125	160	121	198	160	175	177	200	179	
		C.D. (5%)	5.0	21.0	15.0	33.0	16.0	11.0	22.0	9.0	14.0	9.0	23.0	22.0	13.0	16.0	12.0	9.0	
		C.D. (1%)	7.0	27.0	20.0	44.0	22.0	15.0	29.0	11.0	18.0	13.0	30.0	30.0	17.0	21.0	16.0	12.0	
		C.V. (%)	2.0	6.5	4.1	9.7	5.9	3.8	7.7	4.2	5.2	4.8	7.0	6.8	4.6	5.5	3.7	6.5	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	

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Table I.53: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	DHR1	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	IHT 201	MH 2834	2.0	2.5	2.2	2.3	2.3	3.1	2.6	2.1	2.6	1.5	1.3	1.4	3.3	2.8	2.7	2.4	11
2	IHT 202	MH 2835	1.0	1.8	1.9	2.9	1.9	2.4	2.5	1.6	2.2	1.7	2.0	1.8	2.3	2.4	3.1	2.1	30
3	IHT 203	MH 2836	1.0	1.6	1.8	1.9	1.6	3.9	2.9	2.2	3.0	1.1	1.3	1.2	3.5	3.0	2.6	2.2	23
4	IHT 204	MH 2837	1.7	1.6	1.8	2.2	1.8	2.9	2.7	2.0	2.5	1.5	1.2	1.4	2.3	2.0	3.3	2.1	31
5	IHT 205	MH 2838	2.0	1.7	1.9	2.6	2.0	3.0	2.7	2.1	2.6	1.1	1.0	1.1	3.5	3.2	3.3	2.3	14
6	IHT 206	MH 2839	2.0	1.6	1.7	2.0	1.8	2.9	2.1	2.2	2.4	1.2	1.5	1.3	2.5	2.2	2.7	2.1	32
7	IHT 207	MH 2840	2.0	1.6	2.1	2.1	2.0	2.9	2.8	2.1	2.6	1.5	1.5	1.5	3.6	3.2	2.7	2.3	15
8	IHT 208	MH 2841	2.3	2.0	2.0	2.9	2.3	3.6	2.0	2.0	2.5	1.7	1.1	1.4	3.5	3.2	3.5	2.5	6
9	IHT 209	AHB 1269 (Check)	2.0	1.6	1.8	2.4	2.0	3.4	2.6	2.0	2.7	1.5	1.3	1.4	2.4	2.4	3.2	2.2	27
10	IHT 210	MH 2842	1.7	2.0	2.4	2.3	2.1	3.9	2.9	2.1	2.9	1.6	1.3	1.4	1.9	2.4	4.0	2.4	13
11	IHT 211	MH 2843	1.7	1.6	2.0	2.5	1.9	3.3	2.7	2.3	2.8	1.6	1.5	1.5	3.1	2.6	3.7	2.4	9
12	IHT 212	MH 2844	3.0	1.9	1.8	2.7	2.3	3.2	2.5	2.1	2.6	1.5	1.1	1.3	3.3	2.4	2.6	2.3	15
13	IHT 213	MH 2845	1.0	1.7	2.1	2.6	1.9	3.5	2.5	2.2	2.7	1.1	1.8	1.4	3.3	2.3	3.9	2.3	17
14	IHT 214	MH 2846	1.0	1.7	1.9	2.4	1.7	3.7	3.3	1.6	2.9	1.6	1.3	1.4	2.2	2.4	3.6	2.2	26
15	IHT 215	86M01 (Check)	1.7	1.9	1.9	2.2	1.9	2.8	3.5	2.1	2.8	1.6	1.9	1.8	2.6	2.8	3.1	2.3	15
16	IHT 216	MH 2847	1.0	1.8	2.3	2.4	1.9	3.7	2.7	2.1	2.8	1.4	1.4	1.4	3.6	3.2	2.9	2.4	10
17	IHT 217	MH 2848	2.7	1.9	2.2	2.3	2.3	3.5	3.5	2.7	3.2	1.7	1.4	1.5	2.6	2.4	3.9	2.6	5
18	IHT 218	MH 2849	2.7	1.8	2.2	3.0	2.4	3.5	3.0	3.0	3.2	1.4	1.6	1.5	2.4	3.4	3.3	2.6	4
19	IHT 219	MH 2850	2.0	2.2	2.4	2.9	2.4	4.1	3.3	2.9	3.5	1.8	1.9	1.8	3.2	3.6	3.6	2.8	1
20	IHT 220	Pratap (Check)	1.0	1.6	2.2	2.2	1.8	3.3	2.9	2.3	2.9	1.6	1.7	1.6	4.1	3.2	2.5	2.4	8
21	IHT 221	MH 2851	2.0	2.4	2.4	2.9	2.4	3.5	3.6	2.7	3.2	1.3	2.1	1.7	3.8	3.8	2.7	2.8	2
22	IHT 222	MH 2852	1.0	1.4	1.8	3.1	1.8	3.5	2.7	2.2	2.8	1.5	1.5	1.5	3.4	2.8	3.6	2.4	12
23	IHT 223	MH 2853	1.7	1.8	2.1	2.2	2.0	3.7	2.3	2.0	2.6	1.7	1.4	1.5	2.1	3.0	3.3	2.3	22
24	IHT 224	MH 2854	1.0	1.7	2.0	2.5	1.8	3.9	2.3	2.4	2.9	1.5	1.6	1.5	3.0	2.6	2.7	2.3	21
25	IHT 225	MH 2855	1.3	1.7	2.5	3.3	2.2	3.8	2.8	2.5	3.0	1.4	1.5	1.5	4.3	3.4	3.3	2.7	3
26	IHT 226	MH 2856	2.7	1.6	1.8	2.8	2.2	3.9	2.4	2.3	2.8	1.5	1.2	1.3	3.4	2.6	3.3	2.4	7
27	IHT 227	AHB 1200 (Check)	2.0	1.5	2.9	2.1	2.1	3.6	2.4	1.8	2.6	1.5	1.2	1.3	3.9	2.4	2.8	2.3	16
28	IHT 228	MH 2857	2.0	2.1	2.0	2.8	2.2	3.7	2.9	2.1	2.9	1.1	1.5	1.3	2.1	2.0	2.5	2.2	25
29	IHT 229	MH 2858	1.0	1.4	1.7	2.3	1.6	3.7	2.4	2.4	2.8	1.4	1.6	1.5	2.5	2.8	3.1	2.2	28
30	IHT 230	MH 2859	2.0	1.6	1.7	2.7	2.0	2.9	2.3	2.3	2.5	1.5	1.1	1.3	2.3	2.6	3.1	2.2	29
31	IHT 231	MH 2860	2.0	1.4	1.7	2.6	1.9	2.7	1.9	1.7	2.1	1.5	1.6	1.6	3.2	2.4	4.1	2.2	24
32	IHT 232	MH 2861	1.0	1.6	2.5	2.8	2.0	3.6	2.2	2.3	2.7	1.5	1.3	1.4	2.5	3.0	3.0	2.3	19
33	IHT 233	MH 2862	2.0	1.9	2.0	2.4	2.1	3.4	2.4	1.9	2.6	1.3	1.8	1.5	2.4	2.4	3.9	2.3	18
34	IHT 234	MH 2863	2.0	2.0	2.1	2.4	2.1	2.9	2.6	2.0	2.5	1.5	1.3	1.4	2.7	2.8	2.8	2.3	20
LOC. MEAN			1.7	1.8	2.0	2.5	2.0	3.4	2.7	2.2	2.8	1.5	1.5	1.5	3.0	2.7	3.2	2.3	
C.D. (5%)			0.5	0.6	0.2	1.0	0.5	0.8	1.0	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.8	0.3	
C.D. (1%)			0.7	0.9	0.3	1.3	0.7	1.0	1.3	0.5	0.7	0.7	0.6	0.6	0.6	0.5	1.0	0.4	
C.V. (%)			17.3	22.3	7.2	24.0	17.8	14.0	21.9	10.8	11.6	20.9	18.2	15.4	9.3	8.1	14.7	16.3	
F (Prob)			0.000	0.000	0.000	0.000	0.046	0.000	0.000	0.000	0.002	0.000	0.000	0.474	0.000	0.000	0.000	0.000	

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Table I.54: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PANICLE LENGTH (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	DHR1	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	IHT 201	MH 2834	25	23	26	27	25	25	21	17	21	25	26	26	25	26	22	24	20
2	IHT 202	MH 2835	23	27	27	33	28	25	21	18	22	25	30	28	22	24	23	25	9
3	IHT 203	MH 2836	22	24	25	27	25	24	24	16	22	29	26	27	26	23	22	24	22
4	IHT 204	MH 2837	24	25	26	30	26	26	26	18	23	27	26	27	24	23	23	25	14
5	IHT 205	MH 2838	23	24	26	29	26	26	23	18	22	25	25	25	28	23	22	24	17
6	IHT 206	MH 2839	24	23	26	27	25	23	20	18	20	25	25	25	25	24	22	24	25
7	IHT 207	MH 2840	23	27	29	29	27	23	20	21	22	27	25	26	28	23	24	25	10
8	IHT 208	MH 2841	26	25	27	30	27	25	20	21	22	29	27	28	26	26	21	25	8
9	IHT 209	AHB 1269 (Check)	24	25	25	27	25	24	19	18	20	26	25	26	26	27	22	24	21
10	IHT 210	MH 2842	23	27	29	29	27	24	20	22	22	25	23	24	29	21	23	25	15
11	IHT 211	MH 2843	24	27	28	31	28	28	24	19	23	23	35	29	25	23	28	26	5
12	IHT 212	MH 2844	25	26	26	29	27	25	24	20	23	28	27	27	28	18	22	25	11
13	IHT 213	MH 2845	25	24	26	30	26	26	24	20	23	28	27	28	31	21	23	25	7
14	IHT 214	MH 2846	25	29	26	35	29	30	24	21	25	30	30	30	25	23	28	27	2
15	IHT 215	86M01 (Check)	25	25	27	30	27	22	23	20	21	28	28	28	27	22	22	25	12
16	IHT 216	MH 2847	24	26	27	27	26	25	19	21	22	26	26	26	24	22	22	24	19
17	IHT 217	MH 2848	26	26	28	28	27	24	20	20	21	25	28	26	25	21	23	24	18
18	IHT 218	MH 2849	23	21	25	24	23	22	21	17	20	25	24	24	23	24	22	22	28
19	IHT 219	MH 2850	23	23	27	31	26	23	21	18	20	23	28	25	23	21	21	23	26
20	IHT 220	Pratap (Check)	19	21	23	22	21	21	17	16	18	24	24	24	25	20	20	21	32
21	IHT 221	MH 2851	22	20	23	25	22	21	20	18	20	26	26	26	26	19	19	22	31
22	IHT 222	MH 2852	23	25	26	29	26	25	22	20	22	28	25	27	28	25	22	25	13
23	IHT 223	MH 2853	26	28	29	33	29	28	25	22	25	25	31	28	24	24	24	27	4
24	IHT 224	MH 2854	20	23	26	27	24	25	21	18	21	24	27	25	22	20	22	23	27
25	IHT 225	MH 2855	22	21	23	25	23	24	20	18	21	24	22	23	29	18	21	22	30
26	IHT 226	MH 2856	23	25	25	29	26	25	19	18	21	27	26	27	27	22	23	24	19
27	IHT 227	AHB 1200 (Check)	23	26	30	31	27	24	20	19	21	27	26	27	29	21	23	25	13
28	IHT 228	MH 2857	23	21	25	28	24	25	21	19	22	25	26	26	28	22	21	24	23
29	IHT 229	MH 2858	22	23	25	30	25	27	18	20	22	25	24	24	26	22	21	24	24
30	IHT 230	MH 2859	26	27	28	32	28	27	22	22	24	28	30	29	30	25	25	27	3
31	IHT 231	MH 2860	40	38	33	39	38	34	29	27	30	28	38	33	34	45	32	35	1
32	IHT 232	MH 2861	20	24	26	28	24	22	19	16	19	23	23	23	23	22	22	22	29
33	IHT 233	MH 2862	26	28	28	28	27	26	22	20	23	26	27	26	31	22	23	26	6
34	IHT 234	MH 2863	23	26	27	27	26	24	23	19	22	28	25	26	26	23	24	25	16
LOC. MEAN			24	25	27	29	26	25	22	19	22	26	27	26	26	23	23	25	
C.D. (5%)			1.0	3.0	2.0	4.0	2.0	2.0	3.0	2.0	2.0	3.0	3.0	5.0	2.0	2.0	2.0	2.0	
C.D. (1%)			2.0	4.0	2.0	5.0	3.0	3.0	4.0	3.0	3.0	4.0	5.0	7.0	3.0	3.0	3.0	2.0	
C.V. (%)			3.6	7.0	4.2	8.3	5.9	5.1	9.1	6.3	6.9	7.1	7.9	9.0	4.8	5.5	5.3	7.6	
F (Prob)			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.160	0.000	0.000	0.000	0.000	

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Table I.55: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	DHR1	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	IHT 201	MH 2834	3.1	3.6	3.6	3.4	3.4	3.1	2.8	3.0	3.0	3.5	3.3	3.4	3.4	3.2	3.3	8
2	IHT 202	MH 2835	2.7	3.3	3.4	3.6	3.2	2.7	2.6	3.0	2.8	3.2	3.1	3.2	3.2	3.5	3.1	16
3	IHT 203	MH 2836	2.8	3.7	3.6	3.4	3.4	3.2	3.1	3.0	3.1	3.5	3.1	3.3	3.6	3.5	3.3	6
4	IHT 204	MH 2837	3.0	3.6	3.6	3.7	3.5	3.3	3.2	3.2	3.2	3.2	3.1	3.2	4.1	3.3	3.4	5
5	IHT 205	MH 2838	2.8	3.5	3.6	3.4	3.3	3.2	2.9	3.0	3.0	3.4	3.1	3.2	3.7	3.3	3.3	9
6	IHT 206	MH 2839	3.2	3.4	3.6	3.7	3.5	3.2	2.9	3.4	3.1	3.3	3.3	3.3	4.0	3.4	3.4	3
7	IHT 207	MH 2840	3.0	3.5	3.7	3.4	3.4	3.2	2.7	3.1	3.0	3.3	3.1	3.2	2.8	3.1	3.2	13
8	IHT 208	MH 2841	3.1	3.5	3.5	3.2	3.4	3.1	2.8	3.1	3.0	3.1	3.6	3.4	3.4	3.2	3.3	10
9	IHT 209	AHB 1269 (Check)	3.3	3.1	3.3	3.2	3.2	2.6	2.5	3.0	2.7	3.2	3.3	3.2	3.6	3.2	3.1	20
10	IHT 210	MH 2842	3.2	3.8	3.8	3.8	3.7	3.0	3.0	3.2	3.1	3.6	3.5	3.6	3.4	3.2	3.4	2
11	IHT 211	MH 2843	3.0	3.4	3.5	3.5	3.4	2.9	2.9	3.1	3.0	3.3	3.3	3.3	4.0	3.5	3.3	7
12	IHT 212	MH 2844	3.4	3.6	3.7	3.9	3.6	2.9	3.2	2.9	3.0	3.4	3.5	3.5	3.3	3.6	3.4	3
13	IHT 213	MH 2845	2.8	3.2	3.3	3.3	3.2	2.7	2.6	2.8	2.7	3.2	3.0	3.1	3.8	3.5	3.1	19
14	IHT 214	MH 2846	3.3	3.6	3.7	4.0	3.7	3.3	3.3	3.1	3.2	3.6	3.2	3.4	2.8	3.3	3.4	4
15	IHT 215	86M01 (Check)	2.9	3.3	3.4	3.6	3.3	2.7	2.6	3.0	2.8	3.5	3.0	3.3	3.7	3.2	3.2	14
16	IHT 216	MH 2847	2.7	3.2	3.5	3.2	3.2	2.6	2.7	3.0	2.8	3.1	2.7	2.9	3.1	3.2	3.0	26
17	IHT 217	MH 2848	2.9	3.3	3.4	3.2	3.2	3.0	2.7	3.0	2.9	3.2	3.1	3.2	3.1	3.0	3.1	22
18	IHT 218	MH 2849	2.8	3.2	3.6	3.4	3.3	2.7	2.8	2.7	2.7	3.7	3.2	3.4	3.0	3.2	3.1	17
19	IHT 219	MH 2850	2.9	3.0	3.4	3.0	3.1	2.4	2.5	2.7	2.5	3.5	2.9	3.2	2.9	3.9	3.0	27
20	IHT 220	Pratap (Check)	2.8	3.2	3.4	3.1	3.1	2.7	3.0	3.1	2.9	3.3	3.8	3.5	2.8	3.1	3.1	18
21	IHT 221	MH 2851	2.6	2.9	3.5	2.9	3.0	2.2	2.6	2.7	2.5	3.0	2.6	2.8	2.9	2.9	2.8	29
22	IHT 222	MH 2852	2.7	3.3	3.3	3.4	3.2	2.5	2.7	2.6	2.6	3.7	3.1	3.4	3.2	3.3	3.1	24
23	IHT 223	MH 2853	3.2	3.6	3.4	3.6	3.5	2.8	2.7	2.9	2.8	3.6	3.5	3.5	3.1	3.3	3.2	11
24	IHT 224	MH 2854	2.5	3.1	3.4	3.0	3.0	2.6	2.6	2.8	2.7	3.2	3.1	3.2	2.9	3.1	2.9	28
25	IHT 225	MH 2855	2.8	3.2	3.3	3.2	3.1	2.6	2.7	3.0	2.8	3.2	2.9	3.1	3.3	3.1	3.0	25
26	IHT 226	MH 2856	2.7	3.5	3.5	3.6	3.4	2.9	2.4	2.9	2.7	3.4	3.3	3.3	3.2	3.6	3.2	12
27	IHT 227	AHB 1200 (Check)	3.0	3.6	3.7	2.6	3.2	2.9	2.7	2.9	2.8	3.4	3.4	3.4	3.1	3.2	3.1	16
28	IHT 228	MH 2857	2.9	3.1	3.5	3.3	3.2	2.7	2.7	2.9	2.7	3.1	3.2	3.1	3.3	3.5	3.1	21
29	IHT 229	MH 2858	2.8	3.3	3.7	3.5	3.3	2.7	2.6	3.2	2.8	3.2	2.8	3.0	3.0	3.0	3.1	23
30	IHT 230	MH 2859	3.2	3.8	3.9	4.2	3.8	2.8	3.0	3.4	3.0	3.7	3.6	3.7	4.1	3.2	3.5	1
31	IHT 231	MH 2860	2.3	2.8	3.3	2.8	2.8	2.3	2.2	2.4	2.3	3.2	2.8	3.0	2.6	3.6	2.7	30
32	IHT 232	MH 2861	2.7	3.4	3.5	3.0	3.1	2.7	2.8	3.0	2.8	2.8	3.3	3.1	3.2	3.4	3.1	24
33	IHT 233	MH 2862	2.5	3.5	3.5	3.3	3.2	2.7	2.8	2.8	2.8	3.5	3.1	3.3	3.4	3.0	3.1	21
34	IHT 234	MH 2863	2.7	3.5	3.7	3.7	3.4	2.7	2.8	2.9	2.8	3.2	3.3	3.2	3.5	2.8	3.2	15
LOC. MEAN			2.9	3.4	3.5	3.4	3.3	2.8	2.8	2.9	2.8	3.3	3.2	3.3	3.3	3.3	3.2	
C.D. (5%)			0.1	0.4	0.2	0.5	0.3	0.3	0.5	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.2	
C.D. (1%)			0.2	0.5	0.3	0.7	0.3	0.4	0.6	0.3	0.3	0.5	0.5	0.6	0.4	0.3	0.2	
C.V. (%)			3.1	6.8	3.9	9.8	5.4	5.8	10.6	4.8	5.2	7.4	7.9	6.2	5.7	4.7	6.6	
F (Prob)			0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.038	0.000	0.000	0.000	

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Table I.56: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 1000-SEED Wt.(g) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	CBE	ZONE MEAN	RANK
1	IHT 201	MH 2834	9.3	15.7	9.3	11.1	11.3	15.1	13.5	14.3	11.5	12.2	4
2	IHT 202	MH 2835	8.3	14.1	9.6	9.8	10.5	14.8	13.7	14.3	15.1	12.2	3
3	IHT 203	MH 2836	10.0	13.8	10.2	8.1	10.6	14.4	13.3	13.9	11.1	11.6	15
4	IHT 204	MH 2837	11.1	13.7	9.8	12.2	11.7	15.6	13.5	14.6	11.1	12.4	1
5	IHT 205	MH 2838	9.6	14.0	9.5	8.0	10.3	15.2	13.1	14.1	12.4	11.7	12
6	IHT 206	MH 2839	11.0	12.3	11.3	8.2	10.7	14.4	12.5	13.5	11.2	11.5	16
7	IHT 207	MH 2840	10.7	15.4	11.6	8.2	11.5	13.2	13.8	13.5	11.8	12.1	6
8	IHT 208	MH 2841	13.6	16.0	10.1	9.9	12.4	13.6	11.2	12.4	12.2	12.4	2
9	IHT 209	AHB 1269 (Check)	10.8	11.9	9.3	10.8	10.7	13.5	11.1	12.3	9.5	11.0	23
10	IHT 210	MH 2842	10.3	12.8	8.4	11.2	10.7	11.3	11.8	11.6	9.7	10.8	27
11	IHT 211	MH 2843	10.4	14.3	10.0	9.9	11.1	13.8	12.0	12.9	11.9	11.7	11
12	IHT 212	MH 2844	8.4	11.4	8.2	9.0	9.3	14.0	14.1	14.0	12.1	11.0	22
13	IHT 213	MH 2845	11.1	13.1	9.5	9.9	10.9	15.7	13.5	14.6	9.0	11.7	13
14	IHT 214	MH 2846	11.5	15.2	10.0	9.9	11.7	13.9	13.2	13.6	10.5	12.0	7
15	IHT 215	86M01 (Check)	13.5	13.7	7.7	7.9	10.7	13.5	12.1	12.8	11.4	11.4	17
16	IHT 216	MH 2847	9.3	12.8	9.0	11.2	10.6	13.4	12.2	12.8	10.8	11.2	19
17	IHT 217	MH 2848	9.6	13.1	9.6	9.1	10.4	14.5	11.6	13.0	10.9	11.2	20
18	IHT 218	MH 2849	11.4	12.5	9.0	7.5	10.1	12.6	12.0	12.3	11.2	10.9	24
19	IHT 219	MH 2850	12.8	13.6	9.8	11.6	12.0	13.3	12.8	13.0	9.4	11.9	8
20	IHT 220	Pratap (Check)	9.3	15.3	9.4	13.2	11.8	13.6	11.8	12.7	9.9	11.8	10
21	IHT 221	MH 2851	13.1	12.0	8.1	11.9	11.3	13.7	12.8	13.3	9.5	11.6	14
22	IHT 222	MH 2852	10.4	14.1	9.8	9.3	10.9	11.8	12.5	12.2	11.2	11.3	18
23	IHT 223	MH 2853	8.7	11.3	9.5	7.9	9.3	13.2	13.0	13.1	9.4	10.4	31
24	IHT 224	MH 2854	8.7	12.2	9.7	9.3	10.0	11.8	12.3	12.1	9.0	10.4	30
25	IHT 225	MH 2855	13.1	11.1	9.2	7.5	10.2	15.6	14.2	14.9	5.1	10.8	25
26	IHT 226	MH 2856	8.4	12.2	7.9	9.2	9.4	14.0	11.6	12.8	7.3	10.1	32
27	IHT 227	AHB 1200 (Check)	8.7	13.0	7.7	9.5	9.7	13.8	13.0	13.4	7.9	10.5	29
28	IHT 228	MH 2857	10.4	12.4	7.2	9.5	9.9	13.4	13.3	13.4	9.6	10.8	26
29	IHT 229	MH 2858	10.5	15.1	9.9	7.7	10.8	13.5	12.2	12.8	10.9	11.4	17
30	IHT 230	MH 2859	10.4	13.4	10.4	11.6	11.4	13.3	12.5	12.9	11.6	11.9	9
31	IHT 231	MH 2860	9.4	10.8	10.0	9.2	9.9	13.0	13.3	13.2	12.6	11.2	20
32	IHT 232	MH 2861	9.5	11.8	8.0	7.7	9.3	15.0	13.1	14.1	10.1	10.8	28
33	IHT 233	MH 2862	9.2	12.4	9.1	11.6	10.6	13.2	12.4	12.8	10.5	11.2	21
34	IHT 234	MH 2863	10.6	13.0	8.4	13.0	11.3	14.1	13.6	13.8	12.3	12.2	5
LOC. MEAN			10.4	13.2	9.3	9.8	10.7	13.8	12.7	13.3	10.6	11.4	
C.D. (5%)			0.4	1.9	1.0	0.3	1.8	0.5	1.1	1.4	0.9	1.4	
C.D. (1%)			0.6	2.5	1.3	0.4	2.4	0.7	1.5	1.9	1.2	1.8	
C.V. (%)			2.5	8.7	6.3	1.7	12.3	2.3	5.3	5.3	5.1	10.6	
F (Prob)			0.000	0.000	0.000	0.000	0.061	0.000	0.000	0.004	0.000	0.103	

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Table I.57: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	VYP	MLR	DHR1	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	IHT 201	MH 2834	75	61	60	30	57	70	73	38	61	50	48	49	75	55	58	33
2	IHT 202	MH 2835	76	50	48	23	49	72	50	41	55	44	45	45	74	68	54	34
3	IHT 203	MH 2836	73	70	63	42	62	70	71	38	60	44	58	51	74	69	61	23
4	IHT 204	MH 2837	76	75	62	39	63	70	73	36	60	46	54	50	73	53	60	30
5	IHT 205	MH 2838	75	80	50	37	61	73	77	45	65	52	59	56	73	60	62	17
6	IHT 206	MH 2839	76	82	48	32	59	68	78	40	62	51	51	51	77	65	61	27
7	IHT 207	MH 2840	75	89	58	41	66	71	81	48	66	54	67	61	62	64	64	7
8	IHT 208	MH 2841	73	80	55	43	63	73	77	48	66	48	73	61	76	66	65	5
9	IHT 209	AHB 1269 (Check)	73	80	48	43	61	73	77	39	63	47	74	60	77	60	63	12
10	IHT 210	MH 2842	75	86	59	45	66	69	74	42	61	59	89	74	79	63	67	1
11	IHT 211	MH 2843	76	77	61	32	62	70	79	40	63	57	79	68	77	61	64	6
12	IHT 212	MH 2844	75	78	55	30	60	74	76	33	61	45	74	60	78	57	61	22
13	IHT 213	MH 2845	76	76	58	38	62	73	80	32	62	47	63	55	72	64	62	19
14	IHT 214	MH 2846	75	72	55	30	58	71	78	47	65	43	60	52	75	69	61	21
15	IHT 215	86M01 (Check)	76	72	60	30	60	70	75	43	62	51	57	54	74	65	61	24
16	IHT 216	MH 2847	72	80	62	38	63	70	77	42	63	49	67	58	76	69	64	9
17	IHT 217	MH 2848	75	81	56	42	63	69	73	53	65	59	59	59	77	53	63	11
18	IHT 218	MH 2849	73	71	61	30	59	71	77	46	65	51	66	58	77	55	62	20
19	IHT 219	MH 2850	71	83	63	32	62	72	74	40	62	41	55	48	75	59	60	28
20	IHT 220	Pratap (Check)	70	74	51	36	58	71	78	53	68	53	69	61	79	51	62	14
21	IHT 221	MH 2851	73	77	60	27	59	73	73	45	63	42	57	50	75	68	61	25
22	IHT 222	MH 2852	75	79	58	39	63	72	79	35	62	51	53	52	76	65	62	16
23	IHT 223	MH 2853	75	74	60	34	61	72	72	40	62	52	70	61	77	61	62	13
24	IHT 224	MH 2854	74	80	61	38	63	74	76	37	62	48	77	63	77	66	64	8
25	IHT 225	MH 2855	73	74	52	36	59	71	74	53	66	43	53	48	75	65	61	26
26	IHT 226	MH 2856	74	76	67	36	63	69	79	54	67	59	66	63	77	60	65	4
27	IHT 227	AHB 1200 (Check)	70	72	64	27	58	70	73	35	59	48	57	53	79	48	59	32
28	IHT 228	MH 2857	73	75	54	32	58	71	79	58	69	46	61	54	75	56	62	18
29	IHT 229	MH 2858	74	84	61	40	65	69	76	54	66	51	75	63	74	65	66	3
30	IHT 230	MH 2859	76	83	65	38	65	71	70	49	63	46	61	54	76	67	64	10
31	IHT 231	MH 2860	75	82	64	38	65	71	75	48	65	43	49	46	76	64	62	15
32	IHT 232	MH 2861	74	67	62	39	60	72	79	32	61	46	52	49	76	65	60	29
33	IHT 233	MH 2862	73	78	59	33	61	71	74	47	64	45	37	41	77	56	59	31
34	IHT 234	MH 2863	72	77	61	45	64	72	76	64	71	55	67	61	76	65	66	2
LOC. MEAN			74	76	58	36	61	71	75	44	63	49	62	55	75	62	62	
C.D. (5%)			4.0	13.0	9.0	11.0	7.0	2.0	6.0	9.0	9.0	7.0	16.0	14.0	5.0	7.0	5.0	
C.D. (1%)			6.0	17.0	12.0	15.0	9.0	3.0	8.0	11.0	12.0	9.0	21.0	18.0	7.0	9.0	6.0	
C.V. (%)			3.4	10.2	9.5	19.3	7.9	2.1	5.1	12.0	8.6	8.5	16.0	12.1	4.2	6.9	8.9	
F (Prob)			0.000	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.485	0.000	0.000	0.013	0.000	0.000	0.000	

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Table I.58: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 SEED SET (%) UNDER BAG ZONE B

S.No.	TEST CODE	ENTRY	ABD1	PTN	DHL	PCR	MS MEAN	PMP	PLM	CBE	ZONE MEAN	RANK
1	IHT 201	MH 2834	96	87	96	82	90	88	97	84	90	2
2	IHT 202	MH 2835	97	80	95	40	78	97	82	86	82	20
3	IHT 203	MH 2836	95	43	83	70	73	30	97	26	63	29
4	IHT 204	MH 2837	96	50	81	37	66	19	98	8	55	33
5	IHT 205	MH 2838	95	80	95	87	89	96	94	74	89	5
6	IHT 206	MH 2839	95	38	98	72	75	8	95	5	59	32
7	IHT 207	MH 2840	93	87	98	72	87	96	90	78	88	6
8	IHT 208	MH 2841	94	77	99	85	89	94	96	83	90	3
9	IHT 209	AHB 1269 (Check)	95	65	84	70	79	89	97	83	83	16
10	IHT 210	MH 2842	94	83	99	72	87	97	82	83	87	8
11	IHT 211	MH 2843	98	82	96	72	87	74	97	78	85	12
12	IHT 212	MH 2844	97	80	96	32	76	96	92	88	83	17
13	IHT 213	MH 2845	95	55	87	73	78	77	97	31	74	27
14	IHT 214	MH 2846	98	85	98	77	89	100	87	88	90	1
15	IHT 215	86M01 (Check)	99	77	93	80	87	95	96	69	87	9
16	IHT 216	MH 2847	95	80	93	78	87	88	82	63	83	18
17	IHT 217	MH 2848	98	75	94	73	85	84	82	85	84	15
18	IHT 218	MH 2849	95	53	93	72	78	83	97	64	80	24
19	IHT 219	MH 2850	98	48	91	72	77	4	95	17	61	30
20	IHT 220	Pratap (Check)	96	68	84	83	83	90	92	88	86	11
21	IHT 221	MH 2851	93	57	87	70	77	80	94	88	81	23
22	IHT 222	MH 2852	95	85	96	23	75	97	92	90	83	19
23	IHT 223	MH 2853	98	80	96	23	74	95	97	84	82	21
24	IHT 224	MH 2854	97	78	94	70	85	92	86	58	82	20
25	IHT 225	MH 2855	98	32	77	68	69	17	94	30	59	31
26	IHT 226	MH 2856	95	82	93	35	76	91	96	57	78	25
27	IHT 227	AHB 1200 (Check)	95	77	95	23	73	26	97	59	68	28
28	IHT 228	MH 2857	96	77	83	18	69	83	95	85	77	26
29	IHT 229	MH 2858	98	78	71	77	81	93	97	80	85	14
30	IHT 230	MH 2859	97	82	94	73	87	90	85	74	85	13
31	IHT 231	MH 2860	96	83	97	73	87	89	98	85	89	4
32	IHT 232	MH 2861	94	53	88	78	78	93	85	80	82	22
33	IHT 233	MH 2862	96	82	95	70	86	88	96	84	87	7
34	IHT 234	MH 2863	97	57	98	70	81	96	98	87	86	10
LOC. MEAN			96	70	92	64	80	77	93	68	80	
C.D. (5%)			4.0	33.0	11.0	7.0	19.0	11.0	5.0	6.0	19.0	
C.D. (1%)			6.0	43.0	15.0	9.0	25.0	14.0	6.0	8.0	25.0	
C.V. (%)			2.9	28.5	7.4	6.3	16.6	8.5	3.1	5.5	16.6	
F (Prob)			0.000	0.000	0.000	0.000	0.472	0.000	0.000	0.000	0.472	

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Table I.59: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 ZONE B
GRAIN QUALITY: IRON CONTENT (ppm)

S.No.	TEST	ENTRY	PTN	DHL	PCR	VYP	PMP	CBE	ZONE MEAN	RANK
1	IHT 207	MH 2840	40	62	46	43	40	49	46	10
2	IHT 209	AHB 1269 (Check)	56	61	58	54	59	56	57	4
3	IHT 210	MH 2842	39	50	42	44	52	38	44	11
4	IHT 211	MH 2843	53	63	59	49	56	42	53	8
5	IHT 214	MH 2846	65	72	69	40	75	68	65	2
6	IHT 215	86M01 (Check)	41	78	49	46	50	48	52	9
7	IHT 220	Pratap (Check)	49	69	57	42	54	54	54	7
8	IHT 222	MH 2852	46	69	52	48	70	48	56	5
9	IHT 223	MH 2853	51	83	52	48	65	48	58	3
10	IHT 227	AHB 1200 (Check)	63	76	69	46	85	66	67	1
11	IHT 230	MH 2859	48	84	61	44	54	40	55	6
12	IHT 234	MH 2863	53	68	49	50	63	51	56	5

Table I.60: INITIAL HYBRID TRIAL (Medium) KHARIF - 2024 ZONE B
GRAIN QUALITY: ZINC CONTENT (ppm)

S.No.	TEST	ENTRY	PTN	DHL	PCR	VYP	PMP	CBE	ZONE MEAN	RANK
1	IHT 207	MH 2840	30	32	30	33	29	41	33	8
2	IHT 209	AHB 1269 (Check)	41	33	33	36	28	45	36	5
3	IHT 210	MH 2842	39	31	30	27	34	33	32	9
4	IHT 211	MH 2843	36	39	39	41	40	41	39	2
5	IHT 214	MH 2846	42	42	36	37	39	45	40	1
6	IHT 215	86M01 (Check)	30	31	36	40	31	44	35	6
7	IHT 220	Pratap (Check)	37	39	34	35	35	49	38	3
8	IHT 222	MH 2852	35	39	33	36	39	41	37	4
9	IHT 223	MH 2853	33	37	29	34	35	38	34	7
10	IHT 227	AHB 1200 (Check)	40	36	37	36	38	50	40	1
11	IHT 230	MH 2859	39	37	34	35	35	37	36	5
12	IHT 234	MH 2863	38	32	33	35	32	45	36	5

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Table I.61: INITIAL HYBRID TRIAL (Late) KHARIF 2024 EXPERIMENTAL DETAILS ZONE A

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizers			Insecticide
							N	P	K	
RAJASTHAN										
Jaipur (SKNAU)	SL	-	8.7.24	9.10.24	24.7.24	Nil	40	30	0	Nil
Jaipur (Seed works)	MSL	7.1	8.7.24	10.10.24	24.7.24	8.7, 15.8, 20.9.24	80	60	40	Chloropyriphos, Coragen,
Paota (Limagrain)	-	-	27.6.24	15.10.24	29.7.24	Nil	50	30	30	Fem
Alwar (Rallis)	SL	-	29.7.24	11.5.24	18.8.24	Nil	60	30	30	Nil
Alwar (Corteva)	L	7.5	8.7.24	16.10.24	12.8.24	Life Saving	90	60	30	Chloropyriphos+Imidachlorpid
Alwar (Ganga Kaveri)	SL	7.0	13.7.24	21.10.24	9.8.24	13.7, 24.8.24	40	20	20	Coragen,
Dausa (Rasi Seeds)	SL	-	26.6.24	25.9.24	12.7.24	Nil	10	10	2	Nil
Bharatpur (Nuziveedu)	-	-	12.7.24	-	-	Nil	60	40	30	Nil
GUJARAT										
Jamagar (JAU)	MB	7.6	18.7.24	18.10.24	28.7, 2.8, 9.8, 17.8.24	Nil	80	40	0	Nil
Ahemdabad (Nandi)	SL	-	18.7.24	20.10.24	15.8, 25.8.24	Nil	80	40	0	Coragen
Dehgam (kaveri Seed)	SL	-	12.7.24	4.10.24	23.7, 14.8.24	12.7.24	128	92	0	Nil
UTTAR PRADESH										
Aligarh (Hytech)	SL	-	14.7.24	11.10.24	6.8, 23.8.24	14.7.24	60	25	15	Monocrotophos, Bavistin
Mathura (Kamadgiri)	SL	-	12.7.24	14.10.24	-	Nil	80	40	40	Chloropyriphos, Cypermethrin
HARYANA										
Hisar (CCSHAU)	SL	-	11.7.24	25.10.24	-	28.8.24	100	40	0	Nil
MADHYA PRADESH										
Gwalior (RVSKVV)	SL	7.1	11.7.24	14.10.24	11.8.24	26.7.24	60	40	20	Nil
PUNJAB										
Ludhiana (PAU)	SL	-	9.7.24	15.11.24	31.7, 2.9.24	30.7, 31.8, 2.10.24	100	60	0	Nil

SL = Sandy Loam, MB = Medium Black, MSL = Medium Sandy Loam, L=Loam .

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Table I.62: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	PTA	ALW4	ALW5**	ALW	DAS	BHP	RAJ MEAN	JMR	AHD	DEG1	GUJ MEAN	ALR	MTR	UP MEAN	HSR	GLR***	LDA	ZONE MEAN	RANK
1	IHT 301	MH 2864	2389	5383	4078	3778	1747	2331	4466	2517	3563	2037	5159	2823	3340	2481	2961	2721	4914	2376	5121	3603	12
2	IHT 302	MH 2865	2444	3867	3240	3575	2233	2825	4468	2256	3239	2347	3774	2143	2755	1983	2311	2147	4063	1847	2472	2983	24
3	IHT 303	MH 2866	3011	4594	3783	5100	1627	2339	4623	2611	3723	2981	8006	3169	4719	2442	2639	2541	3891	2097	4406	3828	6
4	IHT 304	MH 2867	2161	6167	3204	4449	1944	2667	4125	2639	3630	2829	6129	2998	3985	3007	2250	2628	4481	2046	4341	3675	11
5	IHT 305	MH 2868	2856	6006	3300	4461	2068	2969	3964	2733	3756	1907	5661	3064	3544	2116	2044	2080	2926	1814	4197	3443	16
6	IHT 306	MP 7878 (Check)	4572	6361	3286	4048	3021	2558	4438	2367	3947	3431	7758	3457	4882	3368	3272	3320	4241	2179	4599	4125	2
7	IHT 307	MH 2869	2700	5239	3623	4406	1859	2889	4020	2322	3600	2037	5732	2781	3516	1454	2039	1747	3060	1816	3416	3266	22
8	IHT 308	MH 2870	3039	5117	3448	4128	1979	2697	4008	2672	3587	2356	5967	2228	3517	2178	2561	2369	2502	1733	3576	3320	20
9	IHT 309	AHB 1200 (Check)	2361	4656	2147	3703	2139	2186	4565	2156	3111	1435	4645	2314	2798	1836	1967	1901	3126	1897	3205	2879	26
10	IHT 310	MH 2871	2528	6189	3350	4258	1284	3383	4407	2789	3844	2208	7676	3368	4417	2831	2094	2463	3478	1917	2912	3677	10
11	IHT 311	MH 2872	1839	2367	2441	2211	1200	1458	4267	1967	2364	1648	2375	1894	1972	1462	2606	2034	2757	1728	2688	2284	27
12	IHT 312	MH 2873	2828	6878	2941	5108	2091	2794	4178	2633	3909	2514	5864	2913	3764	3119	2167	2643	3429	2069	2541	3565	14
13	IHT 313	86M84 (Check)	2761	6167	3788	4983	1846	3775	3968	2861	4043	2468	7777	3411	4552	3064	2456	2760	4356	2514	3551	3956	4
14	IHT 314	MH 2874	3878	5322	3207	4733	2206	3364	4088	1883	3782	2505	7343	3403	4417	2886	2722	2804	3386	2229	3746	3747	7
15	IHT 315	MH 2875	3933	6544	3556	4639	2494	3283	4075	2589	4088	1944	8340	3799	4695	3547	3211	3379	3704	2400	3233	4028	3
16	IHT 316	MH 2876	3417	6722	4116	4450	1717	2858	3812	2167	3934	2958	7904	2644	4502	2434	2039	2237	3489	1917	5322	3881	5
17	IHT 317	MH 2877	3083	6000	2405	3767	2274	3033	3986	2172	3492	2046	5667	3403	3705	2473	2550	2512	3688	1375	2999	3377	19
18	IHT 318	MH 2878	2783	7450	4306	5106	2741	4383	3964	2972	4423	2718	7983	3932	4877	3702	2106	2904	4122	2144	5002	4323	1
19	IHT 319	MH 2879	3489	5939	2592	4031	1682	3231	4285	2539	3729	3551	6049	3438	4346	2038	2467	2252	3567	1542	5006	3730	8
20	IHT 320	KBH 108 (Check)	3106	5211	3506	4811	2059	1772	4172	2550	3590	2444	4939	3236	3540	1688	2006	1847	2708	2451	3570	3266	21
21	IHT 321	MH 2880	2472	6117	3481	5097	2314	1847	4502	2572	3727	4292	4909	2959	4054	2302	2633	2468	3914	2064	2852	3568	13
22	IHT 322	MH 2881	3317	6106	3144	4339	2442	2600	4009	2044	3651	1958	5156	3586	3566	2629	2600	2614	3700	2181	2650	3417	17
23	IHT 323	MH 2882	2717	4717	2874	3769	1938	1978	4327	2417	3257	2079	5416	2792	3429	1991	1911	1951	2646	2447	3339	3069	23
24	IHT 324	MH 2883	3356	6128	3124	4078	2027	4681	4462	2833	4095	2667	3678	2559	2968	2831	3228	3029	4068	1517	3928	3687	9
25	IHT 325	MH 2884	2422	4356	2019	2947	1183	2339	4180	2033	2899	1292	7220	1812	3441	2676	2156	2416	2305	2458	3511	2948	25
26	IHT 326	MH 2885	2600	6522	3746	5150	2902	3000	4165	2700	3983	2602	3615	3636	3284	1937	2494	2216	3354	1953	3694	3515	15
27	IHT 327	MH 2886	2683	5394	2496	4133	1804	2728	4544	2039	3431	2083	8087	2516	4229	2248	2350	2299	3099	2436	3253	3404	18
		LOC. MEAN	2916	5612	3230	4269	2030	2814	4225	2446	3644	2420	6031	2973	3808	2471	2438	2455	3518	2042	3672	3502	
		C.D. (5%)	707	640	403	782	1002	799	352	682	574	547	435	629	1572	287	478	834	840	419	292	480	
		C.D. (1%)	942	852	537	1042	1335	1065	469	908	758	729	579	838	2094	383	637	1128	1120	558	390	632	
		C.V. (%)	14.8	7.0	7.6	11.2	30.1	17.3	5.1	17.0	14.9	13.8	4.4	12.9	25.2	7.1	12.0	16.5	14.6	12.5	4.9	18.4	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.051	0.000	0.000	0.030	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	6.00	6.00	6.00	6.00	6.00	6.00	5.40	6.00	-	7.20	6.00	6.00	-	6.00	6.00	-	6.00	6.00	6.00	-	

***TEST LOCATION REJECTED DUE TO LOW AVERAGE YIELD (2042 kg/ha), THAN THE STATE AVERAGE YIELD (2166 kg/ha) TAKEN OVER 10 YEARS

**LOCATION REJECTED DUE TO HIGH C.V. (i.e. > 30%): ALW5 30.1%

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Table I.63: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW4	ALW5	ALW	DAS	BHP	RAJ MEAN	JMR	AHD	DEG1	GUJ MEAN	ALR	MTR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	IHT 301	MH 2864	5778	7900	4773	7512	6367	8651	11243	7461	4060	15704	7422	9062	10833	13361	12097	21333	15000	17178	10474	15
2	IHT 302	MH 2865	4833	5644	4625	6517	8028	7312	12626	7084	4435	11369	9200	8335	8944	9689	9317	14444	9722	11361	8583	23
3	IHT 303	MH 2866	6333	10017	8806	14190	10556	11719	6683	9758	8815	10018	11644	10159	24089	14978	19533	16444	17778	21339	12894	2
4	IHT 304	MH 2867	6889	7700	6658	8656	8989	13170	9515	8797	5421	11999	9822	9081	10700	10311	10506	18303	9444	24250	10789	13
5	IHT 305	MH 2868	4278	11222	5300	8407	6811	7778	10100	7699	4319	14322	12533	10392	5889	9067	7478	13667	6667	17611	9198	22
6	IHT 306	MP 7878 (Check)	7611	11417	8022	13608	10533	8478	11622	10185	7569	8019	14089	9893	16889	13489	15189	18278	11111	19833	12038	4
7	IHT 307	MH 2869	4500	7461	5289	8086	7172	11207	10511	7747	3282	8932	8389	6868	5200	12689	8944	13889	6389	13639	8442	24
8	IHT 308	MH 2870	5944	7089	5169	8943	6867	7611	10176	7400	4491	15402	9911	9935	7367	9378	8372	7778	6389	13528	8403	25
9	IHT 309	AHB 1200 (Check)	3833	7089	5611	8677	5967	11194	11694	7724	3454	12069	8522	8015	7644	10956	9300	10667	6389	9561	8222	26
10	IHT 310	MH 2871	5333	8656	6334	7417	12422	8290	11757	8601	4426	10159	11044	8543	10733	12294	11514	12722	18333	10283	10014	19
11	IHT 311	MH 2872	8667	12811	11276	15496	13439	11364	12211	12180	5801	13022	14767	11197	18789	14811	16800	8833	8611	9233	11942	5
12	IHT 312	MH 2873	6722	12428	8469	11983	8911	11426	12932	10410	5167	15539	9567	10091	21856	11744	16800	13944	11667	8189	11370	8
13	IHT 313	86M84 (Check)	5778	9883	8278	9829	15000	10077	11561	10058	5032	13354	13422	10603	15167	10778	12972	15117	14167	18811	11750	7
14	IHT 314	MH 2874	9389	9139	7946	11067	10650	10809	11541	10077	5593	11803	14011	10469	16233	11956	14094	9179	11389	16828	11169	11
15	IHT 315	MH 2875	8667	9333	7481	11748	11567	7401	10089	9469	4657	11822	15211	10563	14667	12667	13667	15222	15833	12044	11227	9
16	IHT 316	MH 2876	6278	10117	8814	10608	9267	9549	11056	9384	5000	15661	9267	9976	20078	10889	15483	12389	8889	19789	11177	10
17	IHT 317	MH 2877	5000	10583	5869	9520	9122	8759	10728	8512	4352	11044	10761	8719	9856	10139	9997	16111	6667	13183	9446	21
18	IHT 318	MH 2878	7111	9883	9861	16350	18611	11420	11467	12100	7296	9243	16567	11035	18922	15144	17033	18333	13333	17539	13405	1
19	IHT 319	MH 2879	6944	12628	10142	13709	12200	8963	9328	10559	7148	13772	14183	11701	16722	10872	13797	17222	7500	16083	11828	6
20	IHT 320	KBH 108 (Check)	5833	8667	7489	8096	9600	12648	9582	8845	4944	11123	13044	9704	15900	9522	12711	11056	19167	14511	10745	14
21	IHT 321	MH 2880	5000	8906	7192	11764	7211	7377	12722	8596	6361	16151	10500	11004	16067	12578	14322	14833	9167	9728	10370	16
22	IHT 322	MH 2881	5944	8078	6933	9444	7183	7454	12876	8273	3588	17848	13428	11621	13433	11517	12475	15444	8611	9322	10074	18
23	IHT 323	MH 2882	7167	7739	8981	11440	7533	10009	14193	9580	3963	11216	12072	9084	10767	9622	10194	10075	12778	15833	10226	17
24	IHT 324	MH 2883	4944	10378	5400	9242	17017	10426	14463	10267	5009	14366	15633	11670	17744	13456	15600	19111	6944	16606	12049	3
25	IHT 325	MH 2884	4111	5644	4967	6379	8267	7506	10044	6703	3019	17598	7133	9250	9122	7139	8131	6889	12500	12028	8156	27
26	IHT 326	MH 2885	5444	10639	8608	14223	11900	13421	14337	11225	5514	11086	12944	9848	12589	11928	12258	12667	7778	11856	10996	12
27	IHT 327	MH 2886	5500	8311	6383	7933	9833	8759	11876	8371	5324	10910	9422	8552	11033	10178	10606	17222	11667	9700	9604	20
		LOC. MEAN	6068	9236	7210	10402	10038	9733	11368	9151	5113	12724	11649	9828	13601	11524	12563	14118	10885	14440	10540	
		C.D. (5%)	1309	1225	1121	3073	2664	1313	4096	1919	1208	854	2050	3442	3658	2005	6317	5186	2341	2122	1813	
		C.D. (1%)	1744	1632	1494	4094	3550	1749	5457	2536	1610	1138	2731	4587	4873	2671	8539	6909	3119	2827	2388	
		C.V. (%)	13.2	8.1	9.5	18.0	16.2	8.2	22.0	19.1	14.4	4.1	10.7	21.6	16.4	10.6	24.3	22.4	13.1	9.0	23.8	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.858	0.000	0.000	0.018	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	6.00	6.00	6.00	6.00	6.00	5.40	6.00	-	7.20	6.00	6.00	-	6.00	6.00	-	6.00	6.00	6.00	-	

CHAPTER I: BREEDING

Table I.64: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE A

S.No.	TEST	ENTRY	JPR	JPR1	PTA	ALW4	ALW5	ALW	DAS	BHP	RAJ	JMR	AHD	DEG1	GUJ	ALR	MTR	UP	HSR	GLR	LDA	ZONE	RANK
	CODE										MEAN				MEAN			MEAN				MEAN	
1	IHT 301	MH 2864	51	56	53	53	60	58	61	62	57	49	52	56	52	58	52	55	58	54	53	55	20
2	IHT 302	MH 2865	45	46	54	50	51	50	55	62	52	46	50	49	48	51	46	49	52	47	51	50	27
3	IHT 303	MH 2866	57	64	62	61	59	64	67	71	63	56	60	61	59	64	60	62	65	62	58	62	2
4	IHT 304	MH 2867	51	54	57	54	54	54	58	63	56	51	54	56	54	56	51	54	57	55	55	55	21
5	IHT 305	MH 2868	49	51	54	54	56	55	57	64	55	50	52	49	50	54	52	53	56	55	50	54	23
6	IHT 306	MP 7878 (Check)	52	56	55	58	58	58	61	67	58	54	58	57	57	56	50	53	57	59	44	56	17
7	IHT 307	MH 2869	46	51	53	55	51	54	55	63	54	50	53	52	52	52	48	50	55	55	45	52	25
8	IHT 308	MH 2870	47	50	52	55	54	54	57	62	54	50	54	54	53	51	48	50	55	55	47	53	24
9	IHT 309	AHB 1200 (Check)	47	47	53	52	52	50	57	60	52	48	51	51	50	49	45	47	53	49	46	51	26
10	IHT 310	MH 2871	54	55	60	56	58	60	58	68	59	51	55	54	53	57	52	55	61	57	56	57	15
11	IHT 311	MH 2872	58	64	58	65	57	63	67	77	64	57	64	62	61	64	60	62	64	61	60	63	1
12	IHT 312	MH 2873	57	60	61	57	59	62	62	70	61	55	58	59	57	59	58	59	63	60	57	60	6
13	IHT 313	86M84 (Check)	55	61	56	59	60	60	62	63	60	55	57	56	56	61	53	57	60	57	49	58	11
14	IHT 314	MH 2874	51	58	55	56	57	57	60	62	57	54	59	54	56	57	51	54	58	54	46	56	19
15	IHT 315	MH 2875	52	56	54	56	58	57	61	65	57	54	57	55	55	57	51	54	59	56	45	56	18
16	IHT 316	MH 2876	55	62	61	63	62	62	66	76	63	55	59	60	58	63	60	62	63	64	56	62	4
17	IHT 317	MH 2877	54	56	57	55	59	58	65	63	58	51	53	55	53	58	52	55	60	55	57	57	16
18	IHT 318	MH 2878	56	60	56	60	61	63	62	64	60	55	58	57	57	61	56	59	57	56	55	59	9
19	IHT 319	MH 2879	55	62	57	62	60	61	62	71	62	57	61	60	59	65	56	60	62	53	55	60	5
20	IHT 320	KBH 108 (Check)	54	60	57	58	58	63	66	68	60	56	60	57	58	62	55	58	62	57	58	59	8
21	IHT 321	MH 2880	49	56	54	57	57	60	62	70	58	54	59	56	56	59	51	55	58	56	56	57	14
22	IHT 322	MH 2881	57	62	60	60	59	63	66	74	63	55	61	59	58	64	58	61	65	62	61	62	3
23	IHT 323	MH 2882	51	57	59	58	53	62	61	66	59	53	57	56	56	58	52	55	59	56	55	57	13
24	IHT 324	MH 2883	51	53	57	53	58	55	58	61	56	51	53	50	51	55	52	54	56	50	54	54	22
25	IHT 325	MH 2884	53	59	60	58	61	60	59	68	60	55	58	60	57	58	59	59	63	60	62	60	7
26	IHT 326	MH 2885	55	59	58	59	57	60	64	67	60	54	59	57	56	60	54	57	60	57	55	58	10
27	IHT 327	MH 2886	52	58	59	57	58	58	60	69	59	53	59	57	56	56	54	55	58	58	55	57	12
		LOC. MEAN	52	57	57	57	57	59	61	67	58	53	57	56	55	58	53	56	59	56	53	57	
		C.D. (5%)	2.0	1.0	2.0	2.0	3.0	1.0	2.0	6.0	2.0	1.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0	1.0	1.0	1.0	
		C.D. (1%)	2.0	2.0	3.0	2.0	4.0	2.0	3.0	8.0	3.0	2.0	2.0	3.0	3.0	2.0	4.0	4.0	3.0	1.0	2.0	2.0	
		C.V. (%)	2.1	1.3	2.3	1.9	3.2	1.3	2.4	5.7	3.4	1.6	2.0	2.1	2.1	1.8	3.5	2.8	2.4	0.8	1.4	3.5	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.65: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 DAYS TO MATURITY ZONE A

S.No.	TEST	ENTRY	JPR	JPR1	PTA	ALW4	ALW5	ALW	DAS	BHP	RAJ	JMR	AHD	DEG1	GUJ	ALR	MTR	UP	HSR	GLR	LDA	ZONE	RANK
	CODE										MEAN				MEAN			MEAN				MEAN	
1	IHT 301	MH 2864	80	84	80	77	85	85	86	94	84	79	83	83	82	84	79	82	89	75	93	84	21
2	IHT 302	MH 2865	78	78	81	72	78	79	81	93	80	75	78	74	76	83	73	78	83	74	93	80	27
3	IHT 303	MH 2866	84	92	89	88	83	95	91	101	90	85	90	89	88	87	87	87	98	86	99	90	3
4	IHT 304	MH 2867	80	85	84	78	80	80	84	93	83	80	86	82	82	83	78	81	89	86	95	84	20
5	IHT 305	MH 2868	78	82	81	79	81	81	82	94	82	80	84	74	79	83	79	81	88	78	96	82	23
6	IHT 306	MP 7878 (Check)	81	85	82	85	83	85	85	99	86	84	89	85	86	85	77	81	89	86	96	86	16
7	IHT 307	MH 2869	77	82	80	77	75	80	81	95	81	79	84	78	80	83	75	79	85	77	95	81	24
8	IHT 308	MH 2870	78	81	79	78	80	80	79	91	81	78	84	80	81	83	75	79	85	75	94	81	25
9	IHT 309	AHB 1200 (Check)	80	78	80	73	77	76	83	90	80	77	81	77	78	82	72	77	84	75	98	80	26
10	IHT 310	MH 2871	84	83	87	83	82	90	83	100	87	80	84	80	81	85	79	82	94	84	102	86	14
11	IHT 311	MH 2872	87	92	85	90	83	95	93	109	92	86	92	90	89	90	87	89	99	85	104	92	1
12	IHT 312	MH 2873	88	87	88	86	85	95	86	99	89	83	90	87	87	87	85	86	97	88	99	89	6
13	IHT 313	86M84 (Check)	87	90	83	87	85	90	85	92	87	84	88	82	85	89	80	84	92	86	97	87	12
14	IHT 314	MH 2874	80	89	82	80	82	85	85	94	85	82	89	79	84	86	78	82	89	84	95	85	19
15	IHT 315	MH 2875	80	87	81	84	85	85	84	96	85	82	87	81	83	86	78	82	89	87	96	86	18
16	IHT 316	MH 2876	84	91	88	90	86	92	90	106	91	83	90	87	87	90	87	88	95	88	97	90	4
17	IHT 317	MH 2877	86	85	84	79	85	87	91	92	86	80	82	81	81	86	79	83	91	90	103	86	13
18	IHT 318	MH 2878	86	91	83	86	86	95	85	96	89	84	88	84	86	87	83	85	89	87	104	88	9
19	IHT 319	MH 2879	87	90	84	90	85	90	86	103	89	86	91	88	88	93	83	88	94	88	98	90	5
20	IHT 320	KBH 108 (Check)	87	89	84	84	83	94	89	97	88	85	90	85	86	88	82	85	94	88	103	89	7
21	IHT 321	MH 2880	80	86	81	83	82	91	87	99	86	83	88	82	84	85	78	81	89	78	103	86	17
22	IHT 322	MH 2881	82	91	87	88	84	95	89	103	90	84	91	87	87	92	85	89	96	89	104	91	2
23	IHT 323	MH 2882	83	86	86	85	79	94	84	98	87	82	87	83	84	86	79	83	90	80	95	86	15
24	IHT 324	MH 2883	80	82	84	75	83	79	84	92	83	80	82	76	79	82	79	81	89	74	97	83	22
25	IHT 325	MH 2884	81	88	87	86	86	90	84	97	87	84	88	88	86	85	86	86	96	85	108	89	8
26	IHT 326	MH 2885	84	87	85	88	81	91	83	96	87	83	89	82	85	87	81	84	93	83	104	87	10
27	IHT 327	MH 2886	82	86	86	85	84	87	84	101	87	82	89	83	85	86	81	83	90	84	105	87	11
		LOC. MEAN	82	86	84	83	83	88	85	97	86	82	87	82	84	86	80	83	91	83	99	86	
		C.D. (5%)	1.0	1.0	2.0	4.0	3.0	1.0	2.0	6.0	3.0	1.0	3.0	2.0	3.0	2.0	3.0	4.0	3.0	2.0	2.0	2.0	
		C.D. (1%)	1.0	2.0	3.0	5.0	4.0	2.0	2.0	8.0	3.0	2.0	4.0	3.0	3.0	2.0	4.0	6.0	4.0	2.0	2.0	2.0	
		C.V. (%)	0.6	1.1	1.5	2.8	2.0	0.8	1.2	3.8	3.0	0.9	1.9	1.8	1.9	1.3	2.3	2.6	2.0	1.3	1.1	2.8	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.66: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 PLANT HEIGHT (cm) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	PTA	ALW4	ALW5	ALW	DAS	BHP	RAJ MEAN	JMR	AHD	DEG1	GUJ MEAN	ALR	MTR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	IHT 301	MH 2864	136	270	248	195	220	243	250	192	219	159	177	183	173	268	268	268	267	310	218	225	18
2	IHT 302	MH 2865	164	235	229	183	161	223	223	156	197	150	164	162	158	258	233	246	254	281	200	205	22
3	IHT 303	MH 2866	237	303	314	248	265	258	293	211	266	223	265	237	242	290	293	291	287	359	242	270	2
4	IHT 304	MH 2867	137	255	228	213	196	213	225	171	205	185	205	182	191	240	223	231	236	266	197	211	21
5	IHT 305	MH 2868	154	215	215	185	171	203	200	188	192	156	169	170	165	242	209	225	227	243	177	195	26
6	IHT 306	MP 7878 (Check)	150	290	253	233	231	233	248	173	227	206	240	203	216	267	262	264	267	319	202	236	10
7	IHT 307	MH 2869	192	237	208	213	178	210	247	175	208	150	173	160	161	230	253	241	194	266	180	204	23
8	IHT 308	MH 2870	190	227	212	197	183	210	207	171	200	163	194	157	171	227	206	217	213	274	177	200	25
9	IHT 309	AHB 1200 (Check)	173	227	233	195	181	210	218	166	200	161	182	172	171	217	224	220	204	286	192	202	24
10	IHT 310	MH 2871	162	252	250	213	197	232	248	185	217	163	200	180	181	255	240	248	241	266	200	218	19
11	IHT 311	MH 2872	220	308	317	280	294	270	308	238	279	233	271	273	259	292	284	288	318	403	297	288	1
12	IHT 312	MH 2873	165	277	273	225	217	245	233	200	229	189	221	200	203	257	245	251	267	307	255	236	11
13	IHT 313	86M84 (Check)	200	283	256	225	227	248	248	199	236	196	206	190	197	247	234	240	211	313	233	232	14
14	IHT 314	MH 2874	206	265	242	220	210	245	248	180	227	195	219	192	202	260	248	254	264	326	215	233	13
15	IHT 315	MH 2875	212	283	250	230	232	233	232	191	233	191	255	190	212	268	244	256	271	297	230	238	9
16	IHT 316	MH 2876	107	290	295	233	226	250	272	213	236	209	248	222	226	262	242	252	273	298	248	243	5
17	IHT 317	MH 2877	173	258	247	197	211	222	248	164	215	164	179	172	171	233	233	233	246	267	220	215	20
18	IHT 318	MH 2878	200	303	285	248	248	268	277	231	257	226	249	215	230	268	276	272	261	340	230	258	3
19	IHT 319	MH 2879	199	292	265	243	253	263	257	194	246	205	249	233	229	265	245	255	277	328	243	251	4
20	IHT 320	KBH 108 (Check)	184	283	272	235	205	247	257	206	236	215	224	208	216	262	249	255	258	359	193	241	8
21	IHT 321	MH 2880	184	287	239	225	229	220	223	176	223	211	241	198	217	270	259	265	224	319	205	232	15
22	IHT 322	MH 2881	194	275	275	237	230	232	235	201	235	194	268	207	223	263	243	253	281	326	225	243	7
23	IHT 323	MH 2882	166	267	257	242	227	238	238	196	229	204	250	200	218	248	239	244	239	318	233	235	12
24	IHT 324	MH 2883	210	270	252	207	198	248	237	194	227	170	222	183	192	250	265	258	257	321	218	231	16
25	IHT 325	MH 2884	146	188	187	177	157	148	200	155	170	153	170	143	156	192	178	185	171	244	158	173	27
26	IHT 326	MH 2885	203	267	280	237	232	247	267	192	241	202	240	203	215	258	251	255	261	326	218	243	6
27	IHT 327	MH 2886	205	272	251	223	208	235	245	179	227	199	236	187	207	227	237	232	258	288	217	229	17
		LOC. MEAN	180	266	253	221	214	233	244	189	225	188	219	193	200	252	244	248	249	306	216	229	
		C.D. (5%)	10.0	11.0	4.0	17.0	18.0	24.0	15.0	22.0	15.0	15.0	6.0	15.0	19.0	32.0	8.0	19.0	32.0	25.0	12.0	10.0	
		C.D. (1%)	13.0	15.0	6.0	22.0	25.0	32.0	20.0	30.0	20.0	20.0	8.0	20.0	25.0	42.0	11.0	26.0	43.0	33.0	16.0	14.0	
		C.V. (%)	3.3	2.6	1.1	4.6	5.3	6.4	3.8	7.2	6.7	5.0	1.7	4.8	5.7	7.7	2.1	3.8	7.8	4.9	3.3	6.6	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.67: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE A

S.No.	TEST	ENTRY	JPR	JPR1	ALW4	ALW5	ALW	DAS	BHP	RAJ	JMR	AHD	DEG1	GUJ	ALR	HSR	GLR	LDA	ZONE	RANK
	CODE									MEAN				MEAN					MEAN	
1	IHT 301	MH 2864	2.4	2.0	1.1	1.1	2.1	3.0	2.9	2.1	2.3	1.3	1.3	1.7	1.1	2.9	2.3	3.0	2.1	1
2	IHT 302	MH 2865	1.9	2.0	1.1	1.0	1.8	2.0	2.9	1.8	1.9	2.3	1.5	1.9	1.1	3.2	2.3	1.9	1.9	2
3	IHT 303	MH 2866	1.1	1.0	1.1	1.0	1.7	2.0	1.3	1.3	1.6	1.7	1.1	1.4	1.1	2.6	1.7	2.2	1.5	25
4	IHT 304	MH 2867	2.7	1.0	1.1	1.0	1.7	2.0	2.6	1.7	1.4	1.3	1.0	1.2	1.1	2.4	1.5	2.3	1.7	15
5	IHT 305	MH 2868	1.2	1.3	1.1	1.1	1.8	2.0	2.2	1.5	1.3	1.3	1.0	1.2	1.1	3.0	1.7	2.5	1.6	19
6	IHT 306	MP 7878 (Check)	2.0	1.3	1.2	1.1	1.8	2.7	2.1	1.7	1.2	2.3	1.3	1.6	1.1	3.3	2.3	2.8	1.9	3
7	IHT 307	MH 2869	1.1	1.0	1.1	1.0	1.7	2.0	1.5	1.4	1.5	1.3	1.1	1.3	1.1	3.0	1.5	2.5	1.5	24
8	IHT 308	MH 2870	1.2	1.3	1.0	1.1	1.1	2.0	1.7	1.3	1.3	1.7	1.1	1.4	1.1	2.8	1.8	2.7	1.6	23
9	IHT 309	AHB 1200 (Check)	1.9	1.0	1.1	1.0	1.7	3.0	2.6	1.8	1.5	1.3	1.1	1.3	1.1	2.8	1.9	4.0	1.9	4
10	IHT 310	MH 2871	2.0	1.0	1.1	1.0	2.1	2.3	2.5	1.7	1.3	2.0	1.0	1.4	1.1	2.6	2.1	2.7	1.8	10
11	IHT 311	MH 2872	2.0	1.0	1.1	1.1	2.0	2.7	2.4	1.7	1.3	1.0	1.1	1.1	1.1	3.1	2.1	3.1	1.8	9
12	IHT 312	MH 2873	1.1	1.7	1.1	1.1	1.5	2.0	2.6	1.6	1.4	1.0	1.0	1.1	1.1	2.1	1.7	3.2	1.6	19
13	IHT 313	86M84 (Check)	1.0	1.0	1.1	1.0	1.9	2.3	2.1	1.5	1.5	1.3	1.1	1.3	1.1	2.8	1.6	2.9	1.6	18
14	IHT 314	MH 2874	2.3	1.0	1.1	1.0	2.1	2.3	1.6	1.6	1.3	2.0	1.1	1.4	1.1	2.7	2.0	2.5	1.7	12
15	IHT 315	MH 2875	1.1	1.0	1.1	1.0	2.1	2.0	2.0	1.5	1.3	2.3	1.0	1.5	1.1	3.1	1.9	2.9	1.7	14
16	IHT 316	MH 2876	2.0	1.0	1.1	1.1	1.6	2.3	1.7	1.5	1.4	1.3	1.0	1.2	1.1	1.8	2.2	3.6	1.7	16
17	IHT 317	MH 2877	1.2	1.0	1.1	1.1	2.0	2.0	2.0	1.5	1.3	1.0	1.1	1.1	1.1	2.5	1.9	1.9	1.5	26
18	IHT 318	MH 2878	1.2	1.3	1.1	1.0	1.7	2.0	1.8	1.4	1.1	1.7	1.0	1.3	1.1	2.9	1.3	3.2	1.6	21
19	IHT 319	MH 2879	1.0	1.0	1.1	1.0	1.7	2.7	1.3	1.4	1.3	1.3	1.0	1.2	1.1	2.5	1.8	3.2	1.6	22
20	IHT 320	KBH 108 (Check)	1.2	1.0	1.1	1.0	1.9	2.0	2.4	1.5	1.3	1.7	1.0	1.3	1.1	2.1	1.9	3.3	1.7	17
21	IHT 321	MH 2880	1.2	1.0	1.1	1.0	2.0	3.0	2.1	1.6	1.5	2.3	1.1	1.6	1.1	2.7	1.8	3.5	1.8	6
22	IHT 322	MH 2881	1.2	1.0	1.1	1.0	2.0	2.0	2.3	1.5	1.5	1.3	1.0	1.3	1.1	2.9	1.9	2.1	1.6	20
23	IHT 323	MH 2882	3.3	1.0	1.0	1.0	2.0	3.0	2.4	2.0	1.4	1.3	1.1	1.3	1.1	2.8	1.8	2.8	1.9	5
24	IHT 324	MH 2883	2.9	1.0	1.2	1.0	1.7	2.7	1.6	1.7	1.4	1.0	1.0	1.1	1.1	2.7	2.1	3.1	1.8	11
25	IHT 325	MH 2884	2.9	1.0	1.1	1.0	1.7	2.7	1.5	1.7	1.4	2.0	1.1	1.5	1.1	2.7	1.9	3.2	1.8	7
26	IHT 326	MH 2885	2.5	1.0	1.1	1.3	2.1	2.0	2.0	1.7	1.4	1.7	1.0	1.4	1.1	2.7	1.9	2.4	1.7	13
27	IHT 327	MH 2886	1.7	1.0	1.1	1.0	2.0	3.0	2.7	1.8	1.4	2.3	1.1	1.6	1.1	2.6	1.9	2.0	1.8	8
		LOC. MEAN	1.7	1.1	1.1	1.0	1.8	2.4	2.1	1.6	1.4	1.6	1.1	1.4	1.1	2.7	1.9	2.8	1.7	
		C.D. (5%)	0.4	0.4	0.2	0.1	0.6	0.6	0.9	0.4	0.3	0.7	0.3	0.6	0.1	0.8	0.3	0.6	0.3	
		C.D. (1%)	0.6	0.5	0.2	0.1	0.8	0.8	1.2	0.5	0.4	0.9	0.4	0.8	0.1	1.0	0.4	0.8	0.3	
		C.V. (%)	15.1	21.8	9.1	5.4	20.0	15.8	26.1	22.5	11.9	25.9	17.4	22.3	2.9	17.6	9.1	12.6	20.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.063	0.000	0.000	0.000	0.175	0.000	0.000	0.000	0.000	0.000	

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Table I.68: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 PANICLE LENGTH (cm) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	PTA	ALW4	ALW5	ALW	DAS	BHP	RAJ MEAN	JMR	AHD	DEG1	GUJ MEAN	ALR	MTR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	IHT 301	MH 2864	19	28	25	26	25	26	26	27	25	25	26	24	25	28	24	26	28	24	30	26	9
2	IHT 302	MH 2865	18	22	22	24	23	23	24	21	22	20	20	22	21	26	21	24	28	23	21	22	27
3	IHT 303	MH 2866	31	32	32	30	27	29	31	27	30	29	29	27	28	30	31	31	30	30	33	30	2
4	IHT 304	MH 2867	20	25	26	26	24	25	24	25	24	22	26	22	23	28	25	27	28	25	26	25	19
5	IHT 305	MH 2868	23	25	25	27	25	25	24	25	25	22	22	23	22	26	23	25	26	26	28	25	21
6	IHT 306	MP 7878 (Check)	32	26	22	26	28	24	25	25	26	23	24	23	23	27	27	27	30	25	27	26	8
7	IHT 307	MH 2869	26	25	25	27	25	26	25	26	26	23	23	22	23	25	24	24	29	26	27	25	14
8	IHT 308	MH 2870	26	22	22	26	22	23	24	24	24	22	23	19	21	25	22	24	25	26	26	24	25
9	IHT 309	AHB 1200 (Check)	28	25	20	26	22	23	23	22	24	20	23	21	21	26	26	26	28	21	24	24	26
10	IHT 310	MH 2871	21	24	25	26	23	26	24	26	24	20	23	23	22	28	24	26	27	25	26	24	23
11	IHT 311	MH 2872	24	36	33	38	33	35	30	28	32	30	30	33	31	32	31	31	32	37	32	32	1
12	IHT 312	MH 2873	26	25	27	26	24	25	25	25	25	25	23	23	24	25	24	24	28	27	22	25	17
13	IHT 313	86M84 (Check)	21	27	25	29	25	27	26	27	26	24	24	23	24	31	27	29	28	25	31	26	7
14	IHT 314	MH 2874	26	26	25	26	25	26	25	26	26	23	27	23	24	26	24	25	28	24	28	26	10
15	IHT 315	MH 2875	24	25	21	27	23	27	24	27	25	25	26	22	25	28	25	27	27	26	26	25	13
16	IHT 316	MH 2876	24	30	29	30	27	27	25	30	28	27	28	26	27	30	27	29	28	29	31	28	5
17	IHT 317	MH 2877	24	29	24	26	24	24	26	22	25	21	22	22	22	27	26	26	29	28	30	25	15
18	IHT 318	MH 2878	25	26	24	26	23	27	25	25	25	24	23	21	23	25	25	25	29	26	25	25	16
19	IHT 319	MH 2879	24	25	25	26	25	27	25	24	25	22	27	23	24	28	26	27	27	25	29	25	11
20	IHT 320	KBH 108 (Check)	21	24	25	26	23	26	25	26	24	23	23	21	23	28	24	26	29	27	23	25	22
21	IHT 321	MH 2880	29	29	29	30	28	29	25	27	28	30	29	25	28	31	30	31	30	26	30	29	3
22	IHT 322	MH 2881	27	32	27	30	28	27	29	27	28	26	33	24	28	29	27	28	28	27	34	29	4
23	IHT 323	MH 2882	22	26	26	29	29	26	25	29	27	24	27	24	25	29	25	27	28	26	31	27	6
24	IHT 324	MH 2883	26	26	27	26	22	26	24	26	25	22	27	22	24	27	25	26	29	25	26	25	12
25	IHT 325	MH 2884	26	25	25	26	21	24	25	25	25	24	26	23	24	23	23	23	28	26	25	25	20
26	IHT 326	MH 2885	26	27	24	26	22	26	25	23	25	24	24	22	24	25	24	25	27	26	25	25	18
27	IHT 327	MH 2886	24	23	27	26	21	25	24	25	24	24	26	21	24	24	25	25	26	25	25	24	24
		LOC. MEAN	25	26	25	27	25	26	25	26	26	24	25	23	24	27	25	26	28	26	27	26	
		C.D. (5%)	2.0	1.0	1.0	3.0	3.0	3.0	2.0	4.0	2.0	2.0	1.0	2.0	2.0	3.0	1.0	2.0	3.0	1.0	2.0	1.0	
		C.D. (1%)	3.0	2.0	1.0	4.0	4.0	5.0	2.0	5.0	2.0	3.0	1.0	2.0	3.0	4.0	2.0	3.0	4.0	2.0	3.0	2.0	
		C.V. (%)	5.2	3.4	2.2	6.5	7.7	8.1	3.9	9.1	7.3	6.2	1.8	4.7	6.3	7.0	3.1	4.5	5.9	2.9	4.6	6.7	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.69: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW5	ALW	DAS	BHP	RAJ	JMR	AHD	DEG1	GUJ	ALR	MTR	UP	HSR	GLR	LDA	ZONE	RANK
									MEAN				MEAN			MEAN				MEAN	
1	IHT 301	MH 2864	2.5	3.2	3.1	3.0	3.1	2.6	2.9	2.4	3.1	2.8	2.8	3.7	3.7	3.7	4.0	2.5	3.9	3.1	23
2	IHT 302	MH 2865	2.8	3.1	3.2	3.1	2.7	2.7	3.0	2.9	3.0	2.7	2.8	3.4	3.3	3.3	3.7	2.5	3.4	3.0	24
3	IHT 303	MH 2866	3.0	3.2	2.6	3.0	3.2	2.7	3.0	2.8	3.0	3.1	2.9	3.2	4.0	3.6	4.2	2.6	3.7	3.2	22
4	IHT 304	MH 2867	2.7	3.5	3.3	3.4	3.4	2.8	3.2	2.6	3.8	3.3	3.2	3.9	3.9	3.9	4.0	2.5	3.6	3.3	15
5	IHT 305	MH 2868	3.3	3.5	3.1	3.3	3.2	3.0	3.2	2.8	3.3	3.3	3.1	3.9	3.4	3.7	4.0	3.3	3.9	3.4	9
6	IHT 306	MP 7878 (Check)	3.9	3.5	3.6	3.4	3.3	2.5	3.4	3.1	3.7	3.4	3.4	3.8	4.0	3.9	4.1	2.6	3.9	3.5	3
7	IHT 307	MH 2869	3.2	3.5	3.4	3.6	3.2	2.9	3.3	2.9	3.0	3.1	3.0	3.6	3.9	3.7	4.1	2.7	3.9	3.4	12
8	IHT 308	MH 2870	2.8	3.1	3.2	3.3	3.0	2.6	3.0	2.6	3.4	3.0	3.0	3.5	4.1	3.8	3.9	3.0	3.8	3.2	21
9	IHT 309	AHB 1200 (Check)	3.2	3.5	2.8	3.4	3.1	2.0	3.0	2.6	3.8	3.2	3.2	3.7	4.1	3.9	4.3	2.5	3.8	3.3	18
10	IHT 310	MH 2871	3.1	3.6	3.5	3.7	3.3	2.5	3.3	3.0	3.4	3.5	3.3	3.9	3.6	3.8	4.2	2.9	3.8	3.4	4
11	IHT 311	MH 2872	2.7	2.6	2.7	2.8	2.9	2.5	2.7	2.5	2.6	2.6	2.5	3.2	3.0	3.1	3.7	2.7	3.3	2.8	25
12	IHT 312	MH 2873	3.3	3.4	3.5	3.3	3.0	2.3	3.1	2.9	3.4	3.2	3.2	3.8	3.3	3.5	4.1	2.8	3.6	3.3	19
13	IHT 313	86M84 (Check)	2.4	3.5	3.2	3.4	3.5	2.7	3.1	3.2	3.3	3.0	3.1	4.0	3.7	3.9	4.1	2.6	3.7	3.3	17
14	IHT 314	MH 2874	3.2	3.3	3.3	3.3	3.1	2.8	3.2	3.0	3.6	3.3	3.3	3.9	3.7	3.8	4.2	2.6	3.9	3.4	11
15	IHT 315	MH 2875	2.9	3.3	3.6	3.4	3.3	3.3	3.3	3.0	3.7	3.2	3.3	3.8	3.7	3.8	4.0	2.6	3.7	3.4	7
16	IHT 316	MH 2876	3.0	4.0	3.7	3.6	3.2	3.0	3.4	3.2	3.7	3.3	3.4	4.1	3.7	3.9	4.1	3.0	4.0	3.5	2
17	IHT 317	MH 2877	2.7	3.5	3.4	3.5	3.2	2.7	3.2	2.8	3.2	3.2	3.0	3.9	3.5	3.7	4.0	3.5	4.0	3.4	14
18	IHT 318	MH 2878	2.7	3.4	3.4	3.5	3.2	3.0	3.2	3.1	3.4	3.3	3.3	3.7	3.7	3.7	4.2	2.7	3.9	3.4	10
19	IHT 319	MH 2879	3.0	3.4	3.5	3.5	3.5	2.8	3.3	2.9	3.8	3.2	3.3	4.0	3.5	3.8	4.0	2.6	3.7	3.4	8
20	IHT 320	KBH 108 (Check)	2.8	3.2	3.4	3.5	3.4	2.5	3.2	3.0	3.3	3.3	3.2	3.7	3.3	3.5	4.2	3.1	3.5	3.3	16
21	IHT 321	MH 2880	2.8	3.3	3.2	3.1	3.0	2.5	3.0	3.1	3.4	3.1	3.2	3.5	3.8	3.7	4.4	2.5	3.7	3.2	20
22	IHT 322	MH 2881	3.2	3.6	3.5	3.6	3.0	2.3	3.2	3.1	3.7	3.5	3.4	3.8	3.7	3.8	4.0	2.5	4.0	3.4	6
23	IHT 323	MH 2882	3.9	3.6	4.0	3.6	3.4	2.7	3.5	3.4	3.5	3.6	3.5	3.8	4.0	3.9	4.1	3.2	4.3	3.7	1
24	IHT 324	MH 2883	3.2	3.4	3.2	3.5	3.2	2.8	3.2	2.8	3.8	3.0	3.2	3.8	3.7	3.8	4.2	2.6	3.7	3.4	13
25	IHT 325	MH 2884	3.8	3.4	3.1	3.3	3.2	2.7	3.2	3.2	4.0	3.2	3.5	3.5	3.5	3.5	4.2	3.2	3.6	3.4	5
26	IHT 326	MH 2885	3.5	3.4	3.1	3.2	3.1	2.7	3.1	3.1	3.4	3.2	3.2	3.7	3.6	3.7	4.2	2.5	3.8	3.3	16
27	IHT 327	MH 2886	3.4	3.5	3.2	3.4	3.3	2.8	3.3	3.1	3.6	3.1	3.3	3.5	3.7	3.6	4.0	2.5	3.6	3.4	13
		LOC. MEAN	3.1	3.4	3.3	3.4	3.2	2.7	3.2	2.9	3.4	3.2	3.2	3.7	3.7	3.7	4.1	2.7	3.8	3.3	
		C.D. (5%)	0.2	0.2	0.4	0.2	0.3	0.5	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.4	0.5	0.2	0.4	0.2	
		C.D. (1%)	0.2	0.3	0.5	0.3	0.4	0.6	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.5	0.6	0.2	0.5	0.2	
		C.V. (%)	3.2	4.2	7.5	3.8	5.2	10.3	7.0	6.7	3.5	5.7	6.6	5.2	4.1	5.3	7.2	4.1	6.2	6.3	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.70: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 1000-SEED Wt.(g) ZONE A

S.No.	TEST	ENTRY	JPR	JPR1	ALW4	ALW	DAS	BHP	RAJ	JMR	AHD	DEG1	GUJ	MTR	HSR	GLR	LDA	ZONE	RANK
	CODE								MEAN				MEAN					MEAN	
1	IHT 301	MH 2864	6.7	10.5	8.2	6.5	7.0	12.0	8.5	8.8	7.6	9.1	8.5	10.6	10.0	11.1	9.8	9.1	26
2	IHT 302	MH 2865	7.5	11.0	10.2	8.6	8.7	10.2	9.4	10.3	7.6	9.4	9.1	9.9	10.3	11.7	11.2	9.7	23
3	IHT 303	MH 2866	7.2	11.9	11.6	6.1	9.0	11.4	9.6	9.7	9.1	8.4	9.1	10.4	10.2	11.2	12.0	9.9	20
4	IHT 304	MH 2867	7.5	11.5	10.4	7.3	7.2	12.1	9.3	10.5	9.8	11.4	10.6	10.1	11.8	11.5	11.2	10.2	15
5	IHT 305	MH 2868	8.1	13.8	12.9	8.3	9.2	12.6	10.8	10.7	9.3	11.6	10.5	10.7	13.4	11.3	12.9	11.1	4
6	IHT 306	MP 7878 (Check)	9.6	13.4	9.6	8.6	12.4	12.1	11.0	10.6	11.4	11.3	11.1	10.1	14.0	10.7	12.7	11.3	2
7	IHT 307	MH 2869	7.0	10.9	11.8	8.3	11.7	10.2	10.0	10.9	12.0	12.3	11.7	10.8	15.0	11.3	11.7	11.1	5
8	IHT 308	MH 2870	7.6	11.5	13.2	8.7	10.6	10.2	10.3	10.9	9.8	10.6	10.5	10.9	12.9	11.0	13.1	10.8	7
9	IHT 309	AHB 1200 (Check)	9.0	11.6	13.5	8.7	12.3	11.2	11.0	10.7	10.2	9.4	10.1	11.0	13.0	11.8	13.1	11.2	3
10	IHT 310	MH 2871	8.6	10.4	12.6	8.1	9.1	9.5	9.7	10.4	10.4	11.2	10.7	12.0	11.0	12.0	11.3	10.5	10
11	IHT 311	MH 2872	6.7	10.4	8.4	7.1	9.1	12.0	9.0	7.9	7.1	6.5	7.2	11.1	9.3	12.0	8.8	9.0	27
12	IHT 312	MH 2873	7.6	10.9	12.2	7.7	7.8	10.1	9.4	10.1	9.1	9.3	9.5	10.3	12.2	11.7	11.7	10.1	16
13	IHT 313	86M84 (Check)	7.7	12.3	11.3	8.5	7.2	12.1	9.9	10.8	8.8	10.9	10.1	10.3	10.9	12.1	12.9	10.4	11
14	IHT 314	MH 2874	7.7	10.9	8.1	8.5	9.8	9.3	9.1	10.0	8.3	11.0	9.8	10.3	11.8	11.4	12.0	9.9	19
15	IHT 315	MH 2875	9.8	12.5	10.9	8.6	8.5	11.2	10.2	10.3	11.3	11.3	10.9	10.5	13.7	11.5	10.8	10.8	8
16	IHT 316	MH 2876	6.7	12.4	13.0	9.2	8.6	10.2	10.0	11.8	10.6	10.3	10.9	10.6	12.3	12.0	11.3	10.7	9
17	IHT 317	MH 2877	7.7	13.3	12.7	8.9	7.0	12.3	10.3	10.1	10.2	12.1	10.8	10.4	12.5	11.8	14.8	11.1	6
18	IHT 318	MH 2878	7.6	10.5	10.3	8.0	6.5	11.3	9.0	9.3	8.8	9.2	9.1	11.1	11.3	11.9	11.8	9.8	22
19	IHT 319	MH 2879	8.4	14.9	9.8	8.5	11.3	11.2	10.7	11.2	10.8	12.7	11.6	11.2	12.4	11.6	13.6	11.4	1
20	IHT 320	KBH 108 (Check)	7.8	11.9	10.4	8.4	7.5	12.3	9.7	10.2	7.6	10.8	9.5	10.6	12.5	11.7	12.7	10.3	14
21	IHT 321	MH 2880	7.7	11.6	10.6	7.9	7.3	9.1	9.0	10.5	8.1	10.4	9.7	11.6	12.2	11.6	11.9	10.0	18
22	IHT 322	MH 2881	7.6	10.6	9.9	8.2	6.2	12.3	9.1	8.8	7.5	9.3	8.5	11.2	11.2	11.5	13.3	9.8	21
23	IHT 323	MH 2882	9.8	13.5	9.7	8.7	7.8	10.4	10.0	10.0	7.5	11.7	9.7	11.3	11.6	10.4	12.1	10.4	13
24	IHT 324	MH 2883	10.7	11.6	11.3	9.0	9.0	11.0	10.4	9.9	9.2	9.5	9.5	10.8	11.7	11.7	9.5	10.4	12
25	IHT 325	MH 2884	7.6	9.6	8.4	7.6	5.7	10.4	8.2	8.0	11.1	7.0	8.7	11.1	10.2	11.4	12.1	9.3	25
26	IHT 326	MH 2885	9.9	10.6	9.3	8.3	6.4	11.2	9.3	9.1	9.3	9.2	9.2	11.4	8.6	12.1	10.4	9.7	24
27	IHT 327	MH 2886	7.9	9.8	9.6	8.2	11.2	10.8	9.6	10.5	7.4	10.8	9.6	11.7	10.4	11.7	10.7	10.0	17
		LOC. MEAN	8.1	11.6	10.7	8.2	8.7	11.1	9.7	10.1	9.3	10.2	9.9	10.8	11.7	11.5	11.8	10.3	
		C.D. (5%)	0.7	0.6	1.0	1.5	0.2	2.1	1.5	1.0	0.2	1.4	2.1	0.4	1.7	0.9	0.9	1.0	
		C.D. (1%)	0.9	0.8	1.3	2.0	0.3	2.7	2.0	1.3	0.3	1.9	2.8	0.6	2.3	1.2	1.1	1.3	
		C.V. (%)	5.3	3.4	5.8	11.4	1.5	11.3	11.0	6.0	1.3	8.6	13.1	2.5	8.9	4.7	4.4	11.4	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.236	0.000	0.000	0.000	0.000	0.000	

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Table I.71: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	PTA	ALW4	ALW5	ALW	DAS	BHP	RAJ MEAN	JMR	AHD	DEG1	GUJ MEAN	ALR	MTR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	IHT 301	MH 2864	65	91	75	91	67	92	78	61	78	107	72	55	78	80	88	84	48	52	81	75	14
2	IHT 302	MH 2865	68	87	67	108	78	86	80	61	79	98	75	68	80	81	88	84	52	52	81	77	5
3	IHT 303	MH 2866	75	94	70	93	54	95	80	65	78	90	76	74	80	79	86	83	47	48	80	75	12
4	IHT 304	MH 2867	67	89	71	97	72	88	77	61	78	99	77	69	82	80	89	85	42	47	81	75	13
5	IHT 305	MH 2868	82	86	70	93	61	80	81	73	78	90	77	71	79	80	87	83	45	36	81	75	17
6	IHT 306	MP 7878 (Check)	71	89	71	93	75	81	78	65	78	92	69	73	78	80	88	84	46	46	81	75	16
7	IHT 307	MH 2869	58	86	75	93	69	73	81	67	75	105	74	68	83	78	87	83	48	38	80	74	19
8	IHT 308	MH 2870	94	92	75	100	76	68	79	57	80	105	72	73	83	81	86	84	40	37	81	76	8
9	IHT 309	AHB 1200 (Check)	79	87	69	106	76	71	81	66	79	101	74	61	79	81	87	84	46	49	81	76	10
10	IHT 310	MH 2871	50	87	75	94	51	76	80	75	73	96	72	75	81	78	87	83	47	37	80	72	20
11	IHT 311	MH 2872	47	85	70	79	36	80	81	42	65	87	74	64	75	74	87	81	50	47	80	68	27
12	IHT 312	MH 2873	79	88	69	85	58	69	80	52	73	87	75	72	78	80	87	84	51	27	82	71	24
13	IHT 313	86M84 (Check)	83	88	75	101	49	88	81	72	80	97	74	67	79	78	88	83	47	52	81	76	6
14	IHT 314	MH 2874	105	90	70	92	79	85	79	65	83	91	76	75	81	76	90	83	51	49	81	78	4
15	IHT 315	MH 2875	94	89	69	96	74	75	79	63	80	86	73	69	76	77	88	83	45	38	81	75	15
16	IHT 316	MH 2876	61	83	75	93	31	93	80	55	71	97	74	67	79	80	86	83	42	35	81	71	26
17	IHT 317	MH 2877	56	87	67	94	64	75	77	50	71	99	73	69	80	75	88	82	47	40	81	71	23
18	IHT 318	MH 2878	85	89	76	105	67	89	79	72	83	89	76	73	79	79	89	84	47	56	81	78	3
19	IHT 319	MH 2879	68	89	75	104	63	94	80	77	81	110	75	79	88	78	87	83	47	67	81	80	1
20	IHT 320	KBH 108 (Check)	53	79	66	102	55	80	77	58	71	97	73	69	80	76	87	81	42	44	81	71	25
21	IHT 321	MH 2880	72	87	71	99	69	82	79	72	79	104	74	64	81	77	88	83	45	51	80	76	9
22	IHT 322	MH 2881	87	86	69	98	70	97	81	72	83	104	75	73	84	76	89	83	50	52	80	79	2
23	IHT 323	MH 2882	75	88	74	92	57	70	80	67	75	101	74	77	84	77	86	82	51	42	80	74	18
24	IHT 324	MH 2883	57	88	72	109	69	86	77	71	79	94	73	76	81	81	86	83	48	46	80	76	11
25	IHT 325	MH 2884	64	85	69	87	56	89	81	58	74	89	72	72	78	79	86	83	40	43	80	72	22
26	IHT 326	MH 2885	58	86	74	99	73	80	81	71	78	105	74	76	85	78	86	82	44	52	81	76	7
27	IHT 327	MH 2886	54	87	70	98	51	76	79	68	73	95	73	66	78	80	88	84	45	46	81	72	21
		LOC. MEAN	71	87	72	96	63	82	79	64	77	97	74	70	80	79	87	83	46	46	81	75	
		C.D. (5%)	22.0	5.0	3.0	16.0	18.0	23.0	4.0	12.0	8.0	17.0	3.0	9.0	9.0	4.0	3.0	4.0	7.0	22.0	1.0	4.0	
		C.D. (1%)	29.0	7.0	4.0	21.0	24.0	30.0	6.0	16.0	10.0	22.0	3.0	12.0	11.0	5.0	4.0	5.0	9.0	30.0	2.0	6.0	
		C.V. (%)	18.6	3.4	2.5	10.0	17.8	17.0	3.3	11.3	10.3	10.5	2.2	7.9	6.5	3.0	1.9	2.1	9.3	29.7	0.9	8.6	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.640	0.000	0.000	0.865	0.000	0.000	0.000	0.000	

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Table I.72: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 SEED SET (%) UNDER BAG ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	PTA	ALW4	ALW5	ALW	DAS	BHP	RAJ MEAN	JMR	AHD	DEG1	GUJ MEAN	ALR	MTR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	IHT 301	MH 2864	65	97	67	63	78	97	100	100	83	50	77	92	73	63	79	71	95	100	72	81	10
2	IHT 302	MH 2865	75	35	58	57	78	90	98	99	74	32	77	90	66	43	17	30	87	100	53	68	22
3	IHT 303	MH 2866	95	92	62	70	81	87	93	100	85	67	73	78	73	70	50	60	87	100	65	79	17
4	IHT 304	MH 2867	77	72	57	77	78	87	97	100	80	56	83	95	78	83	73	78	91	100	63	81	11
5	IHT 305	MH 2868	98	72	70	63	83	87	98	99	84	43	83	98	75	70	62	66	83	100	70	80	14
6	IHT 306	MP 7878 (Check)	100	98	67	90	79	100	100	98	91	70	77	92	80	83	79	81	87	100	72	87	1
7	IHT 307	MH 2869	97	82	63	73	79	93	95	99	85	47	83	98	76	80	60	70	83	67	73	80	16
8	IHT 308	MH 2870	90	90	42	57	78	77	100	99	79	17	77	72	55	60	83	71	87	37	77	71	21
9	IHT 309	AHB 1200 (Check)	67	70	67	53	79	73	95	99	75	18	77	70	55	60	47	53	85	33	60	66	24
10	IHT 310	MH 2871	98	92	58	70	83	90	95	100	86	67	73	100	80	47	55	51	93	100	62	80	13
11	IHT 311	MH 2872	90	72	58	60	85	90	100	99	82	59	83	68	70	73	55	64	95	87	62	77	18
12	IHT 312	MH 2873	85	97	75	83	82	80	100	98	87	69	67	98	78	70	58	64	97	100	67	83	5
13	IHT 313	86M84 (Check)	95	92	70	90	88	90	93	99	90	71	73	98	81	90	53	72	90	100	88	86	2
14	IHT 314	MH 2874	90	97	67	77	76	90	97	99	86	69	73	97	80	80	70	75	83	97	57	82	7
15	IHT 315	MH 2875	100	92	58	77	85	97	97	99	88	72	67	98	79	83	70	77	98	100	63	85	3
16	IHT 316	MH 2876	92	100	75	67	73	97	100	100	88	79	77	83	80	43	69	56	98	100	43	81	9
17	IHT 317	MH 2877	90	82	47	57	83	83	100	99	80	57	77	95	76	63	58	61	100	33	55	74	20
18	IHT 318	MH 2878	80	95	67	90	76	100	90	98	87	72	67	98	79	73	55	64	93	100	68	83	6
19	IHT 319	MH 2879	85	95	53	83	81	93	98	99	86	72	83	83	80	80	58	69	96	80	65	82	8
20	IHT 320	KBH 108 (Check)	88	90	67	77	83	80	98	98	85	80	73	95	83	65	22	43	92	100	77	80	12
21	IHT 321	MH 2880	63	48	50	50	73	57	98	98	67	16	83	65	55	10	63	37	83	100	62	64	25
22	IHT 322	MH 2881	85	97	70	80	85	93	98	99	88	73	77	97	82	-	48	48	96	100	63	84	4
23	IHT 323	MH 2882	90	65	70	37	83	30	93	98	71	54	13	35	34	80	55	68	90	100	60	66	23
24	IHT 324	MH 2883	85	73	65	63	75	97	93	100	82	73	77	68	73	70	51	61	78	100	63	77	19
25	IHT 325	MH 2884	82	38	57	-	76	30	93	98	68	-	13	-	13	10	30	20	-	47	60	53	27
26	IHT 326	MH 2885	100	22	67	-	79	40	98	99	72	56	17	78	50	67	37	52	96	23	62	63	26
27	IHT 327	MH 2886	92	75	67	83	79	100	100	99	87	59	77	68	68	67	56	61	85	100	72	80	15
		LOC. MEAN	87	79	63	70	80	82	97	99	82	58	70	85	71	65	56	60	90	85	65	77	
		C.D. (5%)	5.0	10.0	19.0	19.0	10.0	18.0	5.0	2.0	9.0	17.0	8.0	30.0	25.0	23.0	9.0	31.0	12.0	8.0	5.0	8.0	
		C.D. (1%)	7.0	14.0	25.0	25.0	13.0	23.0	6.0	3.0	12.0	22.0	11.0	40.0	34.0	31.0	12.0	42.0	17.0	10.0	7.0	11.0	
		C.V. (%)	3.8	8.1	18.3	16.5	7.3	13.0	3.0	1.2	11.3	17.5	7.0	21.5	21.5	22.0	9.8	25.1	8.4	5.5	4.8	15.7	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.000	0.000	0.056	0.000	0.000	0.000	0.000	

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Table I.73: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 GRAIN QUALITY: IRON CONTENT (ppm) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	PTA	ALW4	ALW	DAS	BHP	JMR	AHD	ALR	MTR	LDA	ZONE MEAN	RANK
1	IHT 306	MP 7878 (Check)	48	48	60	53	56	40	53	45	45	53	54	49	50	2
2	IHT 309	AHB 1200 (Check)	47	53	64	74	77	36	80	65	55	66	92	63	64	1
3	IHT 313	86M84 (Check)	41	33	54	49	49	42	55	55	39	49	56	46	47	3
4	IHT 315	MH 2875	40	34	45	48	45	34	54	39	38	36	56	48	43	4
5	IHT 318	MH 2878	43	34	46	40	44	34	63	37	41	35	50	32	42	5
6	IHT 320	KBH 108 (Check)	37	28	37	38	44	36	52	37	31	45	49	37	39	6

Table I.74: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 GRAIN QUALITY: ZINC CONTENT (ppm) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	PTA	ALW4	ALW	DAS	BHP	JMR	AHD	ALR	MTR	LDA	ZONE MEAN	RANK
1	IHT 306	MP 7878 (Check)	35	55	29	40	44	16	32	38	29	27	17	34	33	1
2	IHT 309	AHB 1200 (Check)	39	37	22	47	43	24	26	37	24	27	20	42	32	2
3	IHT 313	86M84 (Check)	35	35	31	38	33	33	28	39	20	31	18	44	32	2
4	IHT 315	MH 2875	34	39	29	38	32	26	26	35	21	29	17	53	32	2
5	IHT 318	MH 2878	38	38	33	35	32	25	30	39	28	30	21	33	32	2
6	IHT 320	KBH 108 (Check)	34	28	26	31	31	32	27	29	21	27	18	33	28	3

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Table I.75: INITIAL HYBRID TRIAL (Late) KHARIF 2024 EXPERIMENTAL DETAILS ZONE B

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizers (kg/ha.)			Insecticide
							N	P	K	
MAHARASHTRA										
Aurangabad (NARP)	MB	7.5	22.7.24	12.11.24	Nil	Nil	60	30	30	Nil
Aurangabad (Ajeet Seed)	M	-	12.7.24	18.10.24	10.8.24	Nil	60	30	30	Nil
Aurangabad (Seed works)	BC	-	9.7.24	15.10.24	1.8.24	9.7, 21.7.24	80	40	40	Chloropyriphos
Paithan (Nath BioGenes)	BCS	-	8.7.24	22.10.24	-	Nil	-	-	-	Nil
Dhule (MPKV)	MB	8.6	4.7.24	15.10.24	28.7.24	Nil	60	30	0	Nil
Pachora (Nirmal Seed)	MB	7.6	1.7.24	3.10.24	29.7.24	1.7.24	100	50	50	Nil
Gangapur (Ganga Kaveri)	BS	6.5	27.6.24	7.10.24	25.7.24	27.6, 5.8.24	40	20	20	Coragen
KARNATAKA										
Vijayapur (UAS, Dharwad)	SB	8.7	6.7.24	25.10.24	16.8.24	Nil	50	25	0	Nil
ANDHRA PRADESH										
Ananthapuram (ANGRAU)	A	6.7	9.8.24	As Per Maturity	5.9.24	As Per Required	60	30	20	Nil
TELANGANA										
Toopran, Medak (NU Genes)	-	-	8.7.24	-	-	Nil	-	-	-	Nil
TAMIL NADU										
Coimbatore (TNAU)	CL	7.8	29.6.24	6.10.24	-	29.6, 18.7, 13.8, 3.9, 18.9, 1.10.24	80	40	40	Nil

SB = Shallow Black, MB = Medium Black, CL = Clay Loam, A = Alfisols, BCS = Black Cotton Soil, BS=Black Soil, M = Medium.

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Table I.76: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE B

S.No.	TEST ENTRY CODE	ABD1	ABD3	ABD7	PTN	DHL	PCR	GNG	MS MEAN	VYP	APR	TPN	CBE	ZONE MEAN	RANK
1	IHT 301 MH 2864	2591	2320	4979	4133	3831	2730	4294	3554	3003	3094	4324	3235	3503	11
2	IHT 302 MH 2865	2758	2315	2829	2611	2031	2198	3400	2592	3124	1683	3213	2843	2637	25
3	IHT 303 MH 2866	3819	2107	5200	4996	3873	4868	3517	4054	2401	3094	3838	2770	3680	6
4	IHT 304 MH 2867	3608	2497	4532	4073	3596	2249	3614	3453	3574	2496	4134	3272	3422	12
5	IHT 305 MH 2868	2702	1541	4356	3921	1831	3045	3564	2994	3932	1632	3727	4137	3126	20
6	IHT 306 NBH 4903 (Check)	3192	2314	4960	5235	3513	2787	3622	3660	4313	3076	4417	3821	3750	3
7	IHT 307 MH 2869	2719	1431	4019	4175	2555	3718	3489	3158	3609	2405	3931	2853	3173	17
8	IHT 308 MH 2870	2850	2649	3631	2764	2199	2817	2931	2835	3491	1698	3560	3287	2898	23
9	IHT 309 AHB 1200 (Check)	3471	1081	3253	2280	1894	2667	3003	2521	2609	1589	3981	2887	2610	26
10	IHT 310 MH 2871	2600	2503	4017	3441	1739	2661	3422	2912	2591	2257	4190	3836	3023	22
11	IHT 311 MH 2872	3283	1394	3928	3356	2301	1492	3364	2731	2393	1386	3756	2747	2673	24
12	IHT 312 MH 2873	3546	1359	3956	4269	4037	2321	3556	3292	3409	1924	4134	2545	3187	15
13	IHT 313 Kaveri S Boss (Check)	3808	2453	4876	4194	4844	2691	3273	3734	4109	2542	4301	3842	3721	4
14	IHT 314 MH 2874	3883	2461	5136	5010	3535	2411	3161	3657	3623	2573	4792	2992	3598	9
15	IHT 315 MH 2875	3717	3496	5844	3686	4594	4090	3483	4130	3541	2802	4579	4604	4040	1
16	IHT 316 MH 2876	3197	3530	4496	3841	3338	3769	3528	3671	3498	2779	4838	5035	3804	2
17	IHT 317 MH 2877	3550	2369	4549	4144	3244	2949	3151	3422	3292	2938	4273	2618	3371	13
18	IHT 318 MH 2878	3780	2429	5198	4745	3390	2372	3656	3653	3946	2816	4324	4238	3718	5
19	IHT 319 MH 2879	3668	2421	4824	4481	3858	3081	3350	3669	4186	2049	3481	4691	3645	7
20	IHT 320 86M86 (Check)	2434	1305	3792	3870	2771	3216	3606	2999	2963	2463	3968	4227	3147	19
21	IHT 321 MH 2880	3372	2440	4944	4538	3770	2129	3578	3539	3659	2475	4296	3907	3555	10
22	IHT 322 MH 2881	3321	2594	4813	3846	4087	3589	2944	3599	3552	2284	4343	4375	3614	8
23	IHT 323 MH 2882	2384	2119	3623	3265	2781	3228	3342	2963	3116	2095	4458	4408	3165	18
24	IHT 324 MH 2883	2984	2141	4099	2472	1633	2868	3388	2798	3733	3075	3769	3201	3033	21
25	IHT 325 MH 2884	2542	996	2573	3438	1876	1892	3397	2388	2729	1527	3394	2535	2445	27
26	IHT 326 MH 2885	2447	2567	4953	3870	3228	3408	3214	3384	2704	1987	3903	2702	3180	16
27	IHT 327 MH 2886	2817	2502	3927	3771	3503	2739	3196	3208	3444	2314	3815	4432	3315	14
	LOC. MEAN	3150	2198	4345	3868	3106	2888	3409	3280	3353	2335	4064	3557	3298	
	C.D. (5%)	478	471	530	994	832	921	756	570	471	336	373	530	438	
	C.D. (1%)	636	627	706	1325	1108	1227	1007	753	628	447	496	706	577	
	C.V. (%)	9.3	13.1	7.4	15.7	16.3	19.5	13.5	16.5	8.6	8.8	5.6	9.1	15.8	
	F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	PLOT SIZE (m ²)	6.00	6.00	6.00	7.20	5.55	5.55	6.00	-	6.00	6.00	7.20	6.00	-	

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Table I.77: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE B

S.No.	TEST ENTRY CODE	ABD1	ABD3	ABD7	PTN	DHL	PCR	GNG	MS MEAN	VYP	APR	CBE	ZONE MEAN	RANK
1	IHT 301 MH 2864	8444	4754	12548	5565	6547	8288	8997	7878	6056	3693	4579	6947	18
2	IHT 302 MH 2865	8833	4978	7046	5889	5646	8228	8689	7044	5944	4293	5327	6487	23
3	IHT 303 MH 2866	8667	5306	15906	3866	9429	11592	9336	9157	7667	3611	8267	8365	5
4	IHT 304 MH 2867	9000	4540	11992	6907	7027	9670	9550	8384	5889	5180	4347	7410	13
5	IHT 305 MH 2868	8944	2583	8830	7046	5105	9069	8939	7217	5222	4591	5758	6609	21
6	IHT 306 NBH 4903 (Check)	8778	5356	14004	7731	9790	9489	8994	9163	7889	5463	5159	8265	7
7	IHT 307 MH 2869	8667	3029	9729	6102	5045	9730	8911	7316	5556	3408	4713	6489	22
8	IHT 308 MH 2870	8333	4631	9421	5231	6126	9309	9197	7464	5222	3613	6807	6789	20
9	IHT 309 AHB 1200 (Check)	8833	2998	8234	5065	4685	7988	8867	6667	5333	3529	5169	6070	27
10	IHT 310 MH 2871	6000	4334	8918	4375	4444	8889	9406	6624	5056	4314	5614	6135	24
11	IHT 311 MH 2872	7833	3908	18851	6167	10631	10210	8811	9487	6722	4079	5456	8267	6
12	IHT 312 MH 2873	8667	3378	12389	5620	7988	15135	9961	9020	5111	4890	6347	7949	10
13	IHT 313 Kaveri S Boss (Check)	8556	4738	14018	5380	9009	14384	8758	9263	6111	3765	5129	7985	9
14	IHT 314 MH 2874	8667	5820	14039	5657	9369	13934	9039	9504	6944	4995	5529	8399	4
15	IHT 315 MH 2875	7833	7430	13862	5787	9489	13393	8711	9501	6500	4821	6673	8450	3
16	IHT 316 MH 2876	7111	7704	15836	7574	7988	11544	8733	9499	5722	3602	5827	8164	8
17	IHT 317 MH 2877	8333	6248	11576	6181	7508	10751	8731	8475	5556	3627	5313	7382	14
18	IHT 318 MH 2878	8833	6839	17072	7269	9550	13514	9347	10346	5333	4462	6055	8827	1
19	IHT 319 MH 2879	8222	6708	20230	6806	10330	8589	8919	9972	7667	4922	5668	8806	2
20	IHT 320 86M86 (Check)	4556	5004	9423	5616	5225	7327	8919	6582	5222	4002	5877	6117	25
21	IHT 321 MH 2880	8056	5326	13578	5718	10691	9550	8839	8822	5556	5054	6778	7914	11
22	IHT 322 MH 2881	8667	5227	10786	5639	6847	10270	8992	8061	5611	3761	5564	7136	17
23	IHT 323 MH 2882	8444	5772	12779	7088	7087	6366	9706	8178	5611	3687	6025	7257	15
24	IHT 324 MH 2883	8556	4723	9974	6134	7387	11622	9250	8235	5167	3607	5723	7214	16
25	IHT 325 MH 2884	8611	2718	8927	6574	4925	5607	8517	6554	5111	3938	6223	6115	26
26	IHT 326 MH 2885	8444	5198	13781	6500	10751	9429	8936	9006	5222	4737	5788	7879	12
27	IHT 327 MH 2886	7500	4741	9953	5750	8168	5586	8906	7229	6111	4554	6703	6797	19
	LOC. MEAN	8200	4963	12359	6046	7659	9980	9036	8320	5893	4230	5793	7416	
	C.D. (5%)	1813	729	1746	1884	2421	2917	1132	1737	806	568	988	1394	
	C.D. (1%)	2416	972	2327	2510	3226	3886	1508	2293	1074	757	1316	1838	
	C.V. (%)	13.5	9.0	8.6	19.0	19.3	17.8	7.6	19.8	8.4	8.2	10.4	19.8	
	F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	PLOT SIZE (m ²)	6.00	6.00	6.00	7.20	5.55	5.55	6.00	-	6.00	6.00	6.00	-	

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Table I.78: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE B

S.No.	TEST	ENTRY	ABD1	ABD3	ABD7	PTN	DHL	PCR	GNG	MS	VYP	APR	TPN	CBE	ZONE	RANK
		CODE								MEAN					MEAN	
1	IHT 301	MH 2864	60	54	56	50	54	55	60	55	50	44	56	48	53	19
2	IHT 302	MH 2865	55	47	45	46	46	47	50	48	46	42	52	43	47	27
3	IHT 303	MH 2866	61	59	60	58	51	53	65	58	51	41	56	51	55	8
4	IHT 304	MH 2867	62	54	54	53	52	55	60	56	53	40	56	48	53	16
5	IHT 305	MH 2868	57	50	49	49	49	52	56	52	46	42	53	47	50	24
6	IHT 306	NBH 4903 (Check)	60	58	58	55	51	55	62	57	52	49	59	50	55	6
7	IHT 307	MH 2869	55	50	50	48	51	54	58	52	46	41	53	45	50	25
8	IHT 308	MH 2870	53	53	53	50	50	51	58	53	46	43	54	46	51	22
9	IHT 309	AHB 1200 (Check)	56	49	48	48	50	51	58	51	47	40	53	46	50	26
10	IHT 310	MH 2871	60	53	50	52	51	53	57	54	48	41	54	44	51	21
11	IHT 311	MH 2872	62	59	62	61	53	56	65	60	52	50	61	47	57	1
12	IHT 312	MH 2873	60	59	58	56	52	55	62	58	51	48	56	51	55	7
13	IHT 313	Kaveri S Boss (Check)	59	59	60	59	53	57	63	59	53	48	58	51	56	2
14	IHT 314	MH 2874	61	56	55	53	51	55	60	56	49	45	57	49	54	13
15	IHT 315	MH 2875	62	55	54	53	52	53	60	55	51	46	58	50	54	12
16	IHT 316	MH 2876	63	57	61	58	51	55	65	59	51	48	58	53	56	3
17	IHT 317	MH 2877	59	53	56	54	52	54	61	55	49	41	57	50	53	18
18	IHT 318	MH 2878	58	56	58	57	50	57	62	57	50	40	58	51	54	9
19	IHT 319	MH 2879	61	59	62	59	50	54	65	59	51	44	59	52	56	4
20	IHT 320	86M86 (Check)	62	56	57	56	50	55	64	57	49	41	57	50	54	10
21	IHT 321	MH 2880	59	56	55	56	50	56	61	56	48	43	57	49	54	14
22	IHT 322	MH 2881	58	55	56	56	51	58	61	57	51	43	58	49	54	11
23	IHT 323	MH 2882	60	52	57	56	52	54	60	56	50	42	57	49	54	15
24	IHT 324	MH 2883	55	51	49	48	49	53	58	52	48	41	55	48	50	23
25	IHT 325	MH 2884	61	59	60	57	50	57	63	58	50	48	55	51	56	5
26	IHT 326	MH 2885	62	54	55	52	51	58	60	56	47	41	54	49	53	20
27	IHT 327	MH 2886	58	54	54	55	52	53	61	55	51	46	55	48	53	17
		LOC. MEAN	59	55	55	54	51	54	61	56	49	44	56	49	53	
		C.D. (5%)	1.0	2.0	1.0	3.0	2.0	2.0	2.0	2.0	1.0	1.0	2.0	2.0	2.0	
		C.D. (1%)	2.0	3.0	2.0	4.0	3.0	3.0	3.0	3.0	2.0	2.0	3.0	2.0	2.0	
		C.V. (%)	1.2	2.2	1.5	3.8	2.8	2.6	2.0	3.4	1.6	1.9	2.2	1.9	3.5	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.79: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 DAYS TO MATURITY ZONE B

S.No.	TEST ENTRY CODE	ABD1	ABD3	ABD7	PTN	DHL	PCR	GNG	MS	VYP	APR	TPN	CBE	ZONE MEAN	RANK
1	IHT 301 MH 2864	99	89	82	78	90	81	90	87	91	78	82	86	86	18
2	IHT 302 MH 2865	95	88	72	74	83	73	79	81	87	79	79	81	81	27
3	IHT 303 MH 2866	98	92	85	86	88	79	92	89	91	76	81	89	87	9
4	IHT 304 MH 2867	100	89	80	81	89	82	90	87	95	75	83	86	86	14
5	IHT 305 MH 2868	96	88	75	77	86	79	86	84	86	77	80	85	83	25
6	IHT 306 NBH 4903 (Check)	100	93	84	83	87	82	90	88	93	84	84	88	88	6
7	IHT 307 MH 2869	95	89	76	76	88	81	88	85	87	75	79	83	83	24
8	IHT 308 MH 2870	95	90	78	78	86	77	88	85	87	76	81	84	84	22
9	IHT 309 AHB 1200 (Check)	94	87	74	76	87	77	88	83	88	73	79	84	82	26
10	IHT 310 MH 2871	96	90	76	80	87	80	86	85	88	76	80	82	84	21
11	IHT 311 MH 2872	101	94	88	89	89	83	94	91	92	84	86	85	89	1
12	IHT 312 MH 2873	98	93	84	84	88	81	92	89	91	84	83	89	88	7
13	IHT 313 Kaveri S Boss (Check)	96	94	85	87	90	84	93	90	96	83	83	89	89	3
14	IHT 314 MH 2874	98	91	81	81	88	81	90	87	91	81	82	87	86	15
15	IHT 315 MH 2875	101	90	80	81	88	79	89	87	91	82	83	88	87	12
16	IHT 316 MH 2876	102	92	88	86	88	81	93	90	92	84	85	91	89	2
17	IHT 317 MH 2877	96	90	82	82	88	80	90	87	91	76	81	88	86	19
18	IHT 318 MH 2878	96	91	83	85	87	84	91	88	91	75	83	89	87	11
19	IHT 319 MH 2879	96	94	87	87	87	80	94	89	91	79	83	90	88	5
20	IHT 320 86M86 (Check)	102	90	84	84	86	81	92	89	90	76	83	88	87	8
21	IHT 321 MH 2880	97	89	80	84	86	83	90	87	90	77	84	87	86	17
22	IHT 322 MH 2881	98	89	81	84	88	84	91	88	91	78	85	87	87	10
23	IHT 323 MH 2882	97	88	82	84	89	81	89	87	92	78	84	87	86	13
24	IHT 324 MH 2883	96	88	74	76	85	79	87	84	89	75	80	86	83	23
25	IHT 325 MH 2884	99	93	86	85	87	84	90	89	91	83	83	89	88	4
26	IHT 326 MH 2885	100	91	82	80	87	85	88	87	87	75	82	87	86	20
27	IHT 327 MH 2886	96	90	79	83	88	80	90	87	92	82	83	86	86	16
	LOC. MEAN	98	90	81	82	87	81	90	87	90	78	82	87	86	
	C.D. (5%)	1.0	1.0	2.0	3.0	2.0	2.0	2.0	2.0	2.0	1.0	3.0	2.0	2.0	
	C.D. (1%)	2.0	2.0	2.0	4.0	3.0	3.0	3.0	3.0	2.0	2.0	4.0	2.0	2.0	
	C.V. (%)	0.7	0.9	1.2	2.5	1.7	1.8	1.3	2.2	1.1	1.0	2.0	1.1	2.2	
	F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.80: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 PLANT HEIGHT (cm) ZONE B

S.No.	TEST	ENTRY	ABD1	ABD3	ABD7	PTN	DHL	PCR	GNG	MS	VYP	APR	TPN	CBE	ZONE	RANK
		CODE								MEAN					MEAN	
1	IHT 301	MH 2864	160	220	217	206	218	236	213	210	179	128	193	164	194	15
2	IHT 302	MH 2865	145	174	177	178	210	200	165	178	162	125	152	156	168	24
3	IHT 303	MH 2866	160	226	263	229	265	260	200	229	207	128	202	187	212	4
4	IHT 304	MH 2867	145	202	213	217	227	228	207	206	200	131	170	183	193	17
5	IHT 305	MH 2868	150	172	183	163	182	190	173	173	164	115	155	159	164	25
6	IHT 306	NBH 4903 (Check)	155	219	243	214	232	231	229	218	199	134	183	183	202	8
7	IHT 307	MH 2869	115	183	183	172	181	184	168	170	163	114	163	155	162	26
8	IHT 308	MH 2870	140	223	197	183	206	203	191	192	172	127	157	156	178	21
9	IHT 309	AHB 1200 (Check)	148	197	190	196	199	198	194	189	162	129	159	154	175	22
10	IHT 310	MH 2871	145	195	193	193	209	185	177	185	163	130	153	163	173	23
11	IHT 311	MH 2872	215	264	307	261	288	304	273	273	214	127	209	240	246	1
12	IHT 312	MH 2873	160	200	233	211	227	225	186	206	204	143	181	181	195	12
13	IHT 313	Kaveri S Boss (Check)	182	210	253	219	242	249	205	223	213	136	191	175	207	5
14	IHT 314	MH 2874	160	221	227	226	232	227	200	213	193	138	198	184	201	9
15	IHT 315	MH 2875	157	226	240	209	244	246	217	220	204	130	195	203	206	6
16	IHT 316	MH 2876	157	211	237	214	239	220	236	216	201	143	198	199	205	7
17	IHT 317	MH 2877	140	188	223	198	220	206	211	198	176	131	158	178	184	20
18	IHT 318	MH 2878	175	211	263	254	263	258	245	238	200	138	223	217	223	2
19	IHT 319	MH 2879	172	233	257	231	245	247	239	232	199	137	213	193	215	3
20	IHT 320	86M86 (Check)	157	192	220	204	233	212	218	205	184	129	196	184	194	16
21	IHT 321	MH 2880	150	188	237	214	237	229	193	207	190	135	189	185	195	13
22	IHT 322	MH 2881	145	239	233	217	241	237	192	215	168	121	215	166	198	11
23	IHT 323	MH 2882	150	223	237	208	231	230	214	213	188	139	191	188	200	10
24	IHT 324	MH 2883	152	199	207	190	237	226	197	201	195	130	178	167	189	19
25	IHT 325	MH 2884	120	159	173	145	162	165	147	153	157	126	186	136	152	27
26	IHT 326	MH 2885	172	205	227	219	237	237	193	213	198	120	183	153	195	14
27	IHT 327	MH 2886	140	190	223	210	236	217	203	203	185	133	183	189	192	18
		LOC. MEAN	154	206	224	207	228	224	203	207	187	130	184	178	193	
		C.D. (5%)	13.0	17.0	9.0	24.0	22.0	18.0	22.0	12.0	14.0	8.0	12.0	20.0	11.0	
		C.D. (1%)	18.0	22.0	12.0	32.0	30.0	24.0	30.0	15.0	19.0	11.0	16.0	27.0	14.0	
		C.V. (%)	5.3	5.0	2.5	7.1	6.0	4.9	6.8	5.4	4.7	3.8	3.9	6.8	6.5	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.81: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE B

S.No.	TEST	ENTRY	ABD1**	ABD3	ABD7	PTN	DHL	PCR	GNG	MS	VYP	APR	TPN	CBE	ZONE	RANK
		CODE								MEAN					MEAN	
1	IHT 301	MH 2864	1.7	1.6	3.0	2.1	2.1	2.3	2.0	2.2	3.3	1.5	3.7	2.7	2.4	2
2	IHT 302	MH 2865	1.0	1.8	2.7	2.0	2.1	2.9	2.0	2.2	3.1	1.5	3.7	3.0	2.5	1
3	IHT 303	MH 2866	1.0	1.4	1.0	1.7	1.5	2.7	2.0	1.7	3.4	1.4	3.0	2.4	2.1	16
4	IHT 304	MH 2867	1.0	1.4	2.0	1.6	1.9	2.0	2.0	1.8	3.6	1.3	2.7	2.3	2.1	12
5	IHT 305	MH 2868	1.7	1.3	2.0	2.0	2.0	2.8	1.7	2.0	2.9	1.2	3.0	3.0	2.2	5
6	IHT 306	NBH 4903 (Check)	1.0	1.0	3.0	2.1	1.9	1.9	2.0	2.0	2.9	1.2	2.7	2.6	2.1	8
7	IHT 307	MH 2869	1.0	1.3	2.0	1.7	1.9	2.6	2.0	1.9	3.0	1.5	2.7	2.0	2.1	15
8	IHT 308	MH 2870	1.0	1.3	1.3	1.6	2.1	2.7	2.0	1.8	3.0	1.3	3.0	2.5	2.1	12
9	IHT 309	AHB 1200 (Check)	1.7	1.4	2.3	1.6	1.8	1.7	2.0	1.8	3.0	1.2	3.0	1.6	2.0	23
10	IHT 310	MH 2871	1.0	1.3	1.7	1.8	1.8	2.4	1.7	1.8	2.9	1.9	2.7	2.3	2.0	17
11	IHT 311	MH 2872	1.3	1.7	2.3	1.6	1.5	1.7	2.0	1.8	3.3	1.5	3.0	2.2	2.1	13
12	IHT 312	MH 2873	1.3	1.2	2.0	1.6	1.8	2.0	2.0	1.8	3.5	1.3	2.7	3.0	2.1	9
13	IHT 313	Kaveri S Boss (Check)	1.3	1.3	2.3	1.7	1.9	2.3	1.3	1.8	2.8	1.3	2.7	2.0	2.0	21
14	IHT 314	MH 2874	1.3	1.3	2.7	2.0	1.9	2.2	2.3	2.1	3.3	1.6	2.0	2.7	2.2	4
15	IHT 315	MH 2875	1.0	1.3	2.3	1.7	2.1	2.3	2.0	2.0	3.5	1.3	3.0	2.5	2.2	3
16	IHT 316	MH 2876	1.0	1.4	2.3	1.6	1.8	2.4	1.7	1.9	3.1	1.6	2.0	3.0	2.1	10
17	IHT 317	MH 2877	1.3	1.2	1.7	1.8	1.9	2.2	1.7	1.7	2.7	1.6	2.7	2.3	2.0	22
18	IHT 318	MH 2878	1.0	1.4	1.3	1.8	1.6	2.1	2.0	1.7	2.9	1.6	2.0	2.2	1.9	24
19	IHT 319	MH 2879	1.7	1.3	2.3	2.0	1.7	1.9	1.7	1.8	3.3	1.3	3.0	2.2	2.1	14
20	IHT 320	86M86 (Check)	1.3	1.4	2.0	1.7	1.7	2.7	2.0	1.9	3.0	1.3	2.3	2.0	2.0	18
21	IHT 321	MH 2880	1.3	1.4	2.0	1.9	1.9	1.8	2.0	1.8	2.9	1.2	3.0	2.0	2.0	19
22	IHT 322	MH 2881	1.0	1.1	2.0	2.1	1.9	2.0	2.0	1.8	2.5	1.8	2.7	2.2	2.0	18
23	IHT 323	MH 2882	1.0	1.3	2.0	1.8	1.9	2.3	2.0	1.9	2.5	1.3	2.7	2.2	2.0	20
24	IHT 324	MH 2883	1.0	1.3	1.7	2.1	2.0	3.1	1.7	2.0	3.3	1.4	2.3	2.0	2.1	11
25	IHT 325	MH 2884	1.3	1.1	1.7	1.5	1.7	2.8	2.0	1.8	2.9	1.7	2.5	2.3	2.0	18
26	IHT 326	MH 2885	1.7	1.3	2.0	1.5	2.0	2.5	2.0	1.9	2.9	1.5	2.5	3.0	2.1	7
27	IHT 327	MH 2886	1.0	1.2	2.0	1.7	1.9	3.0	2.0	2.0	2.7	1.4	2.7	3.0	2.2	6
		LOC. MEAN	1.2	1.3	2.1	1.8	1.9	2.3	1.9	1.9	3.1	1.4	2.7	2.4	2.1	
		C.D. (5%)	0.6	0.4	0.7	0.5	0.2	0.9	0.5	0.3	0.7	0.4	0.8	0.3	0.3	
		C.D. (1%)	0.9	0.5	0.9	0.7	0.3	1.1	0.7	0.4	1.0	0.5	1.1	0.4	0.3	
		C.V. (%)	32.4	16.8	20.2	17.5	7.7	22.3	16.7	15.3	14.5	16.7	18.8	6.7	14.2	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.268	0.000	0.000	0.000	0.000	0.015	

**LOCATION REJECTED DUE TO HIGH C.V. (i.e. > 30%): ABD1 32.4%

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Table I.82: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 PANICLE LENGTH (cm) ZONE B

S.No.	TEST	ENTRY	ABD1	ABD3	ABD7	PTN	DHL	PCR	GNG	MS	VYP	APR	TPN	CBE	ZONE	RANK
	CODE		MEAN										MEAN			
1	IHT 301	MH 2864	23	25	32	24	28	30	24	27	25	27	28	23	26	21
2	IHT 302	MH 2865	18	22	24	25	24	25	22	23	25	27	22	22	23	26
3	IHT 303	MH 2866	29	30	36	30	30	37	24	31	31	32	27	40	31	2
4	IHT 304	MH 2867	26	26	33	29	27	28	23	27	29	29	25	23	27	13
5	IHT 305	MH 2868	24	26	29	26	26	29	23	26	29	29	28	25	27	15
6	IHT 306	NBH 4903 (Check)	25	27	35	30	28	35	25	29	30	31	26	25	29	6
7	IHT 307	MH 2869	21	26	29	27	26	27	22	25	27	31	27	28	26	19
8	IHT 308	MH 2870	21	26	27	24	25	27	23	25	27	26	24	24	25	25
9	IHT 309	AHB 1200 (Check)	22	25	29	25	27	29	24	26	26	29	21	25	26	24
10	IHT 310	MH 2871	21	27	28	25	26	30	24	26	29	28	27	25	26	20
11	IHT 311	MH 2872	32	25	38	28	38	39	30	33	29	33	32	24	32	1
12	IHT 312	MH 2873	23	27	31	27	27	31	23	27	28	30	25	26	27	14
13	IHT 313	Kaveri S Boss (Check)	27	26	32	29	29	33	24	29	28	32	28	25	29	7
14	IHT 314	MH 2874	26	26	31	27	28	32	24	28	27	33	25	25	28	10
15	IHT 315	MH 2875	25	28	33	25	28	30	25	28	30	32	24	30	28	9
16	IHT 316	MH 2876	24	30	32	28	30	32	25	29	25	31	30	31	29	5
17	IHT 317	MH 2877	22	27	32	27	28	32	23	27	28	29	26	26	27	11
18	IHT 318	MH 2878	23	24	30	27	27	30	24	26	26	29	25	28	27	17
19	IHT 319	MH 2879	24	27	30	27	27	31	24	27	28	32	26	24	27	12
20	IHT 320	86M86 (Check)	21	27	27	25	27	29	25	26	24	30	23	25	26	23
21	IHT 321	MH 2880	23	28	37	30	31	38	24	30	28	30	32	25	30	4
22	IHT 322	MH 2881	26	24	34	34	31	34	25	30	33	30	32	24	30	3
23	IHT 323	MH 2882	25	27	32	30	28	34	24	29	26	32	21	31	28	8
24	IHT 324	MH 2883	21	28	29	25	27	28	23	26	24	30	26	26	26	22
25	IHT 325	MH 2884	21	25	29	28	26	29	24	26	28	30	27	26	27	16
26	IHT 326	MH 2885	22	25	31	26	27	28	24	26	28	29	26	27	27	18
27	IHT 327	MH 2886	22	25	30	26	26	28	24	26	24	31	27	26	26	21
		LOC. MEAN	24	26	31	27	28	31	24	27	27	30	26	26	27	
		C.D. (5%)	1.0	3.0	2.0	3.0	2.0	3.0	2.0	2.0	2.0	3.0	2.0	3.0	2.0	
		C.D. (1%)	2.0	5.0	3.0	3.0	3.0	5.0	3.0	2.0	2.0	4.0	3.0	4.0	2.0	
		C.V. (%)	3.5	8.0	4.9	5.8	4.3	6.9	6.3	6.1	3.9	6.5	5.8	6.8	7.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.83: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE B

S.No.	TEST	ENTRY	ABD1	ABD3	ABD7	PTN	DHL	PCR	GNG	MS	VYP	APR	TPN	CBE	ZONE	RANK
	CODE		MEAN										MEAN			
1	IHT 301	MH 2864	2.7	3.7	3.2	3.3	3.4	3.3	3.4	3.3	2.3	3.4	2.4	3.7	3.2	23
2	IHT 302	MH 2865	2.8	3.7	2.9	3.3	3.3	3.0	3.3	3.2	2.3	3.1	2.3	3.5	3.0	25
3	IHT 303	MH 2866	3.0	3.8	3.2	3.3	3.2	3.4	3.4	3.3	2.8	3.3	2.3	3.2	3.2	22
4	IHT 304	MH 2867	3.2	3.8	3.7	3.7	3.5	3.6	3.4	3.6	3.0	3.8	2.5	3.3	3.4	6
5	IHT 305	MH 2868	3.1	3.8	3.5	3.5	3.3	3.6	3.6	3.5	3.1	3.3	2.7	3.5	3.4	11
6	IHT 306	NBH 4903 (Check)	2.9	3.9	3.9	3.7	3.6	3.9	3.5	3.6	3.2	3.6	2.6	3.5	3.5	2
7	IHT 307	MH 2869	3.1	3.8	3.3	3.6	3.4	3.5	3.3	3.4	3.0	3.9	2.8	3.6	3.4	5
8	IHT 308	MH 2870	2.8	3.9	3.3	3.6	3.5	3.5	3.6	3.5	3.0	3.4	2.4	3.6	3.3	16
9	IHT 309	AHB 1200 (Check)	3.2	3.9	3.2	3.3	3.7	3.6	3.5	3.5	3.1	3.6	2.8	3.3	3.4	7
10	IHT 310	MH 2871	3.1	3.8	3.5	3.9	3.7	4.1	3.9	3.7	3.1	3.5	2.5	3.4	3.5	2
11	IHT 311	MH 2872	2.8	3.5	2.9	3.4	2.9	3.6	3.4	3.2	2.7	3.6	2.5	3.3	3.1	24
12	IHT 312	MH 2873	3.2	3.7	3.8	3.6	3.4	3.7	3.4	3.5	3.0	3.3	2.4	3.5	3.4	12
13	IHT 313	Kaveri S Boss (Check)	3.0	3.8	3.2	3.6	3.8	3.6	3.5	3.5	2.7	3.8	2.6	3.3	3.4	14
14	IHT 314	MH 2874	3.3	3.8	3.5	3.5	3.5	3.4	3.3	3.5	2.8	3.9	2.5	3.4	3.4	13
15	IHT 315	MH 2875	3.2	3.8	3.4	3.5	3.7	3.6	3.5	3.5	2.9	4.0	2.3	3.3	3.4	9
16	IHT 316	MH 2876	2.8	3.9	3.8	3.5	3.7	3.9	3.3	3.6	3.2	3.7	2.9	3.6	3.5	2
17	IHT 317	MH 2877	3.1	3.9	3.7	3.5	3.5	3.7	3.3	3.5	3.2	3.8	2.5	3.7	3.4	3
18	IHT 318	MH 2878	3.1	3.7	3.7	3.6	3.3	3.6	3.3	3.5	2.9	3.4	2.4	3.7	3.4	15
19	IHT 319	MH 2879	3.3	3.8	3.9	3.7	3.6	3.6	3.3	3.6	3.0	3.5	2.3	3.1	3.4	8
20	IHT 320	86M86 (Check)	3.1	3.5	3.4	3.3	3.5	3.4	3.4	3.4	3.0	3.6	2.8	2.9	3.3	20
21	IHT 321	MH 2880	2.8	3.7	3.3	3.5	3.4	3.6	3.5	3.4	2.9	4.0	2.6	3.8	3.4	10
22	IHT 322	MH 2881	3.2	3.9	3.6	3.7	3.7	3.6	3.5	3.6	2.9	3.8	2.4	3.3	3.4	4
23	IHT 323	MH 2882	3.2	4.0	3.9	3.9	3.6	4.2	3.3	3.7	3.3	3.5	2.6	3.5	3.6	1
24	IHT 324	MH 2883	3.1	3.7	3.5	3.3	3.4	3.6	3.3	3.4	2.8	3.4	2.5	3.3	3.3	19
25	IHT 325	MH 2884	2.6	3.8	3.5	3.5	3.3	3.5	3.5	3.4	2.8	3.5	2.4	3.6	3.3	18
26	IHT 326	MH 2885	3.2	3.7	3.5	3.5	3.5	3.6	3.5	3.5	2.7	3.5	2.5	3.2	3.3	17
27	IHT 327	MH 2886	2.8	3.7	3.4	3.5	3.5	3.5	3.4	3.4	3.0	3.4	2.5	2.6	3.2	21
		LOC. MEAN	3.0	3.8	3.5	3.5	3.5	3.6	3.4	3.5	2.9	3.6	2.5	3.4	3.3	
		C.D. (5%)	0.2	0.2	0.3	0.3	0.2	0.4	0.3	0.2	0.3	0.4	0.3	0.4	0.1	
		C.D. (1%)	0.2	0.2	0.4	0.4	0.3	0.5	0.4	0.2	0.4	0.5	0.4	0.5	0.2	
		C.V. (%)	3.2	2.9	4.7	5.5	3.4	6.6	5.5	4.5	6.3	6.2	7.3	7.2	5.3	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.84: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 1000-SEED Wt.(g) ZONE B

S.No.	TEST	ENTRY	ABD1	ABD3	ABD7	PTN	DHL	PCR	MS	VYP	TPN	CBE	ZONE	RANK
		CODE							MEAN				MEAN	
1	IHT 301	MH 2864	9.0	10.3	10.3	11.9	7.8	9.4	9.8	12.1	12.7	10.0	10.4	26
2	IHT 302	MH 2865	13.4	10.6	11.3	14.7	6.9	9.8	11.1	12.2	12.7	9.5	11.2	20
3	IHT 303	MH 2866	13.4	10.5	12.0	12.0	7.9	10.8	11.1	13.3	12.6	10.5	11.5	16
4	IHT 304	MH 2867	7.9	11.5	11.7	13.1	8.8	10.4	10.6	14.3	12.9	11.8	11.4	18
5	IHT 305	MH 2868	11.7	10.9	12.7	14.4	9.0	10.2	11.5	14.8	13.2	8.9	11.8	10
6	IHT 306	NBH 4903 (Check)	11.7	11.1	14.0	13.0	9.8	8.6	11.4	12.8	13.0	12.4	11.8	9
7	IHT 307	MH 2869	12.9	11.5	13.0	15.2	9.4	10.5	12.1	14.3	13.5	12.6	12.6	1
8	IHT 308	MH 2870	10.6	10.5	15.7	14.4	9.9	11.2	12.0	14.4	12.6	12.4	12.4	2
9	IHT 309	AHB 1200 (Check)	13.8	11.4	14.3	12.9	11.2	8.9	12.1	14.5	12.2	10.1	12.1	5
10	IHT 310	MH 2871	10.2	11.1	14.3	12.8	11.2	8.4	11.4	12.8	12.8	11.1	11.7	11
11	IHT 311	MH 2872	9.3	9.8	12.3	11.5	8.6	9.5	10.2	11.4	12.8	8.0	10.4	27
12	IHT 312	MH 2873	12.6	11.1	13.0	12.4	10.2	10.0	11.5	13.2	12.6	7.3	11.4	19
13	IHT 313	Kaveri S Boss (Check)	10.4	10.1	12.3	13.0	8.2	8.4	10.4	13.1	12.5	10.7	11.0	23
14	IHT 314	MH 2874	13.4	10.4	11.7	12.6	7.8	9.3	10.9	13.2	12.9	13.2	11.6	12
15	IHT 315	MH 2875	10.2	11.5	13.3	14.3	10.3	8.1	11.3	14.7	12.8	13.5	12.1	6
16	IHT 316	MH 2876	10.7	11.2	14.0	15.2	10.6	10.7	12.1	13.5	12.5	11.4	12.2	4
17	IHT 317	MH 2877	12.8	10.5	13.0	13.5	10.4	10.0	11.7	12.8	12.6	8.8	11.6	14
18	IHT 318	MH 2878	9.5	11.2	12.7	14.8	9.6	10.3	11.4	12.9	13.6	12.2	11.9	8
19	IHT 319	MH 2879	13.5	9.9	15.3	13.9	10.3	9.7	12.1	13.2	12.8	12.6	12.3	3
20	IHT 320	86M86 (Check)	13.2	10.9	10.0	13.6	9.5	9.8	11.2	13.0	12.7	11.5	11.6	15
21	IHT 321	MH 2880	9.6	11.4	11.7	15.1	10.4	10.1	11.4	12.9	13.1	12.7	11.9	7
22	IHT 322	MH 2881	11.2	10.5	10.7	11.3	7.9	10.2	10.3	12.8	12.6	13.1	11.1	21
23	IHT 323	MH 2882	11.1	10.5	12.0	13.0	8.2	10.4	10.9	12.9	12.6	12.1	11.4	17
24	IHT 324	MH 2883	13.7	11.2	11.3	12.2	4.5	8.6	10.3	13.7	12.6	12.0	11.1	22
25	IHT 325	MH 2884	12.9	11.1	11.7	9.5	7.3	9.2	10.3	13.3	12.4	11.3	11.0	24
26	IHT 326	MH 2885	9.6	10.6	10.7	11.9	4.8	11.3	9.8	14.0	12.7	11.4	10.8	25
27	IHT 327	MH 2886	13.3	11.3	12.0	11.5	9.7	8.8	11.1	13.7	12.6	11.6	11.6	13
		LOC. MEAN	11.5	10.8	12.5	13.1	8.9	9.7	11.1	13.3	12.8	11.2	11.5	
		C.D. (5%)	0.4	1.4	1.3	2.1	0.8	0.4	1.5	0.8	0.6	1.3	1.3	
		C.D. (1%)	0.6	1.8	1.8	2.8	1.0	0.6	1.9	1.0	0.8	1.7	1.7	
		C.V. (%)	2.3	7.8	6.4	9.8	5.4	2.8	11.5	3.5	2.9	6.8	10.6	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.004	

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Table I.85: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE B

S.No.	TEST	ENTRY	ABD1	ABD3	ABD7	PTN	DHL	PCR	GNG	MS	VYP	APR	TPN	CBE	ZONE	RANK
		CODE								MEAN					MEAN	
1	IHT 301	MH 2864	76	51	73	69	63	41	87	66	71	51	72	65	65	18
2	IHT 302	MH 2865	75	66	72	67	66	41	87	68	71	48	74	68	67	5
3	IHT 303	MH 2866	74	60	77	73	61	41	86	67	72	47	73	68	66	8
4	IHT 304	MH 2867	74	57	77	69	58	52	89	68	72	51	72	60	67	7
5	IHT 305	MH 2868	76	53	71	64	60	45	91	66	72	43	72	70	65	19
6	IHT 306	NBH 4903 (Check)	75	59	77	69	63	49	90	69	74	58	72	70	69	2
7	IHT 307	MH 2869	76	35	71	72	62	37	90	63	74	49	73	73	65	22
8	IHT 308	MH 2870	75	55	75	71	57	37	90	66	71	51	72	59	65	20
9	IHT 309	AHB 1200 (Check)	76	56	71	68	66	39	89	66	71	48	74	71	66	10
10	IHT 310	MH 2871	75	65	70	58	52	44	90	65	73	45	74	75	66	16
11	IHT 311	MH 2872	75	57	67	63	64	26	87	63	70	52	73	72	64	24
12	IHT 312	MH 2873	76	60	69	67	62	45	86	66	71	43	73	53	64	25
13	IHT 313	Kaveri S Boss (Check)	74	62	75	70	67	50	88	69	72	42	74	56	66	9
14	IHT 314	MH 2874	75	70	70	76	56	37	91	68	70	44	74	65	66	12
15	IHT 315	MH 2875	74	59	71	63	51	44	89	64	72	53	74	57	64	23
16	IHT 316	MH 2876	73	70	65	70	56	41	89	66	73	52	74	69	67	6
17	IHT 317	MH 2877	76	68	67	67	59	40	87	66	70	48	73	68	66	14
18	IHT 318	MH 2878	73	74	71	74	62	57	86	71	72	52	74	74	70	1
19	IHT 319	MH 2879	76	69	75	69	64	43	88	69	72	55	72	70	68	3
20	IHT 320	86M86 (Check)	73	58	73	69	47	33	88	63	71	46	72	65	63	26
21	IHT 321	MH 2880	76	69	77	70	59	35	91	68	73	42	74	61	66	11
22	IHT 322	MH 2881	73	65	71	63	56	41	89	66	73	48	74	69	66	15
23	IHT 323	MH 2882	75	71	75	68	57	41	88	68	70	48	72	60	66	13
24	IHT 324	MH 2883	75	66	77	70	56	47	88	68	73	51	74	70	68	4
25	IHT 325	MH 2884	76	55	67	74	56	35	89	65	72	46	72	65	64	24
26	IHT 326	MH 2885	75	59	73	72	55	37	89	66	72	47	73	68	66	17
27	IHT 327	MH 2886	76	54	76	70	52	38	89	65	70	53	73	65	65	21
		LOC. MEAN	75	61	72	69	59	41	89	67	72	49	73	66	66	
		C.D. (5%)	3.0	7.0	4.0	12.0	11.0	12.0	5.0	5.0	2.0	6.0	2.0	8.0	4.0	
		C.D. (1%)	4.0	9.0	6.0	16.0	15.0	16.0	7.0	7.0	3.0	8.0	3.0	10.0	5.0	
		C.V. (%)	2.3	6.8	3.6	10.8	11.5	17.9	3.5	7.1	1.9	7.3	1.9	7.0	6.6	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.145	0.000	0.000	0.000	0.000	0.113	

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Table I.86: INITIAL HYBRID TRIAL (Late) KHARIF - 2024 SEED SET (%) UNDER BAG ZONE B

S.No.	TEST	ENTRY	ABD1	ABD3	ABD7	PTN	DHL	PCR	GNG	MS	TPN	CBE	ZONE	RANK
		CODE								MEAN			MEAN	
1	IHT 301	MH 2864	97	88	82	75	96	67	72	82	100	83	84	5
2	IHT 302	MH 2865	97	75	72	90	53	63	73	75	93	84	78	21
3	IHT 303	MH 2866	97	38	85	78	94	83	68	78	100	85	81	15
4	IHT 304	MH 2867	97	93	80	72	98	82	77	85	100	90	88	1
5	IHT 305	MH 2868	96	85	75	88	96	47	68	79	100	73	81	16
6	IHT 306	NBH 4903 (Check)	93	77	84	82	93	73	65	81	100	85	83	8
7	IHT 307	MH 2869	95	78	76	84	91	60	68	79	100	85	82	12
8	IHT 308	MH 2870	94	43	78	28	98	42	68	65	100	61	68	26
9	IHT 309	AHB 1200 (Check)	95	85	74	78	86	80	65	81	100	50	79	19
10	IHT 310	MH 2871	93	90	76	82	99	30	65	76	100	75	79	20
11	IHT 311	MH 2872	96	73	88	72	98	85	67	83	100	71	83	9
12	IHT 312	MH 2873	96	83	84	88	97	63	72	83	100	88	86	2
13	IHT 313	Kaveri S Boss (Check)	93	83	85	81	96	73	67	83	100	88	85	3
14	IHT 314	MH 2874	96	78	81	84	97	48	63	78	100	90	82	11
15	IHT 315	MH 2875	94	90	80	90	96	58	67	82	100	87	85	4
16	IHT 316	MH 2876	92	78	88	70	97	73	70	81	100	85	84	7
17	IHT 317	MH 2877	92	80	82	73	97	27	65	74	100	73	77	22
18	IHT 318	MH 2878	95	93	83	67	95	73	72	83	93	88	84	6
19	IHT 319	MH 2879	93	65	87	83	94	63	68	79	100	75	81	14
20	IHT 320	86M86 (Check)	93	70	84	83	89	80	68	81	100	86	84	7
21	IHT 321	MH 2880	90	33	80	43	98	63	67	68	100	89	74	25
22	IHT 322	MH 2881	93	72	81	82	94	58	70	79	100	75	81	17
23	IHT 323	MH 2882	93	27	82	78	92	67	73	73	100	75	76	23
24	IHT 324	MH 2883	90	67	74	88	98	62	73	79	92	73	80	18
25	IHT 325	MH 2884	92	35	86	59	91	73	68	72	100	-	76	24
26	IHT 326	MH 2885	95	52	82	87	94	73	68	79	100	-	81	13
27	IHT 327	MH 2886	95	80	79	87	96	60	70	81	100	83	83	10
		LOC. MEAN	94	71	81	77	93	64	69	78	99	80	81	
		C.D. (5%)	4.0	8.0	2.0	24.0	8.0	6.0	9.0	12.0	2.0	7.0	12.0	
		C.D. (1%)	5.0	11.0	2.0	31.0	11.0	8.0	12.0	16.0	2.0	9.0	16.0	
		C.V. (%)	2.5	7.0	1.2	18.8	5.4	5.7	8.3	14.3	1.0	5.2	14.3	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.181	0.000	0.000	0.181	

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Table I.87: INITIAL HYBRID TRIAL (Late) KHARIF - 2024: GRAIN QUALITY: IRON CONTENT (ppm) ZONE B

S.No.	TEST	ENTRY	ABD1	ABD3	ABD7	PTN	DHL	PCR	CBE	ZONE	RANK
	CODE									MEAN	
1	IHT 306	NBH 4903 (Check)	58	34	55	40	62	38	39	47	4
2	IHT 309	AHB 1200 (Check)	62	60	80	72	101	75	65	74	1
3	IHT 313	Kaveri S Boss (Check)	45	40	53	39	51	46	41	45	5
4	IHT 315	MH 2875	46	39	41	48	55	44	42	45	5
5	IHT 316	MH 2876	51	47	52	52	63	47	44	51	3
6	IHT 320	86M86 (Check)	60	56	58	53	58	52	53	56	2

Table I.88: INITIAL HYBRID TRIAL (Late) KHARIF - 2024: GRAIN QUALITY: ZINC CONTENT (ppm) ZONE B

S.No.	TEST	ENTRY	ABD1	ABD3	ABD7	PTN	DHL	PCR	CBE	ZONE	RANK
	CODE									MEAN	
1	IHT 306	NBH 4903 (Check)	37	47	49	35	38	27	41	39	2
2	IHT 309	AHB 1200 (Check)	35	45	41	41	36	35	49	40	1
3	IHT 313	Kaveri S Boss (Check)	30	35	37	31	31	24	38	32	6
4	IHT 315	MH 2875	35	38	35	34	35	27	42	35	5
5	IHT 316	MH 2876	34	49	39	37	34	30	41	37	4
6	IHT 320	86M86 (Check)	41	41	38	36	36	34	39	38	3

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Table I.89: ADVANCE HYBRID TRIAL (Medium) KHARIF 2024 EXPERIMENTAL DETAILS ZONE B

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizers (kg/ha.)			Insecticide
							N	P	K	
MAHARASHTRA										
Aurangabad (NARP)	MB	7.5	12.7.24	11.11.24	-	Nil	60	30	30	Nil
Niphad (MPKV)	-	-	10.7.24	-	-	Nil	-	-	-	-
Dhule (MPKV)	MB	8.6	4.7.24	15.10.24	28.7.24	Nil	60	30	0	Nil
Pachora (Nirmal Seed)	MB	7.8	16.7.24	25.10.24	10.8.24	16.7.24	100	50	50	Nil
KARNATAKA										
Vijayapur (UAS, Dharwad)	SB	8.7	6.7.24	26.10.24	17.8.24	Nil	50	25	0	Nil
Malnoor (UAS,Raichur)	S	7.6	12.7.24	27.11.24	31.7.24	Nil	50	50	0	Emamectin Benzoate
ANDHRA PRADESH										
Ananthapuram (ANGRAU)	A	6.7	12.8.24	As Per Maturity	5.9.24	Nil	60	30	20	Nil
Vizianagaram (ANGRAU)	RSL	7.4	2.7.24	7.10.24	22.7.24	Nil	60	40	30	Nil
TELANGANA										
Palem (PJ TSAU)	RSL	7.0	9.7.24	24.10.24	27.8, 12.8.24	Nil	60	40	40	Nil
TAMIL NADU										
Coimbatore (TNAU)	CL	7.8	29.6.24	6.10.24	-	29.6, 17.7, 12.8, 3.9, 18.9, 1.10.24	80	40	40	Nil

SB = Shallow Black, MB = Medium Black, CL = Clay Loam, RSL = Red Sandy Loam, S = Shallow, A = Alfisols.

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Table I.90: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	2945	2031	2123	2666	2441	2144	2340	2242	1885	1802	1844	2969	3787	2469	8
2	AHT 402 B	MH 2682	3538	2503	2011	3017	2767	2902	2526	2714	3053	2351	2702	4047	4227	3017	2
3	AHT 403 B	AHB 1269 (Check)	2397	1426	1985	3788	2399	2243	1876	2060	2134	2180	2157	3014	3579	2462	9
4	AHT 404 B	MH 2767	2846	2784	2330	3223	2796	2870	2183	2527	2078	2955	2516	4071	4318	2966	4
5	AHT 405 B	MH 2773	3814	2187	2440	3149	2898	2638	2512	2575	2753	2378	2566	3697	4295	2986	3
6	AHT 406 B	MH 2775	3421	2096	2097	4578	3048	3087	2764	2926	2758	3306	3032	3464	2931	3050	1
7	AHT 407 B	86M01 (Check)	2950	1231	2214	2703	2275	3122	2064	2593	2835	2568	2701	3289	3414	2639	7
8	AHT 408 B	MH 2777	3938	1479	2647	3868	2983	2640	2552	2596	1211	2045	1628	3857	3847	2808	6
9	AHT 409 B	MH 2784	3713	1596	2576	2988	2718	3153	2112	2632	2685	2748	2716	3232	4510	2931	5
10	AHT 410 B	Pratap (Check)	2993	1287	1932	1633	1961	2579	2469	2524	2409	1901	2155	2490	3510	2320	10
		LOC. MEAN	3256	1862	2235	3161	2629	2738	2340	2539	2380	2423	2402	3413	3842	2765	
		C.D. (5%)	439	591	536	827	729	317	416	663	212	506	880	644	598	394	
		C.D. (1%)	602	809	734	1133	984	434	570	952	291	693	1264	882	820	522	
		C.V. (%)	7.9	18.5	14.0	15.3	19.1	6.8	10.4	11.5	5.2	12.2	16.2	11.0	9.1	16.0	
		F (Prob)	0.000	0.000	0.000	0.000	0.093	0.000	0.000	0.338	0.000	0.000	0.088	0.000	0.000	0.001	
		PLOT SIZE (m ²)	12.00	12.00	11.10	7.40	-	12.00	12.00	-	12.00	11.10	-	12.00	12.00	-	

Table I.91: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	7500	4746	4444	4775	5366	4806	7333	6069	3489	2946	3218	6657	6288	5298	8
2	AHT 402 B	MH 2682	7250	5579	5886	6806	6380	5306	6944	6125	3633	3306	3470	9029	5956	5970	3
3	AHT 403 B	AHB 1269 (Check)	4250	6134	4084	5806	5069	4917	5889	5403	3741	2838	3290	6742	7133	5153	9
4	AHT 404 B	MH 2767	6278	7134	7057	6311	6695	5861	12111	8986	3809	3081	3445	9096	7949	6869	1
5	AHT 405 B	MH 2773	7583	6162	6577	6689	6753	5667	8111	6889	2624	3604	3114	8284	6274	6157	2
6	AHT 406 B	MH 2775	7250	6968	6006	6329	6638	4917	6333	5625	3594	3712	3653	7787	5873	5877	6
7	AHT 407 B	86M01 (Check)	7306	4308	4565	5613	5448	5028	7722	6375	3342	3189	3265	7272	7517	5586	7
8	AHT 408 B	MH 2777	8250	5454	8138	5342	6796	5111	7778	6444	3345	2703	3024	8633	4820	5957	4
9	AHT 409 B	MH 2784	7250	4672	7207	5784	6228	5694	9333	7514	2907	2964	2936	7239	6081	5913	5
10	AHT 410 B	Pratap (Check)	7667	4363	3544	5104	5169	4889	6222	5556	3396	2538	2967	5545	4349	4762	10
		LOC. MEAN	7058	5552	5751	5856	6054	5219	7778	6499	3388	3088	3238	7628	6224	5754	
		C.D. (5%)	1600	960	1866	1698	1467	418	2071	2444	368	702	923	1707	981	838	
		C.D. (1%)	2193	1315	2557	2326	1981	573	2838	3511	505	961	1326	2339	1344	1111	
		C.V. (%)	13.2	10.1	18.9	16.9	16.7	4.7	15.5	16.6	6.3	13.3	12.6	13.0	9.2	16.4	
		F (Prob)	0.000	0.000	0.000	0.000	0.084	0.000	0.000	0.156	0.000	0.000	0.723	0.000	0.000	0.000	
		PLOT SIZE (m ²)	12.00	12.00	11.10	7.40	-	12.00	12.00	-	12.00	11.10	-	12.00	12.00	-	

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Table I.92: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD*	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	57	65	50	50	52	45	50	47	41	43	42	41	43	47	8
2	AHT 402 B	MH 2682	52	64	50	55	52	47	49	48	42	49	46	44	46	48	4
3	AHT 403 B	AHB 1269 (Check)	47	57	48	50	49	46	49	47	40	45	42	42	46	46	10
4	AHT 404 B	MH 2767	59	66	47	58	54	49	51	50	45	54	49	47	51	51	1
5	AHT 405 B	MH 2773	58	63	48	55	54	49	52	50	41	50	46	48	50	50	2
6	AHT 406 B	MH 2775	54	61	50	50	51	47	49	48	41	49	45	44	44	48	6
7	AHT 407 B	86M01 (Check)	52	65	49	51	50	47	50	48	41	48	44	44	46	47	7
8	AHT 408 B	MH 2777	57	57	47	53	52	48	49	48	40	48	44	44	45	48	5
9	AHT 409 B	MH 2784	53	66	48	56	52	50	49	50	46	53	50	44	48	50	3
10	AHT 410 B	Pratap (Check)	52	65	49	50	50	46	49	48	42	44	43	43	44	46	9
		LOC. MEAN	54	63	49	53	52	47	50	49	42	48	45	44	46	48	
		C.D. (5%)	1.0	1.0	3.0	3.0	5.0	1.0	2.0	2.0	1.0	2.0	4.0	3.0	1.0	2.0	
		C.D. (1%)	2.0	2.0	4.0	5.0	6.0	2.0	3.0	3.0	2.0	3.0	6.0	5.0	2.0	2.0	
		C.V. (%)	1.3	1.4	3.2	3.6	5.2	1.6	2.4	2.0	1.8	2.3	4.2	4.6	1.5	3.9	
		F (Prob)	0.000	0.000	0.000	0.000	0.315	0.000	0.000	0.071	0.000	0.000	0.031	0.000	0.000	0.000	

*LOCATION REJECTED DUE TO DELAYED FLOWERING IN CHECKS

Table I.93: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 DAYS TO MATURITY ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	96	86	86	70	85	87	83	85	76	73	75	72	81	81	8
2	AHT 402 B	MH 2682	92	86	86	86	88	88	83	85	77	79	78	73	84	83	4
3	AHT 403 B	AHB 1269 (Check)	86	79	85	72	80	86	81	84	74	76	75	70	84	79	10
4	AHT 404 B	MH 2767	99	88	83	95	91	90	84	87	80	86	83	77	89	87	1
5	AHT 405 B	MH 2773	95	84	85	92	89	89	86	88	75	80	78	80	88	85	2
6	AHT 406 B	MH 2775	91	82	86	80	85	87	84	85	75	81	78	74	82	82	6
7	AHT 407 B	86M01 (Check)	92	84	85	77	84	86	84	85	76	78	77	73	84	82	7
8	AHT 408 B	MH 2777	97	85	84	83	87	88	82	85	75	79	77	74	83	83	5
9	AHT 409 B	MH 2784	93	85	85	87	87	90	84	87	81	83	82	74	86	85	3
10	AHT 410 B	Pratap (Check)	92	86	85	67	82	85	84	85	76	73	75	74	82	80	9
		LOC. MEAN	93	85	85	81	86	88	84	86	77	79	78	74	84	83	
		C.D. (5%)	1.0	2.0	3.0	7.0	7.0	2.0	2.0	3.0	1.0	2.0	5.0	4.0	1.0	3.0	
		C.D. (1%)	1.0	3.0	4.0	10.0	9.0	2.0	2.0	4.0	2.0	3.0	8.0	6.0	2.0	4.0	
		C.V. (%)	0.6	1.3	1.8	5.4	5.6	1.1	1.2	1.4	1.0	1.8	3.0	3.2	0.8	3.9	
		F (Prob)	0.000	0.000	0.000	0.000	0.111	0.000	0.000	0.110	0.000	0.000	0.050	0.000	0.000	0.000	

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Table I.94: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 PLANT HEIGHT (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	163	160	205	184	178	167	161	164	131	201	166	155	156	168	9
2	AHT 402 B	MH 2682	175	153	233	210	193	189	198	194	146	211	179	157	196	187	3
3	AHT 403 B	AHB 1269 (Check)	155	160	205	200	180	191	182	187	146	192	169	169	199	180	6
4	AHT 404 B	MH 2767	228	178	264	258	232	202	218	210	177	223	200	201	220	217	1
5	AHT 405 B	MH 2773	172	174	222	212	195	203	179	191	145	179	162	199	183	187	2
6	AHT 406 B	MH 2775	150	173	209	216	187	179	163	171	131	201	166	160	166	175	8
7	AHT 407 B	86M01 (Check)	155	162	212	237	191	182	192	187	141	193	167	179	170	182	5
8	AHT 408 B	MH 2777	170	171	191	214	187	175	203	189	141	187	164	161	168	178	7
9	AHT 409 B	MH 2784	162	165	228	212	192	193	194	194	145	184	165	187	191	186	4
10	AHT 410 B	Pratap (Check)	115	173	193	180	165	159	171	165	125	161	143	181	157	162	10
		LOC. MEAN	165	167	216	212	190	184	186	185	143	193	168	175	181	182	
		C.D. (5%)	9.0	5.0	26.0	49.0	21.0	14.0	13.0	25.0	10.0	9.0	22.0	13.0	22.0	11.0	
		C.D. (1%)	12.0	7.0	35.0	67.0	29.0	20.0	17.0	37.0	14.0	12.0	31.0	18.0	30.0	15.0	
		C.V. (%)	3.1	1.8	7.0	13.5	7.8	4.6	4.0	6.1	4.1	2.8	5.7	4.4	7.0	6.9	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045	0.000	0.000	0.019	0.000	0.000	0.000	

Table I.95: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	2.0	6.0	2.1	2.9	3.3	2.7	3.7	3.2	2.2	2.0	2.1	2.9	3.2	3.0	4
2	AHT 402 B	MH 2682	1.7	6.3	2.1	2.5	3.1	2.5	3.6	3.1	1.4	2.3	1.9	3.3	2.6	2.8	7
3	AHT 403 B	AHB 1269 (Check)	1.3	8.3	1.7	2.1	3.4	3.1	3.3	3.2	1.9	2.0	1.9	2.2	2.8	2.9	6
4	AHT 404 B	MH 2767	1.3	8.0	1.9	2.3	3.4	2.8	3.6	3.2	1.9	1.9	1.9	2.2	2.8	2.9	5
5	AHT 405 B	MH 2773	2.3	6.0	2.2	2.4	3.2	3.3	3.8	3.6	2.1	2.6	2.3	3.0	2.8	3.1	2
6	AHT 406 B	MH 2775	2.0	8.0	2.0	2.5	3.6	3.1	4.0	3.5	1.9	2.4	2.1	4.0	3.6	3.4	1
7	AHT 407 B	86M01 (Check)	1.3	6.0	1.8	2.3	2.9	2.8	3.2	3.0	1.7	2.2	1.9	2.6	2.8	2.7	9
8	AHT 408 B	MH 2777	2.0	6.0	3.1	2.1	3.3	2.8	3.6	3.2	1.4	1.9	1.7	3.4	2.4	2.9	5
9	AHT 409 B	MH 2784	1.0	6.3	2.4	2.2	3.0	2.9	4.3	3.6	1.3	2.3	1.8	2.0	2.0	2.7	8
10	AHT 410 B	Pratap (Check)	1.3	8.3	2.3	2.6	3.6	3.1	3.0	3.0	1.8	1.7	1.8	3.5	2.6	3.0	3
		LOC. MEAN	1.6	6.9	2.1	2.4	3.3	2.9	3.6	3.3	1.8	2.1	2.0	2.9	2.8	2.9	
		C.D. (5%)	0.8	1.4	0.4	0.6	1.0	0.7	0.8	0.7	0.6	0.5	0.7	0.6	0.3	0.4	
		C.D. (1%)	1.1	2.0	0.5	0.9	1.3	0.9	1.0	1.0	0.8	0.7	0.9	0.8	0.5	0.6	
		C.V. (%)	28.6	12.2	9.7	15.7	20.1	13.7	12.3	9.3	19.6	14.6	14.9	11.1	7.3	16.7	
		F (Prob)	0.000	0.000	0.000	0.000	0.808	0.000	0.000	0.435	0.000	0.000	0.569	0.000	0.000	0.120	

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Table I.96: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 PANICLE LENGTH (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	22	22	26	28	24	27	22	25	24	26	25	22	28	25	6
2	AHT 402 B	MH 2682	23	23	25	27	25	29	25	27	24	30	27	23	24	25	5
3	AHT 403 B	AHB 1269 (Check)	20	24	24	23	23	24	20	22	24	25	25	20	22	23	10
4	AHT 404 B	MH 2767	26	22	27	29	26	27	25	26	25	29	27	22	25	26	3
5	AHT 405 B	MH 2773	25	22	26	26	25	26	23	24	25	23	24	24	23	24	8
6	AHT 406 B	MH 2775	25	24	27	30	27	31	25	28	27	31	29	22	27	27	1
7	AHT 407 B	86M01 (Check)	25	22	27	29	26	26	22	24	25	28	27	24	27	26	4
8	AHT 408 B	MH 2777	23	25	30	25	26	29	24	27	26	29	28	23	26	26	2
9	AHT 409 B	MH 2784	22	22	29	26	25	25	21	23	27	26	27	24	25	25	7
10	AHT 410 B	Pratap (Check)	18	25	23	23	22	23	21	22	25	27	26	18	26	23	9
		LOC. MEAN	23	23	27	27	25	27	23	25	25	27	26	22	26	25	
		C.D. (5%)	1.0	3.0	2.0	6.0	3.0	2.0	2.0	2.0	3.0	2.0	4.0	2.0	3.0	1.0	
		C.D. (1%)	2.0	5.0	3.0	8.0	4.0	2.0	3.0	3.0	4.0	3.0	5.0	3.0	4.0	2.0	
		C.V. (%)	3.6	8.7	4.0	13.4	7.6	4.0	4.8	3.6	6.2	4.8	6.4	6.2	5.8	6.6	
		F (Prob)	0.000	0.000	0.000	0.000	0.049	0.000	0.000	0.001	0.000	0.000	0.236	0.000	0.000	0.000	

Table I.97: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	3.1	3.5	3.5	3.4	3.1	2.4	2.8	3.1	2.8	2.9	3.8	3.2	3.2	2
2	AHT 402 B	MH 2682	3.1	3.6	3.7	3.5	3.0	2.0	2.5	3.4	2.1	2.8	3.0	3.3	3.0	3
3	AHT 403 B	AHB 1269 (Check)	2.7	3.5	3.7	3.3	2.7	2.6	2.7	3.3	2.4	2.9	2.8	3.1	3.0	4
4	AHT 404 B	MH 2767	2.8	3.3	3.7	3.3	2.9	2.3	2.6	3.0	2.1	2.6	2.9	3.4	2.9	8
5	AHT 405 B	MH 2773	3.2	3.5	3.6	3.4	2.7	2.5	2.6	3.3	1.6	2.5	3.6	2.9	3.0	6
6	AHT 406 B	MH 2775	2.6	3.3	3.5	3.2	3.1	2.3	2.7	3.0	1.9	2.5	3.8	3.4	3.0	5
7	AHT 407 B	86M01 (Check)	3.1	3.4	3.6	3.4	2.8	2.4	2.6	3.2	1.9	2.6	2.6	3.3	2.9	8
8	AHT 408 B	MH 2777	3.2	3.8	3.7	3.6	3.0	2.7	2.9	3.3	2.7	3	3.8	3.4	3.3	1
9	AHT 409 B	MH 2784	3.1	3.6	3.6	3.4	3.0	2.5	2.8	3.0	2.3	2.7	2.3	3.2	3.0	7
10	AHT 410 B	Pratap (Check)	2.8	3.4	3.3	3.2	2.5	2.4	2.5	2.8	2.1	2.5	2.3	3.2	2.8	9
		LOC. MEAN	3.0	3.5	3.6	3.4	2.9	2.4	2.6	3.1	2.2	2.7	3.1	3.2	3.0	
		C.D. (5%)	0.1	0.2	0.4	0.3	0.3	0.6	0.3	0.5	0.3	0.4	0.3	0.3	0.3	
		C.D. (1%)	0.2	0.2	0.6	0.4	0.4	0.8	0.4	0.7	0.3	0.5	0.4	0.5	0.4	
		C.V. (%)	2.7	2.8	6.8	3.6	5.7	13.9	4.2	9.9	6.7	6.1	5.1	6.2	9.0	
		F (Prob)	0.000	0.000	0.000	0.028	0.000	0.000	0.150	0.000	0.000	0.280	0.000	0.000	0.008	

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Table I.98: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 1000 SEED Wt.(g) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	VZN	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	11.7	9.1	10.2	10.4	13.2	12.3	12.8	9.9	11.0	11.1	2
2	AHT 402 B	MH 2682	10.4	9.2	11.2	10.3	11.6	12.6	12.1	9.3	12.8	11.0	3
3	AHT 403 B	AHB 1269 (Check)	10.4	8.2	10.8	9.8	11.6	12.5	12.0	8.5	13.1	10.7	6
4	AHT 404 B	MH 2767	11.2	7.9	9.3	9.5	10.6	12.5	11.5	7.1	11.2	10.0	9
5	AHT 405 B	MH 2773	10.4	10.0	10.2	10.2	10.8	11.9	11.4	6.1	10.7	10.0	8
6	AHT 406 B	MH 2775	10.5	7.7	10.8	9.7	11.4	12.1	11.7	7.2	7.1	9.5	10
7	AHT 407 B	86M01 (Check)	11.6	7.7	11.4	10.2	12.0	12.5	12.3	7.2	12.9	10.7	5
8	AHT 408 B	MH 2777	13.4	9.3	13.4	12.0	12.3	12.8	12.6	5.7	12.5	11.3	1
9	AHT 409 B	MH 2784	10.3	9.8	10.8	10.3	12.6	12.3	12.5	7.4	13.0	10.9	4
10	AHT 410 B	Pratap (Check)	11.7	9.5	10.2	10.5	11.2	12.5	11.8	5.6	10.8	10.2	7
		LOC. MEAN	11.2	8.9	10.8	10.3	11.7	12.4	12.1	7.4	11.5	10.6	
		C.D. (5%)	0.5	0.5	1.7	2.1	0.3	0.9	1.7	0.7	1.4	1.0	
		C.D. (1%)	0.7	0.7	2.4	3.0	0.4	1.2	2.4	1.0	1.9	1.3	
		C.V. (%)	2.5	3.5	9.3	9.3	1.5	4.3	6.5	5.7	7.0	6.8	
		F (Prob)	0.000	0.000	0.000	0.488	0.000	0.000	0.104	0.000	0.000	0.018	

Table I.99: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	DHL	PCR	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	152	140	47	113	144	157	151	120	129	124	153	125	130	5
2	AHT 402 B	MH 2682	153	113	53	106	143	136	140	125	132	129	128	122	123	10
3	AHT 403 B	AHB 1269 (Check)	151	148	56	118	143	153	148	146	132	139	155	118	133	1
4	AHT 404 B	MH 2767	153	134	48	112	143	158	151	142	132	137	156	129	133	2
5	AHT 405 B	MH 2773	155	129	54	113	144	155	150	148	131	139	154	105	131	4
6	AHT 406 B	MH 2775	154	139	58	117	146	147	147	114	132	123	151	123	129	7
7	AHT 407 B	86M01 (Check)	155	120	53	109	145	148	147	126	130	128	148	113	126	9
8	AHT 408 B	MH 2777	151	144	53	116	146	157	152	120	131	126	154	124	131	3
9	AHT 409 B	MH 2784	152	144	54	117	145	153	149	109	133	121	157	119	130	6
10	AHT 410 B	Pratap (Check)	153	141	54	116	143	145	144	110	130	120	155	121	128	8
		LOC. MEAN	153	135	53	114	144	151	148	126	131	129	151	120	129	
		C.D. (5%)	2.0	25.0	9.0	20.0	3.0	16.0	5.0	14.0	4.0	22.0	12.0	14.0	7.0	
		C.D. (1%)	3.0	35.0	13.0	29.0	4.0	22.0	8.0	19.0	6.0	32.0	16.0	20.0	10.0	
		C.V. (%)	0.8	10.9	10.2	6.1	1.2	6.1	2.4	6.4	2.0	7.1	4.5	7.0	5.6	
		F (Prob)	0.000	0.000	0.000	0.698	0.000	0.000	0.306	0.000	0.000	0.225	0.000	0.000	0.085	

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Table I.100: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 SEED SET (%) UNDER BAG ZONE B

S.No.	TEST CODE	ENTRY	ABD1	DHL	PCR	MS MEAN	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	98	83	87	89	97	84	90	2
2	AHT 402 B	MH 2682	97	92	72	87	87	91	88	5
3	AHT 403 B	AHB 1269 (Check)	97	94	67	86	95	89	89	3
4	AHT 404 B	MH 2767	92	95	67	85	89	84	86	9
5	AHT 405 B	MH 2773	96	88	55	80	96	89	85	10
6	AHT 406 B	MH 2775	97	80	93	90	95	90	91	1
7	AHT 407 B	86M01 (Check)	94	98	70	87	96	75	87	7
8	AHT 408 B	MH 2777	91	97	82	90	85	83	87	6
9	AHT 409 B	MH 2784	92	96	78	89	97	80	88	4
10	AHT 410 B	Pratap (Check)	91	91	70	84	88	89	86	8
		LOC. MEAN	95	91	74	87	93	86	88	
		C.D. (5%)	4.0	11.0	31.0	13.0	7.0	8.0	14.0	
		C.D. (1%)	5.0	15.0	42.0	19.0	10.0	11.0	19.0	
		C.V. (%)	2.4	7.0	24.1	6.1	4.5	5.4	9.5	
		F (Prob)	0.000	0.000	0.000	0.932	0.000	0.000	0.881	

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Table I.101: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 ZONE B
GRAIN QUALITY: IRON CONTENT (ppm)

S.No.	TEST CODE	ENTRY	ABD1	DHL	PCR	VYP	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	61	97	71	51	88	50	70	1
2	AHT 402 B	MH 2682	41	78	49	37	45	44	49	5
3	AHT 403 B	AHB 1269 (Check)	60	74	74	51	72	52	64	2
4	AHT 404 B	MH 2767	45	41	44	34	52	38	43	7
5	AHT 405 B	MH 2773	51	55	52	52	44	43	49	5
6	AHT 406 B	MH 2775	56	68	62	35	76	41	56	3
7	AHT 407 B	86M01 (Check)	47	54	54	40	55	41	48	6
8	AHT 408 B	MH 2777	56	67	51	38	58	38	51	4
9	AHT 409 B	MH 2784	51	53	56	38	58	34	48	6
10	AHT 410 B	Pratap (Check)	58	59	48	41	48	41	49	5

Table I.102: ADVANCE HYBRID TRIAL (Medium) KHARIF - 2024 ZONE B
GRAIN QUALITY: ZINC CONTENT (ppm)

S.No.	TEST CODE	ENTRY	ABD1	DHL	PCR	VYP	PLM	CBE	ZONE MEAN	RANK
1	AHT 401 B	AHB 1200 (Check)	42	40	39	35	22	39	36	2
2	AHT 402 B	MH 2682	36	37	33	31	19	40	33	4
3	AHT 403 B	AHB 1269 (Check)	37	40	45	40	27	45	39	1
4	AHT 404 B	MH 2767	34	29	31	33	24	41	32	5
5	AHT 405 B	MH 2773	39	29	33	32	20	42	32	5
6	AHT 406 B	MH 2775	32	31	33	30	29	40	33	4
7	AHT 407 B	86M01 (Check)	35	37	39	31	23	42	34	3
8	AHT 408 B	MH 2777	31	39	38	28	23	37	33	4
9	AHT 409 B	MH 2784	29	37	38	33	22	34	32	5
10	AHT 410 B	Pratap (Check)	45	41	42	33	20	39	36	2

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Table I.103: ADVANCE HYBRID TRIAL (Late) KHARIF 2024 EXPERIMENTAL DETAILS ZONE A

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizer			Insecticide
							N	P	K	
RAJASTHAN										
Jaipur (SKNAU)	SL	-	8.7.24	9.10.24	24.7.24	Nil	40	30	0	Nil
Jaipur (Seed works)	MSL	7.1	8.7.24	10.10.24	24.7.24	8.7, 15.8, 20.9.24	80	60	40	Chloropyriphos, Coragen,
Alwar(Corteva)	L	7.5	8.7.24	16.10.24	12.8.24	Life Saving	90	60	30	Chloropyriphos+Imidachlorpid
GUJARAT										
Jamnagar (JAU)	MB	7.6	18.7.24	19.10.24	28.7, 3.8, 9.8, 17.8.24	Nil	80	40	0	Nil
Dehgam (Kaveri Seeds)	SL	-	12.7.24	4.10.24	23.7, 14.8.24	12.7.24	128	92	0	Nil
UTTAR PRADESH										
Aligarh (Hytech)	SL	-	14.7.24	11.10.24	6.8, 23.8.24	14.7.24	65	30	15	Monocrotophos, Bavistin
Agra (Mahindra)	SL	-	12.7.24	12.10.24	14.8.24	Nil	85	60	50	Nil
Bichpuri (Kaveri Seeds)	SL	-	24.7.24	21.10.24	16.8.24	24.7.24	148	22.5	22.5	Nil
HARYANA										
Hisar (CCSHAU)	SL	-	11.7.24	25.10.24	-	28.8.24	100	40	0	Nil
MADHYA PRADESH										
Gwalior (RVSKVV)	SL	7.1	10.7.24	10.10.24	8.11.24	26.7.24	60	40	20	Nil
PUNJAB										
Ludhiana (PAU)	SL	-	10.7.24	15.11.24	31.7, 2.9.24	30.7, 31.8, 2.10.24	100	60	0	Nil

SL = Sandy Loam, MB = Medium Black, MSL = Medium Sandy Loam, L = Loam.

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Table I.104: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	AGR2	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	2392	5956	2983	3777	3609	3496	3552	2959	3438	3514	3304	4379	3436	5037	3745	4
2	AHT 502 A	MH 2712	2225	6022	2582	3610	3097	3768	3433	1701	2228	4306	2745	3564	2614	4243	3305	10
3	AHT 503 A	MH 2717	2431	6642	3871	4314	3285	3669	3477	3505	3434	3231	3390	4437	2367	4764	3785	3
4	AHT 504 A	86M86 (Check)	2044	5450	2335	3276	2586	3463	3024	1790	2221	3469	2493	3216	1922	4941	3040	12
5	AHT 505 A	MH 2796	2092	6822	2967	3960	4150	3329	3740	1549	3616	3611	2925	4452	2328	5091	3637	5
6	AHT 506 A	86M84 (Check)	1892	6142	3140	3725	2868	3716	3292	2182	3146	3342	2890	4159	2769	4066	3402	9
7	AHT 507 A	MH 2797	2039	4419	3349	3269	2338	3597	2968	3793	3010	3683	3495	3968	3522	4127	3441	8
8	AHT 508 A	MH 2798	2603	6769	3550	4307	3692	3566	3629	3394	3593	4175	3721	3350	3088	4225	3819	2
9	AHT 509 A	KBH 108 (Check)	2164	4719	1519	2801	3155	3150	3153	1510	828	3711	2016	3631	1972	4394	2796	13
10	AHT 510 A	MH 2801	2083	4397	3957	3479	2537	3617	3077	2211	2602	3531	2781	3568	2863	3997	3215	11
11	AHT 511 A	MP 7878 (Check)	1869	5933	2751	3518	3264	3706	3485	2033	2909	3825	2922	4063	2608	4891	3441	7
12	AHT 512 A	MH 2806	2078	5564	3763	3801	3625	3916	3771	4103	3570	4986	4220	3828	2608	4986	3912	1
13	AHT 513 A	AHB 1200 (Check)	1028	3636	1657	2107	1616	2003	1809	1509	1851	2003	1788	1882	1803	4914	2173	14
14	AHT 514 A	MH 2808	2328	5372	2729	3476	4012	3391	3701	2636	3928	4508	3691	3265	1998	4072	3476	6
		LOC. MEAN	2090	5560	2939	3530	3131	3456	3294	2491	2884	3707	3027	3697	2564	4554	3370	
		C.D. (5%)	589	829	928	961	568	514	936	431	200	792	994	565	293	410	457	
		C.D. (1%)	796	1121	1255	1299	767	695	1304	583	271	1071	1343	764	396	554	604	
		C.V. (%)	16.8	8.9	18.8	16.2	10.8	8.9	13.2	10.3	4.1	12.7	19.6	9.1	6.8	5.4	16.1	
		F (Prob)	0.000	0.000	0.000	0.008	0.000	0.000	0.042	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	12.00	12.00	12.00	-	14.40	12.00	-	12.00	12.00	12.00	-	12.00	12.00	12.00	-	

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Table I.105: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	AGR2	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	5111	7533	8331	6992	5308	13411	9359	10514	17028	11586	13043	14278	7333	15053	10499	10
2	AHT 502 A	MH 2712	6611	9619	9917	8716	5840	13439	9640	7826	10989	15792	11536	15306	9056	13392	10708	9
3	AHT 503 A	MH 2717	5139	9097	12169	8802	5657	12956	9306	10286	16456	17242	14661	16111	9611	13844	11688	3
4	AHT 504 A	86M86 (Check)	4000	6656	8617	6424	5366	12011	8688	9733	15078	7831	10880	12594	8667	15767	9665	12
5	AHT 505 A	MH 2796	4139	8347	9822	7436	7648	11561	9605	9919	15750	15972	13881	16944	8333	17500	11449	4
6	AHT 506 A	86M84 (Check)	4722	10031	13058	9270	5361	12611	8986	7246	14100	13425	11590	14722	5944	14061	10480	11
7	AHT 507 A	MH 2797	4194	7242	11106	7514	4924	12386	8655	15144	14661	13956	14587	14278	6167	16119	10925	7
8	AHT 508 A	MH 2798	5472	8133	9992	7866	6472	14544	10508	14586	14089	14753	14476	14778	8722	14236	11434	5
9	AHT 509 A	KBH 108 (Check)	6250	8389	8439	7693	5463	13089	9276	9776	10100	9553	9810	12944	6944	15167	9647	13
10	AHT 510 A	MH 2801	5972	8925	15150	10016	5037	16742	10889	11093	19328	15647	15356	13722	6556	14733	12082	1
11	AHT 511 A	MP 7878 (Check)	5500	8950	9583	8011	6560	16497	11529	12306	15611	14058	13992	14722	8667	16642	11736	2
12	AHT 512 A	MH 2806	6444	7328	9239	7670	5211	11906	8558	13244	15167	13414	13942	14278	8444	16206	10989	6
13	AHT 513 A	AHB 1200 (Check)	2694	4803	3742	3746	2833	9203	6018	9669	7294	7719	8228	7133	9111	17125	7393	14
14	AHT 514 A	MH 2808	6028	10328	9353	8569	7252	12525	9889	10319	18839	12239	13799	10278	9333	12894	10853	8
		LOC. MEAN	5163	8241	9894	7766	5638	13063	9350	10833	14606	13085	12841	13721	8063	15196	10682	
		C.D. (5%)	1054	601	2262	2255	1023	2218	2837	3444	1280	1966	4045	2370	909	2981	1562	
		C.D. (1%)	1425	813	3058	3048	1383	2998	3956	4655	1730	2657	5468	3204	1228	4030	2064	
		C.V. (%)	12.2	4.4	13.6	17.3	10.8	10.1	14.1	18.9	5.2	9.0	18.8	10.3	6.7	11.7	17.3	
		F (Prob)	0.000	0.000	0.000	0.002	0.000	0.000	0.124	0.000	0.000	0.000	0.035	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	12.00	12.00	12.00	-	14.40	12.00	-	12.00	12.00	12.00	-	12.00	12.00	12.00	-	

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Table I.106: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	AGR2	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	51	54	57	54	51	52	51	54	54	52	53	59	51	54	54	13
2	AHT 502 A	MH 2712	56	58	62	59	53	58	56	57	59	58	58	62	57	55	58	3
3	AHT 503 A	MH 2717	52	54	58	55	52	54	53	54	54	53	54	58	50	54	54	12
4	AHT 504 A	86M86 (Check)	53	56	57	55	53	57	55	56	57	56	57	62	52	56	56	8
5	AHT 505 A	MH 2796	52	58	58	56	51	57	54	56	56	55	55	59	52	55	55	10
6	AHT 506 A	86M84 (Check)	55	59	60	58	53	56	55	57	57	56	57	60	56	58	57	6
7	AHT 507 A	MH 2797	56	59	59	58	53	58	56	58	58	55	57	62	54	60	57	4
8	AHT 508 A	MH 2798	55	55	58	56	52	54	53	55	56	54	55	61	56	58	56	9
9	AHT 509 A	KBH 108 (Check)	50	60	63	57	54	58	56	58	61	58	59	62	56	52	57	5
10	AHT 510 A	MH 2801	54	60	60	58	55	59	57	58	60	58	59	65	58	59	59	2
11	AHT 511 A	MP 7878 (Check)	55	57	58	57	54	56	55	58	58	56	57	60	55	50	56	7
12	AHT 512 A	MH 2806	53	57	58	56	52	55	54	55	55	53	54	59	55	51	55	11
13	AHT 513 A	AHB 1200 (Check)	54	47	51	51	48	51	50	50	49	50	50	54	51	55	51	14
14	AHT 514 A	MH 2808	53	62	61	59	56	59	58	59	62	59	60	65	57	60	59	1
		LOC. MEAN	53	57	59	56	53	56	54	56	57	55	56	61	54	56	56	
		C.D. (5%)	2.0	1.0	1.0	4.0	1.0	2.0	2.0	1.0	2.0	1.0	1.0	2.0	2.0	2.0	1.0	
		C.D. (1%)	2.0	2.0	2.0	5.0	1.0	3.0	3.0	2.0	3.0	1.0	2.0	3.0	2.0	2.0	2.0	
		C.V. (%)	1.9	1.2	1.4	3.9	1.2	2.3	1.8	1.3	2.2	0.9	1.4	1.9	2.0	1.9	3.0	
		F (Prob)	0.000	0.000	0.000	0.014	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.107: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 DAYS TO MATURITY ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	AGR2	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	80	84	86	83	80	78	79	84	83	84	84	91	86	97	85	13
2	AHT 502 A	MH 2712	85	89	90	88	81	86	84	85	86	87	86	93	85	99	88	5
3	AHT 503 A	MH 2717	82	85	88	85	80	80	80	82	83	85	84	90	79	103	85	12
4	AHT 504 A	86M86 (Check)	82	86	86	84	81	83	82	85	87	87	86	94	81	99	86	8
5	AHT 505 A	MH 2796	82	88	86	85	80	84	82	85	86	86	86	92	78	102	86	9
6	AHT 506 A	86M84 (Check)	85	88	90	88	83	82	83	85	87	86	86	94	82	99	87	7
7	AHT 507 A	MH 2797	86	88	87	87	82	85	84	87	88	87	87	92	85	103	88	4
8	AHT 508 A	MH 2798	80	85	85	83	81	79	80	85	87	86	86	92	87	101	86	10
9	AHT 509 A	KBH 108 (Check)	84	88	93	88	83	85	84	88	87	86	87	94	87	101	89	3
10	AHT 510 A	MH 2801	85	89	90	88	83	86	85	87	89	88	88	97	88	105	90	1
11	AHT 511 A	MP 7878 (Check)	87	88	85	87	83	82	83	87	87	88	87	92	84	98	87	6
12	AHT 512 A	MH 2806	82	88	86	85	81	82	82	83	84	85	84	91	83	97	86	11
13	AHT 513 A	AHB 1200 (Check)	83	81	80	81	77	76	77	76	83	83	81	86	78	102	82	14
14	AHT 514 A	MH 2808	80	91	90	87	85	87	86	89	89	88	89	97	84	105	90	2
		LOC. MEAN	83	87	87	86	82	83	82	85	86	86	86	92	83	101	87	
		C.D. (5%)	1.0	2.0	1.0	3.0	1.0	3.0	3.0	1.0	1.0	1.0	2.0	4.0	1.0	2.0	2.0	
		C.D. (1%)	1.0	2.0	1.0	5.0	1.0	5.0	5.0	2.0	1.0	1.0	3.0	5.0	1.0	2.0	2.0	
		C.V. (%)	0.6	1.1	0.7	2.4	0.8	2.5	1.9	1.0	0.7	0.7	1.5	2.3	0.8	1.0	2.2	
		F (Prob)	0.000	0.000	0.000	0.006	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.108: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 PLANT HEIGHT (cm) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	AGR2	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	200	273	243	239	196	207	202	232	283	240	252	265	273	213	239	7
2	AHT 502 A	MH 2712	186	272	245	234	213	225	219	264	272	253	263	268	308	240	250	1
3	AHT 503 A	MH 2717	171	263	245	226	187	195	191	237	253	222	237	253	268	225	229	11
4	AHT 504 A	86M86 (Check)	177	252	227	218	191	200	195	218	252	230	233	246	261	200	223	12
5	AHT 505 A	MH 2796	219	268	238	242	199	198	199	232	262	230	241	265	266	225	237	9
6	AHT 506 A	86M84 (Check)	216	273	243	244	198	197	197	252	260	232	248	252	279	232	239	6
7	AHT 507 A	MH 2797	193	243	220	219	162	178	170	228	247	198	224	231	247	200	213	13
8	AHT 508 A	MH 2798	200	267	253	240	197	200	199	237	273	233	248	254	277	232	239	8
9	AHT 509 A	KBH 108 (Check)	188	273	240	234	213	227	220	249	270	243	254	269	287	237	245	3
10	AHT 510 A	MH 2801	220	265	243	243	191	213	202	238	257	245	246	264	286	234	241	5
11	AHT 511 A	MP 7878 (Check)	199	293	238	244	206	220	213	234	273	250	253	267	285	245	246	2
12	AHT 512 A	MH 2806	172	277	240	229	192	198	195	244	273	240	252	258	270	223	235	10
13	AHT 513 A	AHB 1200 (Check)	155	210	198	188	153	158	156	185	200	197	194	185	206	192	185	14
14	AHT 514 A	MH 2808	218	275	247	247	213	210	212	233	267	248	249	259	270	240	244	4
		LOC. MEAN	194	265	237	232	194	202	198	234	260	233	243	253	270	224	233	
		C.D. (5%)	9.0	10.0	18.0	19.0	10.0	14.0	11.0	6.0	19.0	11.0	15.0	13.0	6.0	12.0	8.0	
		C.D. (1%)	12.0	14.0	24.0	26.0	13.0	19.0	16.0	9.0	26.0	14.0	21.0	17.0	9.0	17.0	10.0	
		C.V. (%)	2.8	2.3	4.4	4.9	3.0	4.2	2.6	1.6	4.3	2.7	3.8	3.0	1.4	3.3	4.0	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.109: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	2.1	1.0	1.7	1.6	1.9	1.0	1.5	1.1	1.1	1.1	2.4	1.7	3.2	1.7	11
2	AHT 502 A	MH 2712	2.2	1.0	2.0	1.7	1.7	1.1	1.4	1.2	1.0	1.1	3.6	3.5	2.8	2.0	2
3	AHT 503 A	MH 2717	1.0	1.0	1.7	1.2	1.8	1.0	1.4	1.1	1.0	1.1	2.5	2.3	3.8	1.7	10
4	AHT 504 A	86M86 (Check)	1.1	1.0	2.0	1.4	1.7	1.1	1.4	1.1	1.2	1.2	3.1	2.2	2.3	1.7	13
5	AHT 505 A	MH 2796	2.5	1.0	1.7	1.8	2.1	1.0	1.6	1.1	1.0	1.1	2.6	2.0	3.6	1.9	3
6	AHT 506 A	86M84 (Check)	2.4	1.0	1.7	1.7	1.7	1.1	1.4	1.1	1.0	1.1	2.4	2.3	3.9	1.9	4
7	AHT 507 A	MH 2797	1.1	1.0	2.1	1.4	1.8	1.1	1.5	1.1	1.1	1.1	2.3	2.3	2.1	1.6	14
8	AHT 508 A	MH 2798	1.0	1.0	1.7	1.2	1.8	1.1	1.5	1.1	1.0	1.1	2.7	2.4	4.0	1.8	7
9	AHT 509 A	KBH 108 (Check)	2.6	1.0	1.7	1.8	2.1	1.0	1.6	1.1	1.1	1.1	2.6	2.0	2.5	1.8	8
10	AHT 510 A	MH 2801	2.5	1.7	2.2	2.1	1.9	1.2	1.6	1.6	1.1	1.3	3.1	2.3	2.9	2.0	1
11	AHT 511 A	MP 7878 (Check)	1.2	1.7	2.1	1.6	1.7	1.1	1.4	1.1	1.0	1.1	2.9	2.5	3.2	1.8	5
12	AHT 512 A	MH 2806	1.1	1.0	2.0	1.4	1.8	1.1	1.4	1.1	1.0	1.1	2.5	1.9	3.7	1.7	12
13	AHT 513 A	AHB 1200 (Check)	1.1	1.0	2.1	1.4	1.5	1.2	1.4	1.1	1.0	1.1	2.9	2.5	3.6	1.8	6
14	AHT 514 A	MH 2808	1.2	1.3	1.8	1.4	1.9	1.1	1.5	1.1	1.2	1.1	2.7	2.1	3.1	1.8	9
		LOC. MEAN	1.7	1.1	1.9	1.6	1.8	1.1	1.5	1.1	1.1	1.1	2.7	2.3	3.2	1.8	
		C.D. (5%)	0.4	0.5	0.7	0.7	0.3	0.2	0.3	0.3	0.1	0.3	0.6	0.5	0.7	0.3	
		C.D. (1%)	0.6	0.6	0.9	1.0	0.5	0.3	0.4	0.4	0.1	0.4	0.8	0.7	0.9	0.4	
		C.V. (%)	15.9	24.5	20.8	27.5	11.3	12.5	10.3	17.3	5.3	17.3	12.7	13.4	12.4	18.4	
		F (Prob)	0.000	0.000	0.000	0.426	0.000	0.000	0.867	0.000	0.000	0.000	0.000	0.000	0.000	0.038	

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Table I.110: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 PANICLE LENGTH (cm) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	AGR2	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	23	25	27	25	27	24	25	28	28	31	29	29	27	26	27	5
2	AHT 502 A	MH 2712	23	31	30	28	27	26	27	31	30	33	31	29	28	34	29	1
3	AHT 503 A	MH 2717	22	27	26	25	25	21	23	27	29	30	29	29	26	23	26	7
4	AHT 504 A	86M86 (Check)	21	24	26	24	24	21	23	27	27	28	28	28	26	21	25	12
5	AHT 505 A	MH 2796	26	25	24	25	24	22	23	26	27	26	26	29	24	25	25	11
6	AHT 506 A	86M84 (Check)	32	27	28	29	26	24	25	28	30	31	30	29	30	29	29	2
7	AHT 507 A	MH 2797	23	23	24	23	23	21	22	26	26	27	26	27	25	27	25	13
8	AHT 508 A	MH 2798	23	24	28	25	24	23	24	27	30	30	29	28	26	27	26	6
9	AHT 509 A	KBH 108 (Check)	25	25	25	25	25	23	24	28	27	28	28	29	25	25	26	8
10	AHT 510 A	MH 2801	21	26	27	25	24	22	23	28	26	26	27	29	26	28	26	10
11	AHT 511 A	MP 7878 (Check)	20	25	27	24	24	24	24	28	26	28	27	30	25	28	26	9
12	AHT 512 A	MH 2806	23	25	27	25	27	24	26	28	29	31	29	28	26	29	27	4
13	AHT 513 A	AHB 1200 (Check)	20	23	23	22	21	23	22	28	26	25	26	27	24	27	24	14
14	AHT 514 A	MH 2808	31	26	27	28	25	23	24	29	29	29	29	29	24	29	27	3
		LOC. MEAN	24	25	26	25	25	23	24	28	28	29	28	29	26	27	26	
		C.D. (5%)	2.0	1.0	2.0	4.0	2.0	2.0	2.0	1.0	3.0	1.0	2.0	2.0	1.0	2.0	1.0	
		C.D. (1%)	3.0	1.0	3.0	5.0	3.0	2.0	3.0	1.0	4.0	2.0	3.0	3.0	2.0	3.0	2.0	
		C.V. (%)	5.2	2.4	5.0	8.8	5.2	4.4	4.1	2.4	6.2	2.3	4.0	4.7	2.9	4.9	6.0	
		F (Prob)	0.000	0.000	0.000	0.040	0.000	0.000	0.006	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.111: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	2.5	3.1	3.1	2.9	2.8	3.0	2.9	3.5	3.0	3.3	3.9	2.5	3.3	3.1	14
2	AHT 502 A	MH 2712	2.8	3.3	3.2	3.1	2.9	3.1	3.0	3.6	3.1	3.4	4.0	2.6	3.8	3.2	12
3	AHT 503 A	MH 2717	2.6	3.5	3.5	3.2	3.2	3.2	3.2	3.9	3.5	3.7	4.2	2.6	3.7	3.4	9
4	AHT 504 A	86M86 (Check)	2.7	3.4	3.5	3.2	3.2	3.3	3.2	3.8	3.4	3.6	4.1	2.6	3.2	3.3	11
5	AHT 505 A	MH 2796	3.5	3.5	3.6	3.6	3.3	3.5	3.4	4.2	3.6	3.9	4.1	2.5	4.2	3.6	1
6	AHT 506 A	86M84 (Check)	3.5	3.3	3.4	3.4	3.1	3.2	3.2	3.8	3.3	3.6	3.8	2.6	3.7	3.4	8
7	AHT 507 A	MH 2797	2.5	3.3	3.4	3.1	2.8	3.1	3.0	3.7	3.0	3.4	4.0	2.5	3.9	3.2	13
8	AHT 508 A	MH 2798	2.9	3.2	3.6	3.3	3.3	3.3	3.3	4.1	3.4	3.8	4.3	2.5	4.1	3.5	3
9	AHT 509 A	KBH 108 (Check)	3.2	3.4	3.4	3.3	3.5	3.3	3.4	4.0	3.5	3.8	4.1	2.5	3.6	3.5	6
10	AHT 510 A	MH 2801	3.5	3.4	3.4	3.5	3.1	3.2	3.2	3.8	3.4	3.6	4.3	2.6	4.1	3.5	4
11	AHT 511 A	MP 7878 (Check)	2.9	3.5	3.4	3.3	3.2	3.4	3.3	3.8	3.5	3.7	4.0	2.5	3.8	3.4	7
12	AHT 512 A	MH 2806	3.1	3.3	3.5	3.3	3.2	3.1	3.2	3.9	3.3	3.6	4.0	2.5	3.8	3.4	10
13	AHT 513 A	AHB 1200 (Check)	3.0	3.4	3.7	3.3	3.1	3.3	3.2	3.8	3.7	3.7	4.1	3.4	3.6	3.5	2
14	AHT 514 A	MH 2808	4.2	3.3	3.4	3.6	3.2	3.2	3.2	3.8	3.3	3.6	3.9	2.6	3.7	3.5	5
		LOC. MEAN	3.1	3.4	3.4	3.3	3.1	3.2	3.2	3.8	3.4	3.6	4.1	2.6	3.8	3.4	
		C.D. (5%)	0.1	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.5	0.2	
		C.D. (1%)	0.2	0.4	0.4	0.6	0.4	0.2	0.3	0.3	0.3	0.3	0.6	0.2	0.7	0.2	
		C.V. (%)	2.8	4.9	4.8	8.7	5.7	2.8	3.0	3.7	3.3	3.7	6.3	4.0	7.8	5.9	
		F (Prob)	0.000	0.000	0.000	0.236	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.112: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 1000-SEED Wt.(g) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	BCR	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	11.4	12.4	8.2	10.6	11.8	11.9	11.8	9.9	13.2	10.3	12.0	11.2	7
2	AHT 502 A	MH 2712	8.5	11.8	7.4	9.2	10.0	9.1	9.5	8.6	10.3	15.5	11.9	10.4	14
3	AHT 503 A	MH 2717	7.7	12.4	8.5	9.5	10.3	9.9	10.1	9.9	10.5	19.7	10.9	11.1	8
4	AHT 504 A	86M86 (Check)	8.4	11.7	8.4	9.5	11.0	10.6	10.8	10.5	12.4	10.7	12.2	10.6	12
5	AHT 505 A	MH 2796	7.9	12.3	8.1	9.4	11.9	12.9	12.4	10.6	12.9	18.2	12.8	11.9	3
6	AHT 506 A	86M84 (Check)	7.8	10.8	9.0	9.2	11.4	9.4	10.4	10.3	11.9	13.5	11.6	10.6	13
7	AHT 507 A	MH 2797	7.0	11.5	9.4	9.3	10.4	11.2	10.8	10.0	12.9	13.5	10.9	10.8	11
8	AHT 508 A	MH 2798	9.4	13.5	10.9	11.3	12.4	15.0	13.7	10.2	13.0	13.8	10.0	12.0	2
9	AHT 509 A	KBH 108 (Check)	9.3	12.3	7.9	9.8	11.1	11.4	11.3	9.1	11.5	13.5	12.7	11.0	9
10	AHT 510 A	MH 2801	8.9	13.5	10.0	10.8	12.2	11.0	11.6	8.9	12.4	18.7	10.9	11.8	5
11	AHT 511 A	MP 7878 (Check)	7.2	13.1	8.5	9.6	11.9	12.0	12.0	11.4	12.9	17.3	12.9	11.9	4
12	AHT 512 A	MH 2806	7.5	11.5	9.1	9.4	11.8	13.3	12.6	10.8	13.3	13.6	14.7	11.7	6
13	AHT 513 A	AHB 1200 (Check)	7.5	12.6	9.6	9.9	11.0	11.3	11.1	8.7	13.6	11.7	11.9	10.9	10
14	AHT 514 A	MH 2808	11.0	12.9	10.4	11.4	13.2	12.3	12.8	10.9	12.4	18.2	12.8	12.7	1
		LOC. MEAN	8.5	12.3	9.0	9.9	11.4	11.5	11.5	10.0	12.4	14.9	12.0	11.3	
		C.D. (5%)	0.8	0.6	1.7	1.5	0.8	1.4	1.8	1.1	1.2	1.1	0.8	0.9	
		C.D. (1%)	1.1	0.9	2.2	2.1	1.0	1.8	2.5	1.5	1.7	1.5	1.1	1.3	
		C.V. (%)	5.6	3.1	11.1	9.2	4.0	7.0	7.2	6.7	5.9	4.5	3.9	8.3	
		F (Prob)	0.000	0.000	0.000	0.050	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	

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Table I.113: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	AGR2	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	182	171	160	171	181	150	165	137	159	161	152	96	108	163	152	2
2	AHT 502 A	MH 2712	171	160	140	157	177	158	168	129	160	146	145	89	131	163	148	4
3	AHT 503 A	MH 2717	94	171	165	143	191	161	176	133	155	162	150	93	136	162	147	5
4	AHT 504 A	86M86 (Check)	83	168	122	125	155	156	155	128	153	90	124	93	96	163	128	14
5	AHT 505 A	MH 2796	134	172	142	149	197	154	175	128	160	157	148	97	109	163	147	7
6	AHT 506 A	86M84 (Check)	77	164	143	128	178	160	169	132	158	155	148	93	120	164	140	11
7	AHT 507 A	MH 2797	128	170	153	150	198	155	177	133	160	167	153	94	148	162	152	1
8	AHT 508 A	MH 2798	131	177	148	152	178	156	167	134	159	163	152	91	103	163	146	9
9	AHT 509 A	KBH 108 (Check)	108	166	134	136	182	149	165	123	165	152	147	90	92	163	139	12
10	AHT 510 A	MH 2801	179	162	134	158	160	152	156	136	166	158	153	88	115	165	147	6
11	AHT 511 A	MP 7878 (Check)	159	160	143	154	180	154	167	123	162	155	147	93	111	163	146	8
12	AHT 512 A	MH 2806	150	169	155	158	203	158	181	132	160	159	150	97	105	163	150	3
13	AHT 513 A	AHB 1200 (Check)	117	171	130	139	188	146	167	114	160	156	143	94	132	164	143	10
14	AHT 514 A	MH 2808	129	175	135	146	172	153	163	130	160	112	134	91	100	163	138	13
		LOC. MEAN	132	168	143	148	181	154	168	129	160	150	146	93	115	163	144	
		C.D. (5%)	45.0	7.0	42.0	34.0	28.0	18.0	21.0	14.0	7.0	13.0	21.0	9.0	28.0	2.0	12.0	
		C.D. (1%)	61.0	10.0	57.0	47.0	39.0	24.0	29.0	19.0	10.0	18.0	28.0	12.0	38.0	3.0	15.0	
		C.V. (%)	20.3	2.5	17.4	13.9	9.4	6.8	5.8	6.6	2.7	5.3	8.5	5.5	14.8	0.9	9.5	
		F (Prob)	0.000	0.000	0.000	0.376	0.000	0.000	0.419	0.000	0.000	0.000	0.267	0.000	0.000	0.000	0.005	

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Table I.114: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 SEED SET (%) UNDER BAG ZONE A

S.No.	TEST CODE	ENTRY	JPR	JPR1	ALW	RAJ MEAN	JMR	DEG1	GUJ MEAN	ALR	BCR	UP MEAN	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	92	97	90	93	70	97	83	73	77	75	92	100	80	87	8
2	AHT 502 A	MH 2712	93	93	73	87	71	90	81	63	68	66	95	100	72	82	12
3	AHT 503 A	MH 2717	95	100	93	96	74	98	86	83	80	82	96	97	73	89	4
4	AHT 504 A	86M86 (Check)	100	83	83	89	70	98	84	83	82	83	90	100	97	89	6
5	AHT 505 A	MH 2796	100	98	83	94	74	100	87	90	80	85	100	100	96	92	1
6	AHT 506 A	86M84 (Check)	98	97	93	96	62	98	80	90	80	85	92	100	77	89	5
7	AHT 507 A	MH 2797	97	80	80	86	50	83	67	87	22	54	93	100	70	76	13
8	AHT 508 A	MH 2798	62	100	100	87	68	100	84	90	78	84	93	100	67	86	10
9	AHT 509 A	KBH 108 (Check)	85	80	97	87	58	98	78	73	82	78	90	100	78	84	11
10	AHT 510 A	MH 2801	98	95	100	98	50	100	75	90	90	90	95	100	97	91	2
11	AHT 511 A	MP 7878 (Check)	97	93	87	92	66	98	82	73	87	80	93	100	98	89	3
12	AHT 512 A	MH 2806	78	93	90	87	69	97	83	90	83	87	92	100	77	87	7
13	AHT 513 A	AHB 1200 (Check)	87	35	73	65	29	78	53	-	73	73	78	83	68	67	14
14	AHT 514 A	MH 2808	98	95	83	92	60	100	80	90	82	86	92	87	77	86	9
		LOC. MEAN	91	89	88	89	62	95	79	83	76	79	92	98	80	85	
		C.D. (5%)	8.0	11.0	26.0	20.0	12.0	12.0	14.0	18.0	9.0	18.0	11.0	4.0	5.0	8.0	
		C.D. (1%)	10.0	15.0	35.0	27.0	16.0	17.0	19.0	24.0	12.0	24.0	15.0	6.0	6.0	11.0	
		C.V. (%)	4.9	7.4	17.7	13.3	11.1	7.7	8.1	12.6	6.8	12.6	7.1	2.7	3.5	9.8	
		F (Prob)	0.000	0.000	0.000	0.231	0.000	0.000	0.010	0.000	0.000	0.000	0.000	0.000	0.000	0.041	

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Table I.115: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 ZONE A
GRAIN QUALITY: IRON CONTENT (ppm)

S.No.	TEST CODE	ENTRY	JPR	ALW	JMR	ALR	BCR	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	40	72	51	38	48	59	66	61	54	4
2	AHT 502 A	MH 2712	48	59	51	51	43	75	67	74	59	3
3	AHT 503 A	MH 2717	42	49	45	35	42	57	65	54	49	7
4	AHT 504 A	86M86 (Check)	51	67	64	48	52	59	74	69	61	2
5	AHT 505 A	MH 2796	42	58	54	45	47	53	76	48	53	5
6	AHT 506 A	86M84 (Check)	42	47	46	46	42	74	59	51	51	6
7	AHT 507 A	MH 2797	39	44	41	33	35	79	38	34	43	10
8	AHT 508 A	MH 2798	38	50	46	41	41	45	53	43	45	9
9	AHT 509 A	KBH 108 (Check)	49	49	41	41	33	70	47	37	46	8
10	AHT 510 A	MH 2801	41	74	61	53	54	57	68	63	59	3
11	AHT 511 A	MP 7878 (Check)	46	52	52	49	49	66	58	60	54	4
12	AHT 512 A	MH 2806	40	43	42	38	37	48	49	47	43	10
13	AHT 513 A	AHB 1200 (Check)	45	91	85	38	65	69	90	79	70	1
14	AHT 514 A	MH 2808	43	48	47	36	33	48	62	43	45	9

Table I.116: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 ZONE A
GRAIN QUALITY: ZINC CONTENT (ppm)

S.No.	TEST CODE	ENTRY	JPR	ALW	JMR	ALR	BCR	HSR	GLR	LDA	ZONE MEAN	RANK
1	AHT 501 A	MH 2709	40	47	42	20	35	50	39	37	39	3
2	AHT 502 A	MH 2712	49	43	42	22	34	56	43	39	41	1
3	AHT 503 A	MH 2717	40	32	40	25	36	51	35	38	37	5
4	AHT 504 A	86M86 (Check)	45	42	48	26	35	49	29	43	40	2
5	AHT 505 A	MH 2796	39	37	40	26	31	43	36	33	36	6
6	AHT 506 A	86M84 (Check)	39	31	41	19	31	52	36	39	36	6
7	AHT 507 A	MH 2797	35	33	37	21	30	54	32	32	34	8
8	AHT 508 A	MH 2798	34	41	39	24	35	44	37	37	36	6
9	AHT 509 A	KBH 108 (Check)	33	32	33	21	26	51	28	29	32	9
10	AHT 510 A	MH 2801	35	41	43	26	36	46	38	36	38	4
11	AHT 511 A	MP 7878 (Check)	42	40	41	27	38	60	41	38	41	1
12	AHT 512 A	MH 2806	33	28	35	24	29	42	32	29	32	9
13	AHT 513 A	AHB 1200 (Check)	37	45	51	20	38	54	40	42	41	1
14	AHT 514 A	MH 2808	38	35	36	24	28	43	37	37	35	7

Table I.117: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 ZONE A
GRAIN QUALITY (Protein and Fat)

S. No.	TEST CODE	ENTRY	Protein (%)	Fat (%)
			HSR	HSR
1	AHT 501 A	MH 2709	10.1	5.1
2	AHT 502 A	MH 2712	9.9	5.3
3	AHT 503 A	MH 2717	8.8	5.7
4	AHT 504 A	86M86 (Check)	9.5	5.9
5	AHT 505 A	MH 2796	9.8	5.6
6	AHT 506 A	86M84 (Check)	9.0	6.0
7	AHT 507 A	MH 2797	9.7	5.5
8	AHT 508 A	MH 2798	10.3	5.6
9	AHT 509 A	KBH 108 (Check)	10.2	5.0
10	AHT 510 A	MH 2801	9.8	5.0
11	AHT 511 A	MP 7878 (Check)	9.2	6.0
12	AHT 512 A	MH 2806	9.3	5.2
13	AHT 513 A	AHB 1200 (Check)	9.5	5.5
14	AHT 514 A	MH 2808	8.8	5.6

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Table I.118: ADVANCE HYBRID TRIAL (Late) KHARIF 2024 EXPERIMENTAL DETAILS ZONE B

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizers (kg/ha.)			Insecticide
							N	P	K	
MAHARASHTRA										
Aurangabad (NARP)	MB	7.5	12.7.24	11.11.24	Nil	Nil	60	30	30	Nil
Aurangabad (Ajeet Seed)	M	-	12.7.24	15.10.24	10.8.24	Nil	60	30	30	Nil
Aurangabad (Seed Works)	BCS	-	9.7.24	15.10.24	1.8.24	9.7, 21.7.24	80	40	40	Chloropyriphos
Niphad (MPKV)	-	-	10.7.24	-	-	Nil	-	-	-	-
Dhule (MPKV)	MB	8.6	4.7.24	15.10.24	28.7.24	Nil	60	30	0	Nil
KARNATAKA										
Vijayapur (UAS, Dharwad)	SB	8.7	6.7.24	26.10.24	17.8.24	Nil	50	25	0	Nil
ANDHRA PRADESH										
Ananthapuram (ANGRAU)	A	6.7	12.8.24	As Per Maturity	5.9.24	As Per Required	60	30	20	Nil
TAMIL NADU										
Coimbatore (TNAU)	CL	7.8	29.6.24	6.10.24	Nil	29.6, 17.7, 12.8, 3.6, 18.9, 01.10.24	80	40	40	Nil

SB = Shallow Black, MB = Medium Black, CL = Clay Loam, BCS = Black Cotton Soil., M = Medium, A = Alfisols.

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Table I.119: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	NPD	DHL	MS MEAN	VYP	APR***	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	2939	3536	5315	2174	2799	3353	2689	2443	3160	3230	4
2	AHT 502 B	Kaveri Super Boss (Check)	2846	2053	4359	1733	2947	2788	3347	1936	3657	2992	5
3	AHT 503 B	MH 2795	2913	2203	4467	1642	3150	2875	2987	1969	2879	2892	6
4	AHT 504 B	86M86 (Check)	2499	1580	4252	1451	2765	2509	2585	1456	3169	2614	7
5	AHT 505 B	MH 2798	3225	3719	5021	1933	3150	3410	3250	1603	4323	3517	1
6	AHT 506 B	NBH 4903 (Check)	2445	3277	4794	1755	2933	3041	3653	1178	4636	3356	2
7	AHT 507 B	MH 2808	3272	3587	5088	1303	2907	3231	2896	1193	3892	3278	3
8	AHT 508 B	AHB 1200 (Check)	2936	2214	2684	1376	1447	2131	2425	1388	3208	2327	8
		LOC. MEAN	2884	2771	4498	1671	2762	2917	2979	1646	3616	3026	
		C.D. (5%)	262	460	945	356	618	615	279	214	590	502	
		C.D. (1%)	364	639	1312	494	858	830	388	297	818	671	
		C.V. (%)	5.2	9.5	12.0	12.2	12.8	16.3	5.4	7.4	9.3	15.4	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	12.00	12.00	8.00	12.00	11.10	-	12.00	12.00	12.00	-	

***TEST LOCATION REJECTED DUE TO LOW AVERAGE YIELD (1646 kg/ha), THAN THE STATE AVERAGE YIELD (1772 kg/ha) TAKEN OVER 10 YEARS

Table I.120: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	NPD	DHL	MS MEAN	VYP	APR	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	6139	8840	14092	7125	6306	8500	5722	4649	6755	7454	4
2	AHT 502 B	Kaveri Super Boss (Check)	6972	7906	12821	6542	7327	8314	5972	3360	5760	7082	6
3	AHT 503 B	MH 2795	7417	10304	12126	6917	7147	8782	5333	3293	5027	7195	5
4	AHT 504 B	86M86 (Check)	4250	5529	10988	4792	5946	6301	5000	3141	7043	5836	7
5	AHT 505 B	MH 2798	7333	8091	12282	8875	7177	8752	5361	3606	7122	7481	3
6	AHT 506 B	NBH 4903 (Check)	6278	10650	15127	6417	8078	9310	5833	4244	5852	7810	2
7	AHT 507 B	MH 2808	6611	12923	16975	6972	4775	9651	5806	4035	5446	7943	1
8	AHT 508 B	AHB 1200 (Check)	7083	5004	7558	6389	3724	5952	4861	3722	5302	5455	8
		LOC. MEAN	6510	8656	12746	6753	6310	8195	5486	3756	6038	7032	
		C.D. (5%)	1462	1349	1035	1153	1590	2080	369	755	1127	1418	
		C.D. (1%)	2029	1872	1437	1600	2206	2806	513	1048	1564	1891	
		C.V. (%)	12.8	8.9	4.6	9.8	14.4	19.6	3.9	11.5	10.7	20.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.006	
		PLOT SIZE (m ²)	12.00	12.00	8.00	12.00	11.10	-	12.00	12.00	12.00	-	

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Table I.121: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	NPD	DHL	MS MEAN	VYP	APR	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	52	54	52	59	53	54	50	54	46	53	7
2	AHT 502 B	Kaveri Super Boss (Check)	62	58	60	58	53	58	51	55	52	56	2
3	AHT 503 B	MH 2795	58	56	57	57	50	55	50	56	46	54	5
4	AHT 504 B	86M86 (Check)	58	58	58	56	54	57	50	57	47	55	3
5	AHT 505 B	MH 2798	56	56	54	57	51	55	51	52	51	53	6
6	AHT 506 B	NBH 4903 (Check)	59	57	58	56	52	56	51	52	51	54	4
7	AHT 507 B	MH 2808	62	60	62	56	51	58	51	56	52	56	1
8	AHT 508 B	AHB 1200 (Check)	49	50	49	53	49	50	47	53	46	49	8
		LOC. MEAN	57	56	56	56	52	55	50	54	49	54	
		C.D. (5%)	2.0	2.0	1.0	2.0	2.0	3.0	2.0	1.0	1.0	2.0	
		C.D. (1%)	2.0	3.0	1.0	3.0	3.0	4.0	3.0	1.0	1.0	3.0	
		C.V. (%)	1.6	2.1	1.0	1.8	2.5	3.7	2.1	1.0	1.2	3.8	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Table I.122: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 DAYS TO MATURITY ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	NPD	DHL	MS MEAN	VYP	APR	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	93	85	78	83	90	86	91	90	84	87	7
2	AHT 502 B	Kaveri Super Boss (Check)	100	90	86	84	90	90	92	92	90	90	2
3	AHT 503 B	MH 2795	96	86	82	83	87	87	90	91	84	87	5
4	AHT 504 B	86M86 (Check)	94	90	84	83	90	88	91	93	85	89	4
5	AHT 505 B	MH 2798	92	88	80	82	88	86	91	88	89	87	6
6	AHT 506 B	NBH 4903 (Check)	101	89	83	83	88	89	92	87	89	89	3
7	AHT 507 B	MH 2808	105	93	87	83	88	91	91	92	90	91	1
8	AHT 508 B	AHB 1200 (Check)	88	82	75	82	85	82	88	87	84	84	8
		LOC. MEAN	96	88	82	83	88	87	91	90	87	88	
		C.D. (5%)	1.0	2.0	2.0	1.0	2.0	3.0	2.0	1.0	1.0	2.0	
		C.D. (1%)	1.0	2.0	2.0	1.0	3.0	4.0	3.0	1.0	1.0	3.0	
		C.V. (%)	0.6	1.1	1.2	0.7	1.4	2.8	1.2	0.6	0.7	2.5	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.123: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 PLANT HEIGHT (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	NPD	DHL	MS MEAN	VYP	APR	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	162	221	217	163	225	198	172	126	202	186	6
2	AHT 502 B	Kaveri Super Boss (Check)	178	235	240	189	249	218	202	122	212	204	2
3	AHT 503 B	MH 2795	150	220	220	189	232	202	188	124	183	188	5
4	AHT 504 B	86M86 (Check)	152	204	217	181	224	195	189	126	189	185	7
5	AHT 505 B	MH 2798	150	220	233	178	230	202	194	124	211	193	4
6	AHT 506 B	NBH 4903 (Check)	168	238	237	178	223	209	203	126	211	198	3
7	AHT 507 B	MH 2808	187	237	253	173	248	220	210	123	212	205	1
8	AHT 508 B	AHB 1200 (Check)	115	183	187	169	204	172	174	120	164	164	8
		LOC. MEAN	158	220	225	177	230	202	191	124	198	190	
		C.D. (5%)	12.0	12.0	10.0	9.0	18.0	13.0	14.0	10.0	18.0	10.0	
		C.D. (1%)	17.0	16.0	14.0	13.0	26.0	17.0	20.0	14.0	25.0	13.0	
		C.V. (%)	4.5	3.0	2.6	2.9	4.6	4.8	4.2	4.6	5.2	5.2	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Table I.124: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	NPD	DHL	MS MEAN	VYP	APR	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	1.0	1.4	2.0	6.0	2.1	2.5	3.3	1.3	2.6	2.5	6
2	AHT 502 B	Kaveri Super Boss (Check)	2.0	1.6	3.0	5.7	2.2	2.9	3.2	1.5	2.6	2.7	1
3	AHT 503 B	MH 2795	1.7	1.4	2.0	6.0	2.8	2.8	2.7	1.6	1.8	2.5	5
4	AHT 504 B	86M86 (Check)	2.0	1.7	2.0	6.7	2.2	2.9	3.1	1.5	2.6	2.7	2
5	AHT 505 B	MH 2798	1.0	1.3	1.7	5.0	2.7	2.3	2.9	1.7	2.6	2.4	7
6	AHT 506 B	NBH 4903 (Check)	1.3	1.8	1.7	5.0	1.9	2.3	3.0	1.4	2.4	2.3	8
7	AHT 507 B	MH 2808	1.3	1.6	1.7	6.3	2.1	2.6	3.1	1.7	3.0	2.6	3
8	AHT 508 B	AHB 1200 (Check)	2.0	1.4	2.0	6.0	1.8	2.6	3.0	1.5	2.6	2.5	4
		LOC. MEAN	1.5	1.5	2.0	5.8	2.2	2.6	3.0	1.5	2.5	2.5	
		C.D. (5%)	0.6	0.5	0.6	1.8	0.2	0.5	0.5	0.5	0.2	0.4	
		C.D. (1%)	0.9	0.7	0.9	2.5	0.3	0.7	0.6	0.7	0.3	0.5	
		C.V. (%)	24.0	18.0	17.7	17.7	5.8	15.0	8.6	20.2	4.5	13.8	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.164	0.000	0.000	0.000	0.193	

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Table I.125: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 PANICLE LENGTH (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	NPD	DHL	MS MEAN	VYP	APR	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	24	26	31	21	29	26	25	27	30	27	3
2	AHT 502 B	Kaveri Super Boss (Check)	23	28	32	21	29	27	29	26	28	27	2
3	AHT 503 B	MH 2795	22	25	27	22	27	24	27	27	27	25	8
4	AHT 504 B	86M86 (Check)	24	26	27	21	27	25	28	23	28	26	6
5	AHT 505 B	MH 2798	23	27	32	19	29	26	29	26	26	26	4
6	AHT 506 B	NBH 4903 (Check)	25	28	36	22	29	28	27	26	27	28	1
7	AHT 507 B	MH 2808	24	25	30	20	28	26	28	25	26	26	5
8	AHT 508 B	AHB 1200 (Check)	19	26	33	18	25	24	28	26	28	25	7
		LOC. MEAN	23	26	31	21	28	26	28	26	28	26	
		C.D. (5%)	1.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0	
		C.D. (1%)	2.0	2.0	3.0	2.0	3.0	3.0	2.0	4.0	4.0	2.0	
		C.V. (%)	3.6	3.8	3.4	4.5	4.1	6.3	3.7	5.9	5.2	6.0	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.026	0.000	0.000	0.000	0.061	

Table I.126: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	DHL	MS MEAN	VYP	APR	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	3.2	3.8	3.6	3.7	3.6	2.8	2.5	3.1	3.2	6
2	AHT 502 B	Kaveri Super Boss (Check)	3.0	3.8	3.5	3.8	3.5	3.1	2.4	3.2	3.3	5
3	AHT 503 B	MH 2795	3.2	3.8	3.5	3.5	3.5	3.1	2.7	3.4	3.3	3
4	AHT 504 B	86M86 (Check)	3.2	3.7	3.4	3.4	3.4	2.8	2.6	3.3	3.2	7
5	AHT 505 B	MH 2798	3.2	4.0	3.7	3.6	3.6	3.1	2.6	3.4	3.3	2
6	AHT 506 B	NBH 4903 (Check)	2.8	3.9	3.9	3.7	3.6	3.1	2.5	3.1	3.3	4
7	AHT 507 B	MH 2808	2.9	3.7	3.5	3.5	3.4	2.9	2.5	3.2	3.2	8
8	AHT 508 B	AHB 1200 (Check)	3.1	3.9	4.1	3.6	3.7	2.9	2.7	3.6	3.4	1
		LOC. MEAN	3.1	3.8	3.6	3.6	3.5	3.0	2.6	3.3	3.3	
		C.D. (5%)	0.1	0.1	0.3	0.2	0.3	0.2	0.3	0.3	0.2	
		C.D. (1%)	0.2	0.2	0.4	0.3	0.4	0.3	0.5	0.4	0.2	
		C.V. (%)	2.6	2.1	4.5	3.8	4.8	4.8	7.4	4.9	4.3	
		F (Prob)	0.000	0.000	0.000	0.000	0.448	0.000	0.000	0.000	0.159	

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Table I.127: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 1000 SEED Wt.(g) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	DHL	MS MEAN	VYP	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	9.9	10.0	13.3	9.7	10.7	11.8	12.2	11.1	4
2	AHT 502 B	Kaveri Super Boss (Check)	8.7	11.2	10.7	7.0	9.4	10.7	10.3	9.8	8
3	AHT 503 B	MH 2795	10.0	9.9	11.7	6.9	9.6	11.5	10.6	10.1	7
4	AHT 504 B	86M86 (Check)	11.2	10.4	11.7	10.2	10.8	10.7	10.7	10.8	6
5	AHT 505 B	MH 2798	13.5	11.8	14.7	9.4	12.4	10.2	13.6	12.2	1
6	AHT 506 B	NBH 4903 (Check)	8.6	11.3	12.0	8.0	10.0	11.9	15.3	11.2	3
7	AHT 507 B	MH 2808	10.5	11.7	14.0	9.0	11.3	11.6	12.9	11.6	2
8	AHT 508 B	AHB 1200 (Check)	11.7	10.2	11.0	9.4	10.6	12.4	11.9	11.1	5
		LOC. MEAN	10.5	10.8	12.4	8.7	10.6	11.3	12.2	11.0	
		C.D. (5%)	0.5	0.8	1.7	0.8	1.9	0.4	1.1	1.4	
		C.D. (1%)	0.7	1.1	2.3	1.1	2.6	0.5	1.5	1.9	
		C.V. (%)	2.6	4.3	7.8	5.2	9.5	1.9	5.2	10.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.052	0.000	0.000	0.059	

Table I.128: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	DHL	MS MEAN	VYP	APR	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	153	120	99	128	125	145	123	120	127	2
2	AHT 502 B	Kaveri Super Boss (Check)	154	110	99	103	117	146	119	115	121	6
3	AHT 503 B	MH 2795	155	118	100	118	123	144	126	112	125	4
4	AHT 504 B	86M86 (Check)	153	87	100	80	105	146	130	107	115	8
5	AHT 505 B	MH 2798	154	104	101	128	122	145	124	120	125	3
6	AHT 506 B	NBH 4903 (Check)	155	129	98	131	128	144	130	117	129	1
7	AHT 507 B	MH 2808	155	127	105	85	118	145	121	118	122	5
8	AHT 508 B	AHB 1200 (Check)	155	104	102	129	122	142	92	122	121	7
		LOC. MEAN	154	112	101	113	120	145	121	117	123	
		C.D. (5%)	2.0	12.0	3.0	14.0	14.0	3.0	12.0	11.0	13.0	
		C.D. (1%)	2.0	17.0	4.0	20.0	19.0	4.0	17.0	15.0	18.0	
		C.V. (%)	0.6	6.3	1.6	7.3	6.5	1.1	5.7	5.2	9.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.379	0.000	0.000	0.000	0.408	

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Table I.129: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 SEED SET (%) UNDER BAG ZONE B

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	DHL	MS MEAN	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	97	83	77	93	88	82	86	4
2	AHT 502 B	Kaveri Super Boss (Check)	96	77	67	99	85	85	85	5
3	AHT 503 B	MH 2795	99	82	80	92	88	83	87	3
4	AHT 504 B	86M86 (Check)	94	83	70	94	85	80	84	6
5	AHT 505 B	MH 2798	94	88	87	97	92	71	87	2
6	AHT 506 B	NBH 4903 (Check)	97	78	70	94	85	72	82	7
7	AHT 507 B	MH 2808	99	88	80	96	91	85	90	1
8	AHT 508 B	AHB 1200 (Check)	97	37	50	91	69	40	63	8
		LOC. MEAN	97	77	73	95	85	75	83	
		C.D. (5%)	5.0	6.0	9.0	7.0	16.0	7.0	12.0	
		C.D. (1%)	6.0	9.0	13.0	10.0	22.0	10.0	17.0	
		C.V. (%)	2.7	4.7	7.4	4.3	11.0	5.3	10.0	
		F (Prob)	0.000	0.000	0.000	0.000	0.034	0.000	0.030	

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Table I.130: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 ZONE B
GRAIN QUALITY: IRON CONTENT (ppm)

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	DHL	VYP	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	43	51	42	56	29	43	44	7
2	AHT 502 B	Kaveri Super Boss (Check)	47	47	52	59	30	33	45	6
3	AHT 503 B	MH 2795	75	60	61	58	35	46	56	3
4	AHT 504 B	86M86 (Check)	75	73	63	65	39	47	60	2
5	AHT 505 B	MH 2798	50	48	47	49	29	39	44	7
6	AHT 506 B	NBH 4903 (Check)	70	51	44	62	30	37	49	4
7	AHT 507 B	MH 2808	59	57	46	47	33	41	47	5
8	AHT 508 B	AHB 1200 (Check)	83	64	79	122	50	42	73	1

Table I.131: ADVANCE HYBRID TRIAL (Late) KHARIF - 2024 ZONE B
GRAIN QUALITY: ZINC CONTENT (ppm)

S.No.	TEST CODE	ENTRY	ABD1	ABD3	ABD7	DHL	VYP	CBE	ZONE MEAN	RANK
1	AHT 501 B	MH 2717	34	36	37	34	30	41	35	5
2	AHT 502 B	Kaveri Super Boss (Check)	31	36	41	34	26	30	33	7
3	AHT 503 B	MH 2795	37	44	49	34	31	41	39	3
4	AHT 504 B	86M86 (Check)	37	52	49	36	32	40	41	1
5	AHT 505 B	MH 2798	40	45	40	32	31	39	38	4
6	AHT 506 B	NBH 4903 (Check)	37	49	43	40	30	38	40	2
7	AHT 507 B	MH 2808	26	49	35	31	30	30	34	6
8	AHT 508 B	AHB 1200 (Check)	47	47	45	39	34	34	41	1

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Table I.132: POPULATION TRIAL KHARIF 2024 EXPERIMENTAL DETAILS ZONE A

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizer			Insecticide
							N	P	K	
RAJASTHAN										
Mandor (ARS, AU Jodhpur)	SL	8.1	10.7.24	As Per Maturity	12.8.24	Nil	40	20	0	Nil
Bikaner (SKRAU)	S	8.0	9.7.24	25.10.24	10.8.24	25.9.24	40	20	0	Nil
Jaipur (SKNAU)	SL	-	8.7.24	9.10.24	24.7.24	Nil	40	30	0	Nil
GUJARAT										
Jamnagar (JAU)	MB	7.6	18.7.24	19.10.24	28.7, 3.8, 9.8, 17.8.24	Nil	80	40	0	Nil
UTTAR PRADESH										
Jhansi (RLBCAU)	R	8.0	4.7.24	26.10.24	15.8.24	25.8.24	80	40	40	Nil
HARYANA										
Hisar (CCSHAU)	SL	-	11.7.24	25.10.24	-	28.8.24	100	40	0	Nil
MADHYA PRADESH										
Gwalior (RVSKVV)	SL	7.1	11.7.24	12.10.24	7.8.24	25.7.24	60	40	20	Nil
Morena (RVSKVV)	SL	7.8	22.7.24	4.11.24	-	Nil	100	50	20	Nil
PUNJAB										
Ludhiana (PAU)	SL	-	10.7.24	15.11.24	31.7, 2.9.24	30.7, 31.8, 2.10.24	100	60	0	Nil
DELHI										
New Delhi (ICAR-IARI)	SL	7.8	2.7.24	15.10.24	-	Nil	60	40	40	Nil

MB = Medium Black, SL = Sandy Loam, S = Sandy, R = Red.

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Table I.133: POPULATION TRIAL KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	JNS***	HSR	GLR***	MRN***	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	1448	1273	1767	1496	2102	356	3369	1942	2392	3859	2867	2384	3
2	PT 602 A	MP 641	2074	1516	1708	1766	2306	528	3662	1858	2438	3023	2102	2341	5
3	PT 603 A	MP 642	1048	833	1172	1018	1338	389	1525	1110	644	3520	1815	1607	16
4	PT 604 A	Dhanshakti (Check)	1388	775	1556	1240	1519	161	2090	966	1363	3840	1965	1876	14
5	PT 605 A	MP 637	1502	1481	1431	1471	2634	753	2873	1791	2065	3938	2124	2283	6
6	PT 606 A	MP 643	1045	1146	1744	1312	1157	617	1987	674	548	2622	1444	1592	17
7	PT 607 A	ICMV 221 (Check)	825	1331	1367	1174	1398	267	2386	870	923	2876	1915	1728	15
8	PT 608 A	MP 644	766	799	1694	1086	1032	411	2292	1011	1764	2869	1228	1526	19
9	PT 609 A	MP 645	858	741	1203	934	1199	450	1500	1874	1113	2896	2313	1530	18
10	PT 610 A	Pusa Comp. 383 (Check)	1648	1123	1781	1517	1935	397	3101	2662	2190	2855	2806	2178	9
11	PT 611 A	MP 646	1213	926	1308	1149	2079	303	1794	1780	1785	3655	3248	2032	13
12	PT 612 A	MP 647	1300	891	1736	1309	2569	394	2509	1997	1773	3770	3039	2259	7
13	PT 613 A	MP 648	1436	926	1625	1329	2356	269	2459	1892	2125	3673	3009	2212	8
14	PT 614 A	MP 649	1356	1817	2722	1965	2199	408	3613	1978	1523	2857	2791	2479	2
15	PT 615 A	Pusa Comp. 701 (Check)	1537	1991	2500	2009	2583	625	3345	1751	1959	3511	3019	2641	1
16	PT 616 A	MP 650	879	1597	1525	1334	2449	389	2471	1871	2390	3356	2517	2113	12
17	PT 617 A	JBV 2 (Check)	1725	1644	1708	1692	2491	325	3112	1808	1379	2711	3106	2357	4
18	PT 618 A	MP 651	1405	1354	2225	1661	1903	544	2450	1761	1335	2837	2830	2143	10
19	PT 619 A	Raj 171 (Check)	1019	1447	1975	1480	1944	322	3166	1023	1396	2882	2498	2133	11
		LOC. MEAN	1288	1243	1724	1418	1958	416	2616	1611	1637	3239	2454	2074	
		C.D. (5%)	215	149	539	459	438	106	505	182	291	122	468	413	
		C.D. (1%)	288	200	723	616	588	142	677	245	390	163	628	547	
		C.V. (%)	10.1	7.3	18.9	19.6	13.5	15.4	11.7	6.8	10.7	2.3	11.5	18.8	
		F (Prob)	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	14.40	14.40	12.00	-	14.40	12.00	12.00	12.00	12.00	12.00	18.00	-	

***TEST LOCATION REJECTED DUE TO LOW AVERAGE YIELD (416, 1611 & 1637 kg/ha), THAN THE STATE AVERAGE YIELD (2008 & 2166 kg/ha) TAKEN OVER 10 YEARS

CHAPTER I: BREEDING

Table I.134: POPULATION TRIAL KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	6608	4954	5194	5585	5236	3778	9722	14306	6972	10639	10078	10456	7730	6
2	PT 602 A	MP 641	8076	5995	4139	6070	6213	5056	10556	12778	7722	10250	11272	9531	8134	3
3	PT 603 A	MP 642	4410	5810	3389	4536	3796	2139	5833	8194	8056	8125	9500	11961	6309	15
4	PT 604 A	Dhanshakti (Check)	8080	5394	3667	5713	4329	2194	5417	7778	5306	6542	10419	10174	6276	16
5	PT 605 A	MP 637	8267	4931	3694	5631	5949	2861	8333	7361	7889	7625	11833	13709	7483	7
6	PT 606 A	MP 643	1944	5787	3278	3670	2204	1250	8056	6389	5361	5875	8244	12653	5517	19
7	PT 607 A	ICMV 221 (Check)	7380	5602	6306	6429	4523	3583	6667	6250	6306	6278	8114	11872	6660	14
8	PT 608 A	MP 644	2188	5509	4083	3927	3454	3194	6667	6806	7472	7139	7967	13192	6053	18
9	PT 609 A	MP 645	3479	5810	3361	4217	2889	2889	6667	9306	6583	7944	8153	13157	6229	17
10	PT 610 A	Pusa Comp. 383 (Check)	6944	5532	3333	5270	4551	1389	10111	9722	6861	8292	9664	13419	7153	10
11	PT 611 A	MP 646	8924	5833	5333	6697	6343	6694	8889	12917	7833	10375	7678	11600	8204	2
12	PT 612 A	MP 647	5101	5231	5611	5314	5231	2083	7583	9444	7667	8556	10103	11656	6971	11
13	PT 613 A	MP 648	8972	5208	3556	5912	6130	2917	6944	7917	7250	7583	9278	10743	6891	12
14	PT 614 A	MP 649	7170	5625	5556	6117	5065	7083	10000	10417	6861	8639	10119	11947	7984	5
15	PT 615 A	Pusa Comp. 701 (Check)	9681	5787	4583	6684	6824	6500	9611	11528	7639	9583	9047	13398	8460	1
16	PT 616 A	MP 650	4868	5694	3222	4595	6097	5444	6222	10417	7556	8986	10519	14563	7460	8
17	PT 617 A	JBV 2 (Check)	8969	6435	5667	7024	6685	3750	10278	8333	6750	7542	9469	13521	7986	4
18	PT 618 A	MP 651	5375	5417	6611	5801	4880	5361	7417	11111	7056	9083	8294	11839	7336	9
19	PT 619 A	Raj 171 (Check)	5774	5509	5389	5557	5375	3583	7778	7639	6139	6889	9472	12076	6873	13
		LOC. MEAN	6432	5582	4525	5513	5041	3776	8039	9401	7015	8208	9433	12182	7143	
		C.D. (5%)	1166	762	1371	2360	1040	973	2605	2830	966	3157	923	1139	1200	
		C.D. (1%)	1564	1021	1838	3164	1394	1304	3493	3795	1295	4325	1237	1527	1584	
		C.V. (%)	11.0	8.2	18.3	25.9	12.5	15.6	19.6	18.2	8.3	18.3	5.9	5.7	19.0	
		F (Prob)	0.000	0.000	0.000	0.220	0.000	0.000	0.000	0.000	0.000	0.136	0.000	0.000	0.000	
		PLOT SIZE (m ²)	14.40	14.40	12.00	-	14.40	12.00	12.00	12.00	12.00	-	12.00	18.00	-	

CHAPTER I: BREEDING

Table I.135: POPULATION TRIAL KHARIF - 2024 DAYS TO 50% FLOWERING ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	58	60	52	57	51	52	57	51	50	50	54	55	54	8
2	PT 602 A	MP 641	52	61	50	55	49	50	56	47	48	48	47	55	52	15
3	PT 603 A	MP 642	59	61	53	58	57	58	59	55	60	58	56	62	58	1
4	PT 604 A	Dhanshakti (Check)	50	50	56	52	45	50	51	40	45	43	44	44	47	17
5	PT 605 A	MP 637	58	62	49	56	50	51	58	51	51	51	47	52	53	12
6	PT 606 A	MP 643	62	61	55	59	52	55	59	55	50	52	58	58	56	5
7	PT 607 A	ICMV 221 (Check)	51	48	44	47	43	44	52	38	47	42	44	43	45	18
8	PT 608 A	MP 644	62	61	50	58	54	57	59	57	59	58	59	58	58	2
9	PT 609 A	MP 645	62	62	53	59	54	55	61	58	52	55	60	58	57	3
10	PT 610 A	Pusa Comp. 383 (Check)	56	63	49	56	50	55	59	45	48	46	52	51	53	13
11	PT 611 A	MP 646	60	61	55	59	53	54	62	57	56	57	55	56	57	4
12	PT 612 A	MP 647	59	61	47	56	51	60	58	51	52	52	56	52	55	6
13	PT 613 A	MP 648	55	62	46	54	50	59	59	48	51	49	53	52	53	10
14	PT 614 A	MP 649	58	60	46	55	46	52	54	48	51	49	52	51	52	15
15	PT 615 A	Pusa Comp. 701 (Check)	56	58	47	54	49	53	54	46	53	50	55	51	52	14
16	PT 616 A	MP 650	59	54	46	53	49	57	55	50	51	51	55	52	53	11
17	PT 617 A	JBV 2 (Check)	60	60	44	55	50	55	59	51	51	51	53	53	54	9
18	PT 618 A	MP 651	61	60	45	55	50	49	61	53	52	53	59	55	55	7
19	PT 619 A	Raj 171 (Check)	56	59	46	54	49	50	53	46	48	47	44	49	50	16
		LOC. MEAN	57	59	49	55	50	54	57	50	51	51	53	53	53	
		C.D. (5%)	3.0	2.0	2.0	5.0	1.0	7.0	4.0	1.0	2.0	5.0	2.0	2.0	2.0	
		C.D. (1%)	4.0	3.0	3.0	7.0	2.0	10.0	5.0	1.0	3.0	7.0	2.0	3.0	3.0	
		C.V. (%)	2.9	2.2	2.9	5.9	1.6	8.2	3.8	1.2	2.5	5.0	2.0	2.2	5.0	
		F (Prob)	0.000	0.000	0.000	0.023	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

CHAPTER I: BREEDING

Table I.136: POPULATION TRIAL KHARIF - 2024 DAYS TO MATURITY ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	91	90	80	87	81	86	89	76	96	86	97	83	87	9
2	PT 602 A	MP 641	89	91	81	87	78	86	86	77	93	85	93	83	86	14
3	PT 603 A	MP 642	91	91	83	88	86	85	91	82	96	89	99	90	89	2
4	PT 604 A	Dhanshakti (Check)	88	80	84	84	74	89	82	72	96	84	94	74	83	18
5	PT 605 A	MP 637	95	91	79	89	80	87	91	80	97	89	90	80	87	7
6	PT 606 A	MP 643	95	90	84	90	81	88	90	85	93	89	101	85	89	1
7	PT 607 A	ICMV 221 (Check)	90	78	75	81	73	87	83	75	92	84	91	72	82	19
8	PT 608 A	MP 644	89	91	84	88	83	88	89	83	92	87	105	88	89	3
9	PT 609 A	MP 645	92	91	84	89	84	79	93	85	95	90	100	85	89	4
10	PT 610 A	Pusa Comp. 383 (Check)	91	93	78	87	79	88	89	76	97	87	100	81	87	8
11	PT 611 A	MP 646	92	91	86	90	82	78	92	82	95	89	102	84	89	5
12	PT 612 A	MP 647	94	91	77	87	80	92	86	85	95	90	103	82	88	6
13	PT 613 A	MP 648	92	92	77	87	79	86	89	74	95	85	100	81	87	11
14	PT 614 A	MP 649	93	90	78	87	75	76	83	75	97	86	99	78	84	16
15	PT 615 A	Pusa Comp. 701 (Check)	93	88	80	87	79	86	83	74	95	85	100	81	86	13
16	PT 616 A	MP 650	92	84	74	83	78	87	87	84	94	89	100	81	86	12
17	PT 617 A	JBV 2 (Check)	93	89	74	86	79	75	86	80	92	86	104	81	85	15
18	PT 618 A	MP 651	94	89	75	86	79	88	92	74	91	83	103	82	87	10
19	PT 619 A	Raj 171 (Check)	92	88	76	85	78	87	85	70	92	81	97	78	84	17
		LOC. MEAN	92	89	79	87	79	85	88	78	94	86	99	82	87	
		C.D. (5%)	2.0	2.0	1.0	5.0	1.0	14.0	3.0	2.0	4.0	8.0	3.0	2.0	3.0	
		C.D. (1%)	3.0	3.0	1.0	7.0	1.0	18.0	5.0	2.0	5.0	10.0	4.0	2.0	4.0	
		C.V. (%)	1.6	1.6	0.7	3.5	0.7	9.8	2.4	1.4	2.3	4.2	1.7	1.2	3.8	
		F (Prob)	0.000	0.000	0.000	0.105	0.000	0.000	0.000	0.000	0.000	0.476	0.000	0.000	0.000	

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Table I.137: POPULATION TRIAL KHARIF - 2024 PLANT HEIGHT (cm) ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	203	170	171	181	185	202	250	265	156	211	215	219	204	13
2	PT 602 A	MP 641	206	205	208	206	199	289	265	328	172	250	225	197	229	2
3	PT 603 A	MP 642	217	173	210	200	194	187	241	259	154	207	205	228	207	12
4	PT 604 A	Dhanshakti (Check)	200	168	183	184	173	196	227	248	161	205	193	238	199	15
5	PT 605 A	MP 637	212	181	231	208	190	195	256	258	152	205	230	232	214	7
6	PT 606 A	MP 643	146	163	146	152	131	158	173	181	117	149	150	154	152	19
7	PT 607 A	ICMV 221 (Check)	201	168	216	195	158	205	242	213	130	172	170	205	191	16
8	PT 608 A	MP 644	164	160	145	156	146	204	200	207	131	169	170	216	174	18
9	PT 609 A	MP 645	168	167	170	168	156	200	206	219	137	178	157	198	178	17
10	PT 610 A	Pusa Comp. 383 (Check)	224	187	219	210	179	188	270	260	144	202	220	215	211	10
11	PT 611 A	MP 646	217	172	181	190	205	221	264	237	148	192	248	226	212	9
12	PT 612 A	MP 647	191	169	205	188	194	184	247	261	143	202	215	218	203	14
13	PT 613 A	MP 648	204	176	201	193	199	193	260	256	179	218	227	228	212	8
14	PT 614 A	MP 649	211	186	269	222	177	224	265	277	168	223	230	196	220	5
15	PT 615 A	Pusa Comp. 701 (Check)	234	217	224	225	201	247	282	276	185	231	220	220	231	1
16	PT 616 A	MP 650	234	197	233	221	196	195	256	297	154	226	222	231	222	4
17	PT 617 A	JBV 2 (Check)	233	192	225	217	200	223	274	263	163	213	210	245	223	3
18	PT 618 A	MP 651	230	191	212	211	185	246	259	256	158	207	217	208	216	6
19	PT 619 A	Raj 171 (Check)	206	200	211	206	192	203	258	231	192	212	170	224	209	11
		LOC. MEAN	205	181	203	197	182	208	247	252	155	204	205	216	205	
		C.D. (5%)	19.0	18.0	8.0	25.0	16.0	57.0	30.0	5.0	24.0	40.0	11.0	14.0	15.0	
		C.D. (1%)	25.0	24.0	11.0	33.0	21.0	77.0	40.0	7.0	32.0	54.0	14.0	18.0	20.0	
		C.V. (%)	5.5	5.9	2.4	7.5	5.3	16.6	7.3	1.3	9.2	9.2	3.2	3.9	8.2	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.009	0.000	0.000	0.000	

CHAPTER I: BREEDING

Table I.138: POPULATION TRIAL KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	4.0	1.3	1.1	2.1	2.8	1.4	4.4	2.7	2.4	2.6	2.3	2.9	2.5	2
2	PT 602 A	MP 641	3.6	1.2	1.4	2.1	2.7	1.4	3.5	1.9	2.4	2.1	3.5	2.7	2.4	4
3	PT 603 A	MP 642	3.4	1.2	1.2	1.9	2.2	1.5	3.1	1.6	2.3	2.0	2.8	2.8	2.2	16
4	PT 604 A	Dhanshakti (Check)	3.4	1.1	1.0	1.8	2.6	1.3	2.9	1.8	2.4	2.1	3.6	2.8	2.3	14
5	PT 605 A	MP 637	3.8	1.2	1.4	2.1	2.1	1.5	4.8	2.4	2.3	2.3	3.3	2.7	2.5	1
6	PT 606 A	MP 643	2.8	1.1	2.0	2.0	1.9	1.7	3.2	1.3	2.1	1.7	2.2	3.0	2.1	17
7	PT 607 A	ICMV 221 (Check)	2.3	1.2	1.9	1.8	1.9	1.4	2.1	1.4	2.2	1.8	2.5	2.9	2.0	19
8	PT 608 A	MP 644	2.9	1.2	1.1	1.7	1.8	1.6	2.7	1.4	2.2	1.8	2.7	2.9	2.1	18
9	PT 609 A	MP 645	2.5	1.3	2.1	2.0	2.3	1.6	3.9	1.9	2.4	2.2	2.5	2.8	2.3	11
10	PT 610 A	Pusa Comp. 383 (Check)	3.3	1.3	2.2	2.3	2.2	1.6	3.2	1.7	2.5	2.1	2.8	2.8	2.4	10
11	PT 611 A	MP 646	3.5	1.2	2.2	2.3	2.1	1.3	3.9	1.6	2.1	1.9	3.8	2.8	2.5	3
12	PT 612 A	MP 647	2.3	1.2	2.0	1.8	2.1	1.5	3.3	1.9	2.3	2.1	3.0	2.8	2.2	15
13	PT 613 A	MP 648	3.3	1.1	2.2	2.2	2.4	1.3	2.9	2.0	2.2	2.1	2.8	2.8	2.3	12
14	PT 614 A	MP 649	4.1	1.1	1.9	2.4	2.5	1.7	3.6	1.8	2.4	2.1	2.2	2.5	2.4	9
15	PT 615 A	Pusa Comp. 701 (Check)	3.2	1.2	1.2	1.9	2.2	1.3	3.5	2.0	2.5	2.2	4.0	2.7	2.4	8
16	PT 616 A	MP 650	3.2	1.3	1.3	1.9	2.5	1.4	3.1	2.5	2.4	2.4	3.5	2.8	2.4	6
17	PT 617 A	JBV 2 (Check)	3.0	1.2	2.2	2.1	2.4	1.4	3.5	1.8	2.2	2.0	2.7	2.5	2.3	13
18	PT 618 A	MP 651	3.2	1.2	2.2	2.2	2.2	1.3	3.6	2.6	2.5	2.6	2.4	2.8	2.4	7
19	PT 619 A	Raj 171 (Check)	3.9	1.2	1.1	2.1	3.1	1.3	3.0	2.6	2.5	2.6	3.0	2.5	2.4	5
		LOC. MEAN	3.2	1.2	1.7	2.0	2.3	1.4	3.4	1.9	2.3	2.1	2.9	2.8	2.3	
		C.D. (5%)	0.4	0.1	0.3	0.7	0.7	0.3	1.0	0.3	0.4	0.6	0.5	0.6	0.3	
		C.D. (1%)	0.5	0.2	0.5	1.0	0.9	0.4	1.4	0.4	0.5	0.8	0.7	0.8	0.4	
		C.V. (%)	7.0	6.4	12.3	21.9	17.2	13.6	18.7	8.9	10.2	12.3	11.0	13.0	16.3	
		F (Prob)	0.000	0.000	0.000	0.930	0.000	0.000	0.000	0.000	0.000	0.074	0.000	0.000	0.084	

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Table I.139: POPULATION TRIAL KHARIF - 2024 PANICLE LENGTH (cm) ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	22	25	27	25	25	25	29	29	21	25	28	24	26	10
2	PT 602 A	MP 641	25	30	28	28	28	24	29	30	22	26	30	24	27	1
3	PT 603 A	MP 642	25	26	28	26	25	23	30	27	25	26	23	25	26	8
4	PT 604 A	Dhanshakti (Check)	17	25	20	21	20	24	28	24	20	22	24	23	22	17
5	PT 605 A	MP 637	22	25	28	25	26	24	31	23	22	22	24	27	25	11
6	PT 606 A	MP 643	23	23	21	23	24	23	29	23	19	21	20	23	23	16
7	PT 607 A	ICMV 221 (Check)	18	25	23	22	21	26	29	20	18	19	19	22	22	18
8	PT 608 A	MP 644	23	26	23	24	22	26	30	21	21	21	23	24	24	15
9	PT 609 A	MP 645	25	25	23	24	24	24	30	25	22	23	27	25	25	12
10	PT 610 A	Pusa Comp. 383 (Check)	26	25	28	26	26	23	30	28	20	24	27	27	26	6
11	PT 611 A	MP 646	27	26	23	26	27	25	31	24	25	25	32	23	26	5
12	PT 612 A	MP 647	24	27	28	26	30	24	30	25	25	25	31	22	27	3
13	PT 613 A	MP 648	22	26	25	24	24	25	30	22	22	22	23	23	24	14
14	PT 614 A	MP 649	26	26	31	28	25	22	29	27	22	25	25	25	26	7
15	PT 615 A	Pusa Comp. 701 (Check)	25	31	25	27	30	24	30	25	25	25	28	24	27	2
16	PT 616 A	MP 650	23	26	31	27	21	24	29	22	21	22	26	26	25	13
17	PT 617 A	JBV 2 (Check)	27	27	28	27	28	25	29	23	24	23	30	25	27	4
18	PT 618 A	MP 651	26	29	23	26	21	24	29	27	24	26	31	23	26	9
19	PT 619 A	Raj 171 (Check)	25	27	28	26	25	24	29	23	23	23	28	25	26	8
		LOC. MEAN	24	26	26	25	25	24	30	25	22	23	26	24	25	
		C.D. (5%)	3.0	3.0	2.0	4.0	3.0	4.0	3.0	2.0	2.0	4.0	2.0	3.0	2.0	
		C.D. (1%)	3.0	4.0	2.0	5.0	4.0	5.0	3.0	2.0	3.0	6.0	3.0	3.0	2.0	
		C.V. (%)	6.6	6.5	3.8	8.7	7.4	8.9	5.3	3.7	6.7	8.8	5.4	6.4	8.2	
		F (Prob)	0.000	0.000	0.000	0.011	0.000	0.000	0.000	0.000	0.000	0.118	0.000	0.000	0.000	

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Table I.140: POPULATION TRIAL KHARIF - 2024 PANICLE DIAMETER (cm) ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	2.5	2.7	3.0	2.7	3.0	2.3	4.0	2.7	2.8	2.8	3.7	2.6	2.9	6
2	PT 602 A	MP 641	2.4	2.5	2.2	2.4	3.1	2.6	3.9	2.8	2.8	2.8	3.0	2.6	2.8	13
3	PT 603 A	MP 642	3.4	2.9	2.8	3.0	3.0	2.8	4.2	2.6	3.1	2.9	3.4	3.3	3.1	1
4	PT 604 A	Dhanshakti (Check)	2.2	2.4	2.5	2.4	2.7	2.4	3.9	2.8	2.9	2.8	3.0	2.5	2.7	15
5	PT 605 A	MP 637	2.7	2.6	2.3	2.5	2.9	2.6	3.9	2.5	3.1	2.8	3.3	3.3	2.9	7
6	PT 606 A	MP 643	2.7	2.2	2.5	2.5	2.8	2.3	4.0	2.4	2.8	2.6	2.9	2.5	2.7	17
7	PT 607 A	ICMV 221 (Check)	2.4	2.6	2.2	2.4	2.8	2.4	4.1	2.6	2.8	2.7	3.2	2.8	2.8	12
8	PT 608 A	MP 644	2.6	2.6	2.8	2.7	2.6	2.3	4.2	2.6	3.1	2.8	3.6	2.6	2.9	8
9	PT 609 A	MP 645	2.8	2.7	2.8	2.8	2.8	2.1	4.4	2.7	3.1	2.9	3.7	2.8	3.0	5
10	PT 610 A	Pusa Comp. 383 (Check)	2.5	2.6	2.8	2.6	3.2	2.3	4.0	2.9	3.0	2.9	3.8	3.2	3.0	3
11	PT 611 A	MP 646	2.8	2.8	2.5	2.7	3.0	2.5	4.2	2.3	2.8	2.6	4.2	3.1	3.0	2
12	PT 612 A	MP 647	2.4	2.5	2.0	2.3	3.0	2.5	4.0	2.9	2.9	2.9	3.3	2.7	2.8	9
13	PT 613 A	MP 648	2.5	2.7	2.8	2.6	2.8	2.8	4.1	2.5	3.0	2.8	3.9	2.9	3.0	4
14	PT 614 A	MP 649	2.4	2.5	2.5	2.5	2.4	2.3	4.0	2.5	2.7	2.6	3.6	2.8	2.8	14
15	PT 615 A	Pusa Comp. 701 (Check)	2.3	2.2	2.4	2.3	2.5	2.8	3.8	1.6	2.6	2.1	3.6	2.7	2.6	18
16	PT 616 A	MP 650	2.3	2.7	2.3	2.4	2.5	2.6	4.0	2.5	3.0	2.7	3.7	2.4	2.8	11
17	PT 617 A	JBV 2 (Check)	2.4	2.2	2.6	2.4	2.5	2.3	4.0	2.6	2.6	2.6	3.4	2.7	2.7	16
18	PT 618 A	MP 651	2.3	2.5	2.7	2.5	2.3	2.5	3.9	2.7	2.7	2.7	3.3	3.0	2.8	10
19	PT 619 A	Raj 171 (Check)	2.3	2.0	2.7	2.3	1.9	2.7	4.0	1.5	2.5	2.0	2.9	2.8	2.5	19
		LOC. MEAN	2.5	2.5	2.5	2.5	2.7	2.5	4.0	2.5	2.9	2.7	3.4	2.8	2.8	
		C.D. (5%)	0.3	0.3	0.1	0.4	0.4	0.4	0.4	0.2	0.2	0.4	0.5	0.3	0.2	
		C.D. (1%)	0.4	0.5	0.2	0.5	0.5	0.5	0.6	0.2	0.3	0.6	0.7	0.4	0.3	
		C.V. (%)	7.6	8.1	3.5	8.4	7.9	9.7	6.7	3.8	4.0	8.0	8.7	6.8	8.3	
		F (Prob)	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000	0.000	0.016	0.000	0.000	0.000	

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Table I.141: POPULATION TRIAL KHARIF - 2024 1000-SEED Wt.(g) ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	HSR	GLR	MRN	MP MEAN	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	7.6	9.0	8.6	8.4	9.5	9.9	11.1	8.0	9.6	12.4	8.6	9.4	16
2	PT 602 A	MP 641	6.5	8.4	8.2	7.7	9.3	10.2	11.2	10.2	10.7	9.2	9.8	9.2	18
3	PT 603 A	MP 642	7.2	9.0	9.6	8.6	11.1	11.0	11.6	9.8	10.7	11.2	11.8	10.3	1
4	PT 604 A	Dhanshakti (Check)	7.0	9.1	8.1	8.1	11.8	14.7	12.0	7.8	9.9	11.9	9.0	10.2	4
5	PT 605 A	MP 637	7.2	9.4	7.5	8.0	9.7	10.5	12.3	9.2	10.7	12.5	10.2	9.8	9
6	PT 606 A	MP 643	6.6	8.8	7.1	7.5	8.7	11.6	10.4	9.3	9.9	9.9	8.8	9.0	19
7	PT 607 A	ICMV 221 (Check)	8.5	8.9	8.5	8.6	11.7	14.0	10.9	8.8	9.8	10.4	9.4	10.1	5
8	PT 608 A	MP 644	7.9	8.7	8.1	8.2	10.3	11.2	11.1	9.7	10.4	11.5	9.9	9.8	8
9	PT 609 A	MP 645	7.4	8.8	9.4	8.5	10.7	10.0	12.0	10.1	11.0	11.4	10.3	10.0	6
10	PT 610 A	Pusa Comp. 383 (Check)	7.2	8.6	10.4	8.7	10.0	11.7	11.9	10.1	11.0	10.7	8.8	9.9	7
11	PT 611 A	MP 646	7.0	8.4	7.5	7.7	10.6	9.4	12.0	9.4	10.7	11.4	9.6	9.5	14
12	PT 612 A	MP 647	6.7	8.9	7.6	7.7	10.1	10.0	11.6	10.1	10.8	11.8	9.9	9.6	11
13	PT 613 A	MP 648	7.5	9.2	10.4	9.0	10.4	11.3	11.7	10.2	11.0	11.4	9.7	10.2	3
14	PT 614 A	MP 649	7.4	8.5	9.7	8.5	9.8	12.2	12.0	10.1	11.0	10.9	11.4	10.2	2
15	PT 615 A	Pusa Comp. 701 (Check)	8.0	9.1	9.7	8.9	9.2	9.3	11.7	9.0	10.4	9.3	10.0	9.5	13
16	PT 616 A	MP 650	7.3	9.3	7.3	8.0	10.9	10.4	11.6	8.9	10.3	11.9	10.1	9.7	10
17	PT 617 A	JBV 2 (Check)	7.4	8.7	7.6	7.9	8.6	10.1	10.9	9.4	10.2	11.0	11.1	9.4	15
18	PT 618 A	MP 651	7.4	8.4	7.4	7.7	10.3	12.1	11.6	9.3	10.5	10.2	8.8	9.5	12
19	PT 619 A	Raj 171 (Check)	7.9	9.0	8.0	8.3	9.1	10.1	11.2	8.4	9.8	11.1	9.0	9.3	17
		LOC. MEAN	7.4	8.8	8.5	8.2	10.1	11.0	11.5	9.4	10.4	11.1	9.8	9.7	
		C.D. (5%)	0.4	0.9	0.5	1.1	0.9	1.4	1.0	0.9	2.3	0.8	1.0	0.8	
		C.D. (1%)	0.5	1.3	0.6	1.5	1.3	1.8	1.4	1.2	3.1	1.0	1.3	1.1	
		C.V. (%)	3.0	6.5	3.4	8.1	5.6	7.4	5.4	6.0	9.7	4.2	6.0	8.6	
		F (Prob)	0.000	0.000	0.000	0.178	0.000	0.000	0.000	0.000	0.532	0.000	0.000	0.039	

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Table I.142: POPULATION TRIAL KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE A

S.No.	TEST CODE	ENTRY	MDR	BKR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	108	132	97	112	164	111	81	111	127	119	163	160	125	4
2	PT 602 A	MP 641	81	137	78	99	159	112	77	96	128	112	163	160	119	8
3	PT 603 A	MP 642	61	129	54	81	150	66	78	42	113	78	162	157	101	19
4	PT 604 A	Dhanshakti (Check)	91	145	72	103	149	98	72	90	91	91	163	158	113	15
5	PT 605 A	MP 637	71	134	55	87	150	97	81	47	100	74	163	158	106	18
6	PT 606 A	MP 643	51	146	117	105	158	122	74	99	91	95	164	154	118	9
7	PT 607 A	ICMV 221 (Check)	82	132	116	110	179	82	70	97	97	97	162	158	117	10
8	PT 608 A	MP 644	51	137	93	94	126	122	79	58	87	73	163	162	108	17
9	PT 609 A	MP 645	60	129	64	84	161	109	76	76	97	86	163	159	109	16
10	PT 610 A	Pusa Comp. 383 (Check)	93	139	95	109	165	87	77	93	126	110	165	159	120	6
11	PT 611 A	MP 646	93	130	87	103	193	114	79	118	120	119	163	158	126	3
12	PT 612 A	MP 647	96	127	95	106	141	89	74	103	142	123	163	162	119	7
13	PT 613 A	MP 648	103	128	63	98	150	103	76	86	125	105	164	161	116	12
14	PT 614 A	MP 649	102	129	115	115	174	122	76	110	112	111	163	154	126	2
15	PT 615 A	Pusa Comp. 701 (Check)	90	130	120	113	195	111	79	97	148	123	164	160	130	1
16	PT 616 A	MP 650	84	128	108	107	169	83	80	79	90	85	164	158	114	14
17	PT 617 A	JBV 2 (Check)	121	125	90	112	187	112	72	72	138	105	162	163	124	5
18	PT 618 A	MP 651	85	133	97	105	162	120	78	66	101	83	162	160	116	11
19	PT 619 A	Raj 171 (Check)	81	138	129	116	173	88	82	53	83	68	163	159	115	13
		LOC. MEAN	84	133	92	103	163	102	77	84	111	98	163	159	117	
		C.D. (5%)	7.0	13.0	36.0	28.0	39.0	30.0	15.0	34.0	22.0	34.0	2.0	6.0	13.0	
		C.D. (1%)	10.0	18.0	49.0	38.0	53.0	40.0	20.0	45.0	29.0	46.0	3.0	8.0	17.0	
		C.V. (%)	5.2	6.0	23.9	16.6	14.5	17.8	11.4	24.1	11.8	16.5	0.9	2.4	12.3	
		F (Prob)	0.000	0.000	0.000	0.404	0.000	0.000	0.000	0.000	0.000	0.030	0.000	0.000	0.001	

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Table I.143: POPULATION TRIAL KHARIF - 2024 GRAIN QUALITY: IRON CONTENT (ppm) ZONE A

S.No.	TEST CODE	ENTRY	MDR	JPR	JMR	HSR	GLR	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	36	54	55	70	39	49	51	50	5
2	PT 604 A	Dhanshakti (Check)	45	90	53	69	62	91	73	69	1
3	PT 605 A	MP 637	35	52	71	57	44	48	65	53	4
4	PT 607 A	ICMV 221 (Check)	47	77	85	74	48	83	59	68	2
5	PT 610 A	Pusa Comp. 383 (Check)	40	57	59	72	53	51	74	58	3
6	PT 614 A	MP 649	33	53	67	61	44	49	63	53	4
7	PT 615 A	Pusa Comp. 701 (Check)	34	45	58	61	37	55	55	49	6
8	PT 617 A	JBV 2 (Check)	34	53	48	81	52	56	45	53	4
9	PT 619 A	Raj 171 (Check)	36	51	56	69	43	52	45	50	5

Table I.144: POPULATION TRIAL KHARIF - 2024 GRAIN QUALITY: ZINC CONTENT (ppm) ZONE A

S.No.	TEST CODE	ENTRY	MDR	JPR	JMR	HSR	GLR	LDA	NDL	ZONE MEAN	RANK
1	PT 601 A	MP 640	31	36	45	56	42	38	36	41	4
2	PT 604 A	Dhanshakti (Check)	41	45	46	54	43	40	39	44	2
3	PT 605 A	MP 637	38	32	61	53	40	41	37	43	3
4	PT 607 A	ICMV 221 (Check)	42	40	60	65	44	54	34	48	1
5	PT 610 A	Pusa Comp. 383 (Check)	39	38	50	56	35	43	44	44	2
6	PT 614 A	MP 649	35	35	54	52	40	44	45	44	2
7	PT 615 A	Pusa Comp. 701 (Check)	37	34	43	53	40	51	44	43	3
8	PT 617 A	JBV 2 (Check)	34	38	34	59	48	46	40	43	3
9	PT 619 A	Raj 171 (Check)	40	40	47	60	41	45	35	44	2

Table I.145: POPULATION TRIAL KHARIF 2024 ZONE A
GRAIN QUALITY(Protein and Fat)

S.No.	TEST CODE	ENTRY	Protein (%)	Fat (%)
			HSR	HSR
1	PT 601 A	MP 640	9.8	5.4
2	PT 602 A	MP 641	10.3	5.5
3	PT 603 A	MP 642	10.6	5.7
4	PT 604 A	Dhanshakti (Check)	11.1	5.4
5	PT 605 A	MP 637	10.2	5.1
6	PT 606 A	MP 643	9.3	6.2
7	PT 607 A	ICMV 221 (Check)	10.9	5.5
8	PT 608 A	MP 644	10.4	5.4
9	PT 609 A	MP 645	10.0	5.0
10	PT 610 A	Pusa Comp. 383 (Check)	10.1	5.2
11	PT 611 A	MP 646	10.1	5.6
12	PT 612 A	MP 647	9.8	5.8
13	PT 613 A	MP 648	10.2	5.7
14	PT 614 A	MP 649	10.3	5.6
15	PT 615 A	Pusa Comp. 701 (Check)	10.8	5.7
16	PT 616 A	MP 650	9.5	5.6
17	PT 617 A	JBV 2 (Check)	9.6	5.4
18	PT 618 A	MP 651	9.8	5.3
19	PT 619 A	Raj 171 (Check)	9.8	5.8

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Table I.146: POPULATION TRIAL KHARIF 2024 EXPERIMENTAL DETAILS ZONE B

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizer			Insecticide
							N	P	K	
MAHARASHTRA										
Aurangabad (NARP)	MB	7.5	23.7.24	18.11.24	-	Nil	60	30	30	Nil
Niphad (MPKV)	-	-	10.7.24	-	-	Nil	-	-	-	Nil
Dhule (MPKV)	MB	8.6	4.7.24	15.10.24	28.7.24	Nil	60	30	0	Nil
KARNATAKA										
Vijayapur (UAS, Dharwad)	SB	8.7	6.7.24	28.10.24	18.8.24	Nil	50	25	0	Nil
Malnoor (UAS, Raichur)	S	7.5	12.7.24	27.11.24	31.7.24	Nil	50	50	0	Emamectin Benzoate
ANDHRA PRADESH										
Ananthapuram (ANGRAU)	RSL	7.7	12.8.24	As Per Maturity	5.9.24	As Per Required	60	30	20	Nil
Perumallapalle (ANGRAU)	SCL	7.3	6.7.24	9.10.24	10.8.24	As Per Required	80	40	30	Nil
Vizianagaram (ANGRAU)	RSL	6.8	2.7.24	7.10.24	22.7.24	Nil	60	40	30	Nil
TELANGANA										
Palem (PJ TSAU)	RSL	7.0	9.7.24	24.10.24	27.7, 12.8.24	Nil	60	40	40	Nil
TAMIL NADU										
Coimbatore (TNAU)	CL	7.8	29.6.24	6.10.24	-	29.6, 18.7, 13.8, 3.9, 18.9, 01.10.24	70	35	35	Nil
ODISHA										
Semiliguda (OUAT)	SL	-	3.7.24	As Per Maturity	-	Nil	60	30	30	Nil

MB = Medium Black, CL = Clay Loam, SB = Shallow Black, RSL = Red Sandy Loam, SL= Sandy Loam, S = Shallow, SCL = Sandy Clay Loam.

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Table I.147: POPULATION TRIAL KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	MS MEAN	VYP	MLR	KS MEAN	APR***	PMP	VZN	AP MEAN	PLM	CBE***	SMG	ZONE MEAN	RANK
1	PT 601 B	MP 640	3153	3271	1966	2796	2398	1731	2064	1534	2833	3288	3061	3092	2679	2667	2711	2
2	PT 602 B	MP 641	2475	1920	1917	2104	1647	1903	1775	1816	2860	2688	2774	1949	1329	2550	2212	12
3	PT 603 B	MP 642	2819	1844	1918	2193	2270	1344	1807	1675	3094	3015	3055	2793	2788	1300	2266	10
4	PT 604 B	MP 643	2414	1782	992	1729	2002	1103	1553	1123	2619	3105	2862	2415	1632	1094	1947	15
5	PT 605 B	Dhanshakti (Check)	2508	1587	909	1668	1940	1056	1498	1133	2088	2177	2132	2424	1718	1094	1754	17
6	PT 606 B	MP 644	2413	2189	966	1856	2493	1254	1873	888	1176	2823	2000	2731	2584	1428	1941	16
7	PT 607 B	MP 645	3182	1514	1223	1973	2573	1468	2021	793	2034	2571	2302	2556	1718	2189	2145	14
8	PT 608 B	ICMV 155 (Check)	1843	1835	750	1476	2005	1345	1675	397	1337	2486	1912	1997	1288	583	1576	18
9	PT 609 B	MP 646	2672	1936	1947	2185	2242	1751	1997	1077	2492	3339	2916	2207	1927	2739	2369	6
10	PT 610 B	ICMV 221 (Check)	2415	4456	1135	2669	2451	1744	2098	1281	1777	2039	1908	2128	2297	1322	2163	13
11	PT 611 B	Raj 171 (Check)	2563	3327	1741	2544	1992	1618	1805	986	1930	2931	2430	2108	1687	2333	2283	9
12	PT 612 B	MP 647	3198	2006	2622	2609	2492	1588	2040	1013	4071	2907	3489	1992	1842	3528	2712	1
13	PT 613 B	MP 648	3223	1993	1999	2405	2729	1582	2156	1148	3968	2832	3400	2453	2552	3117	2655	3
14	PT 614 B	MP 649	2836	2039	1712	2196	2390	1495	1942	1380	2894	2087	2491	2057	2598	2744	2251	11
15	PT 615 B	MP 650	2623	2119	1549	2097	2504	1561	2033	706	3372	2565	2968	2303	2401	2278	2319	7
16	PT 616 B	ABV 04 (Check)	2608	1782	1690	2027	2731	1576	2154	767	3388	3006	3197	2292	1666	2339	2379	5
17	PT 617 B	MP 651	3046	1587	2153	2262	2380	1654	2017	882	3481	2517	2999	1918	2622	2128	2318	8
18	PT 618 B	Pusa Comp. 612 (Check)	2673	1835	1976	2161	2232	1853	2043	1289	3335	2625	2980	2889	1919	2528	2438	4
		LOC. MEAN	2703	2168	1620	2164	2304	1535	1919	1105	2708	2722	2715	2350	2069	2109	2247	
		C.D. (5%)	382	511	396	900	336	424	538	178	759	510	1260	459	321	610	453	
		C.D. (1%)	513	686	531	1208	451	569	739	238	1019	685	1731	616	431	818	598	
		C.V. (%)	8.5	14.2	14.7	25.1	8.8	16.6	13.3	9.7	16.9	11.3	22.0	11.8	9.4	17.4	21.6	
		F (Prob)	0.000	0.000	0.000	0.263	0.000	0.000	0.367	0.000	0.000	0.000	0.244	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	12.00	12.00	11.10	-	12.00	12.00	-	12.00	12.00	11.10	-	12.00	12.00	12.00	-	

***TEST LOCATION REJECTED DUE TO LOW AVERAGE YIELD (1105 & 2069 kg/ha), THAN THE STATE AVERAGE YIELD (1772 & 2388 kg/ha) TAKEN OVER 10 YEARS

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Table I.148: POPULATION TRIAL KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	PMP	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	PT 601 B	MP 640	5611	7092	4535	5746	4444	4167	4306	4253	8958	3174	5462	6904	5830	5497	8
2	PT 602 B	MP 641	4333	4675	5165	4725	4167	5611	4889	4217	9665	3000	5627	4352	3296	4848	16
3	PT 603 B	MP 642	5167	7203	3754	5374	4750	5111	4931	3806	12579	3673	6686	6238	6349	5863	3
4	PT 604 B	MP 643	4972	7064	1111	4382	4639	2333	3486	4536	9794	3502	5944	5362	4211	4752	17
5	PT 605 B	Dhanshakti (Check)	6167	6619	3333	5373	4306	5167	4736	3550	11710	3012	6091	5375	3878	5312	11
6	PT 606 B	MP 644	6333	6731	3303	5456	4417	2500	3458	3211	7124	3045	4460	6081	6302	4905	15
7	PT 607 B	MP 645	7222	5397	3634	5418	4861	3778	4319	3656	12507	4682	6948	5671	4085	5549	6
8	PT 608 B	ICMV 155 (Check)	5083	3731	1742	3519	4500	2944	3722	3764	5169	3024	3986	4457	2008	3642	18
9	PT 609 B	MP 646	5083	4036	5736	4952	4806	4556	4681	4111	12791	3640	6847	4970	5558	5529	7
10	PT 610 B	ICMV 221 (Check)	6222	5731	4505	5486	4806	4778	4792	4514	11239	3084	6279	4736	5881	5549	5
11	PT 611 B	Raj 171 (Check)	6861	5703	5165	5910	5028	5222	5125	4500	7645	4237	5461	4699	4183	5324	10
12	PT 612 B	MP 647	6556	4036	7868	6153	5306	4778	5042	3722	15315	4351	7796	4446	4678	6106	1
13	PT 613 B	MP 648	6472	5814	5225	5837	5389	5056	5222	3492	11757	3745	6331	5513	6999	5946	2
14	PT 614 B	MP 649	6389	4369	4955	5238	5167	3611	4389	3739	12343	3970	6684	4596	4890	5403	9
15	PT 615 B	MP 650	6417	7203	4775	6131	5222	2694	3958	3267	12935	4321	6841	5146	5175	5715	4
16	PT 616 B	ABV 04 (Check)	5528	3981	3814	4441	4944	3889	4417	3431	12478	3075	6328	5107	4182	5043	14
17	PT 617 B	MP 651	6778	3397	6547	5574	5111	3833	4472	2450	9738	2874	5021	4274	5598	5060	13
18	PT 618 B	Pusa Comp. 612 (Check)	6083	6064	4294	5481	5444	4056	4750	2378	8638	2417	4478	6432	5711	5152	12
		LOC. MEAN	5960	5491	4414	5289	4850	4116	4483	3700	10688	3490	5959	5242	4934	5289	
		C.D. (5%)	1314	1013	1142	2203	394	1289	1613	613	2452	865	2385	1013	819	1029	
		C.D. (1%)	1764	1360	1534	2957	529	1730	2216	823	3292	1161	3202	1360	1100	1358	
		C.V. (%)	13.3	11.1	15.6	25.1	4.9	18.9	17.1	10.0	13.8	14.9	24.1	11.7	10.0	22.0	
		F (Prob)	0.000	0.000	0.000	0.714	0.000	0.000	0.516	0.000	0.000	0.000	0.166	0.000	0.000	0.004	
		PLOT SIZE (m ²)	12.00	12.00	11.10	-	12.00	12.00	-	12.00	12.00	11.10	-	12.00	12.00	-	

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Table I.149: POPULATION TRIAL KHARIF - 2024 DAYS TO 50% FLOWERING ZONE B

S.No.	TEST ENTRY	ABD1	NPD	DHL	MS	VYP	MLR	KS	APR	PMP	VZN	AP	PLM	CBE	SMG	ZONE	RANK
	CODE				MEAN			MEAN				MEAN				MEAN	
1	PT 601 B MP 640	59	59	48	55	49	49	49	42	46	57	48	43	46	49	50	6
2	PT 602 B MP 641	51	54	47	51	49	47	48	46	46	41	44	41	44	49	47	14
3	PT 603 B MP 642	59	64	53	58	49	48	48	46	53	49	49	46	52	50	52	2
4	PT 604 B MP 643	60	66	52	59	50	51	51	43	48	54	48	45	48	53	52	1
5	PT 605 B Dhanshakti (Check)	46	64	40	50	48	51	50	41	40	36	39	40	40	41	44	17
6	PT 606 B MP 644	59	54	49	54	50	52	51	46	51	47	48	46	49	48	50	5
7	PT 607 B MP 645	60	54	52	55	51	51	51	46	50	46	47	46	50	45	50	5
8	PT 608 B ICMV 155 (Check)	51	52	44	49	48	52	50	44	41	41	42	42	42	50	46	15
9	PT 609 B MP 646	50	67	52	56	50	56	53	44	49	55	49	47	48	43	51	3
10	PT 610 B ICMV 221 (Check)	45	70	40	51	49	50	50	41	41	35	39	43	40	41	45	16
11	PT 611 B Raj 171 (Check)	47	62	46	52	49	51	50	43	44	40	42	47	45	51	48	10
12	PT 612 B MP 647	51	54	49	51	49	50	49	43	47	48	46	44	45	50	48	9
13	PT 613 B MP 648	49	64	48	54	50	50	50	41	46	47	45	45	45	47	48	8
14	PT 614 B MP 649	49	66	46	53	49	51	50	42	43	41	42	44	44	43	47	13
15	PT 615 B MP 650	52	62	47	54	49	50	49	41	46	42	43	45	44	48	48	11
16	PT 616 B ABV 04 (Check)	56	63	53	57	49	56	52	45	48	48	47	42	48	50	51	4
17	PT 617 B MP 651	54	60	47	54	48	53	51	44	49	44	46	46	44	42	48	7
18	PT 618 B Pusa Comp. 612 (Check)	52	59	47	53	49	51	50	42	45	44	44	43	43	43	47	12
	LOC. MEAN	53	61	48	54	49	51	50	43	46	45	45	44	45	47	48	
	C.D. (5%)	1.0	1.0	3.0	8.0	1.0	2.0	3.0	1.0	2.0	2.0	5.0	3.0	2.0	4.0	3.0	
	C.D. (1%)	1.0	2.0	4.0	10.0	2.0	2.0	5.0	2.0	2.0	3.0	7.0	4.0	2.0	6.0	4.0	
	C.V. (%)	1.0	1.2	3.8	8.6	1.7	2.0	3.3	2.0	2.2	2.8	7.1	4.3	2.2	5.6	6.5	
	F (Prob)	0.000	0.000	0.000	0.377	0.000	0.000	0.379	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	

CHAPTER I: BREEDING

Table I.150: POPULATION TRIAL KHARIF - 2024 DAYS TO MATURITY ZONE B

S.No.	TEST ENTRY	ABD1	NPD	DHL	MS	VYP	MLR	KS	APR	PMP	VZN	AP	PLM	CBE	ZONE	RANK
	CODE				MEAN			MEAN				MEAN			MEAN	
1	PT 601 B MP 640	95	84	84	88	90	84	87	75	80	90	82	73	84	84	6
2	PT 602 B MP 641	93	80	83	85	89	82	86	80	82	71	77	72	82	81	12
3	PT 603 B MP 642	98	89	89	92	89	83	86	80	81	79	80	76	90	85	3
4	PT 604 B MP 643	98	91	89	93	90	83	87	77	80	85	81	76	86	86	2
5	PT 605 B Dhanshakti (Check)	87	89	76	84	88	85	86	75	78	65	73	71	78	79	18
6	PT 606 B MP 644	95	79	86	87	91	86	89	81	81	78	80	76	87	84	7
7	PT 607 B MP 645	95	79	88	88	91	87	89	81	81	77	80	75	88	84	5
8	PT 608 B ICMV 155 (Check)	91	78	81	83	89	84	87	79	78	71	76	72	80	80	16
9	PT 609 B MP 646	88	92	88	90	90	87	89	79	79	86	81	82	86	86	1
10	PT 610 B ICMV 221 (Check)	84	96	76	85	89	85	87	74	79	64	72	75	78	80	17
11	PT 611 B Raj 171 (Check)	85	87	82	85	89	83	86	78	78	70	75	76	83	81	14
12	PT 612 B MP 647	90	79	84	84	89	83	86	76	81	79	79	74	83	82	10
13	PT 613 B MP 648	89	89	84	87	91	83	87	75	81	78	78	75	83	83	9
14	PT 614 B MP 649	87	91	82	87	89	85	87	76	77	71	75	75	82	82	11
15	PT 615 B MP 650	91	87	81	87	89	83	86	75	78	71	75	74	82	81	13
16	PT 616 B ABV 04 (Check)	97	88	88	91	90	86	88	80	79	79	80	71	86	84	4
17	PT 617 B MP 651	95	86	83	88	88	85	86	80	81	75	78	75	82	83	8
18	PT 618 B Pusa Comp. 612 (Check)	91	84	-	88	89	85	87	77	77	75	76	72	81	81	15
	LOC. MEAN	92	86	84	87	90	84	87	78	80	76	78	74	83	83	
	C.D. (5%)	1.0	3.0	3.0	8.0	1.0	1.0	2.0	2.0	2.0	3.0	7.0	5.0	2.0	3.0	
	C.D. (1%)	1.0	4.0	4.0	11.0	2.0	1.0	3.0	2.0	3.0	4.0	9.0	7.0	2.0	4.0	
	C.V. (%)	0.6	1.9	2.1	5.4	1.0	0.7	1.2	1.2	1.4	2.3	5.1	4.0	1.2	4.1	
	F (Prob)	0.000	0.000	0.000	0.472	0.000	0.000	0.102	0.000	0.000	0.000	0.144	0.000	0.000	0.000	

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Table I.151: POPULATION TRIAL KHARIF - 2024 PLANT HEIGHT (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	PMP	VZN	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	PT 601 B	MP 640	160	166	197	174	159	171	165	135	199	170	168	184	170	184	172	13
2	PT 602 B	MP 641	195	172	215	194	183	199	191	138	222	188	183	206	174	177	188	5
3	PT 603 B	MP 642	175	155	199	177	185	175	180	145	207	207	186	187	195	190	184	10
4	PT 604 B	MP 643	130	159	140	143	163	132	147	133	139	143	138	172	139	164	147	17
5	PT 605 B	Dhanshakti (Check)	160	179	188	176	159	169	164	133	196	165	165	158	182	177	170	14
6	PT 606 B	MP 644	155	151	167	157	156	142	149	126	141	146	138	132	175	177	152	16
7	PT 607 B	MP 645	162	163	189	171	173	143	158	130	159	167	152	169	163	184	164	15
8	PT 608 B	ICMV 155 (Check)	92	146	168	135	170	109	140	109	148	140	133	136	93	118	130	18
9	PT 609 B	MP 646	210	164	230	201	165	178	172	143	210	239	197	156	216	228	194	2
10	PT 610 B	ICMV 221 (Check)	162	179	225	189	153	174	164	136	220	214	190	127	152	182	175	11
11	PT 611 B	Raj 171 (Check)	223	180	217	207	165	175	170	137	220	161	173	180	211	228	191	3
12	PT 612 B	MP 647	172	136	235	181	184	164	174	136	222	198	185	159	184	255	186	8
13	PT 613 B	MP 648	193	129	240	187	174	165	170	133	218	227	193	147	206	233	188	6
14	PT 614 B	MP 649	180	159	213	184	161	170	165	140	223	248	204	188	201	213	191	4
15	PT 615 B	MP 650	173	139	240	184	188	153	170	137	211	237	195	165	180	214	185	9
16	PT 616 B	ABV 04 (Check)	163	146	197	169	159	159	159	143	209	219	190	143	185	194	174	12
17	PT 617 B	MP 651	192	166	223	194	184	154	169	131	210	210	184	170	197	212	186	7
18	PT 618 B	Pusa Comp. 612 (Check)	192	179	232	201	192	177	184	134	222	257	204	180	184	247	200	1
		LOC. MEAN	172	159	206	179	171	162	166	134	199	197	177	164	178	199	176	
		C.D. (5%)	7.0	9.0	45.0	33.0	9.0	25.0	33.0	8.0	25.0	21.0	33.0	14.0	19.0	11.0	16.0	
		C.D. (1%)	9.0	12.0	60.0	45.0	12.0	34.0	46.0	11.0	33.0	28.0	45.0	19.0	26.0	15.0	21.0	
		C.V. (%)	2.3	3.3	13.1	11.2	3.2	9.4	9.5	3.6	7.5	6.4	11.4	5.2	6.4	3.5	10.8	
		F (Prob)	0.000	0.000	0.000	0.006	0.000	0.000	0.287	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.152: POPULATION TRIAL KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE B

S.No.	TEST CODE	ENTRY	ABD1**	NPD	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	PMP	VZN	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	PT 601 B	MP 640	1.7	4.3	2.0	3.2	2.8	3.6	3.2	2.1	1.6	1.7	1.8	2.9	3.0	2.7	2.7	3
2	PT 602 B	MP 641	1.7	4.0	2.3	3.1	2.5	2.8	2.7	2.2	1.3	1.7	1.7	3.3	3.3	2.7	2.6	4
3	PT 603 B	MP 642	2.0	4.0	2.0	3.0	3.7	1.5	2.6	1.5	1.7	1.9	1.7	3.5	3.5	2.7	2.6	5
4	PT 604 B	MP 643	2.0	3.0	2.5	2.8	3.7	1.7	2.7	1.8	1.5	1.7	1.7	2.3	2.6	2.7	2.4	14
5	PT 605 B	Dhanshakti (Check)	2.3	4.3	1.8	3.1	3.3	2.5	2.9	1.9	1.8	2.3	2.0	4.3	2.8	2.9	2.8	1
6	PT 606 B	MP 644	2.0	3.7	2.4	3.0	3.3	1.4	2.3	1.3	1.1	1.7	1.4	2.5	2.6	1.6	2.2	18
7	PT 607 B	MP 645	1.7	3.7	1.8	2.8	2.9	2.1	2.5	1.7	1.5	2.0	1.7	4.5	2.8	2.5	2.5	8
8	PT 608 B	ICMV 155 (Check)	2.0	3.3	3.2	3.3	3.2	1.8	2.5	1.8	1.9	1.9	1.9	3.5	2.4	2.0	2.5	10
9	PT 609 B	MP 646	2.3	3.3	2.3	2.8	3.1	2.0	2.5	1.3	1.7	1.5	1.5	2.5	2.6	1.9	2.2	17
10	PT 610 B	ICMV 221 (Check)	2.0	4.0	2.6	3.3	2.9	1.9	2.4	1.7	1.9	1.9	1.8	2.0	2.4	2.6	2.4	13
11	PT 611 B	Raj 171 (Check)	2.0	3.7	2.5	3.1	2.8	1.9	2.3	1.9	1.9	1.7	1.8	3.1	3.0	3.5	2.6	7
12	PT 612 B	MP 647	2.0	4.3	2.1	3.2	3.2	2.2	2.7	1.7	1.6	1.7	1.6	3.3	3.0	2.1	2.5	9
13	PT 613 B	MP 648	2.0	3.3	2.0	2.7	2.7	2.3	2.5	1.9	2.0	3.1	2.3	2.7	1.8	2.4	2.4	12
14	PT 614 B	MP 649	2.0	3.7	2.2	2.9	2.8	1.7	2.3	2.1	1.5	1.9	1.9	3.2	2.8	1.6	2.4	15
15	PT 615 B	MP 650	1.7	3.3	2.1	2.7	3.5	2.3	2.9	1.5	2.1	2.1	1.9	2.6	2.5	1.5	2.4	16
16	PT 616 B	ABV 04 (Check)	2.0	3.3	2.1	2.7	3.3	2.0	2.7	1.9	1.9	1.8	1.9	2.6	2.8	2.5	2.4	11
17	PT 617 B	MP 651	1.7	3.3	2.6	3.0	3.2	1.8	2.5	1.8	2.2	2.3	2.1	4.2	2.5	2.8	2.7	2
18	PT 618 B	Pusa Comp. 612 (Check)	3.0	4.0	2.6	3.3	3.1	2.1	2.6	2.1	2.3	1.7	2.0	3.4	2.5	2.2	2.6	6
		LOC. MEAN	2.0	3.7	2.3	3.0	3.1	2.1	2.6	1.8	1.8	1.9	1.8	3.1	2.7	2.4	2.5	
		C.D. (5%)	1.1	1.1	0.2	0.9	0.6	1.0	1.1	0.4	0.5	0.5	0.5	0.5	0.3	0.5	0.4	
		C.D. (1%)	1.4	1.5	0.2	1.3	0.8	1.4	1.5	0.6	0.7	0.6	0.6	0.7	0.4	0.7	0.5	
		C.V. (%)	32.5	18.4	4.5	14.8	12.0	29.8	19.4	14.4	17.7	14.5	15.0	9.4	6.5	12.8	16.8	
		F (Prob)	0.000	0.000	0.000	0.936	0.000	0.000	0.952	0.000	0.000	0.000	0.066	0.000	0.000	0.000	0.078	

**LOCATION REJECTED DUE TO HIGH C.V. (i.e. > 30%): ABD1 32.5%

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Table I.153: POPULATION TRIAL KHARIF - 2024 PANICLE LENGTH (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	NPD	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	PMP	VZN	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	PT 601 B	MP 640	26	19	27	24	24	19	22	26	27	23	25	26	27	25	25	12
2	PT 602 B	MP 641	25	23	29	25	27	21	24	27	29	27	28	27	26	27	26	7
3	PT 603 B	MP 642	26	22	28	25	28	26	27	29	30	22	27	28	28	27	27	2
4	PT 604 B	MP 643	20	23	26	23	24	18	21	24	25	24	24	28	29	24	24	15
5	PT 605 B	Dhanshakti (Check)	22	36	27	28	22	19	21	24	22	28	25	25	28	23	25	9
6	PT 606 B	MP 644	23	26	26	25	25	20	23	23	23	31	26	23	23	23	24	14
7	PT 607 B	MP 645	26	24	27	26	28	19	24	25	26	27	26	22	26	25	25	8
8	PT 608 B	ICMV 155 (Check)	15	22	15	17	22	18	20	20	16	23	20	16	18	14	18	17
9	PT 609 B	MP 646	30	24	28	28	28	23	25	27	29	30	29	24	27	37	28	1
10	PT 610 B	ICMV 221 (Check)	24	25	24	24	28	18	23	25	23	25	24	23	24	21	24	16
11	PT 611 B	Raj 171 (Check)	26	24	28	26	27	22	25	24	27	33	28	22	29	24	26	6
12	PT 612 B	MP 647	26	19	28	24	30	22	26	25	32	36	31	21	24	29	27	5
13	PT 613 B	MP 648	23	22	27	24	29	19	24	24	28	28	27	20	26	24	24	13
14	PT 614 B	MP 649	24	21	25	24	26	21	24	29	24	27	27	27	25	24	25	11
15	PT 615 B	MP 650	22	23	28	24	26	20	23	26	26	26	26	25	27	25	25	10
16	PT 616 B	ABV 04 (Check)	22	36	27	28	26	18	22	26	29	34	30	22	28	25	27	3
17	PT 617 B	MP 651	29	26	28	27	25	23	24	24	28	29	27	26	23	27	26	7
18	PT 618 B	Pusa Comp. 612 (Check)	28	24	29	27	27	22	25	27	30	29	29	25	24	26	27	4
		LOC. MEAN	24	24	27	25	26	20	23	25	26	28	27	24	26	25	25	
		C.D. (5%)	1.0	3.0	2.0	6.0	2.0	3.0	4.0	3.0	5.0	3.0	5.0	3.0	2.0	3.0	2.0	
		C.D. (1%)	2.0	4.0	3.0	8.0	2.0	4.0	5.0	4.0	7.0	4.0	6.0	3.0	3.0	4.0	3.0	
		C.V. (%)	3.4	8.1	4.5	14.1	3.9	7.9	7.3	6.3	11.2	6.6	10.5	6.5	4.8	7.2	11.0	
		F (Prob)	0.000	0.000	0.000	0.115	0.000	0.000	0.034	0.000	0.000	0.000	0.012	0.000	0.000	0.000	0.000	

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Table I.154: POPULATION TRIAL KHARIF - 2024 PANICLE DIAMETER (cm) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	PMP	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	PT 601 B	MP 640	2.8	3.1	3.0	2.5	2.4	2.4	2.8	2.9	2.9	2.4	3.2	2.8	14
2	PT 602 B	MP 641	2.6	2.5	2.6	2.2	2.0	2.1	2.5	2.8	2.7	2.5	3.1	2.5	17
3	PT 603 B	MP 642	3.3	3.0	3.2	2.8	2.4	2.6	2.8	3.5	3.1	3.2	3.4	3.0	1
4	PT 604 B	MP 643	2.9	2.7	2.8	2.6	2.2	2.4	3.0	2.8	2.9	3.1	3.2	2.8	10
5	PT 605 B	Dhanshakti (Check)	2.9	2.9	2.9	2.2	2.3	2.3	2.8	3.0	2.9	2.5	3.5	2.8	12
6	PT 606 B	MP 644	3.0	3.2	3.1	2.7	2.6	2.7	2.8	2.8	2.8	3.0	3.1	2.9	4
7	PT 607 B	MP 645	3.3	3.2	3.2	3.0	2.1	2.5	2.9	3.0	3.0	2.1	3.3	2.9	6
8	PT 608 B	ICMV 155 (Check)	2.3	2.7	2.5	2.3	1.9	2.1	2.6	2.2	2.4	2.2	3.5	2.5	18
9	PT 609 B	MP 646	3.2	3.1	3.1	2.6	2.1	2.4	2.9	3.1	3.0	2.6	3.1	2.8	8
10	PT 610 B	ICMV 221 (Check)	2.8	3.3	3.0	2.6	2.5	2.6	3.0	2.8	2.9	2.2	3.0	2.8	11
11	PT 611 B	Raj 171 (Check)	2.8	2.8	2.8	2.2	1.7	2.0	3.1	2.1	2.6	3.1	2.9	2.6	16
12	PT 612 B	MP 647	3.2	3.1	3.2	2.7	2.4	2.5	2.8	3.1	3.0	2.1	3.2	2.8	9
13	PT 613 B	MP 648	3.1	3.3	3.2	3.0	2.3	2.6	2.9	2.9	2.9	2.9	3.0	2.9	3
14	PT 614 B	MP 649	3.1	3.0	3.0	2.6	2.4	2.5	3.0	2.9	3.0	2.0	3.1	2.8	13
15	PT 615 B	MP 650	2.8	3.4	3.1	2.1	2.3	2.2	3.1	3.1	3.1	2.5	3.3	2.8	7
16	PT 616 B	ABV 04 (Check)	3.2	3.1	3.1	2.7	2.5	2.6	3.3	3.4	3.4	2.2	3.1	2.9	2
17	PT 617 B	MP 651	3.0	3.3	3.2	2.7	1.9	2.3	3.0	2.9	3.0	3.2	3.2	2.9	5
18	PT 618 B	Pusa Comp. 612 (Check)	2.6	2.8	2.7	2.3	2.3	2.3	3.2	2.5	2.9	2.8	3.3	2.7	15
		LOC. MEAN	2.9	3.0	3.0	2.5	2.2	2.4	2.9	2.9	2.9	2.6	3.2	2.8	
		C.D. (5%)	0.2	0.3	0.2	0.3	0.5	0.4	0.4	0.5	0.4	0.3	0.3	0.2	
		C.D. (1%)	0.2	0.4	0.2	0.3	0.7	0.5	0.6	0.7	0.6	0.4	0.3	0.3	
		C.V. (%)	3.2	6.4	3.2	6.1	13.6	6.7	8.7	10.8	8.1	7.0	4.9	7.4	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.026	0.000	0.000	0.269	0.000	0.000	0.000	

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Table I.155: POPULATION TRIAL KHARIF - 2024 1000-SEED Wt.(g) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	VZN	CBE	ZONE MEAN	RANK
1	PT 601 B	MP 640	10.4	7.2	8.8	10.4	13.9	12.1	8.6	10.7	10.2	9
2	PT 602 B	MP 641	14.8	6.0	10.4	10.2	12.9	11.6	7.4	10.1	10.2	8
3	PT 603 B	MP 642	9.5	6.7	8.1	10.4	13.8	12.1	6.9	11.2	9.8	12
4	PT 604 B	MP 643	10.6	8.8	9.7	13.5	12.6	13.1	4.9	8.1	9.8	13
5	PT 605 B	Dhanshakti (Check)	12.6	6.6	9.6	13.1	13.0	13.0	6.7	7.4	9.9	10
6	PT 606 B	MP 644	13.2	11.1	12.1	11.7	12.7	12.2	6.2	7.5	10.4	7
7	PT 607 B	MP 645	14.8	8.2	11.5	11.5	12.0	11.7	5.8	11.1	10.6	3
8	PT 608 B	ICMV 155 (Check)	8.5	6.9	7.7	11.2	12.5	11.9	7.2	6.6	8.8	17
9	PT 609 B	MP 646	12.3	7.5	9.9	10.7	12.3	11.5	6.4	9.7	9.8	11
10	PT 610 B	ICMV 221 (Check)	13.0	10.0	11.5	13.1	12.5	12.8	5.6	9.4	10.6	2
11	PT 611 B	Raj 171 (Check)	9.4	7.0	8.2	10.3	13.9	12.1	5.7	6.9	8.9	16
12	PT 612 B	MP 647	9.1	6.7	7.9	9.9	12.6	11.3	6.1	8.3	8.8	18
13	PT 613 B	MP 648	12.7	10.6	11.6	11.1	11.7	11.4	5.4	11.4	10.5	6
14	PT 614 B	MP 649	13.2	10.4	11.8	9.6	13.3	11.5	6.2	13.8	11.1	1
15	PT 615 B	MP 650	8.9	6.7	7.8	11.2	13.0	12.1	5.5	9.2	9.1	15
16	PT 616 B	ABV 04 (Check)	11.8	8.3	10.0	13.4	12.7	13.1	6.2	10.7	10.5	4
17	PT 617 B	MP 651	11.9	8.4	10.1	11.0	13.1	12.1	7.5	11.1	10.5	5
18	PT 618 B	Pusa Comp. 612 (Check)	13.3	7.8	10.6	9.9	12.5	11.2	5.3	8.0	9.5	14
		LOC. MEAN	11.7	8.0	9.9	11.2	12.8	12.0	6.3	9.5	9.9	
		C.D. (5%)	0.7	0.5	0.7	0.4	0.9	2.6	0.8	1.0	2.0	
		C.D. (1%)	0.9	0.7	0.9	0.5	1.3	3.6	1.1	1.4	2.6	
		C.V. (%)	3.6	3.8	3.6	2.0	4.4	12.8	7.9	6.5	12.7	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.171	0.000	0.000	0.234	

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Table I.156: POPULATION TRIAL KHARIF - 2024 POPULATION AT HARVEST(No./plot) ZONE B

S.No.	TEST CODE	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	PMP	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	PT 601 B	MP 640	151	86	119	143	143	143	114	125	130	123	155	127	131	6
2	PT 602 B	MP 641	155	116	135	140	130	135	130	118	131	126	153	113	132	5
3	PT 603 B	MP 642	154	64	109	144	140	142	117	97	131	115	158	112	124	14
4	PT 604 B	MP 643	153	71	112	143	150	147	127	131	129	129	140	125	130	9
5	PT 605 B	Dhanshakti (Check)	152	75	114	145	143	144	109	93	131	111	159	126	126	12
6	PT 606 B	MP 644	151	77	114	143	136	139	118	73	131	107	156	119	123	16
7	PT 607 B	MP 645	152	121	137	142	138	140	126	98	132	119	156	128	133	4
8	PT 608 B	ICMV 155 (Check)	153	59	106	144	139	142	108	121	133	120	156	123	126	11
9	PT 609 B	MP 646	153	113	133	142	132	137	103	121	131	118	151	126	130	8
10	PT 610 B	ICMV 221 (Check)	153	89	121	145	134	140	129	107	130	122	153	130	130	9
11	PT 611 B	Raj 171 (Check)	152	97	124	143	150	147	125	114	132	124	151	129	133	3
12	PT 612 B	MP 647	154	136	145	141	135	138	112	122	131	122	152	133	135	1
13	PT 613 B	MP 648	155	106	131	139	136	138	105	120	130	118	154	128	130	7
14	PT 614 B	MP 649	155	73	114	144	133	139	95	126	133	118	156	116	126	13
15	PT 615 B	MP 650	155	98	127	142	140	141	89	107	131	109	156	112	126	13
16	PT 616 B	ABV 04 (Check)	154	114	134	143	131	137	127	125	133	129	153	122	134	2
17	PT 617 B	MP 651	153	126	139	143	135	139	70	90	130	97	143	115	123	15
18	PT 618 B	Pusa Comp. 612 (Check)	152	81	117	144	146	145	116	123	129	123	156	118	130	10
		LOC. MEAN	153	95	124	143	138	141	112	112	131	118	153	123	129	
		C.D. (5%)	3.0	30.0	3.0	3.0	22.0	36.0	12.0	17.0	3.0	21.0	9.0	13.0	12.0	
		C.D. (1%)	4.0	40.0	4.0	3.0	29.0	49.0	16.0	23.0	4.0	28.0	12.0	17.0	15.0	
		C.V. (%)	1.2	19.1	1.2	1.1	9.4	14.3	6.4	9.4	1.5	10.3	3.5	6.3	9.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.642	0.000	0.000	0.000	0.176	0.000	0.000	0.648	

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Table I.157: POPULATION TRIAL KHARIF - 2024 ZONE B

GRAIN QUALITY: IRON CONTENT (ppm)

S.No.	TEST CODE	ENTRY	ABD1	DHL	VYP	APR	PMP	CBE	ZONE MEAN	RANK
1	PT 601 B	MP 640	60	57	44	52	58	47	53	5
2	PT 605 B	Dhanshakti (Check)	82	74	65	77	82	43	71	1
3	PT 608 B	ICMV 155 (Check)	43	70	44	46	42	39	47	8
4	PT 610 B	ICMV 221 (Check)	65	70	52	68	79	54	65	2
5	PT 611 B	Raj 171 (Check)	47	59	41	68	43	51	51	6
6	PT 612 B	MP 647	73	65	46	59	75	51	62	3
7	PT 613 B	MP 648	70	63	46	48	63	59	58	4
8	PT 616 B	ABV 04 (Check)	53	56	40	46	56	48	50	7
9	PT 618 B	Pusa Comp. 612 (Check)	43	56	39	52	56	51	50	7

Table I.158: POPULATION TRIAL KHARIF - 2024 ZONE B

GRAIN QUALITY:ZINC CONTENT (ppm)

S.No.	TEST CODE	ENTRY	ABD1	DHL	VYP	APR	PMP	CBE	ZONE MEAN	RANK
1	PT 601 B	MP 640	41	32	36	24	30	39	34	8
2	PT 605 B	Dhanshakti (Check)	53	44	45	34	39	41	43	1
3	PT 608 B	ICMV 155 (Check)	35	40	39	30	27	42	35	7
4	PT 610 B	ICMV 221 (Check)	45	38	43	41	35	47	41	2
5	PT 611 B	Raj 171 (Check)	39	43	39	41	32	43	39	4
6	PT 612 B	MP 647	46	37	37	28	33	49	38	5
7	PT 613 B	MP 648	51	39	36	27	39	48	40	3
8	PT 616 B	ABV 04 (Check)	41	34	35	35	28	42	36	6
9	PT 618 B	Pusa Comp. 612 (Check)	37	33	35	37	31	42	36	6

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Table I.159: ADVANCE HYBRID AND POPULATION TRIAL (Early) KHARIF 2024 EXPERIMENTAL DETAILS ZONE A₁

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizers			Insecticide
							N	P	K	
RAJASTHAN										
Mandor (ICAR AICRP)	SL	8.2	19.7.24	11.10.24	09.10.24	Nil	40	20	0	Nil
Jodhpur (CAZRI)	SL	7.6	-	-	-	Nil	40	20	0	Nil
Bikaner (SKRAU)	S	8.0	8.7.24	25.10.24	10.8.24	25.9.24	40	20	0	Nil
Fathehpur(SKNAU)	SL	8.0	17.7.24	As Per Maturity	As Per Pop	Nil	As Per Pop	As Per Pop	As Per Pop	Nil
Samdari (ARSS, AUJ)	SL	8.3	10.7.24	15.10.24	10.8.24	Nil	40	20	0	Nil
ARS, Jalore (AUJ)	-	-	22.7.24	As Per Maturity	-	Ni	-	-	-	Nil
Nagaur (AU, Jodhpur)	SL	7.9	16.7.24	As Per Maturity	4.8.24	Nil	40	20	0	Nil
GUJARAT										
Deesa(SDAU)	SL	-	30.6.24	4.10.24	26.7.24	Nil	80	40	0	Nil
HARYANA										
Bawal (CCSHAU)	LS	8.2	10.7.24	As Per Maturity	6.8.24	Nil	40	20	30	Atrazine
Hisar (CCSHAU)	SL	-	11.7.24	25.10.24	-	28.8.24	40	20	0	Nil

SL = Sandy Loam, S= Sandy, LS= Loamy Sand.

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Table I.160: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR**	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	1597	914	1956	1742	846	1242	2130	1531	2605	3448	1992	2720	1914	11
2	AHPT 802	MH 2672	1921	1741	2465	2314	797	1292	1722	1827	2762	3691	3458	3575	2319	5
3	AHPT 803	MH 2673	1701	1704	2199	2596	860	1677	2523	1931	2981	4262	3610	3936	2493	1
4	AHPT 804	MH 2675	1644	1530	1690	1960	688	1283	2347	1643	2444	3831	2888	3360	2114	8
5	AHPT 805	AHB 1200 (Check)	1319	685	1065	2088	474	1269	2394	1337	1901	3715	2298	3006	1771	15
6	AHPT 806	MH 2678	2083	1775	2199	2000	955	1686	2162	1862	3086	4188	2770	3479	2358	3
7	AHPT 807	MH 2743	2049	1491	2211	1919	759	1605	2338	1794	3099	4268	3037	3652	2352	4
8	AHPT 808	MH 2744	2141	1264	2523	2604	1020	1887	2556	2018	2210	4258	2806	3532	2376	2
9	AHPT 809	MH 2746	1400	803	2083	2060	684	1385	2175	1534	2160	2634	1849	2242	1761	16
10	AHPT 810	MH 2747	1829	1590	2211	1962	763	1377	2235	1765	2593	3610	2608	3109	2155	7
11	AHPT 811	RHB 223 (Check)	1389	556	1539	1993	741	1264	2335	1425	2725	3590	2121	2855	1888	13
12	AHPT 812	MH 2748	1574	1650	1736	1809	924	1447	2151	1641	1395	3553	2405	2979	1911	12
13	AHPT 813	MH 2749	1574	1063	1655	2065	709	1602	2366	1572	2099	3228	2136	2682	1877	14
14	AHPT 814	MH 2754	1667	1213	2361	1924	650	1565	2235	1675	2895	2941	2137	2539	2003	9
15	AHPT 815	HJB 67 Imp. (Check)	1389	542	1609	2009	594	1759	2092	1372	1244	2622	2017	2320	1569	17
16	AHPT 816	MH 2758	1782	1678	2130	1876	756	1677	2280	1750	3117	3686	2693	3190	2222	6
17	AHPT 817	MPMH 35 (Check)	1667	1889	1968	1938	722	1454	2090	1712	1852	3202	2292	2747	1958	10
		LOC. MEAN	1690	1299	1976	2050	761	1498	2243	1670	2422	3572	2536	3054	2061	
		C.D. (5%)	548	323	274	318	160	752	443	286	507	333	577	530	293	
		C.D. (1%)	737	434	368	427	216	1012	596	379	681	448	776	731	387	
		C.V. (%)	19.5	15.0	8.3	9.3	12.7	30.2	11.9	14.9	12.6	5.6	13.7	8.2	15.2	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	14.40	14.40	14.40	14.40	14.40	14.40	14.40	-	10.80	14.40	14.40	-	-	

**LOCATION REJECTED DUE TO HIGH C.V. (i.e. > 30%): JLR 30.2%

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Table I.161: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	2569	2259	7245	4074	3125	2755	4588	3802	7099	9749	9491	9620	5295	11
2	AHPT 802	MH 2672	3009	3667	8403	6042	2894	2523	3424	4280	8488	8681	11574	10128	5870	4
3	AHPT 803	MH 2673	2662	4031	6389	6296	2894	3866	4931	4438	5802	10519	12500	11510	5989	2
4	AHPT 804	MH 2675	3171	3272	6713	5069	2963	3102	4625	4131	6883	11825	11343	11584	5897	3
5	AHPT 805	AHB 1200 (Check)	2870	1760	5741	4676	3472	2269	4308	3585	5031	10518	9954	10236	5060	14
6	AHPT 806	MH 2678	3032	3950	5926	4282	3171	2824	4280	3924	6821	8375	9722	9049	5238	12
7	AHPT 807	MH 2743	3148	3898	7130	4792	3125	3449	4234	4254	6111	8996	10880	9938	5576	7
8	AHPT 808	MH 2744	3403	2938	6204	6319	3657	4005	4843	4481	7716	11393	12500	11947	6298	1
9	AHPT 809	MH 2746	2801	1770	5394	4583	2454	3981	4120	3586	5370	7399	6481	6940	4435	17
10	AHPT 810	MH 2747	2708	3992	6412	5116	2755	3380	4181	4078	6296	7973	11574	9773	5439	9
11	AHPT 811	RHB 223 (Check)	2708	1294	5972	4676	3125	3310	4375	3637	5772	8270	10185	9228	4969	15
12	AHPT 812	MH 2748	2454	3938	5162	4583	2986	3611	3956	3813	5309	8829	10417	9623	5124	13
13	AHPT 813	MH 2749	3056	2888	5926	5162	3310	3877	4512	4104	5586	9222	11111	10167	5465	8
14	AHPT 814	MH 2754	2894	2606	7060	4815	3009	3958	4181	4075	6265	7872	10648	9260	5331	10
15	AHPT 815	HJB 67 Imp. (Check)	2130	1280	7106	4630	2847	3773	3963	3676	6327	7100	9491	8295	4865	16
16	AHPT 816	MH 2758	3472	4032	6782	4884	3102	3657	4299	4318	6235	9926	9722	9824	5611	5
17	AHPT 817	MPMH 35 (Check)	2894	4672	5949	5069	3519	3704	3877	4241	8086	9671	8565	9118	5601	6
		LOC. MEAN	2881	3073	6442	5004	3083	3414	4276	4025	6423	9195	10362	9779	5415	
		C.D. (5%)	778	1060	1120	439	803	1601	963	647	1215	1040	1822	2204	704	
		C.D. (1%)	1045	1425	1505	590	1079	2152	1295	857	1634	1398	2450	3037	929	
		C.V. (%)	16.2	20.7	10.5	5.3	15.7	28.2	13.5	15.2	11.4	6.8	10.6	10.6	14.7	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.067	0.000	0.000	0.000	0.028	0.000	
		PLOT SIZE (m ²)	14.40	14.40	14.40	14.40	14.40	14.40	14.40	-	10.80	14.40	14.40	-	-	

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Table I.162: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 DAYS TO 50% FLOWERING ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR*	FTR	SDR	JLR	NGR	RAJ MEAN	SKN	BWL	HSR*	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	48	44	53	44	42	42	44	44	45	44	47	44	44	12
2	AHPT 802	MH 2672	45	44	49	44	46	44	43	44	42	44	45	44	44	15
3	AHPT 803	MH 2673	47	44	47	45	44	44	41	44	41	42	49	42	44	17
4	AHPT 804	MH 2675	48	46	53	44	45	42	46	45	40	46	51	46	45	10
5	AHPT 805	AHB 1200 (Check)	47	47	53	44	48	44	46	46	52	48	50	48	47	1
6	AHPT 806	MH 2678	46	45	51	45	46	42	47	45	42	43	45	43	44	11
7	AHPT 807	MH 2743	45	45	46	45	45	44	44	45	47	47	52	47	45	5
8	AHPT 808	MH 2744	45	45	51	44	45	42	44	44	43	46	52	46	44	13
9	AHPT 809	MH 2746	47	45	52	46	45	43	46	45	45	42	45	42	45	8
10	AHPT 810	MH 2747	46	43	52	46	46	45	44	45	47	45	51	45	45	4
11	AHPT 811	RHB 223 (Check)	48	45	47	45	46	44	47	46	52	47	52	47	47	2
12	AHPT 812	MH 2748	49	43	47	44	45	42	45	45	39	41	45	41	44	16
13	AHPT 813	MH 2749	47	46	54	44	45	44	46	45	44	48	49	48	45	3
14	AHPT 814	MH 2754	46	46	45	46	45	46	45	46	45	42	48	42	45	6
15	AHPT 815	HHB 67 Imp. (Check)	46	46	47	44	45	45	44	45	43	40	45	40	44	14
16	AHPT 816	MH 2758	46	46	50	45	45	44	44	45	45	42	48	42	45	9
17	AHPT 817	MPMH 35 (Check)	46	46	51	45	46	46	46	46	42	44	52	44	45	7
		LOC. MEAN	47	45	50	45	45	44	45	45	44	44	49	44	45	
		C.D. (5%)	1.0	1.0	3.0	2.0	1.0	2.0	3.0	1.0	4.0	2.0	2.0	2.0	2.0	
		C.D. (1%)	2.0	2.0	3.0	2.0	2.0	3.0	4.0	2.0	6.0	3.0	2.0	3.0	2.0	
		C.V. (%)	1.6	1.8	3.0	2.1	1.6	2.7	3.9	2.4	5.9	2.7	2.2	2.7	3.8	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.077	0.000	0.000	0.000	0.000	0.003	

*LOCATION REJECTED DUE TO DELAYED FLOWERING IN CHECKS

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Table I.163: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 DAYS TO MATURITY ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	BKR	FTR	SDR	JLR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	79	82	75	73	75	79	77	79	75	75	75	77	5
2	AHPT 802	MH 2672	78	79	76	75	75	82	78	73	75	74	74	76	10
3	AHPT 803	MH 2673	78	77	75	78	73	77	76	78	72	79	76	76	8
4	AHPT 804	MH 2675	79	80	74	74	75	80	77	76	77	81	79	77	2
5	AHPT 805	AHB 1200 (Check)	79	80	73	77	75	78	77	74	80	79	79	77	4
6	AHPT 806	MH 2678	77	81	73	73	78	75	76	79	74	74	74	76	12
7	AHPT 807	MH 2743	76	76	74	73	77	75	75	78	78	81	80	76	8
8	AHPT 808	MH 2744	75	81	73	74	75	76	76	76	77	81	79	76	7
9	AHPT 809	MH 2746	78	82	72	72	78	79	77	71	73	75	74	76	14
10	AHPT 810	MH 2747	77	82	76	72	80	76	77	71	76	80	78	77	6
11	AHPT 811	RHB 223 (Check)	78	77	77	73	79	76	77	81	78	81	80	78	1
12	AHPT 812	MH 2748	80	77	72	74	76	72	75	71	72	75	74	74	16
13	AHPT 813	MH 2749	77	84	73	74	79	77	77	71	80	80	80	77	3
14	AHPT 814	MH 2754	77	74	71	74	80	75	75	73	74	77	76	75	15
15	AHPT 815	HHB 67 Imp. (Check)	77	77	74	73	81	79	77	75	71	75	73	76	13
16	AHPT 816	MH 2758	77	80	74	74	80	77	77	73	73	78	75	76	11
17	AHPT 817	MPMH 35 (Check)	76	81	75	73	81	73	77	71	74	82	78	76	9
		LOC. MEAN	77	79	74	74	78	77	77	75	75	78	77	76	
		C.D. (5%)	2.0	2.0	5.0	2.0	2.0	4.0	3.0	3.0	2.0	4.0	6.0	2.0	
		C.D. (1%)	2.0	3.0	6.0	3.0	3.0	5.0	3.0	4.0	3.0	5.0	8.0	3.0	
		C.V. (%)	1.4	1.7	3.8	1.6	1.8	2.8	2.7	2.2	1.8	2.8	3.6	3.1	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.920	0.000	0.000	0.000	0.241	0.518	

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Table I.164: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 PLANT HEIGHT (cm) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	186	193	193	172	163	191	179	182	169	196	232	214	187	3
2	AHPT 802	MH 2672	177	186	184	175	151	200	170	178	152	185	234	210	181	11
3	AHPT 803	MH 2673	174	193	182	179	156	207	174	181	169	193	242	218	187	4
4	AHPT 804	MH 2675	188	205	175	182	146	188	179	180	164	189	231	210	185	8
5	AHPT 805	AHB 1200 (Check)	197	193	179	185	155	200	163	182	156	190	221	206	184	10
6	AHPT 806	MH 2678	183	197	184	157	151	172	182	175	149	184	233	209	179	13
7	AHPT 807	MH 2743	186	187	195	170	154	193	179	180	151	191	256	224	186	6
8	AHPT 808	MH 2744	197	204	191	175	164	178	170	183	169	194	236	215	188	2
9	AHPT 809	MH 2746	175	172	169	166	155	171	178	169	144	181	219	200	173	15
10	AHPT 810	MH 2747	172	181	174	162	140	176	181	170	123	190	223	207	172	16
11	AHPT 811	RHB 223 (Check)	193	193	177	158	173	170	162	175	156	205	255	230	184	9
12	AHPT 812	MH 2748	158	165	169	148	134	140	175	156	137	185	214	200	163	17
13	AHPT 813	MH 2749	188	194	192	178	156	141	183	176	184	203	233	218	185	7
14	AHPT 814	MH 2754	202	195	199	186	140	146	165	176	164	202	265	233	186	5
15	AHPT 815	HHB 67 Imp. (Check)	193	169	183	170	152	162	198	175	152	193	233	213	181	12
16	AHPT 816	MH 2758	182	188	176	168	152	167	154	170	153	188	236	212	177	14
17	AHPT 817	MPMH 35 (Check)	202	207	194	187	154	175	196	188	161	194	251	222	192	1
		LOC. MEAN	185	189	183	172	153	175	176	176	156	192	236	214	182	
		C.D. (5%)	14.0	17.0	14.0	11.0	16.0	25.0	5.0	12.0	15.0	10.0	27.0	16.0	9.0	
		C.D. (1%)	19.0	23.0	19.0	15.0	22.0	34.0	7.0	16.0	21.0	13.0	36.0	23.0	12.0	
		C.V. (%)	4.7	5.4	4.5	4.0	6.4	8.7	1.7	6.3	5.9	3.0	6.8	3.6	5.9	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.020	0.000	

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Table I.165: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	1.4	2.3	1.5	5.0	1.3	5.3	3.6	2.9	1.9	1.7	4.0	2.9	2.8	14
2	AHPT 802	MH 2672	1.8	2.7	1.5	5.7	1.5	5.7	3.5	3.2	1.7	2.6	3.3	3.0	3.0	9
3	AHPT 803	MH 2673	1.9	3.3	1.5	5.8	1.5	5.7	3.9	3.4	1.9	2.3	3.5	2.9	3.1	2
4	AHPT 804	MH 2675	1.5	2.7	1.4	4.3	1.5	6.3	4.6	3.2	1.9	1.9	3.0	2.5	2.9	10
5	AHPT 805	AHB 1200 (Check)	1.3	3.3	1.4	3.5	1.5	6.3	4.1	3.1	1.7	2.3	3.4	2.9	2.9	13
6	AHPT 806	MH 2678	1.9	3.3	1.5	5.2	1.1	5.7	3.3	3.1	1.5	2.4	4.4	3.4	3.0	5
7	AHPT 807	MH 2743	1.7	3.3	1.5	5.2	1.6	5.8	4.3	3.3	1.4	2.4	2.8	2.6	3.0	8
8	AHPT 808	MH 2744	1.6	3.7	1.4	5.7	1.7	6.0	4.2	3.5	1.9	2.0	4.1	3.1	3.2	1
9	AHPT 809	MH 2746	2.0	2.7	1.5	5.3	1.9	5.7	3.3	3.2	1.4	1.5	3.8	2.7	2.9	12
10	AHPT 810	MH 2747	2.6	2.7	1.4	5.5	1.4	5.7	4.2	3.3	1.4	2.9	3.5	3.2	3.1	3
11	AHPT 811	RHB 223 (Check)	1.5	2.7	1.5	5.5	1.5	5.3	3.4	3.1	1.5	2.5	3.8	3.1	2.9	10
12	AHPT 812	MH 2748	1.7	3.3	1.6	5.5	1.3	5.3	2.4	3.0	1.2	1.3	5.1	3.2	2.9	13
13	AHPT 813	MH 2749	1.7	3.3	1.4	4.6	1.3	5.7	4.3	3.2	1.7	1.8	3.4	2.6	2.9	11
14	AHPT 814	MH 2754	2.1	2.7	1.5	5.7	1.2	5.7	3.6	3.2	1.8	1.9	3.9	2.9	3.0	7
15	AHPT 815	HHB 67 Imp. (Check)	2.3	3.3	1.5	5.5	1.3	5.3	3.4	3.2	1.6	2.3	3.8	3.1	3.0	4
16	AHPT 816	MH 2758	2.1	3.7	1.4	5.2	1.2	5.7	3.4	3.2	1.7	1.7	4.2	3.0	3.0	6
17	AHPT 817	MPMH 35 (Check)	1.9	2.7	1.5	5.0	1.7	5.3	3.0	3.0	1.5	2.2	3.2	2.7	2.8	15
		LOC. MEAN	1.8	3.0	1.5	5.2	1.4	5.7	3.7	3.2	1.6	2.1	3.7	2.9	3.0	
		C.D. (5%)	0.4	1.0	0.1	0.8	0.5	1.0	0.5	0.4	0.3	0.5	1.0	1.3	0.4	
		C.D. (1%)	0.6	1.3	0.2	1.1	0.7	1.4	0.6	0.6	0.3	0.6	1.3	1.8	0.5	
		C.V. (%)	13.9	19.6	4.6	9.7	22.6	11.1	7.5	12.5	9.5	13.7	15.6	20.7	13.7	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.593	0.000	0.000	0.000	0.978	0.695	

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Table I.166: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 PANICLE LENGTH (cm) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	25	25	23	23	25	23	25	24	20	25	26	26	24	3
2	AHPT 802	MH 2672	23	22	23	21	25	21	22	22	21	24	26	25	23	11
3	AHPT 803	MH 2673	24	26	23	23	24	22	26	24	20	24	25	25	24	7
4	AHPT 804	MH 2675	21	22	23	21	21	23	24	22	18	24	23	24	22	15
5	AHPT 805	AHB 1200 (Check)	22	27	24	24	25	23	25	24	24	25	24	25	24	2
6	AHPT 806	MH 2678	23	24	23	22	23	26	22	23	22	24	25	24	23	9
7	AHPT 807	MH 2743	24	24	25	21	23	24	25	24	22	24	26	25	24	6
8	AHPT 808	MH 2744	23	23	24	23	25	23	27	24	19	26	26	26	24	4
9	AHPT 809	MH 2746	21	22	24	21	24	25	20	22	19	24	23	24	22	14
10	AHPT 810	MH 2747	20	21	22	20	21	25	22	22	19	23	24	24	22	16
11	AHPT 811	RHB 223 (Check)	23	26	25	22	25	24	26	24	24	26	26	26	25	1
12	AHPT 812	MH 2748	20	20	24	17	20	24	20	21	17	22	23	22	21	17
13	AHPT 813	MH 2749	23	24	24	22	23	25	21	23	21	25	26	25	23	10
14	AHPT 814	MH 2754	25	25	26	25	23	24	22	24	17	25	25	25	24	8
15	AHPT 815	HHB 67 Imp. (Check)	22	20	23	22	20	27	23	22	19	24	23	24	22	13
16	AHPT 816	MH 2758	21	25	24	23	24	24	25	24	22	25	25	25	24	5
17	AHPT 817	MPMH 35 (Check)	23	23	23	22	21	23	23	23	17	23	25	24	22	12
		LOC. MEAN	22	23	24	22	23	24	23	23	20	24	25	25	23	
		C.D. (5%)	2.0	3.0	2.0	2.0	3.0	3.0	3.0	2.0	2.0	2.0	3.0	2.0	1.0	
		C.D. (1%)	3.0	4.0	2.0	3.0	5.0	5.0	4.0	2.0	2.0	3.0	4.0	2.0	2.0	
		C.V. (%)	6.6	7.1	4.6	6.0	8.8	8.6	7.6	6.3	5.3	4.7	6.7	3.1	6.0	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.000	

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Table I.167: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 PANICLE DIAMETER (cm) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	NGR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	2.7	2.7	2.5	2.7	3.1	3.4	3.0	2.9	2.0	3.3	4.2	3.7	3.0	7
2	AHPT 802	MH 2672	2.7	2.5	2.5	2.3	3.2	3.0	2.2	2.6	2.6	3.3	4.2	3.8	2.8	13
3	AHPT 803	MH 2673	2.8	2.7	2.3	2.4	3.3	3.4	3.5	2.9	2.2	3.3	3.8	3.6	3.0	5
4	AHPT 804	MH 2675	2.7	2.6	2.4	2.8	3.0	3.4	3.4	2.9	2.2	3.3	3.6	3.5	2.9	9
5	AHPT 805	AHB 1200 (Check)	2.9	2.9	2.7	3.3	3.7	3.2	2.1	3.0	2.4	3.8	4.1	4.0	3.1	1
6	AHPT 806	MH 2678	2.8	2.3	2.6	2.5	3.1	2.6	2.4	2.6	2.6	3.2	3.9	3.5	2.8	14
7	AHPT 807	MH 2743	2.9	2.5	2.7	2.5	3.3	2.9	3.0	2.8	2.7	3.2	4.0	3.6	3.0	6
8	AHPT 808	MH 2744	2.9	2.5	2.8	2.8	3.5	3.3	3.1	3.0	2.5	3.6	3.9	3.8	3.1	3
9	AHPT 809	MH 2746	2.6	2.6	2.7	2.9	3.4	2.1	2.5	2.7	2.6	3.3	3.8	3.5	2.9	12
10	AHPT 810	MH 2747	2.6	2.5	2.6	2.5	3.1	3.9	2.9	2.9	2.5	3.1	3.9	3.5	3.0	8
11	AHPT 811	RHB 223 (Check)	2.6	2.6	2.4	2.5	3.5	3.3	2.8	2.8	2.7	3.6	4.1	3.9	3.0	4
12	AHPT 812	MH 2748	2.6	2.4	2.5	2.5	3.0	3.4	3.4	2.8	2.1	3.5	3.7	3.6	2.9	11
13	AHPT 813	MH 2749	2.8	2.7	2.8	3.1	3.4	3.5	2.3	2.9	2.6	3.5	4.2	3.9	3.1	2
14	AHPT 814	MH 2754	2.1	2.4	2.5	2.5	2.8	3.3	1.9	2.5	2.0	2.8	3.9	3.4	2.6	16
15	AHPT 815	HHB 67 Imp. (Check)	2.3	2.2	2.2	2.1	2.6	2.9	2.5	2.4	2.3	2.9	3.7	3.3	2.6	17
16	AHPT 816	MH 2758	2.7	2.4	2.4	2.4	3.4	3.2	2.7	2.7	2.7	3.4	4.0	3.7	2.9	10
17	AHPT 817	MPMH 35 (Check)	2.4	2.4	2.5	2.3	3.0	3.3	2.4	2.6	2.3	3.0	3.7	3.4	2.7	15
		LOC. MEAN	2.6	2.5	2.5	2.6	3.2	3.2	2.7	2.8	2.4	3.3	3.9	3.6	2.9	
		C.D. (5%)	0.3	0.5	0.2	0.3	0.4	0.8	0.4	0.3	0.2	0.3	0.5	0.4	0.2	
		C.D. (1%)	0.3	0.7	0.3	0.5	0.5	1.1	0.5	0.4	0.3	0.4	0.7	0.5	0.3	
		C.V. (%)	5.8	12.9	5.7	7.8	7.0	15.5	8.0	9.9	5.3	4.8	8.2	4.8	8.7	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.069	0.000	

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Table I.168: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 1000-SEED Wt. (g) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	NGR	RAJ MEAN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	9.2	6.2	9.3	8.3	8.4	8.0	5.4	7.8	11.1	11.1	11.1	8.6	11
2	AHPT 802	MH 2672	7.1	7.4	8.6	8.4	6.9	8.0	5.1	7.4	9.8	11.5	10.7	8.1	17
3	AHPT 803	MH 2673	7.7	8.3	8.7	9.6	7.2	8.0	5.0	7.8	10.8	12.3	11.5	8.6	10
4	AHPT 804	MH 2675	7.6	6.1	9.3	10.4	8.4	7.9	7.1	8.1	10.5	12.2	11.3	8.8	2
5	AHPT 805	AHB 1200 (Check)	8.5	5.7	9.3	8.5	6.4	8.1	5.8	7.5	11.3	12.0	11.7	8.4	12
6	AHPT 806	MH 2678	7.9	6.4	10.5	8.9	7.8	8.1	5.3	7.8	9.4	11.3	10.3	8.4	13
7	AHPT 807	MH 2743	8.9	6.2	9.0	10.0	7.8	8.2	5.2	7.9	11.8	12.2	12.0	8.8	3
8	AHPT 808	MH 2744	8.6	8.1	10.1	8.8	8.1	8.0	7.5	8.5	10.3	13.7	12.0	9.3	1
9	AHPT 809	MH 2746	7.9	7.5	10.3	9.2	8.4	8.0	5.3	8.1	9.5	11.9	10.7	8.7	9
10	AHPT 810	MH 2747	7.9	6.0	10.0	9.5	8.3	8.0	7.3	8.2	9.6	11.5	10.6	8.7	8
11	AHPT 811	RHB 223 (Check)	8.8	6.4	8.7	7.7	7.0	8.1	7.4	7.7	11.3	13.4	12.3	8.8	6
12	AHPT 812	MH 2748	7.9	9.3	8.0	9.4	6.8	8.2	6.3	8.0	10.4	12.1	11.2	8.7	7
13	AHPT 813	MH 2749	8.5	6.2	8.4	8.5	8.5	8.2	5.9	7.7	11.9	13.1	12.5	8.8	4
14	AHPT 814	MH 2754	7.9	6.0	9.8	8.9	7.6	8.2	4.9	7.6	8.5	11.5	10.0	8.1	16
15	AHPT 815	HHB 67 Imp. (Check)	8.1	8.1	9.0	9.7	7.0	8.3	5.4	7.9	10.4	13.0	11.7	8.8	5
16	AHPT 816	MH 2758	8.1	6.0	9.3	9.3	6.7	8.1	6.2	7.7	9.3	11.3	10.3	8.3	15
17	AHPT 817	MPMH 35 (Check)	8.0	5.9	9.0	9.7	6.8	8.2	5.7	7.6	11.2	10.8	11.0	8.4	14
		LOC. MEAN	8.2	6.8	9.3	9.1	7.5	8.1	5.9	7.8	10.4	12.1	11.2	8.6	
		C.D. (5%)	1.2	0.4	1.2	0.6	1.0	0.2	0.5	0.8	1.4	1.1	1.4	0.8	
		C.D. (1%)	1.6	0.5	1.7	0.8	1.3	0.3	0.7	1.0	1.9	1.5	1.9	1.0	
		C.V. (%)	8.9	3.4	8.1	3.9	7.6	1.8	5.3	9.4	8.3	5.7	8.3	9.5	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.493	0.000	0.000	0.000	0.569	

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Table I.169: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 POPULATION AT HARVEST (No./plot) ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	SDR	JLR	RAJ MEAN	SKN	BWL	HSR	HAR MEAN	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	131	106	133	151	170	79	128	144	185	97	141	133	13
2	AHPT 802	MH 2672	164	115	129	151	155	78	132	147	165	102	133	134	8
3	AHPT 803	MH 2673	158	119	138	152	164	75	134	142	197	95	146	138	3
4	AHPT 804	MH 2675	144	114	126	151	154	82	128	141	182	95	139	132	14
5	AHPT 805	AHB 1200 (Check)	122	99	135	151	159	83	125	140	176	99	138	129	16
6	AHPT 806	MH 2678	163	112	131	152	174	86	136	145	191	97	144	139	1
7	AHPT 807	MH 2743	166	111	134	151	170	75	135	149	185	94	139	137	4
8	AHPT 808	MH 2744	163	105	130	151	175	85	135	145	182	95	138	137	5
9	AHPT 809	MH 2746	166	99	134	151	156	77	131	139	193	92	143	134	7
10	AHPT 810	MH 2747	165	105	125	152	166	70	131	128	195	95	145	134	10
11	AHPT 811	RHB 223 (Check)	108	54	121	151	158	72	111	131	179	94	137	119	17
12	AHPT 812	MH 2748	166	107	130	151	156	88	133	137	207	104	156	138	2
13	AHPT 813	MH 2749	160	102	125	152	167	70	129	148	180	92	136	133	12
14	AHPT 814	MH 2754	162	112	130	152	169	76	134	150	169	94	131	135	6
15	AHPT 815	HHB 67 Imp. (Check)	159	69	127	151	154	73	122	150	191	96	144	130	15
16	AHPT 816	MH 2758	168	106	133	151	143	70	128	136	196	94	145	133	11
17	AHPT 817	MPMH 35 (Check)	172	119	129	152	172	68	135	140	165	89	127	134	9
		LOC. MEAN	155	103	130	151	162	77	130	142	185	95	140	133	
		C.D. (5%)	18.0	15.0	19.0	1.0	18.0	19.0	12.0	14.0	14.0	11.0	23.0	10.0	
		C.D. (1%)	24.0	20.0	25.0	2.0	24.0	25.0	15.0	19.0	19.0	14.0	31.0	13.0	
		C.V. (%)	6.8	8.8	8.7	0.5	6.6	14.8	7.8	6.1	4.6	6.8	6.6	7.3	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.865	0.010	

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Table I.170: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024
SEED SET (%) UNDER BAG ZONE A₁

S.No.	TEST CODE	ENTRY	MDR	JDR	BKR	FTR	RAJ MEAN	HSR	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	83	77	43	81	71	87	74	4
2	AHPT 802	MH 2672	78	80	53	85	74	80	75	2
3	AHPT 803	MH 2673	65	82	48	83	70	62	68	12
4	AHPT 804	MH 2675	64	75	60	80	70	85	73	6
5	AHPT 805	AHB 1200 (Check)	77	73	45	85	70	83	73	5
6	AHPT 806	MH 2678	75	77	40	82	68	60	67	13
7	AHPT 807	MH 2743	78	82	45	81	71	85	74	3
8	AHPT 808	MH 2744	75	75	40	85	69	82	71	7
9	AHPT 809	MH 2746	78	73	43	83	69	33	62	15
10	AHPT 810	MH 2747	76	68	43	80	67	73	68	11
11	AHPT 811	RHB 223 (Check)	72	72	47	85	69	78	71	9
12	AHPT 812	MH 2748	44	77	48	82	63	47	59	17
13	AHPT 813	MH 2749	80	80	45	77	71	73	71	8
14	AHPT 814	MH 2754	82	78	48	83	73	90	76	1
15	AHPT 815	HHB 67 Imp. (Check)	70	78	43	83	69	35	62	16
16	AHPT 816	MH 2758	67	77	43	80	67	87	71	10
17	AHPT 817	MPMH 35 (Check)	48	82	52	85	67	62	66	14
		LOC. MEAN	71	77	46	82	69	71	69	
		C.D. (5%)	8.0	8.0	10.0	4.0	10.0	18.0	10.0	
		C.D. (1%)	11.0	10.0	14.0	6.0	13.0	24.0	13.0	
		C.V. (%)	7.0	6.0	13.3	3.1	9.9	15.1	9.9	
		F (Prob)	0.000	0.000	0.000	0.000	0.874	0.000	0.874	

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Table I.171: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 ZONE A₁
GRAIN QUALITY: IRON CONTENT (ppm)

S.No.	TEST CODE	ENTRY	JDR	BKR	NGR	FTR	SKN	BWL	HSR	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	30	48	43	40	48	38	64	45	8
2	AHPT 802	MH 2672	31	46	36	44	44	36	69	44	9
3	AHPT 803	MH 2673	39	43	37	42	45	40	69	45	8
4	AHPT 804	MH 2675	31	50	39	43	58	50	60	47	6
5	AHPT 805	AHB 1200 (Check)	35	70	58	44	67	77	74	61	1
6	AHPT 806	MH 2678	29	42	40	40	37	51	66	44	9
7	AHPT 807	MH 2743	34	44	49	46	40	51	42	44	9
8	AHPT 808	MH 2744	46	37	43	45	44	37	47	43	10
9	AHPT 809	MH 2746	33	49	61	45	65	53	68	53	3
10	AHPT 810	MH 2747	32	36	50	42	44	47	50	43	10
11	AHPT 811	RHB 223 (Check)	34	46	44	42	46	48	63	46	7
12	AHPT 812	MH 2748	39	61	49	44	81	62	61	57	2
13	AHPT 813	MH 2749	34	46	35	43	58	45	74	48	5
14	AHPT 814	MH 2754	36	47	45	43	57	60	61	50	4
15	AHPT 815	HHB 67 Imp. (Check)	30	44	41	45	56	45	68	47	6
16	AHPT 816	MH 2758	48	42	42	44	48	36	53	45	8
17	AHPT 817	MPMH 35 (Check)	40	45	43	40	52	42	47	44	9

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Table I.172: ADVANCE HYBRID & POPULATION TRIAL (Early) KHARIF - 2024 ZONE A₁
GRAIN QUALITY: ZINC CONTENT (ppm)

S.No.	TEST CODE	ENTRY	JDR	BKR	NGR	FTR	SKN	BWL	HSR	ZONE MEAN	RANK
1	AHPT 801	PB 1756 (Check)	42	35	33	32	47	36	42	38	5
2	AHPT 802	MH 2672	41	34	31	32	44	36	45	38	5
3	AHPT 803	MH 2673	40	33	32	34	41	40	48	38	5
4	AHPT 804	MH 2675	36	38	32	34	37	50	41	38	5
5	AHPT 805	AHB 1200 (Check)	36	45	35	24	47	52	41	40	3
6	AHPT 806	MH 2678	38	34	38	35	43	43	40	39	4
7	AHPT 807	MH 2743	37	32	36	38	35	36	36	36	7
8	AHPT 808	MH 2744	43	33	36	29	44	40	43	38	5
9	AHPT 809	MH 2746	32	33	36	28	51	42	44	38	5
10	AHPT 810	MH 2747	36	32	44	33	40	32	41	37	6
11	AHPT 811	RHB 223 (Check)	43	32	43	20	43	35	41	37	6
12	AHPT 812	MH 2748	35	39	38	29	51	44	42	40	3
13	AHPT 813	MH 2749	37	39	37	32	47	41	48	40	3
14	AHPT 814	MH 2754	42	35	49	32	51	47	45	43	1
15	AHPT 815	HHB 67 Imp. (Check)	38	36	47	31	51	43	42	41	2
16	AHPT 816	MH 2758	41	32	32	28	45	38	40	37	6
17	AHPT 817	MPMH 35 (Check)	38	33	33	29	48	40	41	37	6

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Table I.173: ADVANCE HYB. & POP. TRIAL (Early) KHARIF - 2024 ZONE A₁
GRAIN QUALITY (Protein and Fat)

S.No.	TEST CODE	ENTRY	Protein (%)			Fat (%)		
			HSR	BWL	MEAN	HSR	BWL	MEAN
1	AHPT 801	PB 1756 (Check)	10.7	9.5	10.1	5.3	5.7	5.5
2	AHPT 802	MH 2672	11.1	10.1	10.6	5.2	5.9	5.6
3	AHPT 803	MH 2673	10.6	9.9	10.3	5.7	5.7	5.7
4	AHPT 804	MH 2675	12.1	9.7	10.9	6.0	6.1	6.1
5	AHPT 805	AHB 1200 (Check)	10.6	9.9	10.3	5.6	5.6	5.6
6	AHPT 806	MH 2678	10.8	9.1	10.0	6.0	5.9	6.0
7	AHPT 807	MH 2743	9.8	9.9	9.9	5.6	5.2	5.4
8	AHPT 808	MH 2744	10.8	9.0	9.9	5.7	5.8	5.8
9	AHPT 809	MH 2746	11.5	9.6	10.6	5.8	6.3	6.1
10	AHPT 810	MH 2747	10.9	9.1	10.0	5.6	5.5	5.6
11	AHPT 811	RHB 223 (Check)	11.3	9.4	10.4	5.6	5.9	5.8
12	AHPT 812	MH 2748	10.9	9.2	10.1	5.6	6.0	5.8
13	AHPT 813	MH 2749	10.2	8.6	9.4	5.6	6.0	5.8
14	AHPT 814	MH 2754	11.0	10.0	10.5	6.0	6.7	6.4
15	AHPT 815	HHB 67 Imp. (Check)	11.2	11.1	11.2	5.6	5.4	5.5
16	AHPT 816	MH 2758	10.8	9.6	10.2	5.8	5.2	5.5
17	AHPT 817	MPMH 35 (Check)	10.8	9.4	10.1	5.7	6.0	5.9

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Table I.174: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF 2024 EXPERIMENTAL DETAILS ZONE A

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizer			Insecticide
							N	P	K	
RAJASTHAN										
Mandor (ARS,AU Jodhpur)	SL	8.1	10.7.24	As Per Maturity	12.8.24	Nil	40	20	0	Nil
Bikaner (SKRAU)	S	8.0	9.7.24	25.10.24	10.8.24	25.9.24	40	20	0	Nil
Jobner (SKNAU)	-	-	12.7.24	As Per Maturity	-	Nil	-	-	-	Nil
Jaipur (SKNAU)	SL	-	8.7.24	9.10.24	24.7.24	Nil	40	30	0	Nil
GUJARAT										
Jamnagar (JAU)	MB	7.6	18.7.24	16.10.24	28.7, 3.8, 9.8, 17.8.24	Nil	80	40	0	Nil
UTTAR PRADESH										
Jhansi (RLBCAU)	B	8.0	4.7.24	26.10.24	15.8.24	25.8.24	80	40	40	Nil
HARYANA										
Hisar (CCSHAU)	SL	-	11.7.24	25.10.24	-	28.8.24	100	40	0	Nil
MADHYA PRADESH										
Gwalior (RVSKVV)	SL	7.1	18.7.24	17.10.24	12.8.24	26.7.24	60	40	20	Nil
Morena (RVSKVV)	SL	7.8	24.7.24	5.11.24	-	Nil	100	50	20	Nil
JHARKHAND										
Ranchi (BAU)	SRL	5.6	1.7.24	As Per Maturity	25.7, 28.7.24	Nil	60	40	40	Nil

SL = Sandy Loam, MB = Medium Black, S = Sandy, SRL= Sandy Red Lateritic, B = Black.

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Table I.175: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE A1 & A

S.No.	ENTRY	MDR	BKR	JBR***	JPR	RAJ MEAN	JMR	JNS***	HSR	GLR***	MRN***	RNC	ZONE MEAN	RANK
1	MPMH 42	1935	2037	1199	2372	2115	2065	358	2686	1817	2036	3207	2384	12
2	MPMH 35	1983	2014	890	1506	1834	2093	153	3385	1230	2139	3604	2431	9
3	RHB 223	1546	1470	1063	2119	1712	2019	144	1711	1159	1631	2396	1877	25
4	PB 1756	1785	1690	853	1956	1810	1815	175	2188	1782	2072	3874	2218	16
5	HHB 272	1413	1840	767	1267	1507	1856	211	3068	1408	2069	3505	2158	19
6	GHB 719	2409	1551	791	1706	1889	1935	192	3449	941	2036	3532	2430	10
7	GHB 538	1152	1019	915	1525	1232	1694	175	898	944	1369	4072	1727	28
8	HHB 67 Improved	1162	1389	804	1678	1410	1630	142	2559	1452	1722	2667	1847	27
9	86M94	2275	1539	995	2708	2174	2764	281	2553	1228	1103	5910	2958	2
10	DHBH 1397	2192	1458	940	2622	2091	2588	67	3354	2837	1836	5748	2994	1
11	PB 1852	1825	1725	705	2133	1894	2852	111	2874	1833	1081	5838	2874	4
12	86M01	1251	1447	958	1778	1492	2519	122	3898	1766	1725	5748	2773	5
13	GHB 905	1575	1748	649	1875	1732	2009	85	3750	1818	2006	2919	2313	13
14	RHB 173	-	729	-	-	729	-	92	-	-	-	-	729	33
15	GHB 732	1432	1400	711	1794	1542	3019	129	2546	2354	2467	5243	2573	7
16	GHB 744	1331	1377	693	2075	1594	1870	103	1976	1038	1611	4955	2264	15
17	86M80	1265	671	853	2731	1555	2602	72	2752	1850	1117	3676	2283	14
18	MP 7878	1667	2465	921	2503	2212	3532	97	2208	1139	822	3459	2639	6
19	86M84	1569	1343	822	2653	1855	2773	68	3391	1233	1028	2739	2411	11
20	KBH 108	1045	1644	699	1522	1403	2653	67	3403	995	906	2414	2113	20
21	Kaveri Super Boss	1496	2153	1044	2078	1909	2884	67	3678	1255	1425	4973	2877	3
22	86M86	1489	1373	748	2211	1691	2435	97	2885	912	972	1910	2051	23
23	RHB 233	1178	1204	754	2503	1628	2083	244	2124	964	2125	1207	1716	29
24	RHB 234	1097	787	700	2697	1527	1491	133	2228	981	936	2919	1870	26
25	AHB 1269	1423	1238	717	2392	1684	2083	100	2805	1051	1028	4649	2432	8
26	AHB 1200	1621	1179	816	2014	1605	2046	67	2536	921	964	3694	2182	17
27	HHB 299	1371	984	859	1892	1416	1736	67	1825	1305	1103	4000	1968	24
28	Dhanshakti	1026	984	700	2383	1464	907	69	2036	933	947	1423	1460	31
29	ICMV 221	1090	1042	705	1522	1218	1222	64	1357	1006	1028	1730	1327	32
30	Pusa Composite 701	1649	1215	822	1736	1533	2060	111	2860	1035	1325	2829	2058	22
31	Pusa Composite 383	1459	1539	767	1767	1588	1963	89	2423	957	975	3261	2069	21
32	JBV 2	1785	1139	1149	2147	1690	2204	58	2964	1167	1450	2775	2169	18
33	Raj 171	1053	1528	927	2522	1701	1866	208	1594	989	1117	1288	1642	30
	LOC. MEAN	1517	1422	842	2075	1671	2165	128	2624	1322	1443	3505	2218	
	C.D. (5%)	158	200	78	618	604	513	30	663	195	275	410	727	
	C.D. (1%)	210	266	104	821	804	682	40	881	259	365	545	960	
	C.V. (%)	6.4	8.6	5.7	18.2	22.1	14.5	14.4	15.5	9.0	11.7	7.2	28.7	
	F (Prob)	0.000	0.000	0.000	0.000	0.141	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	PLOT SIZE (m ²)	14.40	14.40	10.80	12.00	-	14.40	12.00	12.00	12.00	12.00	9.25	-	

***TEST LOCATION REJECTED DUE TO LOW AVERAGE YIELD (842, 128, 1322 & 1443 kg/ha), THAN THE STATE AVERAGE YIELD (970, 2008 & 2166 kg/ha) TAKEN OVER 10 YEARS

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Table I.176: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE A1 & A

S.No. ENTRY	MDR	BKR	JBR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	RNC	ZONE RANK MEAN
1 MPMH 42	3377	5255	6586	5028	5062	5185	1028	7778	6111	7394	6753	10631	5837 21
2 MPMH 35	3345	5833	7210	4250	5160	5111	1736	11111	7222	8383	7803	11243	6545 13
3 RHB 223	2532	4653	3778	3778	3685	3977	1056	7500	5972	7594	6783	9441	5028 30
4 PB 1756	3211	4213	3023	3167	3403	4648	1147	9167	9583	7286	8435	10901	5635 24
5 HHB 272	3773	4745	4222	2167	3727	4181	1097	10833	5972	8261	7117	13658	5891 20
6 GHB 719	3146	4444	5759	4750	4525	4134	1058	10278	3889	7764	5826	14414	5964 19
7 GHB 538	2632	3843	2920	4250	3411	4231	1117	4333	4167	7192	5679	14883	4957 31
8 HHB 67 Improved	2220	4907	3531	3944	3651	3657	658	7778	6111	5814	5963	15964	5459 25
9 86M94	4808	4583	4235	6000	4906	5181	1694	8056	8472	7658	8065	16793	6748 10
10 DHBH 1397	3438	4074	5352	4917	4445	4389	1228	11111	10139	8156	9147	19369	7217 7
11 PB 1852	4014	4329	8858	5111	5578	6954	1606	8889	10833	7358	9096	20649	7860 2
12 86M01	4685	5231	11506	4111	6383	5083	1900	12778	7778	8125	7951	14252	7545 4
13 GHB 905	3653	3958	4006	4000	3904	3917	1408	12944	9306	6692	7999	19387	6927 9
14 RHB 173	-	3889	-	-	3889	-	1358	-	-	-	-	-	2624 33
15 GHB 732	2326	4537	4290	2889	3511	5384	1122	10833	9583	7069	8326	18919	6695 12
16 GHB 744	2616	4398	4926	3889	3957	4653	1206	10833	5278	6767	6022	18090	6265 18
17 86M80	4051	5648	7783	6722	6051	7028	1456	10278	14167	7353	10760	19982	8447 1
18 MP 7878	3884	5671	4710	5972	5059	7495	1589	7278	9444	7294	8369	11568	6491 14
19 86M84	5410	4097	7222	6889	5905	6602	1300	9833	8472	8544	8508	19495	7787 3
20 KBH 108	4324	5231	3762	5167	4621	5676	1936	11000	5833	8142	6988	18613	6968 8
21 Kaveri Super Boss	5417	4282	6037	4611	5087	6106	2039	12500	5278	8564	6921	19477	7431 5
22 86M86	4421	4676	3278	5250	4406	5745	1750	9722	5972	7406	6689	16288	6451 15
23 RHB 233	2440	4144	4173	5167	3981	3991	1433	9722	3611	6803	5207	11802	5328 26
24 RHB 234	1528	3681	1488	5306	3000	2995	625	9444	2778	7017	4897	10009	4487 32
25 AHB 1269	4259	4514	5093	5806	4918	5806	1833	8889	5972	6700	6336	18541	6741 11
26 AHB 1200	4537	5000	4537	5222	4824	4991	931	8611	5278	6794	6036	11532	5743 23
27 HHB 299	4961	5093	4481	3667	4550	4648	792	8889	4722	6214	5468	14710	5818 22
28 Dhanshakti	2546	4745	3086	5639	4004	3366	792	7500	3333	6850	5092	13532	5139 29
29 ICMV 221	2894	5347	4710	4806	4439	3810	1431	4722	3056	7733	5394	13279	5179 28
30 Pusa Composite 701	2894	4815	6401	5139	4812	5824	1953	10556	8611	8981	8796	17207	7238 6
31 Pusa Composite 383	3634	4468	5068	5639	4702	5097	528	10278	5694	7578	6636	14721	6270 17
32 JBV 2	2315	4213	5636	5222	4346	5162	1611	8889	5833	7369	6601	16577	6283 16
33 Raj 171	2398	4977	4562	6667	4651	5384	744	5361	3611	7022	5317	11459	5219 27
LOC. MEAN	3490	4651	5070	4848	4515	5013	1308	9303	6628	7434	7031	15231	6298
C.D. (5%)	380	702	1368	881	1569	951	317	2434	407	743	3719	1615	1368
C.D. (1%)	505	933	1819	1172	2077	1265	421	3236	542	988	5004	2147	1802
C.V. (%)	6.7	9.3	16.5	11.1	24.7	11.6	14.9	16.0	3.8	6.1	25.9	6.5	24.7
F (Prob)	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	0.000	0.274	0.000	0.000
PLOT SIZE (m ²)	14.40	14.40	10.80	12.00	-	14.40	12.00	12.00	12.00	12.00	-	9.25	-

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Table I.177: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 DAYS TO 50% FLOWERING ZONE A1 & A

S.No.	ENTRY	MDR	BKR	JBR	JPR	RAJ	JMR	JNS	HSR	GLR	MRN	MP	RNC	ZONE RANK
						MEAN						MEAN		MEAN
1	MPMH 42	45	47	53	43	47	44	47	42	41	42	42	42	29
2	MPMH 35	44	47	50	43	46	43	45	44	40	40	40	43	32
3	RHB 223	48	51	52	45	49	46	44	47	44	47	45	45	24
4	PB 1756	46	48	53	47	49	46	43	43	44	43	44	41	27
5	HHB 272	48	49	52	48	49	43	40	40	39	39	39	49	31
6	GHB 719	44	51	55	49	50	46	44	45	49	42	46	51	20
7	GHB 538	49	52	54	46	50	42	45	47	44	42	43	46	25
8	HHB 67 Improved	43	47	50	42	46	42	42	39	39	41	40	47	33
9	86M94	51	59	64	51	56	50	52	49	49	48	48	48	8
10	DHBH 1397	53	56	60	47	54	48	48	49	45	46	45	47	13
11	PB 1852	54	62	65	55	59	54	55	50	52	50	51	53	4
12	86M01	51	58	62	51	55	50	52	48	47	50	49	49	9
13	GHB 905	46	51	60	48	51	48	44	46	40	41	41	48	23
14	RHB 173	-	50	-	-	50	-	51	-	48	-	48	-	14
15	GHB 732	53	55	61	47	54	48	48	51	43	47	45	50	10
16	GHB 744	51	56	61	49	54	48	47	51	48	44	46	49	11
17	86M80	55	61	67	54	59	54	53	53	56	49	53	54	1
18	MP 7878	54	60	65	55	59	54	53	52	51	52	51	52	5
19	86M84	55	61	67	54	59	54	54	54	51	50	51	51	3
20	KBH 108	54	51	74	55	59	54	44	56	53	50	52	52	6
21	Kaveri Super Boss	53	60	66	54	58	53	55	55	51	51	51	53	2
22	86M86	55	54	65	51	56	51	52	54	48	49	49	51	7
23	RHB 233	50	54	57	46	52	48	44	48	44	45	44	41	21
24	RHB 234	48	57	60	48	53	48	45	47	46	47	46	45	16
25	AHB 1269	48	55	60	50	53	47	45	45	44	44	44	43	19
26	AHB 1200	50	51	58	50	52	48	46	45	42	45	44	40	22
27	HHB 299	49	56	61	51	54	47	45	49	42	42	42	44	18
28	Dhanshakti	44	49	54	45	48	42	37	44	40	44	42	48	30
29	ICMV 221	48	48	52	45	48	43	40	42	38	46	42	49	28
30	Pusa Composite 701	51	53	60	46	52	48	46	48	46	46	46	47	17
31	Pusa Composite 383	49	55	61	50	54	49	49	44	44	51	48	44	15
32	JBV 2	50	56	60	50	54	49	50	47	47	46	46	44	12
33	Raj 171	44	50	56	45	49	47	44	46	45	47	46	42	26
	LOC. MEAN	49	54	59	49	53	48	47	47	45	46	46	47	49
	C.D. (5%)	2.0	3.0	5.0	1.0	3.0	1.0	5.0	2.0	1.0	3.0	4.0	2.0	2.0
	C.D. (1%)	3.0	4.0	7.0	2.0	4.0	2.0	7.0	3.0	1.0	4.0	6.0	2.0	3.0
	C.V. (%)	2.5	3.1	5.4	1.6	4.1	1.5	7.0	2.6	1.5	3.7	4.8	2.0	4.6
	F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Table I.178: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 DAYS TO MATURITY ZONE A1 & A

S.No.	ENTRY	MDR	BKR	JBR	JPR	RAJ	JMR	JNS	HSR	GLR	MRN	MP	RNC	ZONE RANK
						MEAN						MEAN		MEAN
1	MPMH 42	75	78	80	75	77	74	84	73	73	88	81	67	77 29
2	MPMH 35	74	77	79	74	76	72	84	75	68	90	79	68	76 31
3	RHB 223	75	81	80	75	78	76	84	77	69	91	80	66	77 28
4	PB 1756	78	78	82	76	79	75	83	73	77	95	86	67	78 25
5	HHB 272	73	79	80	78	78	72	84	71	73	89	81	61	76 31
6	GHB 719	81	80	84	80	81	76	84	76	77	88	83	72	80 18
7	GHB 538	80	82	84	78	81	72	86	78	73	90	81	66	79 23
8	HHB 67 Improved	74	77	81	74	76	70	83	70	72	89	81	58	75 32
9	86M94	80	88	89	82	85	78	82	80	78	94	86	69	82 11
10	DHBH 1397	81	86	84	82	83	78	84	80	80	88	84	68	81 14
11	PB 1852	85	90	89	82	87	83	82	81	81	92	87	74	84 5
12	86M01	83	88	86	85	86	79	84	78	70	93	82	70	82 12
13	GHB 905	85	81	82	78	82	77	87	77	70	86	78	72	79 22
14	RHB 173	-	80	-	-	80	-	83	-	72	-	72	-	79 24
15	GHB 732	89	85	87	75	84	77	84	82	78	92	85	73	82 10
16	GHB 744	92	86	85	78	85	77	86	81	79	90	85	72	83 8
17	86M80	86	91	91	86	88	83	85	85	80	94	87	77	86 1
18	MP 7878	85	90	88	86	88	83	83	82	80	96	88	76	85 2
19	86M84	88	91	90	84	88	83	79	84	70	88	79	71	83 7
20	KBH 108	93	81	92	85	88	83	82	87	69	94	82	73	84 4
21	Kaveri Super Boss	85	90	90	83	87	82	84	86	78	94	86	76	85 3
22	86M86	85	84	91	82	85	80	81	84	79	94	87	73	83 6
23	RHB 233	83	85	85	77	82	78	85	79	80	93	87	69	81 13
24	RHB 234	84	87	88	77	84	78	84	79	80	91	86	78	83 9
25	AHB 1269	84	85	86	80	84	76	86	75	68	92	80	64	80 19
26	AHB 1200	85	81	86	80	83	77	86	76	68	95	81	63	80 20
27	HHB 299	85	86	85	81	84	76	85	81	72	90	81	65	81 17
28	Dhanshakti	85	79	82	77	81	71	86	75	73	88	80	59	78 27
29	ICMV 221	81	78	82	75	79	72	86	74	70	88	79	60	77 30
30	Pusa Composite 701	82	83	87	75	82	78	83	78	75	96	86	70	81 16
31	Pusa Composite 383	84	85	88	78	84	78	86	75	80	90	85	65	81 15
32	JBV 2	80	86	86	76	82	78	85	78	71	90	81	64	79 21
33	Raj 171	74	80	84	75	78	76	82	76	81	92	86	58	78 26
	LOC. MEAN	82	84	85	79	83	77	84	78	75	91	83	68	80
	C.D. (5%)	4.0	3.0	4.0	1.0	4.0	1.0	4.0	3.0	2.0	3.0	7.0	4.0	3.0
	C.D. (1%)	5.0	4.0	6.0	1.0	5.0	1.0	5.0	3.0	3.0	4.0	9.0	5.0	4.0
	C.V. (%)	2.8	2.1	3.1	0.8	3.1	0.8	3.0	2.0	1.9	1.9	3.9	3.4	3.8
	F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.066	0.000	0.000

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Table I.179: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 PLANT HEIGHT (cm.) ZONE A1 & A

S.No. ENTRY		MDR	BKR	JBR	JPR	RAJ MEAN	JMR	JNS	HSR	GLR	MRN	MP MEAN	RNC	ZONE RANK MEAN
1	MPMH 42	167	212	145	191	179	147	175	227	213	151	182	141	177 27
2	MPMH 35	184	206	142	205	184	153	179	247	220	148	184	157	184 20
3	RHB 223	197	205	135	191	182	157	188	244	219	155	187	155	185 19
4	PB 1756	186	191	143	182	175	157	175	219	220	169	195	144	179 25
5	HHB 272	183	159	130	175	162	138	168	204	179	137	158	149	162 33
6	GHB 719	177	167	138	206	172	148	167	245	208	143	176	147	175 29
7	GHB 538	181	177	140	194	173	144	177	223	223	155	189	159	177 26
8	HHB 67 Improved	150	177	129	183	160	127	173	199	223	130	177	140	163 32
9	86M94	217	208	162	216	201	184	204	245	237	168	203	174	202 10
10	DHBH 1397	198	195	135	216	186	158	171	210	238	142	190	172	183 22
11	PB 1852	225	212	147	218	201	191	178	247	241	185	213	180	202 9
12	86M01	204	207	167	198	194	183	176	232	239	156	198	196	196 15
13	GHB 905	193	181	113	191	170	149	167	222	205	131	168	181	173 30
14	RHB 173	-	195	-	-	195	-	154	-	213	-	213	-	187 18
15	GHB 732	187	197	134	223	185	181	203	250	219	179	199	215	199 14
16	GHB 744	185	198	137	223	186	175	232	247	245	148	197	199	199 12
17	86M80	223	188	141	207	190	200	178	255	243	175	209	196	201 11
18	MP 7878	214	215	183	229	210	208	161	258	239	183	211	196	209 6
19	86M84	224	206	189	235	214	199	182	253	266	182	224	210	215 1
20	KBH 108	222	179	188	214	201	213	209	266	227	207	217	209	213 2
21	Kaveri Super Boss	253	196	185	206	210	203	174	271	255	162	208	214	212 3
22	86M86	220	197	184	191	198	188	186	240	243	142	192	199	199 13
23	RHB 233	221	194	147	189	188	166	210	209	221	147	184	185	189 17
24	RHB 234	181	180	161	220	186	153	186	219	233	156	195	124	181 23
25	AHB 1269	220	203	130	179	183	183	197	258	215	149	182	210	194 16
26	AHB 1200	193	170	113	168	161	157	194	236	202	130	166	181	175 28
27	HHB 299	188	163	132	197	170	150	196	195	201	131	166	155	171 31
28	Dhanshakti	174	178	116	188	164	165	197	235	223	137	180	180	179 24
29	ICMV 221	190	177	118	262	187	163	198	202	217	150	184	159	184 21
30	Pusa Composite 701	240	225	162	196	206	197	210	274	225	168	197	217	211 5
31	Pusa Composite 383	240	212	150	239	210	188	173	244	274	173	223	193	209 7
32	JBV 2	249	204	149	254	214	206	179	270	227	186	206	192	212 4
33	Raj 171	222	206	158	201	197	193	193	251	240	176	208	207	205 8
LOC. MEAN		203	193	147	206	187	173	185	237	227	158	192	179	191
C.D. (5%)		13.0	6.0	28.0	8.0	23.0	14.0	29.0	31.0	8.0	18.0	27.0	17.0	14.0
C.D. (1%)		17.0	7.0	38.0	11.0	31.0	19.0	39.0	41.0	11.0	24.0	37.0	23.0	18.0
C.V. (%)		4.0	1.8	11.8	2.5	8.9	5.0	9.8	8.0	2.3	7.1	7.0	5.9	8.1
F (Prob)		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000

CHAPTER I: BREEDING

Table I.180: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE A1 & A

S.No.	ENTRY	MDR	BKR	JBR	JPR	RAJ	JMR	JNS	HSR	GLR	MRN	MP	RNC	ZONE	RANK
						MEAN						MEAN		MEAN	
1	MPMH 42	3.5	1.7	1.4	3.3	2.5	2.8	1.5	4.0	2.4	3.0	2.7	2.2	2.6	6
2	MPMH 35	3.1	1.3	1.5	3.7	2.4	2.6	1.3	3.3	1.9	3.0	2.5	2.3	2.4	11
3	RHB 223	2.8	1.7	1.2	3.5	2.3	2.4	1.3	5.8	1.7	3.0	2.4	2.3	2.6	5
4	PB 1756	2.1	1.3	1.4	2.2	1.7	2.2	1.5	4.0	1.6	3.0	2.3	2.3	2.2	18
5	HHB 272	3.1	2.3	1.4	3.1	2.5	2.5	1.5	3.3	3.1	3.0	3.1	2.1	2.5	7
6	GHB 719	2.3	2.3	1.4	3.7	2.4	2.5	1.3	4.9	2.3	3.0	2.6	2.2	2.6	4
7	GHB 538	2.4	2.0	1.1	4.3	2.5	2.5	1.3	6.2	2.1	3.0	2.5	2.3	2.7	2
8	HHB 67 Improved	2.3	2.2	1.3	4.5	2.6	3.1	1.3	4.5	1.7	3.1	2.4	2.9	2.7	3
9	86M94	1.7	1.0	1.3	3.7	1.9	1.6	1.3	3.7	2.2	3.0	2.6	2.2	2.2	17
10	DHBH 1397	2.2	1.3	1.3	2.4	1.8	1.6	1.4	3.9	1.8	3.0	2.4	1.3	2.0	25
11	PB 1852	2.5	1.3	1.5	1.5	1.7	1.9	1.7	3.2	2.4	3.0	2.7	1.7	2.1	22
12	86M01	3.1	1.7	1.2	3.2	2.3	1.7	1.3	2.8	1.7	3.0	2.3	1.3	2.1	21
13	GHB 905	2.5	2.3	1.5	4.2	2.6	2.9	1.2	3.7	1.7	3.0	2.4	2.0	2.5	8
14	RHB 173	-	1.9	-	-	1.9	-	1.4	-	5.0	-	5.0	-	2.8	1
15	GHB 732	2.2	2.5	1.1	4.4	2.6	2.7	1.3	3.3	2.3	3.0	2.6	2.0	2.5	9
16	GHB 744	2.9	2.7	1.3	3.9	2.7	2.3	1.6	3.0	2.0	3.0	2.5	1.1	2.4	12
17	86M80	2.5	1.2	1.4	2.1	1.8	1.8	1.3	1.7	1.5	3.0	2.2	1.1	1.8	32
18	MP 7878	1.9	1.0	1.6	3.0	1.9	1.6	1.3	3.2	1.9	3.0	2.5	1.7	2.0	26
19	86M84	2.9	1.3	1.5	2.2	2.0	1.7	1.5	3.2	1.7	3.0	2.4	1.3	2.0	24
20	KBH 108	2.5	1.1	1.3	2.0	1.7	1.5	1.2	2.6	1.7	3.0	2.4	1.7	1.8	31
21	Kaveri Super Boss	2.8	1.0	1.3	2.1	1.8	1.5	1.3	3.0	1.7	3.0	2.4	1.3	1.9	30
22	86M86	2.2	1.2	1.2	1.3	1.5	1.7	1.6	4.0	1.9	3.0	2.4	1.6	2.0	27
23	RHB 233	2.3	2.6	1.3	3.0	2.3	1.8	1.2	3.9	1.9	3.0	2.4	1.5	2.2	15
24	RHB 234	2.3	1.5	1.2	3.2	2.1	1.8	1.4	4.2	1.9	3.0	2.5	1.1	2.2	16
25	AHB 1269	1.7	1.3	1.2	2.3	1.6	2.1	1.3	3.1	1.9	3.0	2.4	1.5	1.9	28
26	AHB 1200	2.0	1.3	1.3	3.6	2.1	1.9	1.3	2.3	2.2	3.0	2.6	1.6	2.1	23
27	HHB 299	2.3	1.3	1.3	3.3	2.1	1.7	1.3	3.0	2.2	3.0	2.6	1.3	2.1	20
28	Dhanshakti	2.3	1.3	1.1	3.7	2.1	2.2	1.3	3.0	2.3	3.0	2.6	1.5	2.2	17
29	ICMV 221	1.5	1.3	1.3	2.5	1.7	2.0	1.4	2.7	2.1	3.0	2.5	1.3	1.9	29
30	Pusa Composite 701	1.9	1.5	1.4	4.6	2.3	2.2	1.2	3.1	2.3	3.0	2.6	1.6	2.3	14
31	Pusa Composite 383	2.5	1.9	1.3	3.3	2.2	2.2	1.4	3.8	2.3	3.0	2.7	1.3	2.3	13
32	JBV 2	1.9	2.2	1.4	3.7	2.3	2.0	1.3	2.7	1.8	3.0	2.4	1.2	2.1	19
33	Raj 171	2.3	2.3	1.4	3.7	2.4	2.7	1.3	3.9	1.9	3.0	2.5	1.7	2.4	10
	LOC. MEAN	2.4	1.7	1.3	3.2	2.1	2.1	1.4	3.5	2.1	3.0	2.5	1.7	2.2	
	C.D. (5%)	0.2	0.3	0.3	0.7	0.7	0.5	0.3	1.0	0.5	0.3	0.5	0.5	0.4	
	C.D. (1%)	0.3	0.4	0.4	0.9	1.0	0.7	0.4	1.3	0.7	0.4	0.6	0.6	0.5	
	C.V. (%)	6.0	12.3	12.8	13.5	24.6	15.8	15.0	16.5	15.3	5.9	9.4	17.4	21.1	
	F (Prob)	0.000	0.000	0.000	0.000	0.029	0.000	0.000	0.000	0.000	0.000	0.557	0.000	0.000	

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Table I.181: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 PANICLE LENGTH (cm) ZONE A1 & A

S.No.	ENTRY	MDR	BKR	JBR	JPR	RAJ	JMR	JNS	HSR	GLR	MRN	MP	RNC	ZONE RANK
						MEAN						MEAN		MEAN
1	MPMH 42	22	21	21	21	21	20	22	28	22	20	21	20	22
2	MPMH 35	21	23	16	21	20	19	22	30	23	19	21	21	22
3	RHB 223	24	24	20	24	23	19	21	30	23	21	22	21	23
4	PB 1756	27	25	17	22	23	22	21	30	23	20	22	20	23
5	HHB 272	22	21	15	20	19	18	22	30	15	15	15	19	20
6	GHB 719	21	22	16	22	20	18	18	29	20	19	20	19	21
7	GHB 538	22	24	19	23	22	20	25	30	26	23	25	23	24
8	HHB 67 Improved	21	23	15	19	19	18	18	27	24	17	20	20	20
9	86M94	25	24	23	24	24	25	24	31	23	24	24	21	24
10	DHBH 1397	26	22	19	23	23	22	23	29	24	21	23	21	23
11	PB 1852	24	23	15	22	21	23	17	29	22	21	22	23	22
12	86M01	23	27	16	25	23	24	24	29	29	24	27	25	25
13	GHB 905	25	26	19	22	23	22	21	28	23	21	22	25	23
14	RHB 173	-	25	-	-	25	-	25	-	22	-	22	-	24
15	GHB 732	21	25	20	25	23	27	26	30	20	25	22	24	24
16	GHB 744	23	28	17	22	23	24	24	30	24	23	24	20	24
17	86M80	27	27	20	26	25	30	24	32	26	27	27	27	27
18	MP 7878	28	25	27	25	27	25	25	29	27	24	25	24	26
19	86M84	28	27	21	21	24	27	25	32	27	27	27	27	26
20	KBH 108	25	24	23	26	24	24	25	31	23	22	23	24	25
21	Kaveri Super Boss	25	26	23	22	24	27	24	27	26	24	25	26	25
22	86M86	26	28	24	24	25	24	20	30	24	24	24	25	25
23	RHB 233	23	27	17	24	23	22	22	28	21	23	22	23	23
24	RHB 234	23	26	17	22	22	21	21	30	20	21	21	21	22
25	AHB 1269	23	25	17	20	21	20	21	29	22	20	21	21	22
26	AHB 1200	24	25	17	20	21	22	24	28	25	24	24	26	23
27	HHB 299	27	25	16	22	23	20	22	28	22	20	21	21	22
28	Dhanshakti	22	23	15	21	20	21	24	29	23	18	21	21	22
29	ICMV 221	20	21	13	27	20	18	24	28	19	20	19	21	21
30	Pusa Composite 701	25	26	21	27	25	29	23	28	27	23	25	27	26
31	Pusa Composite 383	30	28	18	23	25	23	25	31	25	23	24	26	25
32	JBV 2	22	26	17	24	22	29	24	31	26	23	25	26	25
33	Raj 171	22	26	17	25	22	25	23	30	25	25	25	24	24
	LOC. MEAN	24	25	18	23	23	23	23	29	23	22	23	23	23
	C.D. (5%)	2.0	2.0	3.0	2.0	3.0	3.0	5.0	3.0	1.0	2.0	3.0	2.0	2.0
	C.D. (1%)	3.0	3.0	4.0	2.0	4.0	3.0	6.0	3.0	2.0	2.0	5.0	3.0	2.0
	C.V. (%)	6.0	5.2	8.8	4.9	8.9	7.0	12.3	5.4	3.8	4.3	7.5	6.3	8.2
	F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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Table I.182: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 PANICLE DIAMETER (cm) ZONE A1 & A

S.No.	ENTRY	MDR	BKR	JPR	RAJ	JMR	JNS	HSR	GLR	MRN	MP	RNC	ZONE	RANK
					MEAN						MEAN		MEAN	
1	MPMH 42	2.3	2.7	2.6	2.5	2.4	2.1	1.3	2.5	2.9	2.7	2.5	2.4	22
2	MPMH 35	2.2	2.4	2.4	2.4	2.0	2.2	1.2	2.2	2.6	2.4	2.3	2.2	28
3	RHB 223	2.5	3.1	3.2	2.9	2.4	2.2	1.3	2.3	2.9	2.6	2.6	2.5	18
4	PB 1756	2.4	2.8	2.6	2.6	2.5	1.6	1.3	2.2	2.7	2.5	2.5	2.3	24
5	HHB 272	2.0	2.6	2.5	2.4	2.3	1.5	1.2	2.2	2.6	2.4	2.5	2.2	29
6	GHB 719	2.2	2.2	2.3	2.2	2.6	1.8	1.2	1.9	2.6	2.2	2.2	2.1	31
7	GHB 538	2.2	2.2	2.4	2.3	2.2	2.6	1.3	2.4	2.6	2.5	2.3	2.2	26
8	HHB 67 Improved	1.9	2.2	2.2	2.1	2.1	2.5	1.2	2.3	2.4	2.4	2.4	2.1	30
9	86M94	2.5	3.3	3.2	3.0	3.1	2.2	1.4	3.0	3.2	3.1	3.0	2.8	6
10	DHBH 1397	2.5	3.2	3.4	3.0	3.1	2.1	1.4	3.4	3.0	3.2	3.1	2.8	4
11	PB 1852	2.7	3.2	3.3	3.1	3.0	2.2	1.3	3.2	3.1	3.1	3.1	2.8	3
12	86M01	2.6	3.1	2.8	2.9	2.9	2.0	1.3	3.0	3.1	3.1	3.2	2.7	12
13	GHB 905	2.6	2.4	2.3	2.4	2.2	2.3	1.2	1.7	2.6	2.1	2.6	2.2	27
14	RHB 173	-	3.0	-	3.0	-	2.7	-	2.3	-	2.3	-	2.7	13
15	GHB 732	2.5	3.1	2.7	2.8	2.1	2.9	1.3	1.9	2.5	2.2	3.1	2.4	19
16	GHB 744	2.3	3.0	2.7	2.7	2.5	2.4	1.3	2.3	2.8	2.6	1.9	2.4	23
17	86M80	2.9	3.0	3.4	3.1	3.0	2.4	1.4	2.6	3.0	2.8	3.1	2.8	7
18	MP 7878	2.9	3.2	3.3	3.1	3.2	2.4	1.4	2.3	3.4	2.9	2.6	2.7	10
19	86M84	2.8	3.0	3.2	3.0	3.3	2.4	1.4	2.5	3.2	2.8	3.1	2.8	5
20	KBH 108	2.7	3.3	3.1	3.0	3.4	2.2	1.4	2.6	3.2	2.9	2.9	2.8	8
21	Kaveri Super Boss	2.9	2.9	3.3	3.0	3.0	2.5	1.2	2.2	2.7	2.5	3.3	2.7	14
22	86M86	2.6	3.3	2.8	2.9	3.1	2.2	1.3	2.5	3.1	2.8	3.2	2.7	11
23	RHB 233	2.9	2.9	2.8	2.9	2.6	2.2	1.3	2.5	2.9	2.7	3.1	2.6	17
24	RHB 234	3.0	3.1	2.9	3.0	2.9	2.2	1.2	3.2	3.2	3.2	3.4	2.8	2
25	AHB 1269	2.6	3.0	3.2	3.0	2.6	2.4	1.3	2.0	3.0	2.5	3.2	2.6	16
26	AHB 1200	2.1	3.3	2.6	2.7	3.2	2.1	1.4	2.6	3.2	2.9	3.4	2.7	15
27	HHB 299	2.7	3.3	3.3	3.1	3.0	2.2	1.4	3.0	3.3	3.1	3.5	2.9	1
28	Dhanshakti	2.0	3.0	3.2	2.7	2.6	2.1	1.3	2.2	2.7	2.4	2.8	2.4	20
29	ICMV 221	2.2	2.9	2.3	2.5	2.8	2.2	1.3	2.5	2.8	2.7	2.5	2.4	21
30	Pusa Composite 701	3.0	2.7	3.1	2.9	1.8	2.5	1.2	2.1	2.6	2.3	2.3	2.4	22
31	Pusa Composite 383	2.8	3.8	3.0	3.2	2.8	1.8	1.3	3.2	2.8	3.0	3.2	2.7	9
32	JBV 2	2.7	2.7	2.2	2.5	2.8	2.3	1.2	2.3	2.3	2.3	3.0	2.4	21
33	Raj 171	3.0	2.7	3.0	2.9	2.0	2.4	1.2	1.8	2.3	2.1	2.1	2.3	25
	LOC. MEAN	2.5	2.9	2.9	2.8	2.7	2.2	1.3	2.4	2.9	2.6	2.8	2.5	
	C.D. (5%)	0.2	0.2	0.2	0.6	0.3	0.5	0.1	0.2	0.2	0.6	0.3	0.3	
	C.D. (1%)	0.3	0.2	0.3	0.8	0.4	0.6	0.1	0.3	0.3	0.8	0.4	0.4	
	C.V. (%)	5.6	3.9	5.0	10.1	6.7	13.4	5.3	5.5	4.4	15.5	5.7	11.2	
	F (Prob)	0.000	0.000	0.000	0.018	0.000	0.000	0.000	0.000	0.000	0.214	0.000	0.000	

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Table I.183: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 1000- SEED Wt.(g) ZONE A1 & A

S.No.	ENTRY	MDR	BKR	JBR	JPR	RAJ	JMR	HSR	GLR	MRN	MP	RNC	ZONE	RANK
						MEAN					MEAN		MEAN	
1	MPMH 42	7.7	8.6	6.9	7.7	7.7	8.7	8.1	10.4	7.9	9.1	7.7	8.2	31
2	MPMH 35	7.6	8.9	6.0	7.2	7.4	9.1	8.2	11.3	8.4	9.8	7.2	8.2	30
3	RHB 223	8.5	9.3	7.0	12.1	9.2	9.6	10.6	11.2	8.1	9.7	7.9	9.4	20
4	PB 1756	10.4	11.9	7.3	9.1	9.7	11.7	12.6	11.9	9.8	10.9	7.5	10.2	4
5	HHB 272	9.2	8.6	6.2	8.3	8.1	8.9	9.9	11.0	7.2	9.1	8.4	8.6	29
6	GHB 719	10.4	9.2	6.6	9.3	8.9	8.0	9.8	11.4	8.8	10.1	9.9	9.3	22
7	GHB 538	10.3	9.7	6.7	8.1	8.7	8.9	9.3	11.3	7.8	9.6	9.1	9.0	25
8	HHB 67 Improved	8.2	9.0	6.2	9.0	8.1	8.3	10.1	10.5	8.3	9.4	8.5	8.7	28
9	86M94	9.8	9.7	6.7	9.0	8.8	10.6	10.6	11.7	8.5	10.1	8.0	9.4	17
10	DHBH 1397	7.5	10.0	7.0	9.5	8.5	10.4	11.2	11.9	9.6	10.7	10.4	9.7	11
11	PB 1852	10.8	8.9	6.5	9.1	8.8	11.5	10.3	10.9	9.3	10.1	10.0	9.7	12
12	86M01	8.3	10.2	6.6	7.7	8.2	11.6	10.7	10.6	10.1	10.3	11.0	9.6	13
13	GHB 905	8.2	9.0	6.5	7.0	7.7	7.6	9.6	10.7	7.3	9.0	7.4	8.2	32
14	RHB 173	-	8.7	-	-	8.7	-	-	11.3	-	11.3	-	10.0	7
15	GHB 732	10.2	8.6	6.0	9.3	8.5	10.0	10.0	11.1	7.9	9.5	10.0	9.2	23
16	GHB 744	11.1	8.9	6.4	8.4	8.7	9.4	9.9	11.6	8.6	10.1	7.1	9.0	24
17	86M80	8.3	8.9	6.8	8.5	8.1	10.6	10.1	11.6	8.6	10.1	10.5	9.3	21
18	MP 7878	12.7	8.9	6.6	9.1	9.3	11.9	12.1	11.7	9.7	10.7	9.4	10.2	3
19	86M84	9.1	9.2	6.8	9.5	8.7	11.3	9.4	11.6	9.8	10.7	13.6	10.1	5
20	KBH 108	11.3	9.5	6.1	7.8	8.7	10.5	11.1	11.5	10.0	10.7	12.7	10.0	6
21	Kaveri Super Boss	10.7	9.8	6.9	8.0	8.9	10.6	11.3	11.3	8.5	9.9	9.5	9.6	14
22	86M86	10.7	10.1	6.5	8.2	8.9	10.7	10.4	10.7	9.5	10.1	11.3	9.8	8
23	RHB 233	11.3	9.4	7.3	9.3	9.4	10.2	11.6	11.2	8.3	9.8	9.0	9.8	9
24	RHB 234	10.6	8.8	6.5	10.4	9.1	8.5	9.6	11.3	8.2	9.7	6.2	8.9	27
25	AHB 1269	11.7	9.8	6.7	9.3	9.4	9.6	9.8	12.1	9.0	10.5	8.6	9.6	15
26	AHB 1200	11.6	9.4	6.2	8.5	8.9	11.3	10.5	11.8	8.8	10.3	9.4	9.7	10
27	HHB 299	11.6	8.8	6.6	10.5	9.4	10.1	10.5	11.1	8.2	9.7	9.8	9.7	12
28	Dhanshakti	11.2	10.5	7.3	11.2	10.1	10.6	11.3	10.9	10.6	10.8	10.8	10.5	1
29	ICMV 221	11.5	10.2	6.4	11.0	9.8	10.5	11.7	10.7	10.1	10.4	10.2	10.3	2
30	Pusa Composite 701	10.4	8.2	6.0	11.4	9.0	8.4	9.4	11.3	7.4	9.3	7.7	8.9	26
31	Pusa Composite 383	10.7	9.7	6.4	12.0	9.7	9.7	10.9	10.7	7.0	8.9	7.9	9.4	16
32	JBV 2	10.8	8.4	6.5	10.9	9.2	8.8	9.4	11.5	8.8	10.1	9.5	9.4	18
33	Raj 171	10.5	9.1	6.1	11.7	9.4	8.8	10.1	11.6	7.9	9.8	8.7	9.4	19
	LOC. MEAN	10.1	9.3	6.6	9.3	8.8	9.9	10.3	11.2	8.7	10.0	9.2	9.4	
	C.D. (5%)	0.3	1.2	0.1	0.6	1.4	0.9	2.0	0.8	0.9	1.5	0.3	0.9	
	C.D. (1%)	0.4	1.6	0.1	0.8	1.9	1.2	2.7	1.1	1.2	2.0	0.3	1.1	
	C.V. (%)	2.0	7.9	1.0	4.1	11.4	5.4	11.9	4.4	6.2	6.6	1.7	9.3	
	F (Prob)	0.000	0.000	0.000	0.000	0.049	0.000	0.000	0.000	0.000	0.226	0.000	0.000	

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Table I.184: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 POPULATION AT HARVEST (No./plot) ZONE A1 & A

S.No.	ENTRY	MDR	BKR	JBR	JPR	RAJ	JMR	JNS	HSR	GLR	MRN	MP	RNC	ZONE RANK
						MEAN						MEAN		MEAN
1	MPMH 42	92	136	153	172	138	213	110	75	103	102	103	145	130 11
2	MPMH 35	97	139	152	110	125	193	116	82	118	124	121	155	129 14
3	RHB 223	43	126	154	133	114	167	102	75	103	105	104	150	116 28
4	PB 1756	104	123	155	104	122	185	117	82	134	130	132	161	130 12
5	HHB 272	119	142	151	121	133	195	107	81	136	191	163	146	139 2
6	GHB 719	107	147	146	103	126	190	96	75	17	133	75	154	117 26
7	GHB 538	36	134	153	77	100	168	78	64	31	87	59	154	98 32
8	HHB 67 Improved	119	146	154	113	133	202	73	83	137	114	125	154	129 13
9	86M94	106	134	152	148	135	201	123	78	165	104	135	160	137 3
10	DHBH 1397	94	129	152	134	127	201	85	81	144	140	142	156	132 9
11	PB 1852	125	138	152	164	145	167	127	79	118	129	124	156	136 4
12	86M01	113	126	153	134	132	183	107	74	169	131	150	153	135 5
13	GHB 905	113	135	153	148	137	194	100	75	165	116	141	144	134 6
14	RHB 173	-	131	-	-	131	-	66	-	3	-	3	-	67 33
15	GHB 732	110	134	152	136	133	167	95	80	103	109	106	149	124 21
16	GHB 744	125	134	154	120	133	170	106	79	97	82	90	147	121 23
17	86M80	103	128	152	169	138	175	126	86	144	103	124	143	133 7
18	MP 7878	94	125	155	131	126	189	125	83	122	144	133	157	133 8
19	86M84	66	138	155	169	132	167	123	77	119	117	118	143	127 16
20	KBH 108	76	130	151	122	120	184	130	67	161	120	141	140	128 15
21	Kaveri Super Boss	115	126	154	110	126	165	132	80	126	110	118	142	126 19
22	86M86	105	125	146	128	126	166	132	88	119	104	112	154	127 18
23	RHB 233	44	140	153	146	121	172	123	76	120	84	102	142	120 25
24	RHB 234	35	127	154	109	106	160	100	82	92	52	72	152	106 31
25	AHB 1269	147	137	154	133	143	205	137	76	136	138	137	157	142 1
26	AHB 1200	139	139	154	84	129	171	118	82	106	96	101	136	123 22
27	HHB 299	72	137	149	91	112	175	102	73	103	103	103	154	116 27
28	Dhanshakti	115	130	152	90	122	178	114	85	93	133	113	157	125 20
29	ICMV 221	90	127	155	113	121	198	93	54	60	118	89	147	115 30
30	Pusa Composite 701	136	133	152	83	126	215	131	74	83	120	102	143	127 17
31	Pusa Composite 383	107	130	154	105	124	178	83	76	94	128	111	151	121 24
32	JBV 2	140	131	153	113	135	186	132	74	117	110	114	147	130 10
33	Raj 171	83	132	152	78	111	189	134	80	68	87	78	151	115 29
	LOC. MEAN	99	133	153	122	127	183	110	77	109	115	112	150	125
	C.D. (5%)	5.0	16.0	4.0	36.0	28.0	36.0	27.0	11.0	27.0	31.0	54.0	6.0	17.0
	C.D. (1%)	6.0	21.0	5.0	48.0	37.0	48.0	35.0	15.0	36.0	41.0	72.0	8.0	22.0
	C.V. (%)	2.8	7.2	1.5	18.4	15.9	12.0	14.7	9.1	15.3	16.7	23.2	2.4	15.1
	F (Prob)	0.000	0.000	0.000	0.000	0.442	0.000	0.000	0.000	0.000	0.000	0.085	0.000	0.000

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Table I.185: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 SEED SET (%) UNDER BAG ZONE A1 & A

S.No.	ENTRY	JBR	JPR	RAJ	JNS	HSR	GLR	ZONE MEAN	RANK
				MEAN					
1	MPMH 42	75	98	87	100	88	100	92	9
2	MPMH 35	64	95	79	100	68	100	85	27
3	RHB 223	67	100	84	100	91	100	92	11
4	PB 1756	61	98	80	100	92	83	87	26
5	HHB 272	63	62	62	100	63	100	78	31
6	GHB 719	63	65	64	93	91	100	83	29
7	GHB 538	65	82	74	100	91	57	79	30
8	HHB 67 Improved	62	95	79	100	96	100	91	19
9	86M94	72	93	83	100	92	100	91	13
10	DHBH 1397	70	95	83	100	92	100	91	14
11	PB 1852	65	100	83	100	94	100	92	10
12	86M01	67	92	79	100	93	100	90	21
13	GHB 905	62	97	79	100	97	100	91	17
14	RHB 173	-	-	-	100	-	67	83	28
15	GHB 732	65	97	81	100	91	100	91	20
16	GHB 744	66	97	81	100	95	100	91	12
17	86M80	73	98	86	100	95	100	93	2
18	MP 7878	75	98	87	100	91	100	93	4
19	86M84	72	97	84	100	88	100	91	14
20	KBH 108	72	97	84	100	95	100	93	6
21	Kaveri Super Boss	71	100	86	100	96	100	93	1
22	86M86	74	100	87	100	89	100	93	7
23	RHB 233	65	100	83	87	91	100	89	23
24	RHB 234	72	100	86	100	92	100	93	5
25	AHB 1269	64	100	82	100	92	100	91	16
26	AHB 1200	65	98	82	100	96	100	92	10
27	HHB 299	61	97	79	100	93	100	90	22
28	Dhanshakti	64	97	80	100	96	100	91	15
29	ICMV 221	64	100	82	100	90	88	88	24
30	Pusa Composite 701	73	97	85	100	93	100	93	8
31	Pusa Composite 383	72	98	85	100	95	100	93	3
32	JBV 2	63	98	81	100	92	100	91	18
33	Raj 171	64	100	82	100	90	82	87	25
	LOC. MEAN	67	95	81	99	91	96	90	
	C.D. (5%)	3.0	6.0	-	5.0	9.0	5.0	13.0	
	C.D. (1%)	4.0	7.0	-	6.0	12.0	6.0	17.0	
	C.V. (%)	2.8	3.6	3.0	3.0	5.9	3.0	7.9	
	F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.128	

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**Table I.186: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 ZONE A1 & A
GRAIN QUALITY (Protein and Fat)**

S.No.	TEST CODE	Protein (%)	Fat (%)
		HSR	HSR
1	MPMH 42	11.3	5.6
2	MPMH 35	12.0	6.1
3	RHB 223	12.0	5.7
4	PB 1756	12.6	5.8
5	HHB 272	11.7	6.1
6	GHB 719	11.3	6.2
7	GHB 538	11.6	5.8
8	HHB 67 Improved	12.0	6.0
9	86M94	11.6	5.3
10	DHBH 1397	11.6	6.4
11	PB 1852	11.3	5.8
12	86M01	11.1	5.3
13	GHB 905	11.2	5.7
14	RHB 173	11.3	6.0
15	GHB 732	11.5	5.8
16	GHB 744	11.0	5.4
17	86M80	11.0	5.9
18	MP 7878	11.7	5.2
19	86M84	10.7	5.3
20	KBH 108	10.7	5.2
21	Kaveri Super Boss	11.5	5.2
22	86M86	11.4	4.7
23	RHB 233	11.5	5.2
24	RHB 234	12.5	5.0
25	AHB 1269	11.5	5.0
26	AHB 1200	11.4	5.7
27	HHB 299	11.8	6.1
28	Dhanshakti	11.3	5.6
29	ICMV 221	11.5	5.4
30	Pusa Composite 701	10.8	5.7
31	Pusa Composite 383	11.8	6.5
32	JBV 2	12.0	5.7
33	Raj 171	11.2	6.1

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Table I.187: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF 2024 EXPERIMENTAL DETAILS ZONE B

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	Irrigation date	Fertilizer			Insecticide
							N	P	K	
MAHARASHTRA										
Aurangabad (NARP)	MB	7.5	24.7.24	19.11.24	-	Nil	60	30	30	Nil
Dhule (MPKV)	MB	8.6	4.7.24	15.10.24	26.7.24	Nil	60	30	0	Nil
KARNATAKA										
Vijayapur (UAS, Dharwad)	SB	8.7	6.7.24	26.10.24	17.8.24	Nil	50	25	0	Nil
Malnoor (UAS, Raichur)	MB	7.5	12.7.24	27.11.24	31.7.24	Nil	50	50	0	Emamectin Benzoate
ANDHRA PRADESH										
Ananthapuram (ANGRAU)	RSL	7.7	12.8.24	As Per Maturity	5.9.24	As Per Required	60	30	20	Nil
Vizianagaram (ANGRAU)	RSL	6.7	2.7.24	7.10.24	22.7.24	Nil	60	40	30	Nil
TELANGANA										
Palem (PJ TSAU)	RSL	7.0	9.7.24	24.10.24	24.7,12.8.24	Nil	60	40	40	Nil
TAMIL NADU										
Coimbatore (TNAU)	CL	7.8	29.6.24	6.10.24	-	29.6, 17.7, 12.8, 3.9, 18.9, 01.10.24	80	40	40	Nil
ODISHA										
Semiliguda (OUAT)	SL	-	3.7.24	As Per Maturity	-	Nil	60	30	30	Nil

MB = Medium Black, CL = Clay Loam, SB = Shallow Black, RSL = Red Sandy Loam, SL = Sandy Loam.

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Table I.188: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 GRAIN YIELD (kg/ha) ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR***	VZN	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	RHB 233	3464	1730	2597	2083	1863	1973	1391	2483	2483	2986	3198	2383	2524	9
2	RHB 234	3497	1198	2347	1928	1974	1951	1401	1928	1928	3267	3527	956	2284	11
3	AHB 1269	2991	1251	2121	2176	2372	2274	1229	2934	2934	3101	3232	2089	2518	10
4	AHB 1200	3401	1248	2325	1947	2389	2168	1594	2805	2805	2633	3975	2633	2629	7
5	HHB 299	3616	2360	2988	2408	2723	2566	1412	2312	2312	3050	3112	3628	2901	5
6	Mahabeej 1005	3266	2109	2688	2700	2282	2491	954	2823	2823	2908	3328	2761	2772	6
7	86M01	3429	2589	3009	2954	2571	2763	1718	3105	3105	3039	3637	3244	3071	3
8	Pratap (MH 1642)	3555	1125	2340	2818	2396	2607	1449	3456	3456	2726	3347	1456	2610	8
9	NBH 4903	3944	2874	3409	3704	3049	3376	1611	2703	2703	3638	4710	5544	3771	1
10	86M86	3507	1824	2665	2388	2496	2442	1164	2483	2483	3088	4306	3156	2906	4
11	Kaveri Super Boss	3874	3094	3484	3089	2661	2875	1305	3132	3132	3407	3962	4289	3439	2
12	Dhanshakti	2853	1203	2028	1537	1333	1435	823	1796	1796	2182	2238	1483	1828	15
13	ICMV 221	2924	765	1844	1775	1325	1550	774	2934	2934	2049	1761	2333	1983	13
14	Pusa Comp. 612	3056	1869	2462	1919	1631	1775	1176	2459	2459	1897	2024	2689	2193	12
15	Raj 171	3335	1348	2342	1818	1592	1705	1152	1862	1862	2183	1476	2122	1967	14
	LOC. MEAN	3381	1773	2577	2350	2177	2263	1277	2614	2614	2810	3189	2718	2626	
	C.D. (5%)	465	268	811	276	476	486	178	642	642	621	511	784	476	
	C.D. (1%)	628	361	1126	372	642	675	240	865	865	838	690	1058	630	
	C.V. (%)	8.2	9.0	14.7	7.0	13.1	10.0	8.4	14.7	14.7	13.2	9.6	17.3	18.3	
	F (Prob)	0.000	0.000	0.019	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
	PLOT SIZE (m ²)	12.00	11.10	-	12.00	12.00	-	12.00	11.10	-	12.00	12.00	12.00	-	

***TEST LOCATION REJECTED DUE TO LOW AVERAGE YIELD (1277 kg/ha), THAN THE STATE AVERAGE YIELD (1772 kg/ha) TAKEN OVER 10 YEARS

Table I.189: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 DRY FODDER YIELD (kg/ha) ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	RHB 233	7556	2943	5249	5361	3833	4597	2422	4514	3468	6674	5401	4838	9
2	RHB 234	6917	2553	4735	4861	2500	3681	2563	3526	3044	7262	4537	4340	13
3	AHB 1269	7056	4414	5735	4917	4000	4458	3388	4883	4135	7465	5469	5199	5
4	AHB 1200	7222	4685	5953	5472	4167	4819	2748	4177	3462	5857	4334	4833	10
5	HHB 299	7333	6066	6700	5083	4611	4847	3354	3559	3456	6851	4213	5134	6
6	Mahabeej 1005	7222	4925	6074	5111	4111	4611	4109	3183	3646	6502	4699	4983	7
7	86M01	6722	5796	6259	5278	6222	5750	3611	3856	3733	6814	7670	5746	3
8	Pratap (MH 1642)	7028	2973	5000	4944	4500	4722	2890	4715	3802	6017	5185	4782	11
9	NBH 4903	6889	8198	7544	5278	7056	6167	2615	4601	3608	8116	5793	6068	2
10	86M86	6778	3754	5266	4889	4667	4778	3531	4808	4169	6894	7994	5414	4
11	Kaveri Super Boss	6583	8198	7391	5222	7722	6472	2973	5105	4039	7593	6009	6176	1
12	Dhanshakti	6806	3183	4994	4778	3167	3972	3080	2814	2947	4851	3983	4083	15
13	ICMV 221	6750	3574	5162	4972	3000	3986	3101	3147	3124	4611	4213	4171	14
14	Pusa Comp. 612	6556	7718	7137	5250	3889	4569	2531	3670	3100	4233	5226	4884	8
15	Raj 171	7250	4535	5892	4833	2778	3806	1861	4619	3240	4891	4402	4396	12
	LOC. MEAN	6978	4901	5939	5083	4415	4749	2985	4078	3532	6309	5275	5003	
	C.D. (5%)	1296	941	3103	360	983	2148	515	849	1572	1365	945	959	
	C.D. (1%)	1748	1269	4307	486	1326	2981	694	1145	2181	1842	1275	1269	
	C.V. (%)	11.1	11.5	24.4	4.2	13.3	21.1	10.3	12.4	20.8	12.9	10.7	19.3	
	F (Prob)	0.000	0.000	0.665	0.000	0.000	0.298	0.000	0.000	0.838	0.000	0.000	0.000	
	PLOT SIZE (m ²)	12.00	11.10	-	12.00	12.00	-	12.00	11.10	-	12.00	12.00	-	

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Table I.190: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 DAYS TO 50% FLOWERING ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	RHB 233	54	51	52	45	47	46	45	45	45	41	45	48	47	9
2	RHB 234	54	56	55	50	51	51	49	46	48	42	47	51	49	4
3	AHB 1269	52	53	53	48	48	48	44	45	44	40	45	45	47	8
4	AHB 1200	49	51	50	45	49	47	46	45	46	39	45	43	46	13
5	HHB 299	49	53	51	48	50	49	44	46	45	40	44	48	47	7
6	Mahabeej 1005	51	56	54	47	49	48	45	46	46	42	45	47	48	6
7	86M01	53	53	53	50	52	51	46	48	47	43	47	50	49	5
8	Pratap (MH 1642)	45	51	48	48	49	49	42	44	43	42	45	46	46	12
9	NBH 4903	56	55	55	51	49	50	43	48	46	47	52	53	50	2
10	86M86	60	52	56	50	51	50	44	47	46	44	50	53	50	3
11	Kaveri Super Boss	59	55	57	51	56	54	46	50	48	48	50	54	52	1
12	Dhanshakti	45	49	47	45	49	47	45	36	41	42	42	42	44	15
13	ICMV 221	46	48	47	45	46	46	44	45	45	43	39	38	44	14
14	Pusa Comp. 612	55	52	53	48	48	48	43	40	42	43	46	44	47	10
15	Raj 171	51	48	49	46	48	47	45	40	42	47	44	48	46	11
	LOC. MEAN	52	52	52	48	49	49	45	45	45	43	46	47	47	
	C.D. (5%)	1.0	6.0	6.0	1.0	2.0	3.0	2.0	2.0	6.0	3.0	1.0	4.0	2.0	
	C.D. (1%)	1.0	8.0	8.0	2.0	2.0	4.0	3.0	2.0	8.0	4.0	2.0	6.0	3.0	
	C.V. (%)	1.3	6.4	5.1	1.6	2.0	2.8	2.5	2.0	6.0	4.5	1.6	5.6	4.8	
	F (Prob)	0.000	0.000	0.026	0.000	0.000	0.002	0.000	0.000	0.332	0.000	0.000	0.000	0.000	

Table I.191: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 DAYS TO MATURITY ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	RHB 233	93	87	90	86	82	84	81	76	78	72	83	83	8
2	RHB 234	93	92	93	90	83	87	84	77	81	72	85	85	5
3	AHB 1269	91	89	90	89	82	85	80	75	77	69	83	82	9
4	AHB 1200	89	88	88	86	83	85	81	76	79	68	83	82	11
5	HHB 299	91	90	90	89	84	87	79	77	78	71	82	83	7
6	Mahabeej 1005	93	93	93	87	82	85	82	78	80	74	83	84	6
7	86M01	94	90	92	90	85	88	81	80	80	71	85	85	4
8	Pratap (MH 1642)	88	87	88	88	82	85	76	74	75	73	83	82	12
9	NBH 4903	96	91	94	92	84	88	79	80	80	75	90	86	2
10	86M86	100	89	95	90	83	87	78	79	79	78	88	86	3
11	Kaveri Super Boss	96	92	94	92	87	90	81	81	81	75	88	87	1
12	Dhanshakti	89	85	87	86	81	84	80	65	72	71	80	80	15
13	ICMV 221	91	85	88	87	82	84	79	75	77	72	77	81	13
14	Pusa Comp. 612	92	89	91	89	82	85	78	69	74	71	84	82	10
15	Raj 171	89	84	87	87	81	84	80	69	75	75	82	81	14
	LOC. MEAN	92	89	91	88	83	86	80	75	78	73	84	83	
	C.D. (5%)	1.0	6.0	4.0	1.0	2.0	2.0	2.0	2.0	7.0	5.0	1.0	2.0	
	C.D. (1%)	2.0	8.0	6.0	2.0	3.0	3.0	2.0	3.0	9.0	7.0	2.0	3.0	
	C.V. (%)	0.7	3.8	2.3	0.9	1.4	1.3	1.3	1.7	4.1	4.1	0.9	2.6	
	F (Prob)	0.000	0.000	0.020	0.000	0.000	0.002	0.000	0.000	0.260	0.000	0.000	0.000	

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Table I.192: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 PLANT HEIGHT (cm.) ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	RHB 233	178	193	186	160	171	166	128	139	134	179	163	189	167	12
2	RHB 234	147	165	156	165	169	167	136	166	151	166	174	150	160	15
3	AHB 1269	168	197	183	165	182	173	137	166	152	147	183	211	173	10
4	AHB 1200	190	184	187	173	171	172	125	172	148	140	174	184	168	11
5	HHB 299	170	175	173	154	157	156	129	162	146	146	164	188	161	14
6	Mahabeej 1005	172	219	196	163	174	169	122	203	163	200	169	224	183	6
7	86M01	173	206	190	162	176	169	124	204	164	180	180	204	179	7
8	Pratap (MH 1642)	160	165	162	154	162	158	117	191	154	166	172	177	163	13
9	NBH 4903	185	226	206	188	192	190	148	220	184	192	204	237	199	2
10	86M86	160	207	184	187	177	182	126	217	172	195	223	204	188	5
11	Kaveri Super Boss	202	236	219	197	199	198	133	238	185	198	223	254	209	1
12	Dhanshakti	190	187	189	153	177	165	122	228	175	172	171	195	177	9
13	ICMV 221	178	214	196	167	172	170	130	195	163	166	192	195	179	8
14	Pusa Comp. 612	172	235	203	194	192	193	125	243	184	194	196	236	199	3
15	Raj 171	185	219	202	183	188	185	134	199	167	194	204	219	192	4
	LOC. MEAN	175	202	189	171	177	174	129	196	163	176	186	205	180	
	C.D. (5%)	8.0	15.0	31.0	10.0	16.0	13.0	12.0	19.0	48.0	15.0	20.0	23.0	13.0	
	C.D. (1%)	10.0	20.0	43.0	14.0	22.0	18.0	16.0	26.0	66.0	21.0	27.0	30.0	17.0	
	C.V. (%)	2.6	4.3	7.6	3.7	5.5	3.5	5.5	5.8	13.7	5.3	6.4	6.6	7.7	
	F (Prob)	0.000	0.000	0.040	0.000	0.000	0.000	0.000	0.000	0.522	0.000	0.000	0.000	0.000	

Table I.193: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 PRODUCTIVE TILLERS (No./Plant) ZONE B

S.No.	ENTRY	ABD1**	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	RHB 233	2.3	2.3	2.3	3.2	3.6	3.4	1.5	1.6	1.5	2.3	4.4	2.5	2.7	6
2	RHB 234	1.7	2.2	2.2	3.3	4.0	3.6	1.6	1.9	1.8	3.3	4.0	2.3	2.8	1
3	AHB 1269	3.0	2.4	2.4	3.3	3.5	3.4	1.7	1.7	1.7	2.5	2.2	2.7	2.5	12
4	AHB 1200	2.7	1.6	1.6	3.0	3.4	3.2	1.5	1.9	1.7	3.3	2.5	2.8	2.5	13
5	HHB 299	3.0	2.1	2.1	3.5	3.8	3.7	1.5	1.5	1.5	2.5	2.5	2.7	2.5	11
6	Mahabeej 1005	2.0	2.1	2.1	3.4	3.6	3.5	1.6	1.7	1.7	3.9	2.5	2.8	2.7	3
7	86M01	1.3	2.3	2.3	3.5	3.5	3.5	1.7	1.6	1.7	3.6	3.2	2.7	2.8	2
8	Pratap (MH 1642)	2.0	2.1	2.1	3.5	4.1	3.8	1.4	2.5	2.0	2.5	2.7	2.1	2.6	9
9	NBH 4903	2.3	2.5	2.5	3.4	3.6	3.5	1.6	1.9	1.7	1.4	3.7	3.0	2.6	7
10	86M86	2.0	1.8	1.8	3.2	3.6	3.4	1.4	2.1	1.7	2.9	3.4	2.3	2.6	10
11	Kaveri Super Boss	2.3	2.7	2.7	3.1	3.6	3.3	1.5	1.6	1.6	3.1	3.0	3.1	2.7	4
12	Dhanshakti	1.7	2.1	2.1	2.9	3.1	3.0	1.2	2.1	1.6	2.5	3.2	2.1	2.4	14
13	ICMV 221	2.3	2.1	2.1	3.1	3.8	3.4	1.5	1.9	1.7	2.3	2.8	2.3	2.5	13
14	Pusa Comp. 612	1.3	2.1	2.1	3.0	3.9	3.4	1.4	2.1	1.8	2.2	3.2	3.0	2.6	8
15	Raj 171	1.7	1.9	1.9	3.4	3.7	3.5	1.6	2.0	1.8	3.6	3.1	2.2	2.7	5
	LOC. MEAN	2.1	2.2	2.2	3.2	3.6	3.4	1.5	1.9	1.7	2.8	3.1	2.6	2.6	
	C.D. (5%)	1.2	0.2	0.2	0.5	0.7	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.4	
	C.D. (1%)	1.6	0.2	0.2	0.7	1.0	0.5	0.6	0.5	0.8	0.6	0.7	0.7	0.5	
	C.V. (%)	33.9	5.0	5.0	9.5	12.1	5.1	19.0	11.7	15.0	8.8	9.4	12.3	15.1	
	F (Prob)	0.000	0.000	0.000	0.000	0.000	0.051	0.000	0.000	0.947	0.000	0.000	0.000	0.772	

**1 LOCATION REJECTED DUE TO HIGH C.V. (i.e. > 30%): ABD1 33.9%

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Table I.194: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 PANICLE LENGTH (cm) ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	SMG	ZONE MEAN	RANK
1	RHB 233	26	27	26	26	23	24	25	33	29	29	29	24	27	3
2	RHB 234	24	23	24	24	21	23	26	32	29	23	25	21	25	9
3	AHB 1269	25	25	25	25	22	24	23	24	24	26	23	22	24	11
4	AHB 1200	28	27	28	24	23	23	26	22	24	28	22	24	25	8
5	HHB 299	22	24	23	24	21	23	23	25	24	21	22	23	23	12
6	Mahabeej 1005	25	26	26	26	22	24	25	28	26	22	22	23	24	10
7	86M01	26	26	26	25	23	24	24	32	28	33	26	23	27	5
8	Pratap (MH 1642)	18	23	20	23	21	22	22	29	25	22	21	21	22	14
9	NBH 4903	25	28	26	27	24	26	24	31	28	32	30	28	28	1
10	86M86	24	26	25	26	23	25	21	27	24	28	26	23	25	7
11	Kaveri Super Boss	26	28	27	28	24	26	23	28	26	26	29	27	27	4
12	Dhanshakti	22	24	23	24	19	21	21	24	22	20	19	22	21	15
13	ICMV 221	18	24	21	25	19	22	25	24	25	25	20	24	23	13
14	Pusa Comp. 612	28	29	29	30	22	26	23	23	23	35	30	25	27	2
15	Raj 171	27	27	27	27	23	25	26	28	27	24	24	26	26	6
	LOC. MEAN	24	26	25	26	22	24	24	27	26	26	25	24	25	
	C.D. (5%)	1.0	2.0	3.0	1.0	2.0	2.0	2.0	3.0	5.0	2.0	3.0	2.0	2.0	
	C.D. (1%)	1.0	2.0	4.0	2.0	2.0	3.0	3.0	4.0	7.0	3.0	4.0	3.0	3.0	
	C.V. (%)	2.3	3.5	6.0	3.0	4.3	4.9	5.7	6.4	9.7	4.8	6.3	5.0	9.0	
	F (Prob)	0.000	0.000	0.001	0.000	0.000	0.022	0.000	0.000	0.257	0.000	0.000	0.000	0.000	

Table I.195: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 PANICLE DIAMETER (cm) ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	PLM	CBE	ZONE MEAN	RANK
1	RHB 233	2.8	3.3	3.1	2.7	2.9	2.8	3.1	2.9	3.2	3.0	8
2	RHB 234	3.3	3.1	3.2	2.6	3.4	3.0	2.9	2.0	3.3	2.9	11
3	AHB 1269	3.0	3.5	3.3	3.1	2.9	3.0	2.8	2.6	3.7	3.1	7
4	AHB 1200	3.2	3.4	3.3	2.7	2.9	2.8	2.8	3.6	3.4	3.2	4
5	HHB 299	3.3	3.5	3.4	2.8	3.1	2.9	2.8	2.9	3.4	3.1	5
6	Mahabeej 1005	3.2	3.4	3.3	2.7	2.8	2.8	2.9	3.0	3.6	3.1	6
7	86M01	2.9	3.2	3.1	2.8	2.8	2.8	2.5	2.7	3.2	2.9	12
8	Pratap (MH 1642)	2.9	3.3	3.1	2.6	3.0	2.8	2.4	3.1	3.3	2.9	10
9	NBH 4903	3.4	3.5	3.4	2.9	3.2	3.1	2.9	3.3	3.9	3.3	1
10	86M86	3.2	3.5	3.3	2.8	3.1	3.0	2.6	3.2	3.8	3.2	3
11	Kaveri Super Boss	3.2	3.6	3.4	2.8	2.7	2.7	2.6	4.0	3.5	3.2	2
12	Dhanshakti	3.3	3.4	3.3	2.3	2.5	2.4	2.8	2.1	2.6	2.7	14
13	ICMV 221	2.9	3.3	3.1	2.6	2.9	2.8	2.9	3.3	2.9	3.0	9
14	Pusa Comp. 612	2.8	3.3	3.1	2.2	2.2	2.2	2.7	3.2	2.7	2.7	13
15	Raj 171	2.4	2.8	2.6	2.4	2.1	2.3	2.5	2.8	2.2	2.5	15
	LOC. MEAN	3.1	3.3	3.2	2.7	2.8	2.7	2.7	3.0	3.2	3.0	
	C.D. (5%)	0.2	0.3	0.3	0.2	0.4	0.4	0.3	0.3	0.2	0.3	
	C.D. (1%)	0.2	0.4	0.4	0.3	0.5	0.5	0.5	0.4	0.3	0.4	
	C.V. (%)	3.4	5.2	4.4	4.8	7.8	6.5	7.6	6.1	4.6	9.4	
	F (Prob)	0.000	0.000	0.004	0.000	0.000	0.005	0.000	0.000	0.000	0.005	

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Table I.196: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 1000-SEED Wt.(g) ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	VZN	CBE	ZONE MEAN	RANK
1	RHB 233	14.2	7.7	11.0	12.3	12.5	12.4	6.1	11.5	10.7	7
2	RHB 234	13.7	5.8	9.8	13.4	12.5	13.0	6.2	10.8	10.4	9
3	AHB 1269	12.2	7.9	10.0	12.6	12.2	12.4	5.4	11.4	10.3	10
4	AHB 1200	13.4	8.2	10.8	13.3	11.9	12.6	6.9	15.0	11.4	1
5	HHB 299	12.0	7.4	9.7	12.9	11.0	11.9	5.9	7.3	9.4	14
6	Mahabeej 1005	14.7	8.7	11.7	13.3	12.2	12.8	6.1	9.6	10.8	5
7	86M01	12.9	6.9	9.9	13.6	11.8	12.7	5.4	12.7	10.6	8
8	Pratap (MH 1642)	11.8	7.2	9.5	12.4	13.2	12.8	6.4	13.3	10.7	6
9	NBH 4903	13.2	7.0	10.1	14.4	12.2	13.3	5.7	12.5	10.8	4
10	86M86	14.4	8.2	11.3	13.4	12.7	13.1	6.5	12.7	11.3	2
11	Kaveri Super Boss	9.5	6.2	7.8	13.8	11.7	12.8	5.7	12.1	9.8	12
12	Dhanshakti	13.0	8.1	10.6	14.4	12.5	13.5	5.4	12.4	11.0	3
13	ICMV 221	13.4	6.4	9.9	14.3	12.3	13.3	5.5	7.7	9.9	11
14	Pusa Comp. 612	8.5	9.8	9.2	13.2	11.6	12.4	5.2	9.2	9.6	13
15	Raj 171	5.6	6.0	5.8	12.2	10.9	11.5	6.6	8.7	8.3	15
	LOC. MEAN	12.2	7.4	9.8	13.3	12.1	12.7	5.9	11.1	10.3	
	C.D. (5%)	0.4	0.5	3.9	0.5	0.7	1.3	0.7	1.2	1.6	
	C.D. (1%)	0.6	0.7	5.4	0.6	1.0	1.9	0.9	1.6	2.1	
	C.V. (%)	2.2	4.1	18.4	2.1	3.5	4.9	6.6	6.5	12.1	
	F (Prob)	0.000	0.000	0.323	0.000	0.000	0.288	0.000	0.000	0.097	

Table I.197: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024 POPULATION AT HARVEST (No./ plot) ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	VYP	MLR	KS MEAN	APR	VZN	AP MEAN	PLM	CBE	ZONE MEAN	RANK
1	RHB 233	154	113	134	145	150	148	89	131	110	158	129	134	8
2	RHB 234	151	101	126	144	148	146	58	131	94	158	119	126	14
3	AHB 1269	153	127	140	142	147	144	95	133	114	154	128	135	3
4	AHB 1200	152	144	148	145	148	147	83	132	108	157	127	136	1
5	HHB 299	153	139	146	145	150	147	74	131	103	159	119	134	7
6	Mahabeej 1005	154	121	138	146	155	150	86	129	108	156	128	134	5
7	86M01	151	121	136	144	151	148	106	131	119	155	119	135	2
8	Pratap (MH 1642)	153	120	136	143	147	145	78	130	104	145	106	128	11
9	NBH 4903	153	131	142	141	160	151	115	129	122	135	107	134	6
10	86M86	151	72	111	142	150	146	93	131	112	152	124	127	12
11	Kaveri Super Boss	153	127	140	143	153	148	94	129	111	151	129	135	4
12	Dhanshakti	151	128	140	142	147	145	84	132	108	157	116	132	10
13	ICMV 221	153	72	112	144	144	144	89	129	109	154	115	125	15
14	Pusa Comp. 612	153	134	144	144	151	148	90	130	110	154	111	133	9
15	Raj 171	152	110	131	144	145	145	68	130	99	153	112	127	13
	LOC. MEAN	152	117	135	144	150	147	87	131	109	153	119	132	
	C.D. (5%)	2.0	28.0	32.0	3.0	13.0	7.0	11.0	3.0	22.0	10.0	10.0	10.0	
	C.D. (1%)	3.0	37.0	45.0	5.0	17.0	9.0	15.0	4.0	30.0	14.0	13.0	13.0	
	C.V. (%)	0.9	14.2	11.2	1.4	5.1	2.1	7.6	1.5	9.3	3.9	4.8	7.4	
	F (Prob)	0.000	0.000	0.465	0.000	0.000	0.624	0.000	0.000	0.523	0.000	0.000	0.267	

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Table I.198: RELEASED HYBRIDS & VARIETIES TRIAL KHARIF - 2024
SEED SET (%) UNDER BAG ZONE B

S.No.	ENTRY	ABD1	DHL	MS MEAN	PLM	CBE	ZONE MEAN	RANK
1	RHB 233	99	98	99	94	69	90	9
2	RHB 234	99	91	95	95	37	81	15
3	AHB 1269	97	93	95	93	83	91	7
4	AHB 1200	97	92	94	96	69	89	12
5	HHB 299	98	93	96	91	94	94	3
6	Mahabeej 1005	99	96	97	95	67	89	11
7	86M01	96	91	94	95	53	84	14
8	Pratap (MH 1642)	98	98	98	85	84	91	8
9	NBH 4903	98	94	96	96	65	88	13
10	86M86	99	98	98	94	69	90	10
11	Kaveri Super Boss	99	98	98	95	83	94	5
12	Dhanshakti	96	93	95	96	90	94	4
13	ICMV 221	99	86	93	95	89	92	6
14	Pusa Comp. 612	98	98	98	97	90	96	1
15	Raj 171	98	98	98	97	83	94	2
	LOC. MEAN	98	94	96	94	75	90	
	C.D. (5%)	2.0	7.0	5.0	6.0	8.0	5.0	
	C.D. (1%)	3.0	9.0	7.0	8.0	11.0	7.0	
	C.V. (%)	1.2	4.4	2.5	3.7	6.5	2.5	
	F (Prob)	0.000	0.000	0.307	0.000	0.000	0.307	

E. AICRP on Pearl Millet Summer Trials: SHT

One coordinated trial in summer 2024 viz. Summer Hybrid Trial comprising entries of first, second and third year of testing was conducted at 16 locations i.e. Six locations in Gujarat, four in Maharashtra and one each in Rajasthan, U.P., Punjab, A.P., Telangana and Tamil Nadu. The results are presented below:

Seventeen hybrids along with five checks MP 7366, Nandi 75, Proagro 9444, 86M22 and 86M64 were evaluated in SHT (Summer Hybrid Trial). Mean performance of experimental hybrids for grain yield, dry fodder yield, days to 50% flowering and days to maturity are given in Tables I.199. Location-wise performance for grain yield and other ancillary characters are given in Tables I.200 to I.213. Two hybrids viz., MSH 406 (4442 kg/ha) and MSH 416 (4420 kg/ha) recorded higher grain yield over the best check MP 7366 (4381 kg/ha). Dry fodder yield ranged from 6907 kg/ha to 10591 kg/ha.

Table I.199: MEAN PERFORMANCE: SUMMER HYBRID TRIAL SUMMER 2024

S.No.	Name of Entry (Year of testing)	Grain Yield (kg/ha)	Dry Fodder Yield (kg/ha)	Days to 50% Flower	Days to Maturity	DM (%) 60 DAS	Blast (score)	Ergot (%)	Smut (%)	Rust (%)	Fe (ppm)	Zn (ppm)
1	MSH 406	4442	10591	57	88	0.0	1.0	0.0	0.5	0.0	53	40
2	MSH 416	4420	9962	55	86	0.0	0.9	0.0	0.6	0.9	51	40
3	MP 7366 (C)	4381	8640	56	86	0.2	0.9	0.4	0.3	3.4	53	42
4	MSH 417	4344	9066	55	87	0.0	0.5	0.0	0.0	1.3	51	40
5	MSH 420	4344	9152	55	86	0.0	0.5	0.0	0.0	2.3	43	34
6	Nandi 75 (C)	4290	9812	54	86	0.3	1.0	0.0	0.5	1.8	38	32
7	MSH 428	4285	9900	55	87	0.0	0.5	0.0	0.4	1.4		
8	MSH 407	4277	9546	55	87	0.7	1.0	0.9	0.4	1.8		
9	MSH 418	4233	8809	54	85	1.0	0.9	0.6	0.0	0.3		
10	86M64 (C)	4213	9594	55	86	0.3	1.5	0.5	0.5	1.6	48	36
11	86M22 (C)	4207	9569	55	86	0.0	0.9	0.0	0.5	0.4	54	42
12	MSH 414	4166	10398	57	88	0.2	0.4	0.0	0.4	0.0		
13	MSH 422	4151	8727	56	87	0.7	0.9	0.0	0.4	1.6		
14	Proagro 9444 (C)	4142	9083	56	87	0.0	0.5	0.0	0.1	0.0	40	35
15	MSH 423	4129	8553	54	85	1.0	1.2	1.0	0.4	3.1		
16	MSH 419	4081	8510	55	87	0.0	1.0	0.5	0.8	1.9		
17	MSH 426	3802	8405	50	82	0.4	0.6	0.0	0.4	2.8		
18	MSH 427	3777	7826	51	83	0.9	0.9	0.0	0.6	2.5		
19	MSH 421	3690	8622	56	87	0.0	0.9	0.0	0.6	2.3		
20	MSH 425	3671	7892	49	82	0.2	0.6	0.0	0.4	0.0		
21	MSH 424	3670	8483	54	85	0.3	1.3	0.0	0.6	2.3		
22	MSH 415	3208	6907	49	81	1.5	0.9	0.4	0.0	2.3		
LOC. MEAN		4087	9002	54	86							

Promotion criteria as per 54th Annual group meet: Grain yield =higher than best check or 5% higher over relevant check, Disease (Across all zones): Downy Mildew (60 DAS): $\leq 5\%$, Blast (score): ≤ 3 (0-9 scale), Ergot (% severity): $\leq 20\%$, Smut (% severity): $\leq 20\%$, Rust (% leaf area): $\leq 20\%$, Iron content: ≥ 42 ppm and Zinc content: ≥ 32 ppm.

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Table I.200: SUMMER HYBRID TRIAL SUMMER 2024 EXPERIMENTAL DETAILS

Locations	Soil	pH	Sowing date	Harvesting date	Interculture date	No. of Irrigations	Fertilizers			Insecticide
							N	P	K	
AICRP-PM, Mandor (AUJ)	SL	8.1	21.02.2024	25.05.2024	13.03.2004 & 14.03.2024	As per requirement	60	40	0	Nil
Anand (AAU)	SL	7.2	15.02.2024	25.05.2024	07.03, 14.03 & 20.03.2024	6	120	60	0	Emamectin Benzoate & Coragen
Jamnagar (JAU)	MB	7.6	17.02.2024	17.05.2024	26.02, 7.03, 16.03, 26.03.2024	8	120	60	0	Nil
Deesa (SDAU)	SL	-	20.02.2024	22.05.2024	15.03.2024	As per requirement	120	60	0	Nil
Ahmedabad (Nandi Seed)	SL	-	07.03.2024	06.06.2024	31.03.2024 & 15.04.2024	As per requirement	80	40	0	Coragen
Palanpur (Corteva)	A	-	04.03.2024	01.06.2024	26.03.2024	As per requirement	120	40	25	Emamectin Benzoate
Dehgam (Rallis)	SL	6.5	25.02.2024	22.05.2024	11.03.2024	11	40	20	20	Coragen
Agra (Kartik Bio Seeds)	SL	-	29.03.2024	01.07.2024	12.04.2024	4	0	0	0	Nil
Ludhiana (Ludhiana))	SL	-	26.03.2024	25.07.2024	13.04.2024 & 17.05.2024	3	100	60	0	Nil
Aurangabad (NARP)	MB	7.5	17.02.2024	25.05.2024	20.03.2024 & 18.04.24	6	60	30	30	Nil
Aurangabad (Seedworks)	BC	8.01	15.02.2024	16.05.2024	18.03.2024	7	80	40	40	Chloropyriphos
Dhule	MB	8.6	15.02.2024	25.05.2024	26,27.03.2024	6	90	45	45	Nil
Jalna (Mahyco)	B	-	15.03.2024	07.06.2024	05.04.2024	6	80	40	40	Delegate
Perumallapalle	RSL	7.7	18.03.2024	-	15.04.2024	As per requirement	60	30	20	Nil
Palem (PJ TSAU)	RSL	7.0	17.02.2024	27.05.2024	26.02.2024 & 18.03.2024	6	36	16	16	Nil
Coimbatore (TNAU)	CL	7.82	23.02.2024	31.05.2024	13.03.2024	5	80	40	40	Nil

SL = Sandy Loam, MB = Medium Black, CL = Clay Loam, B = Black, BC = Black Cotton, RSL= Red Sandy Loam, A = Alluvial

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Table I.201: SUMMER HYBRID TRIAL - 2024 GRAIN YIELD (kg/ha)

S.No.	TEST	ENTRY	MDR	AND	JMR	SKN	AHD	DEG	PNR1	GUJ	AGR1	LDA	ABD1	ABD7	DHL	JLN1	MS	PMP	PLM	CBE	ZONE	RANK
	CODE									MEAN							MEAN				MEAN	
1	SHT 101	MSH 406	4271	6192	4708	5728	4018	5438	5031	5186	2586	2189	3780	6423	2946	5171	4580	3889	3977	4722	4442	1
2	SHT 102	MSH 407	3681	4601	3968	5969	3468	4699	4679	4564	2983	2321	3054	6442	4084	4853	4608	4069	4691	4875	4277	8
3	SHT 103	86M64 (Check)	3565	5834	4241	6157	3885	5222	4864	5034	3008	2494	2929	6007	3996	5036	4492	2719	3327	4131	4213	10
4	SHT 104	MSH 414	3912	4904	4053	5799	4253	5713	4449	4862	3139	2057	3334	6326	3950	4769	4595	2556	3654	3783	4166	12
5	SHT 105	MSH 415	3681	4223	3720	3892	2474	3237	3743	3548	2661	1586	3042	4519	2983	3194	3435	3086	2176	3108	3208	22
6	SHT 106	MSH 416	4009	5724	4718	5596	3976	5572	5250	5139	2583	2998	3334	5904	3483	5068	4447	4586	3597	4325	4420	2
7	SHT 107	MP 7366 (Check)	2789	6641	5282	5170	3366	5591	4461	5085	2694	3391	2859	6115	4292	4706	4493	4289	3998	4458	4381	3
8	SHT 108	MSH 417	3611	5402	4688	6145	4061	5222	4838	5059	2819	2042	3088	6205	3215	5331	4459	4572	4458	3814	4344	4
9	SHT 109	MSH 418	3657	6298	4736	5858	3072	5119	5029	5019	3683	1795	3145	5794	3502	4346	4197	3072	4199	4417	4233	9
10	SHT 110	MSH 419	3611	5686	4606	5972	3328	5250	4263	4851	2711	2771	3317	6349	2980	4189	4209	2783	2947	4531	4081	16
11	SHT 111	86M22 (Check)	3194	6281	4384	5799	2567	5372	5088	4915	2703	3502	3459	6380	3137	4369	4336	3567	4232	3278	4207	11
12	SHT 112	MSH 420	3796	6440	4586	6580	3525	5839	4350	5220	3544	2326	3413	5902	3423	4998	4434	3292	4236	3247	4344	5
13	SHT 113	MSH 421	3519	5579	4016	5083	2980	4557	4516	4455	2586	2795	3128	4083	3142	3623	3494	3311	3388	2736	3690	19
14	SHT 114	MSH 422	3102	4711	3789	6346	3365	4913	4816	4657	2439	3609	2856	6604	3987	4550	4499	3225	3796	4314	4151	13
15	SHT 115	MSH 423	3843	5109	5287	5367	3156	4408	5004	4722	2717	2389	4179	5860	4412	4683	4783	2850	3419	3378	4129	15
16	SHT 116	Nandi 75 (Check)	3750	6303	4826	6019	3553	4719	3787	4868	2944	1996	2887	6186	4505	4994	4643	4303	3111	4756	4290	6
17	SHT 117	MSH 424	3639	4296	3859	3540	3406	3707	4271	3847	2889	2498	3393	5422	3440	4657	4228	2911	3014	3783	3670	21
18	SHT 118	MSH 425	3611	3896	3595	4586	3144	3600	4853	3946	2611	3272	3500	5445	4339	3424	4177	2456	2898	3503	3671	20
19	SHT 119	MSH 426	3773	4630	4002	5284	2975	4353	4356	4267	2783	3060	3988	5803	3996	4144	4483	1969	2803	2919	3802	17
20	SHT 120	MSH 427	3542	4787	3933	4614	2999	4193	4075	4100	3111	3468	3406	5621	3657	4504	4297	2542	2527	3447	3777	18
21	SHT 121	MSH 428	3565	6118	4132	6167	3918	5603	3543	4914	2869	2984	2842	6527	4193	4369	4483	3156	4238	4333	4285	7
22	SHT 122	Proagro 9444 (Check)	3611	4803	3704	6605	3304	4716	5644	4796	3394	3398	3593	5448	3808	3967	4204	3111	3088	4081	4142	14
		LOC. MEAN	3624	5384	4311	5558	3400	4866	4587	4684	2885	2679	3297	5880	3703	4497	4344	3287	3535	3906	4087	
		C.D. (5%)	391	633	964	1266	549	650	1511	580	184	198	360	729	754	945	668	842	926	516	361	
		C.D. (1%)	523	847	1289	1693	734	870	2020	767	247	264	481	974	1009	1263	887	1125	1238	690	476	
		C.V. (%)	6.6	7.1	13.6	13.8	9.8	8.1	20.0	10.8	3.9	4.5	6.6	7.5	12.4	12.8	10.9	15.5	15.9	8.0	12.7	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.024	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	14.40	12.00	14.40	10.80	12.00	8.00	12.00	-	12.00	12.00	12.00	8.00	11.10	12.00	-	12.00	12.00	12.00	-	

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Table I.202: SUMMER HYBRID TRIAL - 2024 DRY FODDER YIELD (kg/ha)

S.No.	TEST	ENTRY	MDR	AND	JMR	SKN	AHD	DEG	PNR1	GUJ	AGR1	LDA	ABD1	ABD7	DHL	JLN1	MS	PMP	PLM	CBE	ZONE	RANK
	CODE		MEAN										MEAN									
1	SHT 101	MSH 406	6250	11313	7421	11914	13095	9746	23516	12834	10111	9411	7556	15223	8303	11583	10666	7722	8871	7422	10591	1
2	SHT 102	MSH 407	6366	8642	5389	7407	6922	6806	22464	9605	7986	6942	6972	12850	7057	18318	11299	10500	11260	6847	9546	8
3	SHT 103	86M64 (Check)	6204	10925	4907	7901	10125	9692	26114	11611	8750	6097	6722	11247	6441	20672	11271	3892	7339	6469	9594	6
4	SHT 104	MSH 414	6296	9851	6028	7500	13419	10138	25956	12149	8422	5744	7250	14718	6937	19935	12210	8456	8551	7172	10398	2
5	SHT 105	MSH 415	6319	8913	4303	6235	6610	5371	13928	7560	9297	4700	7750	6448	5135	10199	7383	5808	5263	4239	6907	22
6	SHT 106	MSH 416	6319	11180	5898	8395	10080	8858	20997	10902	9167	10111	7333	13044	7538	15882	10949	9836	8041	6708	9962	3
7	SHT 107	MP 7366 (Check)	6343	10983	6292	6265	8700	10717	14033	9498	8503	9364	7444	10354	7613	8442	8463	7306	9447	6431	8640	14
8	SHT 108	MSH 417	6197	11175	6384	8025	7405	8192	20294	10246	7336	5211	7806	11368	6847	9963	8996	10250	11025	7583	9066	11
9	SHT 109	MSH 418	6123	11110	5727	6728	6730	7850	20183	9721	8653	9214	7278	10748	7162	10296	8871	7111	9349	6681	8809	12
10	SHT 110	MSH 419	5716	11013	5347	7500	7370	7467	19036	9622	10222	7528	8167	10742	6907	6699	8128	9344	6698	6403	8510	17
11	SHT 111	86M22 (Check)	5000	12120	6060	7438	5788	9192	23847	10741	9972	9636	8194	13366	6547	9707	9453	9681	10630	5933	9569	7
12	SHT 112	MSH 420	6597	11233	4894	8796	8938	8329	20225	10402	9778	8742	8583	12416	7312	8589	9225	5931	9654	6408	9152	9
13	SHT 113	MSH 421	5706	10660	4343	8148	9721	7946	17472	9715	8833	7553	6889	11065	7027	9443	8606	8183	8379	6578	8622	15
14	SHT 114	MSH 422	5412	10678	5493	8210	7463	9163	18500	9918	8458	11019	7750	12564	7102	6333	8437	6192	8958	6342	8727	13
15	SHT 115	MSH 423	6829	10443	5931	6728	6984	6892	19658	9439	8575	10042	8361	11304	8078	7428	8793	6022	7497	6069	8553	16
16	SHT 116	Nandi 75 (Check)	6366	9958	7023	8858	11671	8542	25403	11909	9264	7889	6889	15071	8544	7817	9580	8547	7390	7761	9812	5
17	SHT 117	MSH 424	5660	8991	5664	5340	9153	6121	19356	9104	7083	10319	7444	11831	7372	13024	9918	4958	6772	6636	8483	18
18	SHT 118	MSH 425	6181	8147	4546	6636	5948	6288	19897	8577	7778	9950	7778	9677	7868	9692	8753	4472	6454	4967	7892	20
19	SHT 119	MSH 426	6206	10236	4734	7099	5938	7258	17664	8821	8569	10058	8472	12506	7282	11381	9910	6364	6614	4092	8405	19
20	SHT 120	MSH 427	5625	10380	4375	6235	6010	6625	18219	8641	9694	8472	8028	10335	5240	9461	8266	6058	6219	4242	7826	21
21	SHT 121	MSH 428	6343	10568	5639	8796	9040	9625	25125	11465	10319	10986	7083	12488	7102	11517	9547	7275	9532	6967	9900	4
22	SHT 122	Proagro 9444 (Check)	5949	9915	5100	7778	8842	8350	25564	10925	10542	8867	7556	9539	7012	11103	8802	6236	7069	5906	9083	10
		LOC. MEAN	6091	10383	5523	7633	8452	8144	20793	10155	8969	8539	7605	11768	7110	11249	9433	7279	8228	6266	9002	
		C.D. (5%)	752	1626	1243	1653	674	1492	4057	1856	330	829	1006	2088	1694	2322	3193	1821	2698	883	1192	
		C.D. (1%)	1005	2174	1661	2210	901	1995	5424	2456	441	1108	1345	2791	2264	3105	4244	2435	3608	1181	1570	
		C.V. (%)	7.5	9.5	13.7	13.1	4.8	11.1	11.8	16.0	2.2	5.9	8.0	10.8	14.5	12.5	24.0	15.2	19.9	8.6	19.0	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333	0.000	0.000	0.000	0.000	
		PLOT SIZE (m ²)	14.40	12.00	14.40	10.80	12.00	8.00	12.00	-	12.00	12.00	12.00	8.00	11.10	12.00	-	12.00	12.00	12.00	-	

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Table I.203: SUMMER HYBRID TRIAL - 2024 DAYS TO 50% FLOWERING

TABLE 12.2. SUMMARY OF DATA FROM 2017 DATA TO 2020 PERFORMANCE																						
S.No.	TEST	ENTRY	MDR	AND	JMR	SKN	AHD	DEG	GUJ	AGR1	LDA	ABD1	ABD7	DHL	JLN1	MS	PMP	PLM	CBE	ZONE	RANK	
	CODE		MEAN										MEAN									
1	SHT 101	MSH 406	61	52	59	54	56	61	56	67	60	61	64	65	53	61	45	50	52	57	2	
2	SHT 102	MSH 407	58	50	56	54	55	56	54	62	59	61	61	64	55	60	43	47	49	55	8	
3	SHT 103	86M64 (Check)	59	50	54	52	53	55	53	65	58	59	62	61	56	59	42	48	48	55	13	
4	SHT 104	MSH 414	59	52	59	55	54	59	56	66	63	60	63	63	58	61	46	51	53	57	1	
5	SHT 105	MSH 415	55	43	49	45	50	51	48	56	52	52	55	54	51	53	43	44	39	49	22	
6	SHT 106	MSH 416	58	49	54	52	58	55	54	61	55	62	62	60	55	60	44	47	51	55	12	
7	SHT 107	MP 7366 (Check)	60	48	55	54	54	56	53	61	57	61	62	62	62	62	42	49	50	56	6	
8	SHT 108	MSH 417	59	50	56	51	53	56	53	63	59	62	62	63	55	60	42	48	49	55	10	
9	SHT 109	MSH 418	58	48	53	52	54	58	53	56	52	58	62	62	53	59	43	49	49	54	16	
10	SHT 110	MSH 419	58	49	54	54	54	57	54	63	57	61	62	63	53	60	46	50	49	55	9	
11	SHT 111	86M22 (Check)	60	50	56	53	54	57	54	63	56	61	62	64	51	60	44	51	49	55	7	
12	SHT 112	MSH 420	58	45	55	54	55	56	53	59	56	62	62	63	51	60	46	49	51	55	14	
13	SHT 113	MSH 421	61	46	57	53	51	56	52	70	60	61	60	61	57	60	45	48	48	56	3	
14	SHT 114	MSH 422	58	51	55	54	54	56	54	71	54	60	62	65	53	60	44	48	49	56	4	
15	SHT 115	MSH 423	57	47	52	52	52	56	52	54	59	57	61	61	53	58	43	51	48	54	18	
16	SHT 116	Nandi 75 (Check)	56	48	53	51	55	55	52	68	56	56	61	61	55	58	44	48	50	54	15	
17	SHT 117	MSH 424	55	45	51	46	55	50	50	70	65	63	60	57	58	59	44	41	42	54	17	
18	SHT 118	MSH 425	57	42	47	43	50	47	46	67	54	51	55	53	51	53	43	41	38	49	21	
19	SHT 119	MSH 426	58	43	48	45	51	47	47	67	53	53	55	55	54	54	41	43	38	50	20	
20	SHT 120	MSH 427	58	45	50	47	49	51	48	66	56	52	56	57	53	55	40	46	37	51	19	
21	SHT 121	MSH 428	61	47	55	52	53	55	53	65	55	63	62	62	52	60	43	50	47	55	11	
22	SHT 122	Proagro 9444 (Check)	59	46	57	53	54	57	53	67	60	63	62	64	53	61	44	46	49	56	5	
		LOC. MEAN	58	47	54	51	53	55	52	64	57	59	61	61	54	59	43	48	47	54		
		C.D. (5%)	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	3.0	3.0	4.0	3.0	1.0	2.0		
		C.D. (1%)	3.0	2.0	2.0	2.0	1.0	2.0	3.0	3.0	2.0	1.0	2.0	3.0	4.0	4.0	6.0	4.0	2.0	2.0		
		C.V. (%)	2.0	2.3	1.9	2.2	1.1	2.0	3.0	2.3	1.8	1.0	1.6	2.4	3.4	3.6	5.8	3.4	1.6	4.3		
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		

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Table I.204: SUMMER HYBRID TRIAL - 2024 DAYS TO MATURITY

S.No. TEST ENTRY MDR AND JMR SKN AHD DEG GUJ AGR1 LDA ABD1 ABD7 DHL JLN1 MS PMP PLM CBE ZONE RANK																					
CODE		MEAN										MEAN									
1	SHT 101	MSH 406	91	85	88	86	86	86	86	88	97	96	90	100	83	92	78	81	87	88	2
2	SHT 102	MSH 407	91	83	86	88	84	81	84	82	99	96	88	99	85	92	77	78	83	87	6
3	SHT 103	86M64 (Check)	87	84	84	83	82	80	83	88	94	96	87	96	86	91	81	79	83	86	14
4	SHT 104	MSH 414	91	86	88	84	84	84	85	88	101	97	89	98	88	93	80	81	88	88	1
5	SHT 105	MSH 415	81	82	79	80	79	76	79	78	90	91	82	89	81	86	75	73	77	81	22
6	SHT 106	MSH 416	87	85	84	84	87	80	84	82	92	96	88	96	85	91	77	77	86	86	15
7	SHT 107	MP 7366 (Check)	88	87	85	83	83	81	84	84	94	94	88	98	92	93	75	79	85	86	11
8	SHT 108	MSH 417	88	87	85	84	82	81	84	85	95	98	87	98	85	92	82	80	84	87	7
9	SHT 109	MSH 418	85	84	82	84	83	83	83	88	91	94	88	97	83	91	77	79	84	85	16
10	SHT 110	MSH 419	86	85	84	88	83	82	84	90	93	95	89	98	83	91	81	82	84	87	5
11	SHT 111	86M22 (Check)	87	86	85	84	84	82	84	87	94	95	87	99	81	91	80	81	84	86	10
12	SHT 112	MSH 420	88	82	85	87	84	81	84	81	96	98	90	99	81	92	79	78	86	86	12
13	SHT 113	MSH 421	89	87	86	86	80	81	84	91	100	97	86	97	87	92	76	78	83	87	4
14	SHT 114	MSH 422	87	87	85	87	83	81	85	92	99	94	88	100	83	92	77	78	84	87	3
15	SHT 115	MSH 423	85	86	82	85	81	81	83	74	101	96	87	96	83	90	77	81	83	85	17
16	SHT 116	Nandi 75 (Check)	85	84	83	83	85	80	83	88	98	95	89	96	85	91	80	79	85	86	13
17	SHT 117	MSH 424	86	83	81	79	85	75	81	91	105	98	87	92	88	91	76	70	77	85	18
18	SHT 118	MSH 425	81	81	77	79	79	72	78	90	102	91	81	89	81	85	75	71	75	82	21
19	SHT 119	MSH 426	80	82	78	83	80	72	79	90	98	91	82	90	84	87	76	72	76	82	20
20	SHT 120	MSH 427	83	83	80	82	79	76	80	87	101	88	83	92	83	87	76	75	75	83	19
21	SHT 121	MSH 428	89	84	86	86	82	80	84	87	99	100	88	98	81	92	78	80	82	87	8
22	SHT 122	Proagro 9444 (Check)	89	82	88	85	83	82	84	83	103	93	88	99	83	91	80	76	84	87	9
		LOC. MEAN	87	84	84	84	83	80	83	86	97	95	87	96	84	91	78	78	83	86	
		C.D. (5%)	2.0	3.0	1.0	2.0	1.0	2.0	2.0	2.0	2.0	1.0	2.0	3.0	3.0	4.0	3.0	5.0	2.0	2.0	
		C.D. (1%)	2.0	3.0	2.0	3.0	1.0	2.0	3.0	2.0	3.0	2.0	3.0	4.0	4.0	5.0	4.0	7.0	2.0	2.0	
		C.V. (%)	1.1	1.8	0.9	1.5	0.7	1.4	2.1	1.2	1.5	0.9	1.5	1.8	2.1	3.0	2.4	4.1	1.2	3.0	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.000	0.000	0.000	0.000	

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Table I.205: SUMMER HYBRID TRIAL - 2024 PLANT HEIGHT (cm)

S.No.	TEST	ENTRY	MDR	AND	JMR	SKN	AHD	DEG	PNR1	GUJ	AGR1	LDA	ABD1	ABD7	DHL	JLN1	MS	PMP	PLM	CBE	ZONE	RANK
	CODE		MEAN										MEAN									
1	SHT 101	MSH 406	202	212	207	200	205	213	237	212	212	158	155	240	222	242	215	162	139	192	200	1
2	SHT 102	MSH 407	182	169	177	160	196	163	220	181	182	115	115	200	196	227	185	164	109	161	171	15
3	SHT 103	86M64 (Check)	185	184	183	177	198	187	220	192	185	117	137	213	191	213	189	175	114	160	178	14
4	SHT 104	MSH 414	202	212	208	193	235	207	233	215	210	135	155	233	214	230	208	190	129	180	198	2
5	SHT 105	MSH 415	172	155	152	136	165	142	183	155	163	97	135	163	161	165	156	156	101	128	148	22
6	SHT 106	MSH 416	198	216	205	187	221	193	242	211	209	110	125	223	219	231	200	189	129	174	192	6
7	SHT 107	MP 7366 (Check)	202	186	191	170	187	187	217	190	201	108	175	210	197	222	201	170	123	183	183	10
8	SHT 108	MSH 417	199	217	208	189	180	200	242	206	227	115	175	237	217	249	219	176	129	191	197	3
9	SHT 109	MSH 418	200	185	193	156	180	185	222	187	212	123	140	210	204	212	191	168	127	167	180	13
10	SHT 110	MSH 419	221	194	191	170	178	182	222	189	187	121	140	213	205	243	200	192	120	157	184	9
11	SHT 111	86M22 (Check)	193	195	192	157	192	188	230	193	181	124	150	217	201	211	195	176	121	161	181	12
12	SHT 112	MSH 420	193	209	193	167	200	188	237	199	181	124	158	227	200	221	202	173	130	172	186	8
13	SHT 113	MSH 421	201	206	198	180	216	188	240	205	199	138	152	223	213	212	200	185	131	180	191	7
14	SHT 114	MSH 422	181	170	173	168	194	168	213	181	137	121	125	200	187	212	181	166	113	152	168	18
15	SHT 115	MSH 423	177	172	171	156	163	168	190	170	149	110	120	183	196	182	170	159	117	160	161	20
16	SHT 116	Nandi 75 (Check)	197	210	205	180	214	192	242	207	191	119	155	237	210	253	214	177	129	172	193	4
17	SHT 117	MSH 424	180	188	175	151	169	157	222	177	165	115	143	193	200	195	183	165	111	161	168	16
18	SHT 118	MSH 425	170	163	153	137	159	138	208	160	145	102	125	180	190	208	176	159	107	145	156	21
19	SHT 119	MSH 426	168	179	161	143	169	152	208	169	169	107	152	193	201	211	189	174	109	144	165	19
20	SHT 120	MSH 427	174	187	173	154	157	152	218	174	205	98	103	193	184	231	178	184	121	148	168	17
21	SHT 121	MSH 428	184	214	193	191	208	197	233	206	208	133	152	227	206	234	205	185	134	177	192	5
22	SHT 122	Proagro 9444 (Check)	195	178	188	160	182	182	225	186	202	120	175	207	201	227	202	184	119	167	182	11
		LOC. MEAN	190	191	186	167	189	179	223	189	187	119	144	210	201	220	194	174	121	165	179	
		C.D. (5%)	23.0	5.0	11.0	14.0	9.0	9.0	22.0	10.0	3.0	8.0	7.0	11.0	17.0	15.0	17.0	27.0	15.0	11.0	7.0	
		C.D. (1%)	31.0	7.0	15.0	19.0	12.0	11.0	29.0	13.0	4.0	11.0	9.0	15.0	22.0	20.0	23.0	37.0	20.0	15.0	10.0	
		C.V. (%)	7.5	1.7	3.6	5.1	2.8	2.9	5.9	4.4	1.0	4.1	2.8	3.2	5.1	4.1	6.3	9.5	7.6	4.0	5.9	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.206: SUMMER HYBRID TRIAL - 2024 PRODUCTIVE TILLERS (No./Plant)

S.No.	TEST	ENTRY	MDR	AND	JMR	SKN	AHD**	DEG	PNR1**	GUJ	AGR1	LDA	ABD1	ABD7	DHL	JLN1**	MS	PMP	PLM	CBE	ZONE	RANK
	CODE		MEAN										MEAN									
1	SHT 101	MSH 406	2.2	3.1	2.1	1.8	1.3	1.0	2.7	2.0	1.1	2.2	1.7	2.0	1.8	2.0	1.8	1.4	2.5	2.7	2.0	18
2	SHT 102	MSH 407	2.1	2.7	2.0	1.3	1.7	1.0	1.3	1.8	1.2	1.3	1.7	2.0	2.0	1.3	1.9	2.5	2.9	2.4	1.9	20
3	SHT 103	86M64 (Check)	2.3	3.3	1.9	1.5	1.0	1.2	2.7	2.0	1.4	2.2	1.0	2.3	2.3	2.3	1.9	1.3	3.1	2.3	2.0	17
4	SHT 104	MSH 414	2.3	3.3	2.4	1.9	1.3	1.1	1.3	2.2	1.3	2.5	1.0	2.3	1.8	1.7	1.7	1.9	2.5	2.3	2.0	16
5	SHT 105	MSH 415	2.4	3.1	2.3	1.5	1.7	1.0	1.0	2.0	1.3	2.0	1.3	3.0	2.0	1.3	2.1	1.9	2.7	2.1	2.1	14
6	SHT 106	MSH 416	2.3	3.2	2.0	1.5	1.3	1.1	2.7	1.9	1.2	3.2	1.0	2.0	1.8	2.0	1.6	1.9	2.5	2.7	2.0	17
7	SHT 107	MP 7366 (Check)	2.5	3.6	2.1	1.4	1.3	1.2	1.7	2.1	1.3	2.6	2.0	2.7	2.4	1.3	2.4	1.5	2.6	2.4	2.2	6
8	SHT 108	MSH 417	2.2	3.3	2.5	1.5	1.3	1.2	1.7	2.1	1.5	2.3	1.0	2.3	2.3	1.0	1.9	1.7	2.7	2.4	2.1	13
9	SHT 109	MSH 418	2.6	3.5	2.5	1.9	1.3	1.3	2.7	2.3	1.3	1.8	1.0	3.0	2.3	1.7	2.1	1.4	3.5	2.9	2.2	4
10	SHT 110	MSH 419	2.9	3.5	2.7	1.9	1.7	1.3	1.3	2.4	1.4	3.2	1.7	2.7	2.2	1.7	2.2	1.9	2.9	2.5	2.4	1
11	SHT 111	86M22 (Check)	2.3	2.7	1.7	1.8	1.3	1.0	2.7	1.8	1.3	3.0	2.3	2.0	2.0	2.0	2.1	1.9	2.5	2.7	2.1	11
12	SHT 112	MSH 420	2.6	3.7	2.2	1.6	1.7	1.2	2.0	2.2	1.3	1.8	1.0	2.0	1.9	1.7	1.6	1.3	2.5	2.4	2.0	19
13	SHT 113	MSH 421	2.7	3.5	2.5	1.6	1.3	1.2	1.7	2.2	1.2	2.9	1.7	3.0	1.4	1.7	2.0	1.9	3.1	2.3	2.2	3
14	SHT 114	MSH 422	2.1	2.9	1.8	1.9	1.0	1.0	2.0	1.9	1.4	2.3	1.7	2.3	2.0	1.0	2.0	1.1	2.5	2.1	1.9	21
15	SHT 115	MSH 423	2.1	3.3	2.1	1.5	1.3	1.2	2.0	2.0	1.6	1.7	1.3	3.3	2.5	1.3	2.4	1.5	3.7	2.1	2.1	9
16	SHT 116	Nandi 75 (Check)	2.2	3.7	2.2	1.3	1.7	1.2	1.7	2.1	1.4	2.3	1.7	2.0	2.6	1.3	2.1	1.3	2.7	2.3	2.1	15
17	SHT 117	MSH 424	2.1	3.4	2.0	1.3	1.3	1.3	1.3	2.0	1.2	2.9	1.7	3.3	2.0	2.3	2.3	1.5	3.3	2.0	2.2	7
18	SHT 118	MSH 425	2.1	3.9	1.9	1.5	1.3	1.3	1.7	2.2	1.4	2.4	1.0	3.3	2.4	2.0	2.2	1.5	2.9	2.4	2.2	8
19	SHT 119	MSH 426	2.2	3.6	2.1	1.7	1.7	1.2	1.0	2.2	1.2	3.0	1.7	2.3	1.8	1.7	1.9	1.7	2.5	2.5	2.1	10
20	SHT 120	MSH 427	2.2	2.9	2.1	1.9	1.3	1.2	1.7	2.0	1.2	3.1	1.0	3.0	1.7	1.7	1.9	1.1	2.7	3.1	2.1	12
21	SHT 121	MSH 428	2.1	3.4	1.9	2.1	1.3	1.2	1.3	2.2	1.3	3.0	2.7	2.0	1.9	1.0	2.2	1.2	2.9	2.7	2.2	5
22	SHT 122	Proagro 9444 (Check)	2.6	4.2	2.7	1.7	1.7	1.5	2.7	2.5	1.3	3.2	1.7	4.0	2.1	2.7	2.6	1.6	2.5	1.4	2.4	2
		LOC. MEAN	2.3	3.4	2.2	1.6	1.4	1.2	1.8	2.1	1.3	2.5	1.5	2.6	2.1	1.7	2.0	1.6	2.8	2.4	2.1	
		C.D. (5%)	0.3	0.4	0.7	0.3	0.9	0.1	1.1	0.3	0.1	0.3	0.7	0.6	0.3	0.9	0.8	0.6	0.5	0.5	0.3	
		C.D. (1%)	0.4	0.5	1.0	0.4	1.2	0.2	1.5	0.4	0.1	0.5	0.9	0.9	0.4	1.2	1.0	0.7	0.7	0.7	0.4	
		C.V. (%)	7.3	6.7	20.0	11.0	39.4	7.3	35.6	11.0	2.7	8.3	28.9	15.0	7.9	32.9	23.2	21.4	10.6	13.6	16.5	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.647	0.000	0.000	0.000	0.067	

**LOCATIONS REJECTED DUE TO HIGH C.V. (i.e.> 30%): AHD 39.4%; PNR1 35.6%; JLN1 32.9%

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Table I.207: SUMMER HYBRID TRIAL - 2024 PANICLE LENGTH (cm)

S.No.	TEST	ENTRY	MDR	AND	JMR	SKN	AHD	DEG	PNR1	GUJ	AGR1	LDA	ABD1	ABD7	DHL	JLN1	MS	PMP	PLM	CBE	ZONE	RANK
	CODE		MEAN										MEAN									
1	SHT 101	MSH 406	28	31	29	32	27	28	27	29	33	28	31	31	30	31	31	29	25	30	29	1
2	SHT 102	MSH 407	25	25	24	24	25	22	25	24	28	21	24	23	24	25	24	27	21	25	24	17
3	SHT 103	86M64 (Check)	18	29	26	26	29	24	28	27	31	17	27	29	26	27	27	29	25	28	26	8
4	SHT 104	MSH 414	28	30	27	26	29	24	26	27	28	22	26	27	26	28	27	27	23	28	27	6
5	SHT 105	MSH 415	25	26	24	24	26	23	24	25	28	23	24	28	25	27	26	28	20	25	25	13
6	SHT 106	MSH 416	27	28	28	28	28	24	27	27	30	23	26	29	28	30	28	29	22	27	27	3
7	SHT 107	MP 7366 (Check)	26	28	27	26	22	24	28	26	28	23	24	27	27	28	26	28	24	27	26	9
8	SHT 108	MSH 417	27	28	31	27	29	25	27	28	32	29	25	30	29	31	29	28	24	28	28	2
9	SHT 109	MSH 418	27	29	26	24	27	23	27	26	29	23	23	27	25	28	26	29	21	27	26	10
10	SHT 110	MSH 419	24	27	25	24	25	21	26	25	28	25	25	26	26	25	25	27	22	25	25	13
11	SHT 111	86M22 (Check)	25	27	25	25	24	23	25	25	28	19	25	26	26	27	26	27	24	25	25	12
12	SHT 112	MSH 420	23	24	22	23	26	21	25	24	27	19	24	24	25	26	25	26	20	24	24	20
13	SHT 113	MSH 421	24	27	27	29	29	25	26	27	28	18	26	28	26	28	27	28	25	28	27	5
14	SHT 114	MSH 422	25	24	23	25	24	21	28	24	27	21	26	25	24	23	25	27	22	25	24	15
15	SHT 115	MSH 423	25	27	23	25	28	23	29	26	25	16	24	25	25	29	26	27	23	24	25	14
16	SHT 116	Nandi 75 (Check)	26	29	27	27	29	24	23	26	30	16	27	29	27	31	28	28	21	29	26	7
17	SHT 117	MSH 424	25	29	25	23	27	21	28	25	29	25	25	27	27	26	26	27	22	26	26	11
18	SHT 118	MSH 425	22	23	22	21	24	21	27	23	27	20	23	25	24	22	23	26	18	23	23	21
19	SHT 119	MSH 426	24	24	23	23	22	21	26	23	27	25	22	26	25	27	25	25	18	24	24	18
20	SHT 120	MSH 427	25	26	25	23	23	20	23	23	28	21	25	24	23	22	24	27	21	25	24	19
21	SHT 121	MSH 428	26	26	27	26	28	25	22	26	29	27	25	28	26	29	27	30	24	27	27	4
22	SHT 122	Proagro 9444 (Check)	23	27	23	22	24	21	29	24	29	21	24	24	24	28	25	26	21	24	24	16
		LOC. MEAN	25	27	25	25	26	23	26	25	29	22	25	27	26	27	26	27	22	26	26	
		C.D. (5%)	5.0	1.0	3.0	1.0	1.0	2.0	4.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0	1.0	
		C.D. (1%)	7.0	2.0	4.0	2.0	2.0	3.0	5.0	2.0	1.0	2.0	2.0	3.0	3.0	3.0	2.0	5.0	4.0	3.0	1.0	
		C.V. (%)	12.1	2.7	8.0	3.5	2.9	6.2	8.2	6.2	0.9	4.4	3.9	5.3	5.3	5.1	4.6	7.5	7.5	4.8	6.3	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

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Table I.208: SUMMER HYBRID TRIAL - 2024 PANICLE DIAMETER (cm)

S.No.	TEST CODE	ENTRY	MDR	AND	JMR	SKN	AHD	DEG	PNR1	GUJ	AGR1	LDA	ABD1	ABD7	DHL	JLN1	MS	PMP	PLM	CBE	ZONE	RANK
			MEAN										MEAN									
1	SHT 101	MSH 406	3.4	3.8	3.7	3.5	3.6	3.7	3.4	3.6	4.0	3.1	3.5	3.8	3.6	3.8	3.7	3.2	2.7	3.5	3.5	2
2	SHT 102	MSH 407	3.0	3.5	3.4	3.2	3.3	3.4	3.5	3.4	3.8	2.7	2.8	3.6	3.4	4.0	3.4	3.2	2.6	3.6	3.3	12
3	SHT 103	86M64 (Check)	3.1	3.8	3.4	3.3	3.6	3.6	3.8	3.6	4.1	2.8	3.3	3.6	3.6	3.9	3.6	3.1	3.1	3.7	3.5	4
4	SHT 104	MSH 414	3.1	3.8	3.6	3.1	3.5	3.3	3.5	3.5	3.8	2.9	3.2	3.7	3.5	3.7	3.5	3.0	2.6	3.5	3.4	6
5	SHT 105	MSH 415	3.3	3.6	3.6	3.0	3.3	3.3	3.4	3.4	3.9	2.8	3.4	3.8	3.5	3.4	3.5	3.0	2.4	3.6	3.3	11
6	SHT 106	MSH 416	3.1	3.2	3.5	3.3	3.3	3.4	3.3	3.3	3.7	2.9	3.2	3.7	3.6	3.7	3.6	3.2	2.7	3.3	3.3	10
7	SHT 107	MP 7366 (Check)	3.3	3.7	3.6	3.0	3.1	3.5	3.6	3.4	3.6	2.8	3.2	3.4	3.6	3.4	3.4	3.1	2.8	3.5	3.3	9
8	SHT 108	MSH 417	3.3	3.2	3.2	3.2	3.4	3.2	3.4	3.3	3.7	2.9	3.0	3.6	3.5	3.6	3.4	3.0	2.5	3.7	3.3	16
9	SHT 109	MSH 418	3.3	3.6	3.7	2.9	3.2	3.4	3.9	3.5	3.6	2.6	3.2	3.7	3.5	3.4	3.4	3.0	2.4	3.7	3.3	13
10	SHT 110	MSH 419	3.1	3.5	3.5	3.0	2.6	3.2	3.1	3.2	3.7	3.3	3.3	3.7	3.5	3.9	3.6	3.2	2.5	3.2	3.3	15
11	SHT 111	86M22 (Check)	3.3	3.8	3.5	3.6	3.5	3.4	3.5	3.6	3.8	3.0	3.2	3.8	3.7	4.1	3.7	3.2	2.8	3.8	3.5	3
12	SHT 112	MSH 420	3.0	3.5	3.4	3.0	3.7	3.3	3.7	3.4	3.7	2.8	3.3	3.6	3.4	3.5	3.5	3.0	2.8	3.6	3.3	8
13	SHT 113	MSH 421	3.1	3.4	3.4	3.3	4.1	3.3	3.4	3.5	3.8	2.7	3.2	3.7	3.6	3.0	3.4	3.1	2.9	3.6	3.3	7
14	SHT 114	MSH 422	3.1	3.6	3.5	3.4	3.4	3.1	3.5	3.4	3.4	3.0	2.7	3.6	3.5	3.2	3.2	3.0	2.8	2.7	3.2	18
15	SHT 115	MSH 423	3.2	3.6	3.6	3.3	3.6	3.4	3.6	3.5	3.8	2.8	2.8	3.6	3.7	3.6	3.4	3.1	2.9	3.9	3.4	5
16	SHT 116	Nandi 75 (Check)	2.9	3.9	3.4	3.3	3.4	3.1	3.5	3.4	3.6	2.6	2.8	3.7	3.7	3.6	3.5	3.0	2.5	3.5	3.3	14
17	SHT 117	MSH 424	3.3	3.7	3.4	2.9	3.7	3.1	3.3	3.4	3.3	2.4	3.0	3.5	3.5	3.3	3.3	2.9	2.8	3.1	3.2	20
18	SHT 118	MSH 425	3.0	3.5	3.1	2.7	3.4	3.1	3.3	3.2	3.4	2.9	3.1	3.1	3.6	2.9	3.2	3.0	2.4	3.0	3.1	21
19	SHT 119	MSH 426	3.0	3.4	3.1	2.9	3.6	3.0	3.5	3.3	3.6	2.5	3.2	3.5	3.5	3.8	3.5	3.0	2.5	3.1	3.2	19
20	SHT 120	MSH 427	3.1	3.5	2.9	3.2	3.7	3.1	3.7	3.4	3.5	3.0	3.2	3.5	3.4	3.0	3.3	3.0	2.7	3.3	3.2	17
21	SHT 121	MSH 428	3.3	3.6	3.5	3.5	3.8	3.6	3.4	3.6	3.8	3.5	3.2	3.9	3.7	4.0	3.7	3.5	3.2	3.6	3.6	1
22	SHT 122	Proagro 9444 (Check)	3.1	3.2	3.0	2.9	3.1	3.0	3.7	3.2	3.2	2.7	3.0	3.2	3.2	3.2	3.1	2.7	2.4	2.8	3.0	22
		LOC. MEAN	3.2	3.6	3.4	3.2	3.4	3.3	3.5	3.4	3.7	2.9	3.1	3.6	3.5	3.5	3.5	3.1	2.7	3.4	3.3	
		C.D. (5%)	0.2	0.1	0.3	0.2	0.1	0.2	0.5	0.2	0.0	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.1	
		C.D. (1%)	0.3	0.1	0.4	0.3	0.2	0.2	0.7	0.3	0.0	0.4	0.2	0.3	0.3	0.5	0.4	0.5	0.4	0.4	0.2	
		C.V. (%)	4.3	1.3	5.3	4.4	2.5	2.9	8.9	5.8	0.6	6.6	3.0	4.3	4.3	6.7	5.6	7.3	6.8	5.0	5.7	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	

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Table I.209: SUMMER HYBRID TRIAL - 2024 1000-GRAIN Wt. (g)

S.No. TEST ENTRY MDR AND JMR SKN AHD DEG GUJ AGR1 LDA ABD1 ABD7 DHL JLN1 MS PMP CBE ZONE RANK																					
CODE		MEAN										MEAN									
1	SHT 101	MSH 406	10.4	11.9	10.8	9.8	9.5	13.0	11.0	6.6	7.6	8.9	12.1	9.2	13.2	10.9	9.5	11.4	10.3	15	
2	SHT 102	MSH 407	9.5	8.8	8.6	10.9	7.4	10.8	9.3	6.8	8.1	8.5	10.9	9.1	10.9	9.8	8.4	7.9	9.1	22	
3	SHT 103	86M64 (Check)	9.7	10.8	10.1	11.8	9.3	13.6	11.1	8.3	7.9	8.5	11.5	10.4	12.8	10.8	9.3	8.3	10.2	17	
4	SHT 104	MSH 414	9.8	10.0	9.3	9.8	8.4	11.0	9.7	8.5	6.6	9.0	10.9	10.1	13.6	10.9	8.8	10.7	9.8	19	
5	SHT 105	MSH 415	9.8	11.6	9.8	9.9	10.2	14.0	11.1	11.7	10.6	10.1	10.7	9.8	13.1	10.9	10.0	10.1	10.8	8	
6	SHT 106	MSH 416	10.1	11.6	10.5	11.3	10.1	14.0	11.5	7.8	8.2	9.7	13.1	10.3	13.3	11.6	9.1	11.5	10.8	10	
7	SHT 107	MP 7366 (Check)	10.3	12.6	11.2	9.9	10.7	14.1	11.7	9.9	11.5	10.3	12.7	11.3	13.1	11.9	8.7	12.3	11.3	1	
8	SHT 108	MSH 417	10.1	11.7	11.2	12.7	10.4	14.3	12.1	8.9	9.4	8.9	13.2	10.0	13.3	11.4	10.7	9.2	11.0	5	
9	SHT 109	MSH 418	9.5	11.2	10.2	11.2	9.7	14.2	11.3	11.0	9.6	10.1	12.0	9.9	12.8	11.2	11.0	8.7	10.8	9	
10	SHT 110	MSH 419	9.9	10.1	9.7	8.8	8.9	12.3	10.0	9.6	8.3	11.0	11.7	9.7	13.4	11.4	10.4	10.4	10.3	14	
11	SHT 111	86M22 (Check)	9.8	12.7	10.1	12.1	9.9	13.1	11.6	9.3	7.4	10.1	11.9	8.8	13.2	11.0	8.1	10.5	10.5	13	
12	SHT 112	MSH 420	10.0	12.8	11.2	10.0	12.3	13.8	12.0	8.6	10.7	9.8	13.5	9.3	13.5	11.5	9.3	11.4	11.1	4	
13	SHT 113	MSH 421	10.2	11.3	10.9	10.7	9.1	13.8	11.2	8.7	9.2	8.7	13.6	10.4	13.5	11.5	7.5	11.6	10.6	11	
14	SHT 114	MSH 422	9.9	9.0	9.0	11.5	7.1	10.7	9.5	6.3	7.2	8.6	10.9	10.9	9.9	10.1	7.2	10.0	9.2	21	
15	SHT 115	MSH 423	9.6	12.1	10.6	12.0	10.7	14.0	11.9	8.4	9.9	11.1	11.9	11.3	12.3	11.7	9.9	12.4	11.2	3	
16	SHT 116	Nandi 75 (Check)	9.1	11.4	10.8	10.6	10.3	12.1	11.0	8.1	7.4	9.3	11.1	12.3	13.1	11.4	11.0	10.4	10.5	12	
17	SHT 117	MSH 424	9.7	10.9	9.9	9.2	10.1	13.7	10.7	7.8	9.8	9.1	11.7	9.6	11.6	10.5	8.8	11.2	10.2	16	
18	SHT 118	MSH 425	10.3	11.8	10.8	12.2	9.5	11.8	11.2	9.3	10.2	9.3	10.6	11.3	13.5	11.2	9.4	11.9	10.9	6	
19	SHT 119	MSH 426	9.9	12.5	10.5	10.3	10.7	14.0	11.6	8.9	8.3	11.4	12.9	9.5	12.3	11.5	8.1	12.4	10.8	7	
20	SHT 120	MSH 427	9.1	10.7	8.7	11.3	8.1	12.3	10.2	10.6	7.2	9.1	12.0	9.6	13.5	11.0	8.2	10.6	10.1	18	
21	SHT 121	MSH 428	9.0	11.5	10.7	10.9	11.7	13.9	11.7	9.9	12.1	9.6	13.7	10.6	13.7	11.9	9.1	12.2	11.3	2	
22	SHT 122	Proagro 9444 (Check)	9.2	10.5	9.2	10.0	8.0	13.4	10.2	7.8	9.0	9.1	10.6	9.4	13.0	10.5	8.5	8.2	9.7	20	
		LOC. MEAN	9.8	11.2	10.2	10.8	9.6	13.1	11.0	8.8	8.9	9.5	12.0	10.1	12.8	11.1	9.1	10.6	10.5		
		C.D. (5%)	0.4	0.8	0.9	1.4	0.9	0.9	1.0	0.2	0.4	0.4	1.6	0.3	0.5	1.4	0.2	0.5	0.7		
		C.D. (1%)	0.6	1.1	1.2	1.9	1.1	1.1	1.3	0.3	0.6	0.6	2.2	0.4	0.6	1.9	0.3	0.7	0.9		
		C.V. (%)	2.7	4.3	5.6	8.1	5.4	4.0	7.3	1.5	3.0	2.7	8.3	1.9	2.3	9.8	1.2	3.1	8.6		
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.026	0.000	0.000	0.000		

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Table I.210: SUMMER HYBRID TRIAL - 2024 POPULATION AT HARVEST (No./plot)

S.No.	TEST	ENTRY	MDR	AND	JMR	SKN	AHD	DEG	PNR1	GUJ	AGR1	LDA	ABD1	ABD7	DHL	JLN1	MS	PMP	PLM	CBE	ZONE	RANK
	CODE		MEAN										MEAN									
1	SHT 101	MSH 406	191	156	187	159	196	147	178	171	171	164	154	87	117	132	123	127	154	116	152	7
2	SHT 102	MSH 407	173	155	186	164	180	156	188	172	177	164	152	92	142	155	135	133	159	114	156	2
3	SHT 103	86M64 (Check)	192	152	189	159	176	142	191	168	167	164	154	93	117	150	128	113	158	114	152	8
4	SHT 104	MSH 414	192	157	191	157	187	157	178	171	158	162	155	94	132	158	135	133	157	121	156	3
5	SHT 105	MSH 415	180	152	169	163	198	150	175	168	171	162	152	66	119	144	120	124	158	120	150	12
6	SHT 106	MSH 416	184	158	189	153	188	154	202	174	174	164	152	92	120	159	131	130	155	123	156	1
7	SHT 107	MP 7366 (Check)	183	154	189	140	178	151	181	165	168	161	153	87	124	137	125	137	138	107	149	15
8	SHT 108	MSH 417	182	155	181	161	189	151	191	171	172	162	153	90	123	147	128	134	158	115	154	5
9	SHT 109	MSH 418	178	157	182	163	194	147	188	172	157	163	153	93	128	151	131	127	156	116	153	6
10	SHT 110	MSH 419	166	154	160	160	174	153	191	166	170	162	153	91	124	119	122	124	152	107	148	18
11	SHT 111	86M22 (Check)	161	156	157	171	185	147	189	167	172	163	150	92	121	130	123	120	153	125	149	14
12	SHT 112	MSH 420	196	160	201	145	168	148	167	165	180	161	153	93	142	156	136	143	157	111	155	4
13	SHT 113	MSH 421	168	152	154	148	180	146	180	160	177	163	154	88	97	129	117	132	158	111	146	20
14	SHT 114	MSH 422	178	156	188	158	164	152	180	166	160	162	153	99	129	138	130	132	159	113	151	10
15	SHT 115	MSH 423	172	151	168	159	165	139	207	165	164	162	152	90	116	138	124	125	158	108	148	17
16	SHT 116	Nandi 75 (Check)	176	152	178	162	173	156	173	166	171	161	152	97	125	149	131	134	157	112	152	9
17	SHT 117	MSH 424	172	154	167	156	178	133	184	162	128	164	152	90	124	131	124	116	158	117	145	21
18	SHT 118	MSH 425	178	158	191	151	181	148	169	166	168	162	151	91	133	144	130	122	155	101	150	13
19	SHT 119	MSH 426	169	156	167	166	185	153	174	167	158	163	153	89	109	148	125	114	157	122	149	16
20	SHT 120	MSH 427	182	154	187	160	189	151	163	167	165	162	153	90	124	146	128	124	158	111	151	11
21	SHT 121	MSH 428	173	153	168	162	161	146	174	161	158	163	152	90	122	138	126	120	155	113	147	19
22	SHT 122	Proagro 9444 (Check)	160	147	148	165	170	143	196	161	162	161	152	82	101	141	119	128	138	113	144	22
		LOC. MEAN	178	155	177	158	180	149	183	167	166	162	153	90	122	143	127	127	155	114	151	
		C.D. (5%)	16.0	9.0	33.0	7.0	7.0	13.0	18.0	11.0	2.0	3.0	3.0	7.0	15.0	26.0	10.0	24.0	5.0	17.0	6.0	
		C.D. (1%)	21.0	12.0	44.0	9.0	10.0	18.0	23.0	14.0	3.0	4.0	3.0	9.0	20.0	34.0	14.0	32.0	7.0	23.0	7.0	
		C.V. (%)	5.5	3.6	11.2	2.5	2.5	5.5	5.8	5.7	0.8	1.1	1.0	4.7	7.2	10.9	5.8	11.5	2.1	9.1	5.3	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.478	0.000	0.000	0.000	0.000	0.000	0.000	0.015	0.000	0.000	0.000	0.000	

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Table I.211: SUMMER HYBRID TRIAL - 2024 SEED SET (%) UNDER BAG

S.No.	TEST	ENTRY	MDR	AND	JMR	SKN	AHD	DEG	PNR1	GUJ	AGR1	LDA	ABD1	ABD7	DHL	JLN1	MS	PMP	PLM	CBE	ZONE	RANK
	CODE		MEAN										MEAN									
1	SHT 101	MSH 406	85	69	82	81	70	73	83	77	64	73	99	88	96	72	89	67	96	79	80	6
2	SHT 102	MSH 407	82	76	80	86	82	73	70	78	92	98	99	93	98	75	91	72	90	82	84	4
3	SHT 103	86M64 (Check)	77	57	73	26	45	67	87	59	54	53	99	82	95	68	86	68	83	71	69	15
4	SHT 104	MSH 414	74	83	78	87	62	90	73	79	90	93	98	92	97	77	91	79	96	93	85	3
5	SHT 105	MSH 415	41	10	19	2	48	10	70	26	94	95	98	30	82	80	73	81	94	34	56	19
6	SHT 106	MSH 416	75	85	71	88	23	83	80	72	80	93	100	87	99	67	88	73	82	51	77	10
7	SHT 107	MP 7366 (Check)	65	38	50	64	55	47	87	57	84	95	98	60	96	73	82	62	96	92	73	13
8	SHT 108	MSH 417	77	65	74	58	28	70	87	64	80	63	98	83	98	87	92	72	94	92	77	11
9	SHT 109	MSH 418	39	1	30	5	12	8	50	18	4	65	98	12	92	82	71	72	82	7	41	22
10	SHT 110	MSH 419	47	4	36	5	15	27	60	24	-	98	99	20	91	68	70	59	96	10	49	21
11	SHT 111	86M22 (Check)	75	76	67	86	65	70	80	74	83	93	98	77	88	72	83	69	87	72	78	8
12	SHT 112	MSH 420	80	48	75	86	52	77	83	70	74	98	98	87	94	67	86	87	94	77	80	7
13	SHT 113	MSH 421	78	84	80	87	75	80	80	81	83	88	98	95	100	73	92	83	94	93	86	1
14	SHT 114	MSH 422	78	83	76	81	82	87	80	81	59	72	99	90	99	68	89	60	96	91	81	5
15	SHT 115	MSH 423	76	61	73	60	68	70	80	69	64	80	99	83	95	77	89	75	93	90	78	9
16	SHT 116	Nandi 75 (Check)	77	50	73	20	55	60	65	54	82	52	98	82	93	68	85	75	83	91	70	14
17	SHT 117	MSH 424	43	10	28	5	25	47	60	29	79	82	98	80	90	75	86	85	94	70	61	18
18	SHT 118	MSH 425	45	6	27	2	15	20	67	23	80	93	98	17	93	72	70	73	95	6	51	20
19	SHT 119	MSH 426	63	45	33	5	15	23	73	32	84	99	93	53	98	75	80	50	93	76	61	17
20	SHT 120	MSH 427	63	38	30	31	18	47	60	37	89	93	99	57	91	73	80	57	92	84	64	16
21	SHT 121	MSH 428	80	77	75	83	62	80	77	76	91	98	98	90	98	80	92	83	98	93	85	2
22	SHT 122	Proagro 9444 (Check)	78	17	72	77	25	77	77	57	90	92	98	87	97	75	89	83	92	71	75	12
		LOC. MEAN	68	49	59	51	45	58	74	56	76	85	98	70	95	74	84	72	92	69	71	
		C.D. (5%)	12.0	9.0	13.0	9.0	7.0	18.0	21.0	17.0	2.0	4.0	2.0	14.0	5.0	10.0	19.0	9.0	5.0	12.0	11.0	
		C.D. (1%)	16.0	13.0	18.0	12.0	9.0	24.0	28.0	22.0	2.0	6.0	2.0	19.0	6.0	13.0	26.0	13.0	7.0	16.0	14.0	
		C.V. (%)	10.5	11.6	13.5	10.7	9.2	19.0	17.3	26.2	1.5	3.0	1.1	12.3	3.0	8.0	16.2	7.9	3.6	10.6	21.9	
		F (Prob)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.299	0.000	0.000	0.000	0.000	

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Table I.212: SUMMER HYBRID TRIAL - 2024
GRAIN QUALITY: IRON CONTENT (ppm)

S.No.	TEST	ENTRY	MDR	AND	JMR	ABD1	ABD7	DHL	PMP	ZONE	RANK
		CODE								MEAN	
1	SHT 101	MSH 406	32	46	42	65	56	60	68	53	2
2	SHT 103	86M64 (Check)	27	51	38	68	56	53	44	48	4
3	SHT 106	MSH 416	29	45	41	73	61	56	51	51	3
4	SHT 107	MP 7366 (Check)	34	43	47	71	60	67	48	53	2
5	SHT 108	MSH 417	32	49	46	71	56	58	49	51	3
6	SHT 111	86M22 (Check)	32	50	47	79	55	65	48	54	1
7	SHT 112	MSH 420	24	37	51	58	52	44	33	43	5
8	SHT 116	Nandi 75 (Check)	22	35	39	51	40	41	36	38	7
9	SHT 122	Proagro 9444 (Check)	19	37	39	54	45	40	42	40	6

Table I.213: SUMMER HYBRID TRIAL - 2024
GRAIN QUALITY: ZINC CONTENT (ppm)

S.No.	TEST	ENTRY	MDR	AND	JMR	ABD1	ABD7	DHL	PMP	ZONE	RANK
		CODE								MEAN	
1	SHT 101	MSH 406	49	28	44	48	37	47	27	40	2
2	SHT 103	86M64 (Check)	41	28	40	50	32	39	25	36	3
3	SHT 106	MSH 416	43	30	43	59	36	37	29	40	2
4	SHT 107	MP 7366 (Check)	51	30	46	54	34	48	32	42	1
5	SHT 108	MSH 417	47	32	45	53	34	40	29	40	2
6	SHT 111	86M22 (Check)	49	34	46	54	33	45	35	42	1
7	SHT 112	MSH 420	39	21	43	42	32	34	24	34	5
8	SHT 116	Nandi 75 (Check)	31	25	41	40	29	33	24	32	6
9	SHT 122	Proagro 9444 (Check)	36	27	43	45	32	37	27	35	4

BREEDER SEED PRODUCTION

F. BREEDER SEED PRODUCTION (2024-2025)

In response to 15.48 q breeder seed indents received from the Department of Agriculture and Cooperation, Ministry of Agriculture and Farmer's Welfare (GOI), New Delhi, the target of production of 15.48 q breeder seed was assigned to different institutions for undertaking breeder seed production of 16 varieties and 103 parental lines of different hybrids during the year 2024-25. The breeder seed production programme was organized for seven parental lines and one variety at SKNAU, Jaipur, four parental lines at AU, Jodhpur, two parental line at SKRAU, Bikaner, three parental lines and three varieties at Delhi (ICAR-IARI), fifteen parental lines at CCSHAU, Hisar, two varieties at RVSKVV Gwalior, thirteen parental lines at JAU, Jamnagar, one parental at SDAU, SK Nagar, three varieties and one parental lines at PAU, Ludhiana, forty two parental lines at ICRISAT, one parental line at PJTSAU, Telangana, one variety and two varieties and two parental lines at NARP, Aurangabad, one variety (Dhanshakti) and ten parental lines at MPKV, Dhule, one variety at ANGRAU, Ananthapuram, one variety and one parental line at RARS, UAS, Dharwad, one variety at ARS, Malnoor, UAS, Raichur, one parental line and one variety at TNAU, Coimbatore.

The deficit breeder seed production in these cases is planned in summer 2025. The parental line/variety-wise DAC indent, actual production and supply position as per BSP I issued is summarized in Table I.214-216.

A total of 41.21 q breeder seed was produced against the DAC indent while supply of breeder seed of some of parental lines was assured through carry over seed stock of the year 2024-2025.

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Table I.214: Center-wise Breeder Seed Production Report Kharif 2024-25
Crop: Pearl millet

Year of Indent/ Production: 2024
Year of supply: February: 2025

S. No.	Name of Producing center/state	Name of parental line/ variety	DAC indent (q)	Actual allocation as per BSP-I Target (q)	Actual Production (q)	Production Surplus (+)/ Deficit (-) over BSP-I target (q)
A	Varieties					
1	PAU, Ludhiana	PCB 166 (FBL 4)	0.05	0.05	0.40	0.35
2	PAU, Ludhiana	PCB 165 (GBL 2) (MP 595)	0.05	0.05	0.20	0.15
3	RARS, UAS (Dharwad), Vijayapur	VPMV 9	0.05	0.05	0.50	0.45
4	ARS, Malnoor (UAS, Raichur)	MBP-2	0.05	0.05	0.00	-0.05
5	ANGRAU, Ananthapuram	ABV 04 (MP 552)	2.05	2.05	20.00	17.95
6	ICAR-IARI, New Delhi	Pusa Composite 701 (MP 535)	3.15	3.15	3.15	0.00
7	TNAU, Coimbatore	CO 10	0.05	0.05	0.05	0.00
8	ICRISAT, Patancheru	Dhanshakti (ICTP 8203 Fe 10-2)	1.55	1.55	2.10	0.55
9	NARP, Aurangabad	ABPC4-3 (MP 448)	0.13	0.13	0.25	0.12
10	ICAR-IARI, New Delhi	Pusa Composite 612 (MP 480)	0.12	0.12	0.12	0.00
11	ICAR-IARI, New Delhi	Pusa Composite 443 (MP 443)	0.05	0.05	0.25	0.20
12	PAU, Ludhiana	PCB 164	0.05	0.05	Not in seed chain**	-0.05
13	RVSKVV, Gwalior	JBV-4 (MP 403)	0.05	0.05	0.15	0.10
14	NARP, Aurangabad	PPC-6 (Parbhani Sampada)	0.12	0.12	0.20	0.08
15	RVSKVV, Gwalior	JBV-2 (GKKV-93191)	0.05	0.05	0.25	0.20
16	RARI, SKNAU, Durgapura	Raj 171	0.05	0.05	0.00	-0.05
		Total (A)	7.62	7.62	27.62	20.00
B.	Parental lines					
17	ICRISAT, Patancheru	ICMA 92777 (A Line MPMH 42, GHB 757)	0.12	0.12	Nucleus Seed***	-0.12
18	ICRISAT, Patancheru	ICMB 92777 (B Line MPMH 42, GHB 757)	0.08	0.08	Nucleus Seed***	-0.08
19	ICRISAT, Patancheru	ICMA 93333 (A Line GHB 1294, MPMH 21, RHB 173)	0.52	0.52	0.52	0.00
20	ICRISAT, Patancheru	ICMB 93333 (B Line GHB 1294, MPMH 21, RHB 173)	0.29	0.29	0.29	0.00
21	ICRISAT, Patancheru	ICMA 98222 (A Line Palem Sajja-1625, Moti	0.32	0.32	0.32	0.00

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S. No.	Name of Producing center/state	Name of parental line/ variety	DAC indent (q)	Actual allocation as per BSP-I Target (q)	Actual Production (q)	Production Surplus (+)/ Deficit (-) over BSP-I target (q)
		Shakti (GHB 1225), AHB 1269, AHB 1200)				
22	ICRISAT, Patancheru	ICMB 98222 (B Line Palem Sajja-1625, Moti Shakti (GHB 1225), AHB 1269, AHB 1200)	0.12	0.12	0.12	0.00
23	ICRISAT, Patancheru	ICMA 95444 (A Line GHB 538 Imp, RHB 154, GHB 538)	0.09	0.09	Nucleus Seed***	-0.09
24	ICRISAT, Patancheru	ICMB 95444 (B Line GHB 538 Imp, RHB 154, GHB 538)	0.06	0.06	Nucleus Seed***	-0.06
25	ICRISAT, Patancheru	ICMA 98444 (A Line GHB 1351 (Banas Nayan), GHB 744)	0.06	0.06	0.06	0.00
26	ICRISAT, Patancheru	ICMB 98444 (B Line GHB 1351 (Banas Nayan), GHB 744)	0.04	0.04	0.04	0.00
27	ICRISAT, Patancheru	ICMA 94555 (A Line MPMH 35, VPMH 7, HHB 223, GHB 558)	0.12	0.12	0.12	0.00
28	ICRISAT, Patancheru	ICMB 94555 (B Line MPMH 35, VPMH 7, HHB 223, GHB 558)	0.08	0.08	0.08	0.00
29	ICRISAT, Patancheru	ICMA 843-22 (A Line HHB 67 Imp 2, RHB 228, BHB 1202, HHB 226, RHB 177, HHB 67 Imp)	0.44	0.44	0.50	0.06
30	ICRISAT, Patancheru	ICMB 843-22 (B Line HHB 67 Imp 2, RHB 228, BHB 1202, HHB 226, RHB 177, HHB 67 Imp)	0.27	0.27	0.30	0.03
31	ICRISAT, Patancheru	ICMA 11222 (A Line GHB 1231/Sawaj Shakti)	0.05	0.05	Nucleus Seed***	-0.05
32	ICRISAT, Patancheru	ICMB 11222 (B Line GHB 1231/Sawaj Shakti)	0.06	0.06	Nucleus Seed***	-0.06
33	ICRISAT, Patancheru	ICMA 88004 (A Line BHB 1602)	0.19	0.19	Nucleus Seed***	-0.19
34	ICRISAT, Patancheru	ICMB 88004 (B Line BHB 1602)	0.10	0.10	Nucleus Seed***	-0.10
35	ICRISAT, Patancheru	ICMA 02333 (A Line HHB 311, RHB 234)	0.22	0.22	0.22	0.00
36	ICRISAT, Patancheru	ICMB 02333 (B Line HHB 311, RHB 234)	0.12	0.12	0.12	0.00
37	ICRISAT, Patancheru	ICMA 99222 (A Line Jam Shakti/GHB 1129, PHULE MAHSHAKTI/DHBH 1211)	0.06	0.06	0.06	0.00
38	ICRISAT, Patancheru	ICMB 99222 (B Line Jam Shakti/GHB 1129, PHULE MAHSHAKTI/DHBH 1211)	0.04	0.04	0.04	0.00
39	ICRISAT, Patancheru	ICMA 99444 (A Line RHB 233)	0.13	0.13	0.13	0.00
40	ICRISAT, Patancheru	ICMB 99444 (B Line RHB 233)	0.07	0.07	0.07	0.00
41	ICRISAT, Patancheru	ICMA 96666 (A Line RHB 223)	0.23	0.23	0.23	0.00
42	ICRISAT, Patancheru	ICMB 96666 (B Line RHB 223)	0.12	0.12	0.12	0.00
43	ICRISAT, Patancheru	ICMA 04888 (A Line HHB 299)	0.56	0.56	0.56	0.00
44	ICRISAT, Patancheru	ICMB 04888 (B Line HHB 299)	0.28	0.28	0.28	0.00

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S. No.	Name of Producing center/state	Name of parental line/ variety	DAC indent (q)	Actual allocation as per BSP-I Target (q)	Actual Production (q)	Production Surplus (+)/ Deficit (-) over BSP-I target (q)
45	ICRISAT, Patancheru	ICMA 22777 (A Line PHB 2884)	0.03	0.03	Nucleus Seed***	-0.03
46	ICRISAT, Patancheru	ICMB 22777 (B Line PHB 2884)	0.02	0.02	Nucleus Seed***	-0.02
47	ICRISAT, Patancheru	ICMA 04999 (A Line MPMH 17, GHB 905)	0.24	0.24	0.24	0.00
48	ICRISAT, Patancheru	ICMB 04999 (B Line MPMH 17, GHB 905)	0.16	0.16	0.16	0.00
49	ICRISAT, Patancheru	ICMA 93111 (A Line CO 9)	0.03	0.03	Nucleus Seed***	-0.03
50	ICRISAT, Patancheru	ICMB 93111 (B Line CO 9)	0.02	0.02	Nucleus Seed***	-0.02
51	ICRISAT, Patancheru	ICMA 92333 (A Line PHB 2168)	0.03	0.03	Nucleus Seed***	-0.03
52	ICRISAT, Patancheru	ICMB 92333 (B Line PHB 2168)	0.02	0.02	Nucleus Seed***	-0.02
53	ICRISAT, Patancheru	ICMA 97111 (A Line HHB 197)	0.03	0.03	0.03	0.00
54	ICRISAT, Patancheru	ICMB 97111 (B Line HHB 197)	0.02	0.02	0.02	0.00
55	ICRISAT, Patancheru	ICMA 96222 (A Line GHB 732)	0.03	0.03	0.03	0.00
56	ICRISAT, Patancheru	ICMB 96222 (B Line GHB 732)	0.02	0.02	0.02	0.00
57	ICRISAT, Patancheru	ICMA 95222 (A Line GHB 719, HHB 146, GHB 526)	0.09	0.09	0.09	0.00
58	ICRISAT, Patancheru	ICMB 95222 (B Line GHB 719, HHB 146, GHB 526)	0.06	0.06	0.06	0.00
59	MPKV, Dhule	DHLB-16A (A Line DHBH 1397)	0.03	0.03	0.05	0.02
60	MPKV, Dhule	DHLB-16B (B Line DHBH 1397)	0.02	0.02	0.04	0.02
61	MPKV, Dhule	DHLBI 1035 (R Line DHBH 1397)	0.01	0.01	0.04	0.03
62	MPKV, Dhule	DHLB-8A (A Line ADISHAKTI)	0.03	0.03	0.10	0.07
63	MPKV, Dhule	DHLB-8B (B Line ADISHAKTI)	0.02	0.02	0.06	0.04
64	MPKV, Dhule	DHLBI-967 (R Line ADISHAKTI)	0.01	0.01	0.05	0.04
65	MPKV, Dhule	RHRB 13A (A Line RHRBH-9808)	0.03	0.03	0.03	0.00
66	MPKV, Dhule	RHRB 13B (B Line RHRBH-9808)	0.02	0.02	0.03	0.01
67	MPKV, Dhule	RHRBI 1314 (R Line RHRBH-9808)	0.01	0.01	0.03	0.02
68	MPKV, Dhule	DHLBI 1201 (R Line PHULE MAHASHAKTI/DHBH 1211)	0.01	0.01	0.03	0.02
69	NARP, Aurangabad	AUBI 1105 (R Line AHB 1269)	0.01	0.01	0.40	0.39
70	NARP, Aurangabad	AUBI 1101 (R Line AHB 1200)	0.06	0.06	0.12	0.06
71	RARS, UAS (Dharwad), Vijayapur	CPRT-112 (R Line VPMH 7)	0.01	0.01	0.10	0.09
72	PJTSAU, Telangana	PBR511 (R Line Palem Sajja-1625)	0.01	0.01	0.02	0.01
73	TNAU, Coimbatore	PT 6029-30 (R Line CO 9)	0.01	0.01	0.01	0.00
74	JAU, Jamnagar	JMS A 101 (A Line GHB 577)	0.03	0.03	Not in seed chain**	-0.03
75	JAU, Jamnagar	JMS B 101 (B Line GHB 577)	0.02	0.02	Not in seed	-0.02

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S. No.	Name of Producing center/state	Name of parental line/ variety	DAC indent (q)	Actual allocation as per BSP-I Target (q)	Actual Production (q)	Production Surplus (+)/ Deficit (-) over BSP-I target (q)
					chain**	
76	JAU, Jamnagar	J 2405 (R Line GHB 577)	0.01	0.01	Not in seed chain**	-0.01
77	JAU, Jamnagar	J-2632 (R Line GHB 1294)	0.01	0.01	0.00	-0.01
78	JAU, Jamnagar	J-2340 Imp (R Line GHB 538Imp)	0.01	0.01	0.00	-0.01
79	JAU, Jamnagar	J-2597 (R Line GHB 1231/Sawaj Shakti)	0.05	0.05	0.06	0.01
80	JAU, Jamnagar	J-2565 (R Line GHB 1129/ Jam Shakti)	0.01	0.01	0.00	-0.01
81	JAU, Jamnagar	J-2591 (R Line GHB 1225/ Moti Shakti)	0.03	0.03	0.00	-0.03
82	JAU, Jamnagar	J-2454 (R Line GHB 905, GHB 719)	0.02	0.02	0.00	-0.02
83	JAU, Jamnagar	J-2340 (R Line GHB 732, GHB 538, GHB 744)	0.03	0.03	0.00	-0.03
84	JAU, Jamnagar	J-2467 (R Line GHB 757)	0.01	0.01	0.00	-0.01
85	JAU, Jamnagar	J-2290 (R Line GHB 558)	0.01	0.01	0.00	-0.01
86	JAU, Jamnagar	J-2372 (R Line GHB 526)	0.01	0.01	0.00	-0.01
87	SDAU, Deesa	ICMR 17548 (R Line GHB 1351/Banas Nayan)	0.01	0.01	0.00	-0.01
88	IARI, New Delhi	MS 411 A (A Line Pusa 1201)	0.03	0.03	0.05	0.02
89	IARI, New Delhi	MS 411 B (B Line Pusa 1201)	0.02	0.02	0.03	0.01
90	IARI, New Delhi	ICMR 07333 (R Line Pusa 1201)	0.01	0.01	0.01	0.00
91	HAU, Hisar	HMS 47A (A Line HHB 272)	0.03	0.03	0.00	-0.03
92	HAU, Hisar	HMS 47B (B Line HHB 272)	0.02	0.02	0.00	-0.02
93	HAU, Hisar	AC 04/13 (R Line HHB 272)	0.01	0.01	0.10*	0.09
94	HAU, Hisar	HMS 7A (A Line HHB 234, HHB 117)	0.09	0.09	0.20*	0.11
95	HAU, Hisar	HMS 7B (B Line HHB 234, HHB 117)	0.05	0.05	0.10*	0.05
96	HAU, Hisar	H77/833-2-202 (R Line HHB 234, HHB 67 Imp)	0.05	0.05	0.10*	0.05
97	HAU, Hisar	HMS 37A (A Line HHB 216)	0.03	0.03	Not in seed chain**	-0.03
98	HAU, Hisar	HMS 37B (B Line HHB 216)	0.02	0.02	Not in seed chain**	-0.02
99	HAU, Hisar	HTP 3/13 (R Line HHB 216)	0.01	0.01	Not in seed chain**	-0.01
100	HAU, Hisar	H 77/29-2 (R Line HHB 117)	0.01	0.01	Not in seed chain**	-0.01
101	HAU, Hisar	H 77-833-2-202-6R (R Line HHB 67 Imp 2)	0.11	0.11	0.15	0.04
102	HAU, Hisar	H 14/003 (R Line HHB 311)	0.04	0.04	0.04*	0.00
103	HAU, Hisar	H 13/0001 (R Line HHB 299)	0.27	0.27	0.30	0.03
104	HAU, Hisar	HL 11 (R Line HHB 226, HHB 223, HHB 197)	0.03	0.03	Not in seed	-0.03

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S. No.	Name of Producing center/state	Name of parental line/ variety	DAC indent (q)	Actual allocation as per BSP-I Target (q)	Actual Production (q)	Production Surplus (+)/ Deficit (-) over BSP-I target (q)
					chain***	
105	HAU, Hisar	HTP 94/54 (R Line HHB 146)	0.01	0.01	Not in seed chain***	-0.01
106	SKNAU, Jaipur	RIB 15S076 (R Line RHB 228)	0.01	0.01	4.00	3.99
107	SKNAU, Jaipur	RIB 15176 (R Line RHB 233)	0.06	0.06	0.07	0.01
108	SKNAU, Jaipur	RIB 15177 (R Line RHB 234)	0.06	0.06	0.04	-0.02
109	SKNAU, Jaipur	RIB 3135-18 (R Line RHB 223)	0.11	0.11	0.16	0.05
110	SKNAU, Jaipur	RIB 494 (R Line RHB 177)	0.01	0.01	0.01	0.00
111	SKNAU, Jaipur	RIB 192 S/99 (R Line RHB-173)	0.01	0.01	0.01	0.00
112	SKNAU, Jaipur	RIB 57 S/05 (R Line RHB 154)	0.01	0.01	0.01	0.00
113	AU, Jodhpur	MIR 519-1 (R Line MPMH 42)	0.05	0.05	0.12	0.07
114	AU, Jodhpur	MIR 1252 (R Line MPMH 35)	0.01	0.01	0.52	0.51
115	AU, Jodhpur	MIR 524 (R Line MPMH 21)	0.22	0.22	0.98	0.76
116	AU, Jodhpur	MIR 525-2 (R Line MPMH 17)	0.13	0.13	0.42	0.29
117	SKRAU, Bikaner	BIB-16810 (R Line BHB-1602)	0.09	0.09	0.09	0.00
118	SKRAU, Bikaner	BIB-22 (R Line BHB-1202)	0.04	0.04	0.04	0.00
119	PAU, Ludhiana	PIB 686 (R Line PHB-2884, PHB 2168)	0.02	0.02	0.04	0.02
		Total (B)	7.86	7.86	13.59	5.73
		Total (A)+(B)	15.48	15.48	41.21	25.73

*Carryover of Kharif 2023 season

**Not in seed chain

***Nucleus Seed can provide

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Table I.215: State-wise Breeder Seed Production Report Kharif 2024-25
Crop: Pearl millet

Year of Indent/ Production: 2024
Year of supply: February 2025

S. No.	Name of Producing center/state	Hybrid/ Variety	Name of parental line	DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
	Rajasthan						
1	SKNAU, Jaipur	RHB 228 (R Line)	RIB 15S076	0.01	0.01	4.00	3.99
2	SKNAU, Jaipur	RHB 233 (R Line)	RIB 15176	0.06	0.06	0.07	0.01
3	SKNAU, Jaipur	RHB 234 (R Line)	RIB 15177	0.06	0.06	0.04	-0.02
4	SKNAU, Jaipur	RHB 223 (R Line)	RIB 3135-18	0.11	0.11	0.16	0.05
5	SKNAU, Jaipur	RHB 177 (R Line)	RIB 494	0.01	0.01	0.01	0.00
6	SKNAU, Jaipur	RHB-173 (R Line)	RIB 192 S/99	0.01	0.01	0.01	0.00
7	SKNAU, Jaipur	RHB 154 (R Line)	RIB 57 S/05	0.01	0.01	0.01	0.00
8	AU, Jodhpur	MPMH 42 (R Line)	MIR 519-1	0.05	0.05	0.12	0.07
9	AU, Jodhpur	MPMH 35 (R Line)	MIR 1252	0.01	0.01	0.52	0.51
10	AU, Jodhpur	MPMH 21 (R Line)	MIR 524	0.22	0.22	0.98	0.76
11	AU, Jodhpur	MPMH 17 (R Line)	MIR 525-2	0.13	0.13	0.42	0.29
12	SKRAU, Bikaner	BHB-1602 (R Line)	BIB-16810	0.09	0.09	0.09	0.00
13	SKRAU, Bikaner	BHB-1202 (R Line)	BIB-22	0.04	0.04	0.04	0.00
14	RARI, SKNAU, Durgapura	Raj 171	-	0.05	0.05	0.00	-0.05
		Total		0.86	0.86	6.47	5.61
	Delhi						
1	ICAR-IARI, New Delhi	Pusa Composite 701 (MP 535)	-	3.15	3.15	3.15	0.00
2	ICAR-IARI, New Delhi	Pusa Composite 612 (MP 480)	-	0.12	0.12	0.12	0.00
3	ICAR-IARI, New Delhi	Pusa Composite 443 (MP 443)	-	0.05	0.05	0.25	0.20
4	IARI, New Delhi	Pusa 1201 (A Line)	MS 411 A	0.03	0.03	0.05	0.02
5	IARI, New Delhi	Pusa 1201 (B Line)	MS 411 B	0.02	0.02	0.03	0.01
6	IARI, New Delhi	Pusa 1201 (R Line)	ICMR 07333	0.01	0.01	0.01	0.00
		Total		3.38	3.38	3.61	0.23
	Haryana						
1	HAU, Hisar	HHB 272 (A Line)	HMS 47A	0.03	0.03	0.00	-0.03
2	HAU, Hisar	HHB 272 (B Line)	HMS 47B	0.02	0.02	0.00	-0.02
3	HAU, Hisar	HHB 272 (R Line)	AC 04/13	0.01	0.01	0.10*	0.09

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S. No.	Name of Producing center/state	Hybrid/ Variety	Name of parental line	DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
4	HAU, Hisar	HHB 234, HHB 117 (A Line)	HMS 7A	0.09	0.09	0.20*	0.11
5	HAU, Hisar	HHB 234, HHB 117 (B Line)	HMS 7B	0.05	0.05	0.10*	0.05
6	HAU, Hisar	HHB 234, HHB 67 Imp (R Line)	H77/833-2-202	0.05	0.05	0.10*	0.05
7	HAU, Hisar	HHB 216 (A Line)	HMS 37A	0.03	0.03	Not in seed chain**	-0.03
8	HAU, Hisar	HHB 216 (B Line)	HMS 37B	0.02	0.02	Not in seed chain**	-0.02
9	HAU, Hisar	HHB 216 (R Line)	HTP 3/13	0.01	0.01	Not in seed chain**	-0.01
10	HAU, Hisar	HHB 117 (R Line)	H 77/29-2	0.01	0.01	Not in seed chain**	-0.01
11	HAU, Hisar	HHB 67 Imp 2 (R Line)	H 77-833-2-202-6R	0.11	0.11	0.15	0.04
12	HAU, Hisar	HHB 311 (R Line)	H 14/003	0.04	0.04	0.04*	0.00
13	HAU, Hisar	HHB 299 (R Line)	H 13/0001	0.27	0.27	0.30	0.03
14	HAU, Hisar	HHB 226, HHB 223, HHB 197 (R Line)	HBL 11	0.03	0.03	Not in seed chain***	-0.03
15	HAU, Hisar	HHB 146 (R Line)	HTP 94/54	0.01	0.01	Not in seed chain***	-0.01
		Total		0.78	0.78	0.99	0.21
	Madhya Pradesh						
1	RVSKVV, Gwalior	JBV-4 (MP 403)	-	0.05	0.05	0.15	0.10
2	RVSKVV, Gwalior	JBV-2 (GKKV-93191)	-	0.05	0.05	0.25	0.20
		Total		0.10	0.10	0.40	0.30
	Gujarat						
1	JAU, Jamnagar	GHB 577 (A Line)	JMS A 101	0.03	0.03	Not in seed chain**	-0.03
2	JAU, Jamnagar	GHB 577 (B Line)	JMS B 101	0.02	0.02	Not in seed chain**	-0.02
3	JAU, Jamnagar	GHB 577 (R Line)	J 2405	0.01	0.01	Not in seed chain**	-0.01
4	JAU, Jamnagar	GHB 1294 (R Line)	J-2632	0.01	0.01	0.00	-0.01
5	JAU, Jamnagar	GHB 538Imp (R Line)	J-2340 Imp	0.01	0.01	0.00	-0.01
6	JAU, Jamnagar	GHB 1231/Sawaj Shakti (R Line)	J-2597	0.05	0.05	0.06	0.01

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S. No.	Name of Producing center/state	Hybrid/ Variety	Name of parental line	DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
7	JAU, Jamnagar	GHB 1129/ Jam Shakti (R Line)	J-2565	0.01	0.01	0.00	-0.01
8	JAU, Jamnagar	GHB 1225/ Moti Shakti (R Line)	J-2591	0.03	0.03	0.00	-0.03
9	JAU, Jamnagar	GHB 905, GHB 719 (R Line)	J-2454	0.02	0.02	0.00	-0.02
10	JAU, Jamnagar	GHB 732, GHB 538, GHB 744 (R Line)	J-2340	0.03	0.03	0.00	-0.03
11	JAU, Jamnagar	GHB 757 (R Line)	J-2467	0.01	0.01	0.00	-0.01
12	JAU, Jamnagar	GHB 558 (R Line)	J-2290	0.01	0.01	0.00	-0.01
13	JAU, Jamnagar	GHB 526 (R Line)	J-2372	0.01	0.01	0.00	-0.01
14	SDAU, Deesa	GHB 1351/Banas Nayan (R Line)	ICMR 17548	0.01	0.01	0.00	-0.01
		Total		0.26	0.26	0.06	-0.20
	Punjab						
1	PAU, Ludhiana	PCB 166 (FBL 4)	-	0.05	0.05	0.40	0.35
2	PAU, Ludhiana	PCB 165 (GBL 2) (MP 595)	-	0.05	0.05	0.20	0.15
3	PAU, Ludhiana	PCB 164	-	0.05	0.05	0.00	-0.05
4	PAU, Ludhiana	PHB-2884, PHB 2168 (R Line)	PIB 686	0.02	0.02	0.04	0.02
		Total		0.17	0.17	0.64	0.47
	Maharashtra						
1	NARP, Aurangabad	PPC-6 (Parbhani Sampada)	-	0.12	0.12	0.20	0.08
2	MPKV, Dhule	DHBH 1397 (A Line)	DHLB-16A	0.03	0.03	0.05	0.02
3	MPKV, Dhule	DHBH 1397 (B Line)	DHLB-16B	0.02	0.02	0.04	0.02
4	MPKV, Dhule	DHBH 1397 (R Line)	DHLBI 1035	0.01	0.01	0.04	0.03
5	MPKV, Dhule	ADISHAKTI (A Line)	DHLB-8A	0.03	0.03	0.10	0.07
6	MPKV, Dhule	ADISHAKTI (B Line)	DHLB-8B	0.02	0.02	0.06	0.04
7	MPKV, Dhule	ADISHAKTI (R Line)	DHLBI-967	0.01	0.01	0.05	0.04
8	MPKV, Dhule	RHRBH-9808 (A Line)	RHRB 13A	0.03	0.03	0.03	0.00
9	MPKV, Dhule	RHRBH-9808 (B Line)	RHRB 13B	0.02	0.02	0.03	0.01
10	MPKV, Dhule	RHRBH-9808 (R Line)	RHRBI 1314	0.01	0.01	0.03	0.02
11	MPKV, Dhule	PHULE MAHASHKTI/DHBH 1211 (R Line)	DHLBI 1201	0.01	0.01	0.03	0.02
12	NARP, Aurangabad	AHB 1269 (R Line)	AUBI 1105	0.01	0.01	0.40	0.39
13	NARP, Aurangabad	AHB 1200 (R Line)	AUBI 1101	0.06	0.06	0.12	0.06
14	NARP, Aurangabad	ABPC4-3 (MP 448)	-	0.13	0.13	0.25	0.12
		Total		0.51	0.51	1.43	0.92
	Andhra Pradesh						
1	ANGRAU, Ananthapuram	ABV 04 (MP 552)	-	2.05	2.05	20.00	17.95

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S. No.	Name of Producing center/state	Hybrid/ Variety	Name of parental line	DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
		Total		2.05	2.05	20.00	17.95
	Karnataka						
1	RARS, UAS (Dharwad), Vijayapur	VPMV 9	-	0.05	0.05	0.50	0.45
2	ARS, Malnoor (UAS, Raichur)	MBP-2	-	0.05	0.05	0.00	-0.05
3	RARS, UAS (Dharwad), Vijayapur	VPMH 7 (R Line)	CPRT-112	0.01	0.01	0.10	0.09
		Total		0.11	0.11	0.60	0.49
	Tamil Nadu						
1	TNAU, Coimbatore	CO 10	-	0.05	0.05	0.05	0.00
2	TNAU, Coimbatore	CO 9 (R Line)	PT 6029-30	0.01	0.01	0.01	0.00
		Total		0.06	0.06	0.06	0.00
	Telangana						
1	ICRISAT, Patancheru	MPMH 42, GHB 757 (A Line)	ICMA 92777	0.12	0.12	Nucleus Seed***	-0.12
2	ICRISAT, Patancheru	MPMH 42, GHB 757 (B Line)	ICMB 92777	0.08	0.08	Nucleus Seed***	-0.08
3	ICRISAT, Patancheru	GHB 1294, MPMH 21, RHB 173 (A Line)	ICMA 93333	0.52	0.52	0.52	0.00
4	ICRISAT, Patancheru	GHB 1294, MPMH 21, RHB 173 (B Line)	ICMB 93333	0.29	0.29	0.29	0.00
5	ICRISAT, Patancheru	Palem Sajja-1625, Moti Shakti (GHB 1225), AHB 1269, AHB 1200 (A Line)	ICMA 98222	0.32	0.32	0.32	0.00
6	ICRISAT, Patancheru	Palem Sajja-1625, Moti Shakti (GHB 1225), AHB 1269, AHB 1200 (B Line)	ICMB 98222	0.12	0.12	0.12	0.00
7	ICRISAT, Patancheru	GHB 538 Imp, RHB 154, GHB 538 (A Line)	ICMA 95444	0.09	0.09	Nucleus Seed***	-0.09
8	ICRISAT, Patancheru	GHB 538 Imp, RHB 154, GHB 538 (B Line)	ICMB 95444	0.06	0.06	Nucleus Seed***	-0.06
9	ICRISAT, Patancheru	GHB 1351 (Banas Nayan), GHB 744 (A Line)	ICMA 98444	0.06	0.06	0.06	0.00
10	ICRISAT, Patancheru	GHB 1351 (Banas Nayan), GHB 744 (B Line)	ICMB 98444	0.04	0.04	0.04	0.00
11	ICRISAT, Patancheru	MPMH 35, VPMH 7, HHB 223, GHB 558 (A Line)	ICMA 94555	0.12	0.12	0.12	0.00
12	ICRISAT, Patancheru	MPMH 35, VPMH 7, HHB 223, GHB 558) (B Line)	ICMB 94555	0.08	0.08	0.08	0.00

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S. No.	Name of Producing center/state	Hybrid/ Variety	Name of parental line	DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
13	ICRISAT, Patancheru	HHB 67 Imp 2, RHB 228, BHB 1202, HHB 226, RHB 177, HHB 67 Imp (A Line)	ICMA 843-22	0.44	0.44	0.50	0.06
14	ICRISAT, Patancheru	HHB 67 Imp 2, RHB 228, BHB 1202, HHB 226, RHB 177, HHB 67 Imp (B Line)	ICMB 843-22	0.27	0.27	0.30	0.03
15	ICRISAT, Patancheru	GHB 1231/Sawaj Shakti (A Line)	ICMA 11222	0.05	0.05	Nucleus Seed***	-0.05
16	ICRISAT, Patancheru	GHB 1231/Sawaj Shakti (B Line)	ICMB 11222	0.06	0.06	Nucleus Seed***	-0.06
17	ICRISAT, Patancheru	BHB 1602 (A Line)	ICMA 88004	0.19	0.19	Nucleus Seed***	-0.19
18	ICRISAT, Patancheru	BHB 1602 (B Line)	ICMB 88004	0.10	0.10	Nucleus Seed***	-0.10
19	ICRISAT, Patancheru	HHB 311, RHB 234 (A Line)	ICMA 02333	0.22	0.22	0.22	0.00
20	ICRISAT, Patancheru	HHB 311, RHB 234 (B Line)	ICMB 02333	0.12	0.12	0.12	0.00
21	ICRISAT, Patancheru	Jam Shakti/GHB 1129, PHULE MAHSHAKTI/DHBH 1211 (A Line)	ICMA 99222	0.06	0.06	0.06	0.00
22	ICRISAT, Patancheru	Jam Shakti/GHB 1129, PHULE MAHSHAKTI/DHBH 1211 (B Line)	ICMB 99222	0.04	0.04	0.04	0.00
23	ICRISAT, Patancheru	RHB 233 (A Line)	ICMA 99444	0.13	0.13	0.13	0.00
24	ICRISAT, Patancheru	RHB 233 (B Line)	ICMB 99444	0.07	0.07	0.07	0.00
25	ICRISAT, Patancheru	RHB 223 (A Line)	ICMA 96666	0.23	0.23	0.23	0.00
26	ICRISAT, Patancheru	RHB 223 (B Line)	ICMB 96666	0.12	0.12	0.12	0.00
27	ICRISAT, Patancheru	HHB 299 (A Line)	ICMA 04888	0.56	0.56	0.56	0.00
28	ICRISAT, Patancheru	HHB 299 (B Line)	ICMB 04888	0.28	0.28	0.28	0.00
29	ICRISAT, Patancheru	PHB 2884 (A Line)	ICMA 22777	0.03	0.03	Nucleus Seed***	-0.03
30	ICRISAT, Patancheru	PHB 2884 (B Line)	ICMB 22777	0.02	0.02	Nucleus Seed***	-0.02
31	ICRISAT, Patancheru	MPMH 17, GHB 905 (A Line)	ICMA 04999	0.24	0.24	0.24	0.00
32	ICRISAT, Patancheru	MPMH 17, GHB 905 (B Line)	ICMB 04999	0.16	0.16	0.16	0.00
33	ICRISAT, Patancheru	CO 9 (A Line)	ICMA 93111	0.03	0.03	Nucleus Seed***	-0.03
34	ICRISAT, Patancheru	CO 9 (B Line)	ICMB 93111	0.02	0.02	Nucleus Seed***	-0.02
35	ICRISAT, Patancheru	PHB 2168 (A Line)	ICMA 92333	0.03	0.03	Nucleus	-0.03

CHAPTER I: BREEDING

S. No.	Name of Producing center/state	Hybrid/ Variety	Name of parental line	DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
						Seed***	
36	ICRISAT, Patancheru	PHB 2168 (B Line)	ICMB 92333	0.02	0.02	Nucleus Seed***	-0.02
37	ICRISAT, Patancheru	HHB 197 (A Line)	ICMA 97111	0.03	0.03	0.03	0.00
38	ICRISAT, Patancheru	HHB 197 (B Line)	ICMB 97111	0.02	0.02	0.02	0.00
39	ICRISAT, Patancheru	GHB 732 (A Line)	ICMA 96222	0.03	0.03	0.03	0.00
40	ICRISAT, Patancheru	GHB 732 (B Line)	ICMB 96222	0.02	0.02	0.02	0.00
41	ICRISAT, Patancheru	GHB 719, HHB 146, GHB 526 (A Line)	ICMA 95222	0.09	0.09	0.09	0.00
42	ICRISAT, Patancheru	GHB 719, HHB 146, GHB 526 (B Line)	ICMB 95222	0.06	0.06	0.06	0.00
43	ICRISAT, Patancheru	Dhanshakti (ICTP 8203 Fe 10-2)	-	1.55	1.55	2.10	0.55
44	PJTSAU, Telangana	Palem Sajja-1625 (R Line)	PBR511	0.01	0.01	0.02	0.01
		Total		7.20	7.20	6.95	-0.25
		Grand Total		15.48	15.48	41.21	25.73

*Carryover of Kharif 2023 season

**Not in seed chain

***Nucleus Seed can provide

CHAPTER I: BREEDING

Table I.216: Variety-wise Breeder Seed Production Report Kharif 2024-25

Crop: Pearl millet

Year of Indent/ Production: 2024

Year of supply: February 2025

S. No.	Name Variety/Hybrid	Name of parental line	Year of Release	Total DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
1	PCB 166 (FBL 4)	-	2023	0.05	0.05	0.40	0.35
2	PCB 165 (GBL 2) (MP 595)	-	2021	0.05	0.05	0.20	0.15
3	VPMV 9	-	2021	0.05	0.05	0.50	0.45
4	MBP-2	-	2021	0.05	0.05	0.00	-0.05
5	ABV 04 (MP 552)	-	2019	2.05	2.05	20.00	17.95
6	Pusa Composite 701 (MP 535)	-	2016	3.15	3.15	3.15	0.00
7	CO 10	-	2016	0.05	0.05	0.05	0.00
8	Dhanshakti (ICTP 8203 Fe 10-2)		2014	1.55	1.55	2.10	0.55
9	ABPC4-3 (MP 448)		2012	0.13	0.13	0.25	0.12
10	Pusa Composite 612 (MP 480)		2011	0.12	0.12	0.12	0.00
11	Pusa Composite 443 (MP 443)		2009	0.05	0.05	0.25	0.20
12	PCB 164		2007	0.05	0.05	Not in seed chain**	-0.05
13	JBV-4 (MP 403)		2007	0.05	0.05	0.15	0.10
14	PPC-6 (Parbhani Sampada)		2005	0.12	0.12	0.20	0.08
15	JBV-2 (GKKV-93191)		1999	0.05	0.05	0.25	0.20
16	Raj 171		1992	0.05	0.05	0.00	-0.05
			Total (A)	7.62	7.62	27.62	20.00
17	MPMH 42	ICMA 92777 (A Line)	2024	0.09	0.09	Nucleus Seed***	-0.09
		ICMB 92777 (B Line)		0.06	0.06	Nucleus Seed***	-0.06
		MIR 519-1 (R Line)		0.05	0.05	0.12	0.07
18	GHB 757	ICMA 92777 (A Line)	2008	0.03	0.03	Nucleus Seed***	-0.03
		ICMB 92777 (B Line)		0.02	0.02	Nucleus Seed***	-0.02
		J 2467 (R Line)		0.01	0.01	0.00	-0.01
19	GHB 1294	ICMA 93333 (A Line)	2024	0.03	0.03	0.03	0.00
		ICMB 93333 (B Line)		0.02	0.02	0.02	0.00
		J-2632 (R Line)		0.01	0.01	0.00	-0.01

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S. No.	Name Variety/Hybrid	Name of parental line	Year of Release	Total DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
20	MPMH 21	ICMA 93333 (A Line)		0.46	0.46	0.46	0.00
		ICMB 93333 (B Line)		0.25	0.25	0.25	0.00
		MIR 524		0.22	0.22	0.98	0.76
21	RHB 173	ICMA 93333 (A Line)		0.03	0.03	0.03	0.00
		ICMB 93333 (B Line)		0.02	0.02	0.02	0.00
		RIB 192S/99		0.01	0.01	0.01	0.00
22	Palem Sajja-1625	ICMA 98222 (A Line)	2024	0.03	0.03	0.03	0.00
		ICMB 98222 (B Line)		0.02	0.02	0.02	0.00
		PBR511		0.01	0.01	0.02	0.01
23	Moti Shakti (GHB 1225)	ICMA 98222 (A Line)	2020	0.07	0.07	0.07	0.00
		ICMB 98222 (B Line)		0.04	0.04	0.04	0.00
		J-2591 (R Line)		0.03	0.03	0.00	-0.03
24	AHB 1269	ICMA 98222 (A Line)	2019	0.03	0.03	0.03	0.00
		ICMB 98222 (B Line)		0.02	0.02	0.02	0.00
		AUBI 1105 (R Line)		0.01	0.01	0.40	0.39
25	AHB 1200	ICMA 98222 (A Line)	2018	0.19	0.19	0.19	0.00
		ICMB 98222 (B Line)		0.04	0.04	0.04	0.00
		AUBI 1101 (R Line)		0.06	0.06	0.12	0.06
26	GHB 538 Imp.	ICMA 95444 (A Line)	2024	0.03	0.03	Nucleus Seed***	-0.03
		ICMB 95444 (B Line)		0.02	0.02	Nucleus Seed***	-0.02
		J-2340 (R Line)		0.01	0.01	0.00	-0.01
27	RHB 154	ICMA 95444 (A Line)	2009	0.03	0.03	Nucleus Seed***	-0.03
		ICMB 95444 (B Line)		0.02	0.02	Nucleus Seed***	-0.02
		RIB 57 S/05 (R Line)		0.01	0.01	0.01	0.00
28	GHB 538	ICMA 95444 (A Line)	2005	0.03	0.03	Nucleus Seed***	-0.03
		ICMB 95444 (B Line)		0.02	0.02	Nucleus Seed***	-0.02
		J-2340 (R Line)		0.01	0.01	0.00	-0.01
29	GHB 1351 (Banas Nayan)	ICMA 98444 (A Line)	2024	0.03	0.03	0.03	0.00
		ICMB 98444 (B Line)		0.02	0.02	0.02	0.00
		ICMR 17548 (R Line)		0.01	0.01	0.00	-0.01
30	GHB 744	ICMA 98444 (A Line)	2008	0.03	0.03	0.03	0.00
		ICMB 98444 (B Line)		0.02	0.02	0.02	0.00
		J 2340 (R Line)		0.01	0.01	0.00	-0.01
31	MPMH 35	ICMA 94555 (A Line)	2022	0.03	0.03	0.03	0.00

CHAPTER I: BREEDING

S. No.	Name Variety/Hybrid	Name of parental line	Year of Release	Total DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
		ICMB 94555 (B Line)		0.02	0.02	0.02	0.00
		MIR 1252 (R Line)		0.01	0.01	0.52	0.51
32	VPMH 7	ICMA 94555 (A Line)	2021	0.03	0.03	0.03	0.00
		ICMB 94555 (B Line)		0.02	0.02	0.02	0.00
		CPRT-112 (R Line)		0.01	0.01	0.10	0.09
33	HHB 223	ICMA 94555 (A Line)	2010	0.03	0.03	0.03	0.00
		ICMB 94555 (B Line)		0.02	0.02	0.02	0.00
		HBL 11 (R Line)		0.01	0.01	Not in seed chain**	-0.01
34	GHB 558	ICMA 94555 (A Line)	2003	0.03	0.03	0.03	0.00
		ICMB 94555 (B Line)		0.02	0.02	0.02	0.00
		J 2290 (R Line)		0.01	0.01	0.00	-0.01
35	HHB 67 Imp	ICMA 843-22 (A Line)	2005	0.09	0.09	0.12	0.03
		ICMB 843-22 (B Line)		0.04	0.04	0.07	0.03
		H 77/833-2-202 (R Line)		0.03	0.03	0.05*	0.02
36	HHB 67 Imp 2	ICMA 843-22 (A Line)	2021	0.17	0.17	0.20	0.03
		ICMB 843-22 (B Line)		0.12	0.12	0.12	0.00
		H 77/833-2-202-6 (R Line)		0.11	0.11	0.15	0.04
37	RHB 228	ICMA 843-22 (A Line)	2021	0.03	0.03	0.03	0.00
		ICMB 843-22 (B Line)		0.02	0.02	0.02	0.00
		RIB15S076 (R Line)		0.01	0.01	4.00	3.99
38	BHB 1202	ICMA 843-22 (A Line)	2018	0.09	0.09	0.09	0.00
		ICMB 843-22 (B Line)		0.05	0.05	0.05	0.00
		BIB-22 (R Line)		0.04	0.04	0.04	0.00
39	HHB 226	ICMA 843-22 (A Line)	2011	0.03	0.03	0.03	0.00
		ICMB 843-22 (B Line)		0.02	0.02	0.02	0.00
		HBL 11 (R Line)		0.01	0.01	Not in seed chain**	-0.01
40	RHB 177	ICMA 843-22 (A Line)	2011	0.03	0.03	0.03	0.00
		ICMB 843-22 (B Line)		0.02	0.02	0.02	0.00
		RIB 494 (R Line)		0.01	0.01	0.01	0.00
41	GHB 1231(Sawaj Shakti)	ICMA 11222	2021	0.05	0.05	Nucleus Seed***	-0.05
		ICMB 11222		0.06	0.06	Nucleus Seed***	-0.06
		J-2597 (R Line)		0.05	0.05	0.06	0.01

CHAPTER I: BREEDING

S. No.	Name Variety/Hybrid	Name of parental line	Year of Release	Total DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
42	BHB 1602	ICMA 88004 (A Line)	2020	0.19	0.19	Nucleus Seed***	-0.19
		ICMB 88004 (B Line)		0.10	0.10	Nucleus Seed***	-0.10
		BIB-16810 (R Line)		0.09	0.09	0.09	0.00
43	HHB 311	ICMA 02333 (A Line)	2020	0.09	0.09	0.09	0.00
		ICMB 02333 (B Line)		0.05	0.05	0.05	0.00
		H-14/003 (R Line)		0.04	0.04	0.04*	0.00
44	RHB 234	ICMA 02333 (A Line)	2019	0.13	0.13	0.13	0.00
		ICMB 02333 (B Line)		0.07	0.07	0.07	0.00
		RIB 15177 (R Line)		0.06	0.06	0.04	-0.02
45	Jam Shakti (GHB 1129)	ICMA 99222 (A Line)	2020	0.03	0.03	0.03	0.00
		ICMB 99222 (B Line)		0.02	0.02	0.02	0.00
		J-2565 (R Line)		0.01	0.01	0.00	-0.01
46	PHULE MAHASHAKTI (DHBH 1211)	ICMA 99222 (A Line)	2019	0.03	0.03	0.03	0.00
		ICMB 99222 (B Line)		0.02	0.02	0.02	0.00
		DHLBI 1201 (R Line)		0.01	0.01	0.03	0.02
47	RHB 233	ICMA 99444 (A Line)	2019	0.13	0.13	0.13	0.00
		ICMB 99444 (B Line)		0.07	0.07	0.07	0.00
		RIB 15176 (R Line)		0.06	0.06	0.07	0.01
48	RHB 223	ICMA 96666 (A Line)	2018	0.23	0.23	0.23	0.00
		ICMB 96666 (B Line)		0.12	0.12	0.12	0.00
		RIB 3135-18 (R Line)		0.11	0.11	0.16	0.05
49	HHB 299	ICMA 04888 (A Line)	2018	0.56	0.56	0.56	0.00
		ICMB 04888 (B Line)		0.28	0.28	0.28	0.00
		H 13/0001 (R Line)		0.27	0.27	0.30	0.03
50	PHB 2884	ICMA 22777 (A Line)	2016	0.03	0.03	Nucleus Seed***	-0.03
		ICMB 22777 (B Line)		0.02	0.02	Nucleus Seed***	-0.02
		PIB 686 (R Line)		0.01	0.01	0.02	0.01
51	MPMH 17	ICMA 04999 (A Line)	2013	0.21	0.21	0.21	0.00
		ICMB 04999 (B Line)		0.14	0.14	0.14	0.00
		MIR 525-2 (R Line)		0.13	0.13	0.42	0.29
52	GHB 905	ICMA 04999 (A Line)	2013	0.03	0.03	0.03	0.00
		ICMB 04999 (B Line)		0.02	0.02	0.02	0.00
		J-2454 (R Line)		0.01	0.01	0.00	-0.01

CHAPTER I: BREEDING

S. No.	Name Variety/Hybrid	Name of parental line	Year of Release	Total DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
53	CO09	ICMA 93111 (A Line)	2012	0.03	0.03	Nucleus Seed***	-0.03
		ICMB 93111 (B Line)		0.02	0.02	Nucleus Seed***	-0.02
		PT 6029-30 (R Line)		0.01	0.01	0.01	0.00
54	PHB 2168	ICMA 92333 (A Line)	2008	0.03	0.03	Nucleus Seed***	-0.03
		ICMB 92333 (B Line)		0.02	0.02	Nucleus Seed***	-0.02
		PIB 686 (R Line)		0.01	0.01	0.02	0.01
55	HHB 197	ICMA 97111 (A Line)	2008	0.03	0.03	0.03	0.00
		ICMB 97111 (B Line)		0.02	0.02	0.02	0.00
		HBL 11 (R Line)		0.01	0.01	Not in seed chain**	-0.01
56	GHB 732	ICMA 96222 (A Line)	2008	0.03	0.03	0.03	0.00
		ICMB 96222 (B Line)		0.02	0.02	0.02	0.00
		J 2340 (R Line)		0.01	0.01	0.00	-0.01
57	GHB 719	ICMA 95222 (A Line)	2007	0.03	0.03	0.03	0.00
		ICMB 95222 (B Line)		0.02	0.02	0.02	0.00
		J 2454 (R Line)		0.01	0.01	0.00	-0.01
58	HHB 146	ICMA 95222 (A Line)	2003	0.03	0.03	0.03	0.00
		ICMB 95222 (B Line)		0.02	0.02	0.02	0.00
		HTP 94/54 (R Line)		0.01	0.01	Not in seed chain**	-0.01
59	GHB 526	ICMA 95222 (A Line)	2003	0.03	0.03	0.03	0.00
		ICMB 95222 (B Line)		0.02	0.02	0.02	0.00
		J 2372 (R Line)		0.01	0.01	0.00	-0.01
60	DHBH 1397	DHLB-16A (A Line)	2019	0.03	0.03	0.05	0.02
		DHLB-16B (B Line)		0.02	0.02	0.04	0.02
		DHLBI 1035 (R Line)		0.01	0.01	0.04	0.03
61	ADISHAKTI	DHLB-8A (A Line)	2016	0.03	0.03	0.10	0.07
		DHLB-8B (B Line)		0.02	0.02	0.06	0.04
		DHLBI-967 (R Line)		0.01	0.01	0.05	0.04
62	RHRBH-9808	RHRB 13A (A Line)	2010	0.03	0.03	0.03	0.00
		RHRB 13B (B Line)		0.02	0.02	0.03	0.01
		RHRBI 1314 (R Line)		0.01	0.01	0.03	0.02
63	GHB 577	JMS A 101 (A Line)	2004	0.03	0.03	Not in seed chain**	-0.03

CHAPTER I: BREEDING

S. No.	Name Variety/Hybrid	Name of parental line	Year of Release	Total DAC indent (q)	Actual allocation as per BSP-I target (q)	Actual Production (q)	Production Surplus (+) Deficit (-) over BSP-I target (q)
		JMS B 101 (B Line)		0.02	0.02	Not in seed chain**	-0.02
		J 2405 (R Line)		0.01	0.01	Not in seed chain**	-0.01
64	Pusa 1201	MS 411 A (A Line)	2018	0.03	0.03	0.05	0.02
		MS 411 B (B Line)		0.02	0.02	0.03	0.01
		ICMR 07333 (R Line)		0.01	0.01	0.01	0.00
65	HHB 272	HMS 47 A (A Line)	2016	0.03	0.03	0.00	-0.03
		HMS 47 B (B Line)		0.02	0.02	0.00	-0.02
		AC04/13 (R Line)		0.01	0.01	0.10*	0.09
66	HHB 234	HMS 7 A (A Line)	2013	0.06	0.06	0.12*	0.06
		HMS 7B (B Line)		0.03	0.03	0.06*	0.03
		H77/833-2-202 (R Line)		0.02	0.02	0.05*	0.03
67	HHB 117	HMS 7 A (A Line)	2004	0.03	0.03	0.08*	0.05
		HMS 7B (B Line)		0.02	0.02	0.04*	0.02
		H77/29-2 (R Line)		0.01	0.01	Not in seed chain**	-0.01
68	HHB 216	HMS 37 A (A Line)	2010	0.03	0.03	Not in seed chain**	-0.03
		HMS 37 B (B Line)		0.02	0.02	Not in seed chain**	-0.02
		HTP3/13 (R Line)		0.01	0.01	Not in seed chain**	-0.01
		Total (B)		7.86	7.86	13.59	5.73
		Total (A)+(B)		15.48	15.48	41.21	25.73

*Carryover of Kharif 2023 season

**Not in seed chain

***Nucleus Seed can provide

DUS TESTING

G. DUS Testing under PPV and FRA**a. DUS Testing of varieties/ hybrids/ parental lines**

The DUS testing trial was undertaken as per approved guidelines of PPV and FRA during Kharif 2024. Two candidate varieties for second year, five candidate varieties for first year, seven farmers' varieties and four reference varieties along with two local checks were tested at ICAR-AICRP on Pearl Millet, Mandor, Jodhpur and ICAR-AICRP on Pearl Millet, BRS, MPKV, Dhule as under:

S. No.	Name of candidate variety	S. No.	Name of candidate variety
Second year of testing			
1	Nutrifast-ADV 961 (ADV0061) (2889/2178/H)	2	TMBH 2652
First year of testing			
1	KPH6288	4	KP19SB021
2	MB1030	5	KP19SR022
3	KPH6499		
Farmers' Varieties			
1	Sundaram Verma Local	5	Moochwali Bajri
2	Pili Bajri	6	DR-1
3	Chanana Bajri	7	Sulkhaniya Bajri
4	DR-2		
Reference Varieties			
1	RHB 173	3	86M64
2	Kaveri Super boss	4	Pratap
Checks			
1	HHB 67 Improved	2	GHB 538

Observations on candidate and reference varieties on following 28 characters were recorded as per general and specific DUS guidelines (Pearl Millet) notified by PPV & FRA in Plant Variety Journal of India Vol. - 12, No. – 04, June 05, 2018:

S. No.	Characteristics	S. No.	Characteristics
1	Plant: Anthocyanin colouration of first leaf sheath	15	Spike: Length (cm)
2	Plant: Growth habit	16	Spike: Anthocyanin pigmentation of glume
3	Time of spike emergence (50% plant with at least one spike emerged fully)	17	Spike: Bristle
4	Leaf : Sheath pubescence	18	Spike: Bristle colour
5	Leaf : Sheath length (cm)	19	Spike: Bristle Appearance
6	Leaf: Blade length (cm)	20	Spike: Girth [maximum point (excluding bristles)] (cm)
7	Leaf: Blade width (at widest point) (cm)	21	Plant: Number of productive tillers
8	Spike: Stigma Pigmentation	22	Plant: Height (including spike) (cm)
9	Spike: Anther colour	23	Spike: Shape
10	Plant: Node pubescence	24	Spike: Tip sterility
11	Plant: Number of nodes	25	Spike: Density
12	Plant: Node pigmentation	26	Seed: colour
13	Plant: Internode pigmentation (between 3 rd and 4 th node from top)	27	Seed: Shape
14	Spike exsertion	28	Seed: Weight of 1000 grains (g)

b. Maintenance of DUS reference varieties

Fifty four genotypes including B lines (18), R lines (16) and hybrids (20) listed below were studied for DUS characteristics at ICAR-AICRP on Pearl Millet, Jodhpur and MPKV, Dhule during Kharif 2023-24 & 2024-25 and maintained (B and R lines only) at ICAR-AICRP on Pearl Millet, Jodhpur during Kharif 2024.

S. No.	Reference/example varieties	S. No.	Reference/example varieties	S. No.	Reference/example varieties
1	81 B	20	J 2454	39	RHB 173
2	841 B	21	J 2467	40	MPMH 17
3	842 B	22	ICMR 356	41	GHB 558
4	843-22 B	23	H 77/833-2-202	42	GHB 744
5	ICMB 88004	24	G 73-107	43	GHB 732
6	ICMB 92333	25	H 77/29-2	44	ICMH 356
7	ICMB 92777	26	H 77/833-2	45	HHB 67 Improved
8	ICMB 93333	27	H 90/4-5	46	HHB 197
9	ICMB 94555	28	HBL 11	47	HHB 223
10	ICMB 94111	29	RHRBI 1314	48	Pratap
11	ICMB 95222	30	RIB 3135-18	49	Nandi 61
12	ICMB 97111	31	RIB 494	50	86M64
13	ICMB 97444	32	RIB 335/74	51	Kaveri Super Boss
14	ICMB 02333	33	PIB 686	52	86M86
15	ICMB 04999	34	MIR 525-2	53	JKBH 26
16	RHRB 1B	35	RHB 177	54	Proagro 9444
17	RHRB 5B	36	GHB 538		
18	RHRB 13B	37	GHB 719		
19	J 2340	38	PB 106		

c. Registration of cultivars in PPV and FRA

So far 228 cultivars and parental lines (46 Public, 174 private and 8 farmer varieties) have been registered with PPV and FRA and several are in the process of registration. ICAR-AICRP on Pearl Millet is the nodal agency for undertaking pearl millet variety registration with PPV & FRA. Details of registered genotypes are as under:

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1.	1 of 2009	Extant (Notified)	JKBH-26 (MH-595)	JK Agri Genetics Ltd.	Private	14-Jun-2007	E17 PG 24 07 094	12 February 2009	16 September 2012	14-Jun-2007 to 12-Feb-2009
2.	27 of 2009	Extant (Notified)	GHB-719 (MH-1236)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E20 PG29 07 203	12 February 2009	05 February 2022	06-Nov-2007 to 12-Feb-2009
3.	28 of 2009	Extant (Notified)	GHB-538 (MH-1049)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E21 PG30 07 204	12 February 2009	24 August 2020	06-Nov-2007 to 12-Feb-2009
4.	29 of 2009	Extant (Notified)	Parbhani Sampada (PPC-6)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E24 PG33 07 207	12 February 2009	01 February 2020	06-Nov-2007 to 12-Feb-2009
5.	30 of 2009	Extant (Notified)	GHB-526 (MSH-105)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E26 PG 35 07 209	12 February 2009	11 March 2018	06-Nov-2007 to 12-Feb-2009
6.	31 of 2009	Extant (Notified)	GHB-558 (MH-946)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E27 PG36 07 210	12 February 2009	11 March 2018	06-Nov-2007 to 12-Feb-2009
7.	56 of 2009	Extant (Notified)	MP-406 (CZP-9802)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E30 PG39 07 213	16 April 2009	11 March 2018	06-Nov-2007 to 16-Apr-2009
8.	57 of 2009	Extant (Notified)	CoCu-9	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E31 PG 40 07 214	16 April 2009	24 August 2020	06-Nov-2007 to 16-Apr-2009
9.	58 of 2009	Extant (Notified)	HC-20-(HMP 9102)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E33 PG 42 07 216	16 April 2009	03 September 2017	06-Nov-2007 to 16-Apr-2009
10.	59 of 2009	Extant (Notified)	RHB-121 (MH-892)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E36 PG45 07 219	16 April 2009	14 November 2016	06-Nov-2007 to 16-Apr-2009
11.	60 of 2009	Extant (Notified)	COH (Cu)8	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E38 PG47 07 221	16 April 2009	14 November 2016	06-Nov-2007 to 16-Apr-2009
12.	61 of 2009	Extant (Notified)	Pusa Composite-383 (MP-383)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E39 PG48 07 222	16 April 2009	14 November 2016	06-Nov-2007 to 16-Apr-2009
13.	62 of 2009	Extant (Notified)	AIMP-92901 (Samrudhi-MP-282)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E41 PG50 07 224	16 April 2009	14 November 2016	06-Nov-2007 to 16-Apr-2009
14.	63 of 2009	Extant	JBV-2 (GKKV-	Indian Council of	Public	6-Nov-2007	E47 PG56	16 April	07 June	06-Nov-2007 to

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		(Notified)	93191)	Agricultural Research (ICAR)			07 230	2009	2014	16-Apr-2009
15.	64 of 2009	Extant (Notified)	X-6 (MH-140)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E50 PG59 07 233	16 April 2009	30 April 2012	06-Nov-2007 to 16-Apr-2009
16.	65 of 2009	Extant (Notified)	Pusa Bajri-266 (MP-226)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E56 PG65 07 239	16 April 2009	30 April 2012	06-Nov-2007 to 16-Apr-2009
17.	66 of 2009	Extant (Notified)	RHRBH-8609 (Shraddha)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E59 PG68 07 242	16 April 2009	01 September 2009	06-Nov-2007 to 16-Apr-2009
18.	72 of 2009	Extant (Notified)	HHB 67 Improved	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E22 PG31 07 205	20 July 2009	04 November 2020	06-Nov-2007 to 20-Jul-2009
19.	73 of 2009	Extant (Notified)	HHB-117	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E32 PG41 07 215	20 July 2009	30 May 2019	06-Nov-2007 to 20-Jul-2009
20.	74 of 2009	Extant (Notified)	Haryana Composite-10	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E44 PG53 07 227	20 July 2009	02 April 2015	06-Nov-2007 to 20-Jul-2009
21.	75 of 2009	Extant (Notified)	X-7	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E51 PG60 07 234	20 July 2009	08 September 2012	06-Nov-2007 to 20-Jul-2009
22.	76 of 2009	Extant (Notified)	RBH-30	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E55 PG64 07 238	20 July 2009	30 April 2012	06-Nov-2007 to 20-Jul-2009
23.	112 of 2009	Extant	Nandi-52 (MH-1078) (NMH-45)	New Nandi Seeds Corporation	Private	8-Sep-2008	E322 PG20 08 446	20 July 2009	09 January 2023	08-Sep-2008 to 20-Jul-2009
24.	113 of 2009	Extant	Nandi-62 (MH-1274) (NMH-68)	New Nandi Seeds Corporation	Private	18-Sep-2008	E323 PG21 08 448	20 July 2009	04 October 2022	18-Sep-2008 to 20-Jul-2009
25.	114 of 2009	Extant	Nandi-35 (MH-889)	New Nandi Seeds Corporation	Private	18-Sep-2008	E324 PG22 08 449	20 July 2009	14 November 2016	18-Sep-2008 to 20-Jul-2009
26.	115 of 2009	Extant	Nandi-8 (MH-741)	New Nandi Seeds Corporation	Private	18-Sep-2008	E325 PG23 08 450	20 July 2009	07 June 2014	18-Sep-2008 to 20-Jul-2009
27.	116 of 2009	Extant	Nandi-30 (MH-515)	New Nandi Seeds Corporation	Private	18-Sep-2008	E326 PG24 08 451	20 July 2009	30 April 2012	18-Sep-2008 to 20-Jul-2009
28.	117 of 2009	Extant	Nandi-32 (MH-	New Nandi Seeds	Private	18-Sep-2008	E327 PG25	20 July	25 October	18-Sep-2008 to

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			773)	Corporation			08 452	2009	2014	20-Jul-2009
29.	161 of 2009	Extant	GICK V-96752 (MP 363)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E40 PG49 07 223	21 December 2009	01 February 2016	06-Nov-2007 to 21-Dec-2009
30.	35 of 2011	Extant	JKBH-676 (MH-1299)	JK Agri Genetics Ltd.	Private	14-Jun-2007	E16 PG23 07 93	24 June 2011	26 August 2024	14-Jun-2007 to 24-Jun-2011
31.	49 of 2011	Extant	PROAGRO-9444 (MSH-118)	Bayer Biosciences Pvt. Ltd.	Private	12-Aug-2009	E15 PG22 09 335	24 June 2011	01 February 2020	12-Aug-2009 to 24-Jun-2011
32.	77 of 2011	Extant	PCB 164	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E29 PG38 07 212	21 October 2011	19 July 2022	06-Nov-2007 to 21-Oct-2011
33.	82 of 2011	Extant	PHB-2168	Indian Council of Agricultural Research (ICAR)	Public	22-Jan-2008	E390 PG27 08 158	21 October 2011	07 May 2023	22-Jan-2008 to 21-Oct-2011
34.	83 of 2011	Extant	GHB-744 (MH-1272)	Indian Council of Agricultural Research (ICAR)	Public	22-Jan-2008	E391 PG28 08 159	21 October 2011	09 January 2023	22-Jan-2008 to 21-Oct-2011
35.	99 of 2011	Extant	Pusa Composite 443 (MP 443)	Indian Council of Agricultural Research (ICAR)	Public	29-Apr-2009	E11 PG16 09 218	21 October 2011	10 February 2024	29-Apr-2009 to 21-Oct-2011
36.	111 of 2011	New	B 2114	Maharashtra Hybrid Seeds Company Limited	Private	21-May-2007	N1 PG3 07 017	07 December 2011	06 December 2026	21-May-2007 to 07-Dec-2011
37.	8 of 2012	New	B 2124	Maharashtra Hybrid Seeds Company Limited	Private	21-May-2007	N3 PG5 07 019	07 March 2012	06 March 2027	21-May-2007 to 07-Mar-2012
38.	9 of 2012	New	MIP-003	Emergent Genetics India Pvt Ltd	Private	22-May-2007	N6 PG14 07 077	07 March 2012	06 March 2027	22-May-2007 to 07-Mar-2012
39.	10 of 2012	New	SYN-PM-0458	Syngenta India Limited	Private	10-Oct-2007	N9 PG28 07 141	07 March 2012	06 March 2027	10-Oct-2007 to 07-Mar-2012
40.	11 of 2012	New	86M64	Pioneer Overseas corporation-India Branch Office	Private	17-Sep-2007	N8 PG27 07 140	07 March 2012	06 March 2027	17-Sep-2007 to 07-Mar-2012
41.	43 of 2012	Extant	HHB-146 (MH-960)	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E28 PG37 07 211	02 July 2012	11 February 2018	06-Nov-2007 to 02-Jul-2012
42.	177 of 2012	Extant	Proagro 9443 (MH-846)	Bayer Biosciences Pvt. Ltd.	Private	19-Sep-2011	E1 PG1 11 931	16 October 2012	01 February 2016	19-Sep-2011 to 16-Oct-2012

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43.	195 of 2012	Extant	Pusa 605 (MH 564)	Indian Council of Agricultural Research (ICAR)	Public	17-Jan-2008	E129 PG4 08 142	09 November 2012	07 June 2014	17-Jan-2008 to 09-Nov-2012
44.	196 of 2012	Extant	Pusa Composite-334 (MP-334)	Indian Council of Agricultural Research (ICAR)	Public	17-Jan-2008	E127 PG2 08 140	09 November 2012	25 October 2014	17-Jan-2008 to 09-Nov-2012
45.	197 of 2012	Extant	Pusa-415	Indian Council of Agricultural Research (ICAR)	Public	6-Nov-2007	E46 PG55 07 229	09 November 2012	25 October 2014	06-Nov-2007 to 09-Nov-2012
46.	21 of 2013	Extant	HHB 197 (MH-1302)	Indian Council of Agricultural Research (ICAR)	Public	22-Jan-2008	E395 PG10 08 161	01 February 2013	09 January 2023	22-Jan-2008 to 01-Feb-2013
47.	30 of 2013	Extant	Proagro 555 (MSH 16) (PB 727)	Bayer Biosciences Pvt. Ltd.	Private	1-Oct-2009	E20 PG28 09 414	06 March 2013	09 January 2023	01-Oct-2009 to 06-Mar-2013
48.	88 of 2013	Extant	GHB-732 (MH-1307)	Indian Council of Agricultural Research (ICAR)	Public	22-Jan-2008	E394 PG9 08 160	17 May 2013	09 January 2023	22-Jan-2008 to 17-May-2013
49.	89 of 2013	Extant	GHB-757 (MH-1328)	Indian Council of Agricultural Research (ICAR)	Public	22-Jan-2008	E396 PG11 08 162	17 May 2013	09 January 2023	22-Jan-2008 to 17-May-2013
50.	92 of 2013	Extant	KPMH-1	M/S Kaveri Seed Company Limited	Private	5-Feb-2009	E3 PG7 09 36	24 May 2013	09 September 2027	05-Feb-2009 to 24-May-2013
51.	115 of 2013	Extant (VCK)	MRB 204	Maharashtra Hybrid Seeds Company Limited	Private	21-May-2007	E2 PG2 07 016	17 July 2013	16 July 2028	21-May-2007 to 17-Jul-2013
52.	116 of 2013	Extant (VCK)	MRB 2210	Maharashtra Hybrid Seeds Company Limited	Private	21-May-2007	E1 PG1 07 013	22 July 2013	21 July 2028	21-May-2007 to 22-Jul-2013
53.	271 of 2013	Extant (VCK)	BPM 901	Bayer Biosciences Pvt. Ltd.	Private	12-Aug-2009	E14 PG21 09 334	16 December 2013	16 December 2028	12-Aug-2009 to 16-Dec-2013
54.	282 of 2013	Extant (VCK)	Nirmal-40 (NPH-40)	Nirmal Seeds Private Ltd.	Private	22-Sep-2009	E18 PG26 09 395	16 December 2013	16 December 2028	22-Sep-2009 to 16-Dec-2013
55.	283 of 2013	Extant (VCK)	NB-14A	Nuziveedu Seeds Limited	Private	3-Nov-2009	E28 PG36 09 465	16 December 2013	16 December 2028	03-Nov-2009 to 16-Dec-2013
56.	285 of 2013	Extant	NB-10R	Nuziveedu Seeds	Private	3-Nov-2009	E30 PG38	19	19	03-Nov-2009 to

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		(VCK)		Limited			09 467	December 2013	December 2028	19-Dec-2013
57.	287 of 2013	Extant (VCK)	NB-61A	Nuziveedu Seeds Limited	Private	3-Nov-2009	E24 PG32 09 461	20 December 2013	20 December 2028	03-Nov-2009 to 20-Dec-2013
58.	289 of 2013	New	DGB-013	Devgen NV, Belgium	Private	3-Nov-2009	N9 PG43 09 478	26 December 2013	26 December 2028	03-Nov-2009 to 26-Dec-2013
59.	290 of 2013	Extant (VCK)	NB-86R	Nuziveedu Seeds Limited	Private	3-Nov-2009	E26 PG34 09 463	26 December 2013	26 December 2028	03-Nov-2009 to 26-Dec-2013
60.	291 of 2013	Extant (VCK)	NB-153R	Nuziveedu Seeds Limited	Private	3-Nov-2009	E29 PG37 09 466	26 December 2013	26 December 2028	03-Nov-2009 to 26-Dec-2013
61.	299 of 2013	Extant (VCK)	BPM 904	Bayer Biosciences Pvt. Ltd.	Private	1-Oct-2009	E21 PG29 09 415	31 December 2013	31 December 2028	01-Oct-2009 to 31-Dec-2013
62.	300 of 2013	Extant (VCK)	GK 1044	Ganga Kaveri Seed Pvt. Ltd., Hyderabad	Private	23-Jun-2009	E13 PG19 09 299	31 December 2013	31 December 2028	23-Jun-2009 to 31-Dec-2013
63.	301 of 2013	Extant (VCK)	NB-151R	Nuziveedu Seeds Limited	Private	3-Nov-2009	E32 PG40 09 469	31 December 2013	31 December 2028	03-Nov-2009 to 31-Dec-2013
64.	302 of 2013	Extant (VCK)	NB-152 R	Nuziveedu Seeds Limited	Private	3-Nov-2009	E31 PG39 09 468	31 December 2013	31 December 2028	03-Nov-2009 to 31-Dec-2013
65.	1 of 2014	Extant (VCK)	NB-101 A	Nuziveedu Seeds Limited	Private	3-Nov-2009	E34 PG42 09 471	02 January 2014	02 January 2029	03-Nov-2009 to 02-Jan-2014
66.	2 of 2014	Extant (VCK)	NB-102A	Nuziveedu Seeds Limited	Private	3-Nov-2009	E33 PG41 09 470	02 January 2014	02 January 2029	03-Nov-2009 to 02-Jan-2014
67.	3 of 2014	Extant (VCK)	NB-20R	Nuziveedu Seeds Limited	Private	3-Nov-2009	E27 PG35 09 464	02 January 2014	02 January 2029	03-Nov-2009 to 02-Jan-2014
68.	4 of 2014	Extant (VCK)	NB-60A	Nuziveedu Seeds Limited	Private	3-Nov-2009	E25 PG33 09 462	09 January 2014	09 January 2029	03-Nov-2009 to 09-Jan-2014
69.	5 of 2014	Extant (VCK)	BPM 906	Bayer Biosciences Pvt. Ltd.	Private	1-Oct-2009	E23 PG31 09 417	09 January 2014	09 January 2029	01-Oct-2009 to 09-Jan-2014
70.	7 of 2014	New	KBH Boss 65	M/S Kaveri Seed Company Limited	Private	5-Feb-2009	N4 PG6 09 35	09 January 2014	09 January 2029	05-Feb-2009 to 09-Jan-2014
71.	9 of 2014	New	HT-PM-4201	Hytech Seed India Private Limited	Private	19-Nov-2009	N13 PG47 09 507	09 January 2014	09 January 2029	19-Nov-2009 to 09-Jan-2014

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72.	10 of 2014	New	BIO 448 H	Bioseed Research India Private Limited	Private	5-Feb-2009	N1 PG2 09 29	09 January 2014	09 January 2029	05-Feb-2009 to 09-Jan-2014
73.	27 of 2014	Extant (VCK)	BPM 905	Bayer Biosciences Pvt. Ltd.	Private	1-Oct-2009	E22 PG30 09 416	20 January 2014	20 January 2029	01-Oct-2009 to 20-Jan-2014
74.	30 of 2014	Extant	Pratap (MH 1642)	Nuziveedu Seeds Limited	Private	17-Mar-2009	E7 PG11 09 76	21 January 2014	09 September 2027	17-Mar-2009 to 21-Jan-2014
75.	32 of 2014	New	KBR 621	M/S Kaveri Seed Company Limited	Private	5-Feb-2009	N3 PG4 09 33	22 January 2014	22 January 2029	05-Feb-2009 to 22-Jan-2014
76.	33 of 2014	New	KBMS 329	M/S Kaveri Seed Company Limited	Private	5-Feb-2009	N2 PG3 09 32	22 January 2014	22 January 2029	05-Feb-2009 to 22-Jan-2014
77.	45 of 2014	New	VBBH 3040	Vibha Agrotech Limited	Private	17-Mar-2008	N25 PG14 08 203	05 February 2014	04 February 2029	17-Mar-2008 to 05-Feb-2014
78.	170 of 2014	New	KBR-780	M/S Kaveri Seed Company Limited	Private	21-Jun-2010	N27 PG27 10 169	13 May 2014	12 May 2029	21-Jun-2010 to 13-May-2014
79.	625 of 2014	New	JKBH 768	JK Agri Genetics Ltd.	Private	7-Apr-2008	N104 PG 19 08 351	17 September 2014	16 September 2029	07-Apr-2008 to 17-Sep-2014
80.	11 of 2015	Extant	MP-7792 (MH-1609)	Metahelix Life Sciences Limited	Private	21-Jul-2014	E2 PG23 14 1412	06 January 2015	25 July 2027	21-Jul-2014 to 06-Jan-2015
81.	13 of 2015	Extant	MP-7872 (MH-1610)	Metahelix Life Sciences Limited	Private	21-Jul-2014	E1 PG22 14 1411	07 January 2015	25 July 2027	21-Jul-2014 to 07-Jan-2015
82.	31 of 2015	New	JKBH 778	JK Agri Genetics Ltd.	Private	7-Apr-2008	N103 PG18 08 350	19 January 2015	18 January 2030	07-Apr-2008 to 19-Jan-2015
83.	32 of 2015	Extant (VCK)	AKASH (VBBH 350)	Vibha Agrotech Limited	Private	31-Mar-2008	E192 PG15 08 222	19 January 2015	18 January 2030	31-Mar-2008 to 19-Jan-2015
84.	79 of 2015	New	KBR 870	M/S Kaveri Seed Company Limited	Private	8-Mar-2010	N05 PG05 10 64	20 February 2015	19 February 2030	08-Mar-2010 to 20-Feb-2015
85.	82 of 2015	New	KBMS 293	M/S Kaveri Seed Company Limited	Private	8-Mar-2010	N06 PG06 10 65	25 February 2015	24 February 2030	08-Mar-2010 to 25-Feb-2015
86.	93 of 2015	New	NBBH-913	Navbharat Seeds Pvt. Ltd.	Private	12-Jan-2010	N02 PG02 10 06	07 April 2015	06 April 2030	12-Jan-2010 to 07-Apr-2015
87.	99 of 2015	New	BPM907	Bayer Biosciences Pvt. Ltd.	Private	19-Oct-2010	N38 PG38 10 319	27 April 2015	26 April 2030	19-Oct-2010 to 27-Apr-2015
88.	101 of 2015	New	KBMS 231	Kaveri Seed Company Limited	Private	8-Mar-2010	N10 PG10 10 69	27 April 2015	26 April 2030	08-Mar-2010 to 27-Apr-2015
89.	102 of 2015	New	KBR 864	Kaveri Seed	Private	8-Mar-2010	N04 PG04	27 April	26 April	08-Mar-2010 to

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				Company Limited			10 63	2015	2030	27-Apr-2015
90.	199 of 2015	Extant (VCK)	JKBH-550	JK Agri Genetics Ltd.	Private	14-Jun-2007	E15 PG22 07 92	27 August 2015	26 August 2030	14-Jun-2007 to 27-Aug-2015
91.	200 of 2015	New	VBBH 3115	VIBHA AGROTECH LIMITED	Private	4-Jan-2010	N01 PG01 10 02	27 August 2015	26 August 2030	04-Jan-2010 to 27-Aug-2015
92.	203 of 2015	Extant (VCK)	NBH-1188 (Big B)	Nath Bio-Genes (I) Ltd.	Private	13-Jun-2012	E1 PG5 12 200	27 August 2015	26 August 2030	13-Jun-2012 to 27-Aug-2015
93.	204 of 2015	Extant (VCK)	86M01	Pioneer Overseas Corporation	Private	28-Jun-2012	E3 PG8 12 228	27 August 2015	26 August 2030	28-Jun-2012 to 27-Aug-2015
94.	206 of 2015	Extant (VCK)	NBH-1134	Nuziveedu Seeds Ltd.	Private	17-Mar-2009	E6 PG10 09 75	02 September 2015	09 January 2030	17-Mar-2009 to 02-Sep-2015
95.	207 of 2015	Extant (VCK)	NBH-2223	Nuziveedu Seeds Ltd.	Private	17-Mar-2009	E8 PG12 09 77	02 September 2015	09 January 2030	17-Mar-2009 to 02-Sep-2015
96.	208 of 2015	Extant (VCK)	NBH-4455	Nuziveedu Seeds Ltd.	Private	13-Apr-2009	E9 PG14 09 139	02 September 2015	09 January 2030	13-Apr-2009 to 02-Sep-2015
97.	209 of 2015	Extant (VCK)	NBH-216	Nuziveedu Seeds Ltd.	Private	21-May-2009	E12 PG17 09 278	02 September 2015	01 September 2030	21-May-2009 to 02-Sep-2015
98.	210 of 2015	New	KBR 721	Kaveri Seed Company Limited	Private	8-Mar-2010	N07 PG07 10 66	02 September 2015	01 September 2030	08-Mar-2010 to 02-Sep-2015
99.	212 of 2015	Extant (VCK)	NBH-1717	Nath Bio-Genes (I) Ltd.	Private	13-Jun-2012	E2 PG6 12 201	02 September 2015	01 September 2030	13-Jun-2012 to 02-Sep-2015
100.	243 of 2015	Extant	RHRBH-9808	Mahatma Phule Krishi Vidyapeeth	Public	9-Jan-2015	E1 PG1 15 28	15 October 2015	30 August 2025	09-Jan-2015 to 15-Oct-2015
101.	361 of 2016	Extant (VCK)	PM80105R	DCM Shriram Limited	Private	26-Mar-2009	E35 PG13 9 113	09 November 2016	08 November 2031	26-Mar-2009 to 09-Nov-2016
102.	226 of 2017	New	KBMS 569	Kaveri Seed Company Limited	Private	3-Jun-2010	N15 PG15 10 136	30 August 2017	29 August 2032	03-Jun-2010 to 30-Aug-2017
103.	227 of 2017	New	KBMS 253	Kaveri Seed Company Limited	Private	3-Jun-2010	N16 PG16 10 137	30 August 2017	29 August 2032	03-Jun-2010 to 30-Aug-2017
104.	228 of 2017	New	KBMS 219	Kaveri Seed Company Limited	Private	21-Jun-2010	N21 PG21 10 163	30 August 2017	29 August 2032	21-Jun-2010 to 30-Aug-2017
105.	229 of 2017	New	KBR 877	Kaveri Seed Company Limited	Private	21-Jun-2010	N23 PG23 10 165	30 August 2017	29 August 2032	21-Jun-2010 to 30-Aug-2017

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106.	270 of 2017	New	KBMS 227	Kaveri Seed Company Limited	Private	3-Jun-2010	N18 PG18 10 139	29 September 2017	28 September 2032	03-Jun-2010 to 29-Sep-2017
107.	282 of 2017	New	KBMS 239	Kaveri Seed Company Limited	Private	8-Mar-2010	N8 PG8 10 67	04 October 2017	03 October 2032	08-Mar-2010 to 04-Oct-2017
108.	284 of 2017	New	KBR 831	Kaveri Seed Company Limited	Private	21-Jun-2010	N22 PG22 10 164	04 October 2017	03 October 2032	21-Jun-2010 to 04-Oct-2017
109.	285 of 2017	New	KBR 823	Kaveri Seed Company Limited	Private	21-Jun-2010	N25 PG25 10 167	04 October 2017	03 October 2032	21-Jun-2010 to 04-Oct-2017
110.	309 of 2017	New	SONY-NBH227	Nuziveedu Seeds Ltd.	Private	22-Sep-2008	N124 PG26 8 453	28 November 2017	27 November 2032	22-Sep-2008 to 28-Nov-2017
111.	312 of 2017	New	KBMS 251	Kaveri Seed Company Limited	Private	3-Jun-2010	N19 PG19 10 140	28 November 2017	27 November 2032	03-Jun-2010 to 28-Nov-2017
112.	41 of 2018	New	JKBH 1108	JK Agri Genetics Ltd.	Private	25-Jul-2012	N7 PG10 12 373	28 March 2018	27 March 2033	25-Jul-2012 to 28-Mar-2018
113.	42 of 2018	New	JKBH 1093	JK Agri Genetics Ltd.	Private	25-Jul-2012	N8 PG11 12 374	28 March 2018	27 March 2033	25-Jul-2012 to 28-Mar-2018
114.	43 of 2018	New	JKBH 1100	JK Agri Genetics Ltd.	Private	25-Jul-2012	N9 PG12 12 375	28 March 2018	27 March 2033	25-Jul-2012 to 28-Mar-2018
115.	19 of 2019	New	NBH-4903	Nuziveedu Seeds Limited	Private	19-Dec-2011	N2 PG3 11 1353	18 March 2019	17 March 2034	19-Dec-2011 to 18-Mar-2019
116.	95 of 2019	New	86M88	Pioneer Overseas Corporation	Private	28-Jun-2012	N6 PG9 12 229	27 March 2019	26 March 2034	28-Jun-2012 to 27-Mar-2019
117.	96 of 2019	New	86M12	Pioneer Overseas Corporation	Private	28-Jun-2012	N5 PG7 12 227	28 March 2019	27 March 2034	28-Jun-2012 to 28-Mar-2019
118.	99 of 2019	New	KBR 618	Kaveri Seed Company Limited	Private	21-Jun-2010	N24 PG24 10 166	28 March 2019	27 March 2034	21-Jun-2010 to 28-Mar-2019
119.	101 of 2019	Extant (Notified)	NBH 5061 (MH 1812)	Nuziveedu Seeds Ltd.	Private	20-Jul-2016	E5 PG31 16 946	28 March 2019	29 July 2029	20-Jul-2016 to 28-Mar-2019
120.	287 of 2019	Extant (VCK)	B 2037	Maharashtra Hybrid Seeds Company Limited	Private	21-May-2007	E68 PG4 7 18	19 December 2019	18 December 2034	21-May-2007 to 19-Dec-2019
121.	337 of 2019	New	PSP68	Bayer Biosciences Pvt. Ltd.	Private	7-Nov-2013	N12 PG12 13 753	19 December 2019	18 December 2034	07-Nov-2013 to 19-Dec-2019
122.	358 of 2019	New	PP63	Bayer Biosciences Pvt. Ltd.	Private	28-Dec-2012	N11 PG14 12 691	19 December 2019	18 December 2034	28-Dec-2012 to 19-Dec-2019

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123.	359 of 2019	New	DGB-017	M/s Crystal Crop Protection Limited	Private	22-Jul-2010	N31 PG31 10 214	19 December 2019	18 December 2034	22-Jul-2010 to 19-Dec-2019
124.	361 of 2019	New	MIP-007	M/s Crystal Crop Protection Limited	Private	22-May-2007	N10 PG15 7 78	19 December 2019	18 December 2034	22-May-2007 to 19-Dec-2019
125.	22 of 2020	Extant (VCK)	MIP-008	M/s Crystal Crop Protection Limited	Private	22-May-2007	E5 PG10 7 68	17 January 2020	16 January 2035	22-May-2007 to 17-Jan-2020
126.	126 of 2020	New	NPA-84	Nirmal Seeds Pvt. Ltd.	Private	19-Aug-2014	N24 PG28 14 1701	19 February 2020	18 February 2035	19-Aug-2014 to 19-Feb-2020
127.	127 of 2020	New	NPA-168	Nirmal Seeds Pvt. Ltd.	Private	19-Aug-2014	N23 PG27 14 1700	19 February 2020	18 February 2035	19-Aug-2014 to 19-Feb-2020
128.	112 of 2013	Extant (VCK)	86M52	Pioneer Overseas Corporation (reissued with address change, old serial no. 658)	Private	22-Aug-2007	E19 PG26 7 137	17 July 2013	16 July 2028	22-Aug-2007 to 17-Jul-2013
129.	94 of 2015	New	86M66	Pioneer Overseas Corporation (reissued with address change, old serial no. 1777)	Private	19-Apr-2010	N12 PG12 10 118	07 April 2015	06 April 2030	19-Apr-2010 to 07-Apr-2015
130.	97 of 2015	New	86M33	Pioneer Overseas Corporation (reissued with address change, old serial no. 1780)	Private	19-Apr-2010	N11 PG11 10 117	08 April 2015	07 April 2030	19-Apr-2010 to 08-Apr-2015
131.	105 of 2015	New	86M86	Pioneer Overseas Corporation (reissued with address change, old serial no. 1788)	Private	13-May-2010	N13 PG13 10 126	27 April 2015	26 April 2030	13-May-2010 to 27-Apr-2015
132.	40 of 2016	New	86 M 40	Pioneer Overseas Corporation (reissued with address change, old serial no. 2109)	Private	18-Jan-2012	N2 PG2 12 5	29 January 2016	28 January 2031	18-Jan-2012 to 29-Jan-2016
133.	41 of 2016	New	86 M 76	Pioneer Overseas Corporation (reissued with address change, old serial no. 2110)	Private	18-Jan-2012	N3 PG3 12 6	29 January 2016	28 January 2031	18-Jan-2012 to 29-Jan-2016
134.	42 of 2016	New	86M11	Pioneer Overseas Corporation (reissued	Private	8-Feb-2012	N4 PG4 12 12	29 January 2016	28 January 2031	08-Feb-2012 to 29-Jan-2016

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				with address change, old serial no. 2111)						
135.	201 of 2017	New	86M84	Pioneer Overseas Corporation (reissued with address change, old serial no. 2875)	Private	13-May-2014	N12 PG14 14 1150	29 May 2017	28 May 2032	13-May-2014 to 29-May-2017
136.	REG/2019/73 H	Extant (Notified)	PB 1705 (MH 2008)	Bayer Crop Science LP	Public	6-May-2019	E2 PG2 19 73	20 August 2020	26 March 2033	06-May-2019 to 20-Aug-2020
137.	REG/2019/73 A	Extant (Notified)	PSP83	Bayer Crop Science LP	Public	6-May-2019	E2 PG2 19 73	20 August 2020	26 March 2033	06-May-2019 to 20-Aug-2020
138.	REG/2019/73 B	Extant (Notified)	PSP84	Bayer Crop Science LP	Public	6-May-2019	E2 PG2 19 73	20 August 2020	26 March 2033	06-May-2019 to 20-Aug-2020
139.	REG/2019/73 R	Extant (Notified)	PP78	Bayer Crop Science LP	Public	6-May-2019	E2 PG2 19 73	20 August 2020	26 March 2033	06-May-2019 to 20-Aug-2020
140.	REG/2018/112 H	Extant (Notified)	Mahabeej-1005 (MH-1852)	Maharashtra State Seeds Corporation Ltd.	Public	13-Mar-2018	E2 PG7 18 112	20 August 2020	24 August 2032	13-Mar-2018 to 20-Aug-2020
141.	REG/2018/112 A	Extant (Notified)	MBJ-2A	Maharashtra State Seeds Corporation Ltd.	Public	13-Mar-2018	E2 PG7 18 112	20 August 2020	24 August 2032	13-Mar-2018 to 20-Aug-2020
142.	REG/2018/112 B	Extant (Notified)	MBJ-2B	Maharashtra State Seeds Corporation Ltd.	Public	13-Mar-2018	E2 PG7 18 112	20 August 2020	24 August 2032	13-Mar-2018 to 20-Aug-2020
143.	REG/2018/112 R	Extant (Notified)	MBJ-1R	Maharashtra State Seeds Corporation Ltd.	Public	13-Mar-2018	E2 PG7 18 112	20 August 2020	24 August 2032	13-Mar-2018 to 20-Aug-2020
144.	REG/2019/72 H	Extant (Notified)	PB 1720 (MH 2107) (PB 1720)	Bayer Crop Science LP	Private	6-May-2019	E1 PG1 19 72	20 August 2020	25 December 2033	06-May-2019 to 20-Aug-2020
145.	REG/2019/72 A	Extant (Notified)	PSP93	Bayer Crop Science LP	Private	6-May-2019	E1 PG1 19 72	20 August 2020	25 December 2033	06-May-2019 to 20-Aug-2020
146.	REG/2019/72 B	Extant (Notified)	PSP94	Bayer Crop Science LP	Private	6-May-2019	E1 PG1 19 72	20 August 2020	25 December 2033	06-May-2019 to 20-Aug-2020
147.	REG/2019/72 R	Extant (Notified)	PP106	Bayer Crop Science LP	Private	6-May-2019	E1 PG1 19 72	20 August 2020	25 December 2033	06-May-2019 to 20-Aug-2020
148.	REG/2019/172 H	Extant (Notified)	PB 1852 (MH-2224)	Bayer Crop Science LP	Private	3-Dec-2019	E9 PG10 19 172	29 October 2020	04 September	03-Dec-2019 to 29-Oct-2020

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									2034	
149.	REG/2019/172 A	Extant (Notified)	PSP95	Bayer Crop Science LP	Private	3-Dec-2019	E9 PG10 19 172	29 October 2020	04 September 2034	03-Dec-2019 to 29-Oct-2020
150.	REG/2019/172 B	Extant (Notified)	PSP96	Bayer Crop Science LP	Private	3-Dec-2019	E9 PG10 19 172	29 October 2020	04 September 2034	03-Dec-2019 to 29-Oct-2020
151.	REG/2019/172 R	Extant (Notified)	PP110	Bayer Crop Science LP	Private	3-Dec-2019	E9 PG10 19 172	29 October 2020	04 September 2034	03-Dec-2019 to 29-Oct-2020
152.	REG/2014/2446	Extant (VCK)	BLPMR 1295	Bisco Biosciences Pvt. Ltd.	Private	8-Dec-2014	E4 PG30 14 2446	12 November 2020	11 November 2035	08-Dec-2014 to 12-Nov-2020
153.	REG/2017/1870 H	Extant (Notified)	Nutrifeed (PAC-981)	UPL Limited	Private	18-Sep-2017	E2 PG27 17 1870	12 November 2020	23 April 2029	18-Sep-2017 to 12-Nov-2020
154.	REG/2017/1870 A	Extant (Notified)	110001	UPL Limited	Private	18-Sep-2017	E2 PG27 17 1870	12 November 2020	23 April 2029	18-Sep-2017 to 12-Nov-2020
155.	REG/2017/1870 B	Extant (Notified)	120001	UPL Limited	Private	18-Sep-2017	E2 PG27 17 1870	12 November 2020	23 April 2029	18-Sep-2017 to 12-Nov-2020
156.	REG/2017/1870 R	Extant (Notified)	PM03-48-23-32	UPL Limited	Private	18-Sep-2017	E2 PG27 17 1870	12 November 2020	23 April 2029	18-Sep-2017 to 12-Nov-2020
157.	REG/2010/224	Extant (VCK)	JKR 11568	JK Agri Genetics Ltd	Private	26-Jul-2010	E2 PG33 10 224	28 January 2021	27 January 2036	26-Jul-2010 to 28-Jan-2021
158.	REG/2010/225	Extant (VCK)	JKR 4259	JK Agri Genetics Ltd	Private	29-Jul-2010	E1 PG34 10 225	28 January 2021	27 January 2036	29-Jul-2010 to 28-Jan-2021
159.	REG/2010/227	Extant (VCK)	JKMS 405A	JK Agri Genetics Ltd	Private	29-Jul-2010	E3 PG36 10 227	28 January 2021	27 January 2036	29-Jul-2010 to 28-Jan-2021
160.	REG/2014/1171	New	M171G	Pioneer Overseas Corporation	Private	16-May-2014	N15 PG17 14 1171	28 January 2021	27 January 2036	16-May-2014 to 28-Jan-2021
161.	REG/2015/271	Extant (VCK)	MP12P16A	Metahelix Life Sciences Limited	Private	11-Feb-2015	E9 PG12 15 271	24 March 2021	23 March 2036	11-Feb-2015 to 24-Mar-2021
162.	REG/2010/68	New	KBMS 261	Kaveri Seed Company Limited	Private	8-Mar-2010	N9 PG9 10 68	06 April 2021	05 April 2036	08-Mar-2010 to 06-Apr-2021
163.	REG/2010/138	New	KBMS 353	Kaveri Seed Company Limited	Private	3-Jun-2010	N17 PG17 10 138	06 April 2021	05 April 2036	03-Jun-2010 to 06-Apr-2021
164.	REG/2015/301	New	PMGP100001A	Metahelix Life	Private	13-Feb-2015	N10 PG14	06 April	05 April	13-Feb-2015 to

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				Sciences Limited			15 301	2021	2036	06-Apr-2021
165.	REG/2016/771	New	BIO EM189Z	DCM Shriram Limited	Private	24-Jun-2016	N13 PG17 16 771	06 April 2021	05 April 2036	24-Jun-2016 to 06-Apr-2021
166.	REG/2014/2419	New	JKR 06128	JK Agri Genetics Ltd	Private	1-Dec-2014	N25 PG29 14 2419	20 April 2021	19 April 2036	01-Dec-2014 to 20-Apr-2021
167.	REG/2009/34	New	KBR 837	Kaveri Seed Company Limited	Private	5-Feb-2009	N14 PG5 9 34	16 June 2021	15 June 2036	05-Feb-2009 to 16-Jun-2021
168.	REG/2010/162	New	KBMS 229	Kaveri Seed Company Limited	Private	21-Jun-2010	N20 PG20 10 162	16 June 2021	15 June 2036	21-Jun-2010 to 16-Jun-2021
169.	REG/2010/168	New	KBR 672	Kaveri Seed Company Limited	Private	21-Jun-2010	N26 PG26 10 168	16 June 2021	15 June 2036	21-Jun-2010 to 16-Jun-2021
170.	REG/2010/170	New	KBR 882	Kaveri Seed Company Limited	Private	21-Jun-2010	N28 PG28 10 170	16 June 2021	15 June 2036	21-Jun-2010 to 16-Jun-2021
171.	REG/2010/172	New	KBR 880	Kaveri Seed Company Limited	Private	21-Jun-2010	N29 PG29 10 172	16 June 2021	15 June 2036	21-Jun-2010 to 16-Jun-2021
172.	Reg/2015/1166	New	M172R	Pioneer Overseas Corporation	Private	10-Jun-2015	N21 PG30 15 1166	16 June 2021	15 June 2036	10-Jun-2015 to 16-Jun-2021
173.	REG/2016/68	New	M297F	Pioneer Overseas Corporation	Private	16-Feb-2016	N5 PG6 16 68	16 June 2021	15 June 2036	16-Feb-2016 to 16-Jun-2021
174.	REG/2020/114 H	Extant (Notified)	CO 9	Tamil Nadu Agricultural University	Public	7-Jul-2020	E2 PG8 20 114	30 June 2021	25 July 2027	07-Jul-2020 to 30-Jun-2021
175.	REG/2020/114 A	Extant (Notified)	ICMA 93111A	Tamil Nadu Agricultural University	Public	7-Jul-2020	E2 PG8 20 114	30 June 2021	25 July 2027	07-Jul-2020 to 30-Jun-2021
176.	REG/2020/114 B	Extant (Notified)	ICMB 93111B	Tamil Nadu Agricultural University	Public	7-Jul-2020	E2 PG8 20 114	30 June 2021	25 July 2027	07-Jul-2020 to 30-Jun-2021
177.	REG/2020/114 R	Extant (Notified)	PT 6029-30	Tamil Nadu Agricultural University	Public	7-Jul-2020	E2 PG8 20 114	30 June 2021	25 July 2027	07-Jul-2020 to 30-Jun-2021
178.	REG/2016/5	New	PP56	Bayer Crop Science LP	Private	12-Jan-2016	N2 PG3 16 5	07 December 2021	06 December 2036	12-Jan-2016 to 07-Dec-2021
179.	REG/2016/6	New	PSP66	Bayer Crop Science LP	Private	12-Jan-2016	N3 PG4 16 6	07 December 2021	06 December 2036	12-Jan-2016 to 07-Dec-2021
180.	REG/2011/1354	New	NB-98R	Nuziveedu Seeds Limited	Private	Monday, December 19, 2011	N3 PG4 11 1354	Monday, March 18, 2019	17-March-2034	19-Dec-2011 to 18-Mar-2019

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181.	REG/2017/1643	Farmer	Sulkhaniya Bajra	Shri Hanumanaram Jhuriya,	Farmer	Monday, July 03, 2017	F8 PG17 17 1643	02-March-2022	01-March-2037	03-Jul-2017 to 02-Mar-2022
182.	REG/2020/153	Extant (VCK)	M164R	Pioneer Overseas Corporation	Private	Wednesday, July 22, 2020	E3 PG10 20 153	18-October-2022	17-October-2037	22-Jul-2020 to 18-Oct-2022
183.	REG/2020/388	Farmer	BABARKOT NO BAJRO	Laxmanbhai Bhavanbhai Makwana	Farmer	Thursday, December 24, 2020	F1 PG11 20 388	18-October-2022	17-October-2037	24-Dec-2020 to 18-Oct-2022
184.	REG/2021/0215 H	Extant (Notified)	Pusa 1201 (MH 1849)	Indian Agricultural Research Institute	Public	Thursday, December 30, 2021	E1 PG12 21 215	15-November-2022	26-March-2033	30-Dec-2021 to 15-Nov-2022
185.	REG/2021/0215 A	Extant (Notified)	MS 411A	Indian Agricultural Research Institute	Public	Thursday, December 30, 2021	-	15-November-2022	26-March-2033	30-Dec-2021 to 15-Nov-2022
186.	REG/2021/0215 B	Extant (Notified)	MS 411B	Indian Agricultural Research Institute	Public	Thursday, December 30, 2021	-	15-November-2022	26-March-2033	30-Dec-2021 to 15-Nov-2022
187.	REG/2021/0215 R	Extant (Notified)	ICMR 07333	Indian Agricultural Research Institute	Public	Thursday, December 30, 2021	-	15-November-2022	26-June-2033	30-Dec-2021 to 15-Nov-2022
188.	REG/2013/182	New	PP 64	M/s Crystal Crop Protection Limited	Private	01 April 2013	N3 PG3 13 182	21-February-2023	20-February-2038	01-Apr-2013 to 21-Feb-2023
189.	REG/2013/977	New	PSP70	M/s Crystal Crop Protection Limited	Private	26 November 2013	N15 PG16 13 977	21-February-2023	20-February-2038	26-Nov-2013 to 21-Feb-2023
190.	REG/2014/489	New	BIO-LM135Z	DCM Shriram Limited	Private	03 March 2014	N3 PG4 14 489	21-February-2023	20-February-2038	03-Mar-2014 to 21-Feb-2023
191.	REG/2014/492	New	EM104Z	DCM Shriram Limited	Private	03 March 2014	N6 PG7 14 492	21-February-2023	20-February-2038	03-Mar-2014 to 21-Feb-2023
192.	REG/2019/96	Extant (VCK)	PP83	M/s Crystal Crop Protection Limited	Private	06 June 2019	E8 PG9 19 96	21-February-2023	20-February-2038	06-Jun-2019 to 21-Feb-2023
193.	REG/2015/270	New	MP12P021R	Rallis India Limited	Private	11 February 2015	N7 PG11 15 270	15-March-2023	14-March-2038	11-Feb-2015 to 15-Mar-2023

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194.	REG/2017/2023	Farmer	AH-PM	Abdul Hadi Khan	Farmer	13 October 2017	F21 PG32 17 2023	09-June-2023	08-June-2038	13-Oct-2017 to 09-Jun-2023
195.	REG/2022/0035 H	Extant (Notified)	NBH 5929 (MH 2423)	Nuziveedu Seeds Ltd	Private	08 March 2022	E1 PG1 22 35	09-June-2023	23-December-2036	08-Mar-2022 to 09-Jun-2023
196.	REG/2022/0035 A	Extant (Notified)	NB 1121A	Nuziveedu Seeds Ltd	Private	08 March 2022	-	09-June-2023	23-December-2036	08-Mar-2022 to 09-Jun-2023
197.	REG/2022/0035 B	Extant (Notified)	NB 1121B	Nuziveedu Seeds Ltd	Private	08 March 2022	-	09-June-2023	23-December-2036	08-Mar-2022 to 09-Jun-2023
198.	REG/2022/0035 R	Extant (Notified)	NB 197R	Nuziveedu Seeds Ltd	Private	08 March 2022	-	09-June-2023	23-December-2036	08-Mar-2022 to 09-Jun-2023
199.	REG/2016/1015	Extant (VCK)	M162F	Pioneer Overseas Corporation	Private	01 August 2016	E6 PG32 16 1015	13-July-2023	12-July-2038	01-Aug-2016 to 13-Jul-2023
200.	REG/2016/1743	Extant (VCK)	M444R	Pioneer Overseas Corporation	Private	18 October 2016	E8 PG40 16 1743	13-July-2023	12-July-2038	18-Oct-2016 to 13-Jul-2023
201.	REG/2015/210	New	PM12P017R	Rallis India Limited	Private	30 January 2015	N5 PG6 15 210	25-October-2023	24-October-2038	30-Jan-2015 to 25-Oct-2023
202.	REG/2017/997	Farmer	Bichhua Bajra	Sirpat Khapre	Farmer	30 March 2017	F1 PG6 17 997	25-October-2023	24-October-2038	30-Mar-2017 to 25-Oct-2023
203.	REG/2017/2012	Farmer	YKB-PM	Yogesh Kumar	Farmer	13 October 2017	F19 PG30 17 2012	25-October-2023	24-October-2038	13-Oct-2017 to 25-Oct-2023
204.	REG/2017/2181	Farmer	DEVNATH BAJRA	Devnath	Farmer	16 October 2017	F27 PG38 17 2181	25-October-2023	24-October-2038	16-Oct-2017 to 25-Oct-2023
205.	REG/2014/482	Farmer	Rukmani	Khamkaran Rajpoot	Farmer	03 March 2014	F1 PG1 14 482	26-November-2023	25-November-2038	03-Mar-2014 to 26-Nov-2023
206.	REG/2015/237	Farmer	BAGDAL DESHI BAAJRA	Mohammed Idris Ahmed Quadri	Farmer	06 February 2015	F1 PG7 15 237	26-November-2023	25-November-2038	06-Feb-2015 to 26-Nov-2023

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207.	REG/2013/79	New	KBH 1952	Kaveri Seed Company Ltd	Private	01 March 2013	N1 PG1 13 79	22 April 2024	21 April 2039	01-Mar-2013 to 22-Apr-2024
208.	REG/2014/1293	New	NU 3214	NU Genes Pvt. Ltd.	Private	30 June 2014	N19 PG21 14 1293	22 April 2024	21 April 2039	30-Jun-2014 to 22-Apr-2024
209.	REG/2013/344	New	86M85	Pioneer Overseas Corporation	Private	01 July 2013	N7 PG7 13 344	07 May 2024	06 May 2039	01-Jul-2013 to 07-May-2024
210.	REG/2013/478	New	NBH-5782	Nuziveedu Seeds Ltd	Private	29 August 2013	N10 PG10 13 478	21 May 2024	20 May 2039	29-Aug-2013 to 21-May-2024
211.	REG/2013/181	New	BPM909	M/s Crystal Crop Protection Limited	Private	01 April 2013	N2 PG2 13 181	22 May 2024	21 May 2039	01-Apr-2013 to 22-May-2024
212.	REG/2013/975	New	9444 Gold	M/s Crystal Crop Protection Limited	Private	26 November 2013	N13 PG14 13 975	12 June 2024	11 June 2039	26-Nov-2013 to 12-Jun-2024
213.	REG/2013/976	New	PP71	M/s Crystal Crop Protection Limited	Private	26 November 2013	N14 PG15 13 976	12 June 2024	11 June 2039	26-Nov-2013 to 12-Jun-2024
214.	REG/2016/774	New	BIO LM460Z	DCM Shriram Limited	Private	24 June 2016	N16 PG20 16 774	12 June 2024	11 June 2039	24-Jun-2016 to 12-Jun-2024
215.	REG/2013/477	New	NBH-5807	Nuziveedu Seeds Ltd	Private	29 August 2013	N9 PG9 13 477	13 June 2024	12 June 2039	29-Aug-2013 to 13-Jun-2024
216.	REG/2017/62	New	MP15P035R	Rallis India Limited	Private	08 February 2017	N1 PG1 17 62	18 July 2024	17 July 2039	08-Feb-2017 to 18-Jul-2024
217.	REG/2017/1468	New	PSP73	M/s Crystal Crop Protection Limited	Private	11 May 2017	N9 PG10 17 1468	18 July 2024	17 July 2039	11-May-2017 to 18-Jul-2024
218.	REG/2017/63	New	MP14P028A	Rallis India Limited	Private	08 February 2017	N2 PG2 17 63	19 July 2024	18 July 2039	08-Feb-2017 to 19-Jul-2024
219.	REG/2010/215	New	DGB-016	M/s Crystal Crop Protection Limited	Private	22 July 2010	N32 PG32 10 215	26 July 2024	25 July 2039	22-Jul-2010 to 26-Jul-2024
220.	REG/2014/1201	New	MP 7794	Rallis India Limited	Private	21 May 2014	N17 PG19 14 1201	25 September	24 September	21-May-2014 to 25-Sep-2024

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								2024	2039	
221.	REG/2016/1893	New	PA9001	Crystal Crop Protection Limited	Private	22 December 2016	N26 PG42 16 1893	25 September 2024	24 September 2039	22-Dec-2016 to 25-Sep-2024
222.	REG/2015/272	Extant (VCK)	PM12P018R	Rallis India Limited	Private	11 February 2015	E8 PG13 15 272	27 November 2024	26 November 2039	11-Feb-2015 to 27-Nov-2024
223.	REG/2017/1467	New	PP74	M/s Crystal Crop Protection Limited	Private	11 May 2017	N8 PG9 17 1467	27 November 2024	26 November 2039	11-May-2017 to 27-Nov-2024
224.	REG/2018/39	New	PP107	M/s Crystal Crop Protection Limited	Private	30 January 2018	N3 PG3 18 39	09 December 2024	08 December 2039	30-Jan-2018 to 09-Dec-2024
225.	REG/2018/40	New	PSP92	M/s Crystal Crop Protection Limited	Private	30 January 2018	N4 PG4 18 40	09 December 2024	08 December 2039	30-Jan-2018 to 09-Dec-2024
226.	REG/2014/844	New	MP 7793	Rallis India Limited	Private	02 April 2014	N9 PG11 14 844	06 January 2025	05 January 2040	02-Apr-2014 to 06-Jan-2025
227.	REG/2016/772	New	BIO MM368Z	DCM Shriram Limited	Private	24 June 2016	N14 PG18 16 772	06 January 2025	05 January 2040	24-Jun-2016 to 06-Jan-2025
228.	REG/2009/74	Extant (VCK)	NBH-1024	Nuziveedu Seeds Ltd	Private	17 March 2009	E5 PG9 9 74	06 March 2025	05 March 2040	17 Mar 2009 to 06 Mar 2025

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ICAR-ICRISAT PARTNERSHIP TRIALS

CHAPTER I: BREEDING

ICAR-ICRISAT Partnership Project Trials *Kharif 2024-25*

Project title: Pearl millet hybrids for harshest drought prone environments and for new emerging markets.

Table 1: The summary table of breeding trials and nurseries is given below

S. No.	Nursery/Trial	Trial size	HYD	ABD	APR	MLR	DHL	JMR	DSA	MDR	JDR	BKR	JPR	HSR	NDL	VYP	GLR	GDN	LDN	Total
		Ent x reps x rows																		
	Seed Parent Progeny Trial																			
1	Potential B-line Nursery (PBLN)	60x2x1		*			*	*	*F				*F	*F						6
	Restorer Parent Progeny Trial																			
2	Potential R-Line Nursery (PRLN)	60x2x1		*			*	*	*F	*			*F	*F	*					8
	Other Trials																			
3	Drought Tolerant Restorer Parent Nursery (DTRPN)	50x2x1								*	*F	*	*F	*F						5
4	Blast Resistant B and R Line Nursery (BRB&RLN)	35x2x1	*	*	*		*		*F				*F	*F	*		*			9
5	Elite Joint Biofortification Nursery (EJBFN)	60x2x1				*	*	*		*			*	*F	*	*			*	9
	Marker Assisted Breeding Trial and Nurseries																			
6	Blast Resistance Trial: Mapping population	290x2x2					*F											*F		2
	Total Trials		1	3	1	1	5	3	3	3	1	1	5	5	3	1	1	1	1	39

Abbreviations * = Trial successfully conducted, *F = Trial conducted but failed

HYD=Hyderabad, ABD= NARP-Aurangabad, APR= Ananthapuram, MLR= Malnoor, DHL=Dhule, JMR=Jamnagar, DSA=Deesa (SDAU), MDR=Mandor, JDR=Jodhpur (CAZRI), BKR=Bikaner, JPR=Jaipur, HSR=Hisar, NDL=New Delhi, VYP=Vijayapura, GLR=Gwalior, GDN=Gudhamalani and LDN=Ludhiana.

AS=Agronomic score (1-Poor, 2-Average, 3-Good, 4-Very good, 5-Excellent), BS=Blast score 0-9 (0=Blast free, 9=more than 90% blast), DF=Days to 50% flowering, DM=Downy mildew per cent, E. or Ent.=Entry, ETPP=Effective tillers/plant, PH = Plant height (cm), HD=Head diameter (cm), HL= Head length (cm), NG = Not germinated, PH=Plant height (cm), SG 1 - 3 (1=Low or non stay green, 2=Medium stay green, 3=High stay green) Fe=XRF Fe (ppm), Zn = XRF Zn (ppm).

ICAR-ICRISAT COLLABORATIVE NURSERIES

A total of 6 trials comprising of potential B- line nursery, potential R- line nursery, drought tolerant restorer parent nursery, blast resistant B and R line nursery, elite joint biofortification nursery and biparental QTL mapping population trial for blast resistance conducted as per details given in table 1. Trial-wise results are given below:-

SEED PARENT PROGENY NURSERY

1. Potential B-line nursery (PBLN): In potential B-line nursery, a total of 60 entries along with 5 checks were evaluated across 6 locations-Aurangabad, Dhule, Jamnagar, Deesa (failed), Jaipur (failed) and Hisar (failed) (Table 7). In potential B-line nursery flowering time ranged from 61 to 73 days. The range of plant height is 77 to 125 cm, head length 14 to 26 cm, head diameter 1.5 to 2.6 cm, effective tillers per plant 1.3 to 3.3, stay green scores 3.0, blast scores 1.2 to 5.2 and agronomic scores 1.3 to 2.7. None of the entry was early to the best check ICMB 02333 (61 days). The entry no. 46, 15, 16, 20, 33, 22, 10 and 26 were superior in head length to the best check ICMB 18111 (21 cm). In head diameter entry no. 6, 21, 52, 1, 9, 11, 40, 49, 50, 51 and 54 were superior to the best check ICMB 18111 (2.1 cm). None of the entry was high tillering to the best check ICMB 02333 (3.3). None of the entry was higher in stay green scores to stay green best check ICMB 1604 (3.0). The entry no. 27, 52, 15, 26, 51, 55, 14, 32, 54, 21, 22, 40, 2, 10, 11, 25, 50, 3, 8, 20, 39 and 53 were superior in blast tolerance to the best check ICMB 18111 (2.7). The entry no. 4, 52, 3, 10, 14, 27, 51, 11, 15, 16, 18, 19, 21, 22, 23, 31, 34, 36, 1, 2, 6, 9, 12, 30, 48 and 49 were superior in agronomic scores to the best check ICMB 04999 (2.0).

RESTORER PARENT PROGENY NURSERY

2. Potential R-line nursery (PRLN): In potential R-line nursery, a total of 60 entries along with 3 checks were evaluated across 8 locations-Aurangabad, Dhule, Jamnagar, Deesa (failed), Mandor, Jaipur (failed), Hisar (failed) and New Delhi (Table 8). In Potential R-line nursery, the flowering time ranged from 59 to 72 days, plant height 100 to 165 cm, head length 15 to 33 cm, head diameter 1.8 to 2.7 cm, effective tillers per plant 1.7 to 2.9, stay green scores 1.5 to 3.0, blast scores 1.7 to 7.0 and agronomic scores 1.8 to 3.5. The entry no. 11, 18, 12, 23 and 47 were early to best check ICMR 10222 (63 days). Only entry no. 42 was superior in head length to the best check ICMR 10222 (30 cm). In head diameter entry no. 1, 5, 8, 13, 38, 6, 25, 32, 49, 50, 2, 14, 24, 34, 40, 46, 3, 9, 26, 28, 33, 35, 37 and 47 were superior to the best check ICMR 21555 (2.2 cm). None of the entry was high tillering to the best check ICMR 14888 (2.9). The entry no. 16, 26, 29, 36, 39, 42, 51 and 55 were equal in stay green scores to stay green best check ICMR 21555 (3.0). The entry no. 42, 13, 39 and 30 were superior in blast tolerance to the best check ICMR 21555 (2.2). The entry no. 50 and 13 were superior in agronomic scores to the best check ICMR 21555 (3.3).

OTHER TRIALS

3. Drought tolerant restorer parent nursery (DTRPN): In drought tolerant restorer parent nursery, a total of 50 entries along with 2 R line checks were evaluated across 5 locations-Mandor, Jodhpur (failed), Bikaner, Jaipur (failed) and Hisar (failed) (Table 9). In drought

tolerant nursery flowering time ranged from 53 to 63 days. The range of plant height 92 to 165 cm, head length 14 to 24 cm, head diameter 1.8 to 4.1 cm, effective tillers per plant 1.0 to 2.5 and agronomic scores 3.0 to 5.0. In drought tolerant restorer parent nursery entry no. 8, 17, 34, 44, 28, 37 and 38 were early to the best check PRLT 2/89-33 (55 days). The entry no. 27, 47, 48, 44, 12, 16, 14, 15, 17, 29, 31, 40, 41, 21, 22, 24, 35, 1, 13, 18, 20, 28, 32 and 43 were superior in head length to the best check H77/833-2 (17 cm). In head diameter only entry no. 22 was superior to the best check PRLT 2/89-33 (2.9 cm). None of the entry was high tillering to the best check H77/833-2 (2.5). The entry no. 2, 13, 17, 23, 24, 26, 27, 35, 40, 44, 47, 10, 12, 18, 20, 21, 22, 28, 29, 33, 39, 42, 45 and 48 were superior in agronomic scores to the best check H77/833-2 (4.0).

4. Blast resistant B and R line nursery (BRB & RLN): In this nursery, a total of 35 entries along with 1 B line and 1 R line checks were evaluated across 9 locations-Hyderabad, Aurangabad, Ananthapuram, Dhule, Deesa (failed), Jaipur (failed), Hisar (failed), New Delhi and Gwalior (Table 10). The days to 50% flowering of progenies ranged from 51 to 63 days. Progenies showed variation for plant height 94 to 182 cm, head length 17 to 30 cm, head diameter 1.6 to 2.6 cm, effective tillers per plant 1.5 to 2.8, stay green scores 1.3 to 2.6, blast scores 2.1 to 7.0 and agronomic scores 2.3 to 3.4.

Amongst blast resistant B lines none of the entry was early to the best check ICMB 95444 (51 days). The entry no. 3, 14, 1, 11, 2, 5, 12, 13, 4, 6, 8, 9 and 10 were superior in head length to the best check ICMB 95444 (17 cm). In head diameter the entry no. 10, 1, 13, 3, 4, 5, 11, 2, 7, 9, 14, 8, 12 and 6 were superior to the best check ICMB 95444 (1.6 cm). None of the entry was high tillering to the best check ICMB 95444 (2.8). The entry no. 1, 3, 6, 11, 2, 5, 8, 14, 4, 9, 7, 13, 12 and 10 were higher in stay green scores to stay green best checks ICMB 95444 (1.3). Amongst blast resistant B lines the entry no. 6, 13, 8, 12, 5, 10, 3, 1, 14, 2, 11, 9, 4 and 7 were superior in blast tolerance to the best check ICMB 95444 (7.0). The B lines entry no. 13, 5 and 11 were superior in agronomic scores to the best check ICMB 95444 (3.0).

Amongst blast resistant R lines the entry no. 24, 19, 20, 22, 16, 17, 21, 23, 33, 26, 27, 28, 31, 30, 32, 15, 18 and 29 were early to the best check ICMR 06666 (62 days). The entry no. 21, 31, 19, 24, 30, 17, 26, 22, 25, 29, 16, 32, 33, 20, 23, 27, 28 and 15 were superior in head length to the best check ICMR 06666 (19 cm). In head diameter entry no. 22, 31, 19, 26, 29, 20, 28, 30, 15, 21, 24, 25, 32, 33, 17 and 27 were superior to the best check ICMR 06666 (2.1 cm). The entry no. 25, 16, 17, 33, 24, 29, 23, 27 and 31 were high tillering to the best check ICMR 06666 (2.1). The entry no. 21, 22, 30, 29, 33, 25, 28, 31, 23, 24, 27, 16, 19 and 26 were higher in stay green scores to stay green best check ICMR 06666 (1.8). Amongst blast resistant R lines entry no. 18, 27, 21, 25, 26, 29, 15 and 31 were superior in blast tolerance to the best check ICMR 06666 (3.0). The R-lines entry no. 19, 17, 16, 27, 29, 31, 26, 20 and 24 were superior in agronomic scores to the best check ICMR 06666 (2.8).

5. Elite joint biofortification nursery (EJBFN): In this nursery, 60 entries along with 2 B lines and 1 R line checks were evaluated across 9 locations-Malnoor, Dhule, Jamnagar, Mandor, Jaipur, Hisar(failed), New Delhi, Vijayapur and Ludhiana (Table 11). The range of progenies for days to 50% flowering 51 to 65 days, plant height 95 to 161 cm, head length 16 to 26 cm, head diameter 1.5 to 2.9 cm, effective tillers per plant 1.7 to 3.0, stay green scores 1.1 to 3.1, blast scores 2.0 to 6.2, agronomic scores 1.9 to 3.4, Fe 37 to 145 ppm and Zn 30 to 83 ppm.

Amongst biofortification B lines none of the entry was early to the best check ICMB 92111 (51 days). The entry no. 3, 18, 54, 5, 20, 49, 51, 52, 55, 1, 9, 14, 2, 6, 7, 11, 12, 16 and 46 were superior in head length to the best check ICMB 92111 (19 cm). In head diameter entry no. 6 and 50 were superior to the best check ICMB 98222 (2.5 cm). The entry no. 8, 47, 53, 6 and 55 were high tillering to the best check ICMB 92111 (2.6). The entry no. 8, 6, 54, 7, 20, 17, 12, 18, 49, 3, 11, 1, 5, 13, 15, 16, 50, 10, 53, 4, 14, 19, 48, 55, 2, 51, 9 and 46 were higher in stay green scores to stay green best check ICMB 92111 (1.8). The entry no. 8, 6, 7, 54, 3, 12, 5, 17, 55, 10, 20, 49, 1, 18, 48, 53, 13, 51, 11, 46, 15, 16, 2, 9, 19, 47, 50, 4, 52 and 14 were superior in blast tolerance to the best check ICMB 92111 (5.3). The entry no. 1, 10, 18, 51, 6, 15, 20, 7, 49, 3, 54, 4, 11, 13, 48, 52, 14, 19, 5, 8, 46, 47 and 50 were superior in agronomic scores to the best check ICMB 92111 (2.5). In B lines high Fe were recorded in entry no. 9, 8, 2 and 7 in comparison to the best check ICMB 98222 (Fe 102 ppm) and high Zn were also recorded in entry no. 2, 8, 9 and 17 in comparison to the best check ICMB 92111 (Zn 64 ppm).

Amongst biofortification R lines entry no. 56, 60, 34, 59, 35, 38 and 57 were early to the best check ICMR 1202 (57 days). Only entry no. 58 was superior in head length to the best check ICMR 1202 (25 cm). In head diameter only entry no. 26 was superior to the best check ICMR 1202 (2.7 cm). The entry no. 56, 25 and 36 were high tillering to the best check ICMR 1202 (2.3). The entry no. 32, 24, 37 and 42 were higher in stay green scores to stay green best check ICMR 1202 (2.6). The entry no. 24, 23, 39, 40, 22, 26, 31, 36, 25, 21, 33, 35, 27 and 28 were superior in blast tolerance to the best check ICMR 1202 (4.2). None of the R line was superior in agronomic scores to the best check ICMR 1202 (3.3). In R lines high Fe were recorded in entry no. 32, 31, 21, 27, 37, 33, 40 and 30 in comparison to the best check ICMR1202 (Fe 100 ppm) and high Zn were also recorded in entry no. 21, 41, 32, 31, 60, 40, 37, 33, 36, 27, 24, 39, 29, 35, 38, 57, 34 and 56 in comparison to the best check ICMR 1202 (Zn 48 ppm).

CHAPTER I: BREEDING

Table 2: Pedigree of entries in potential B-line nursery (PBLN) *kharif* - 2024

E. no.	Pedigree
1	[Blast and DM Resistance B-com HS-29-3-1-1-3 X ((ICMB 94333 x ICMB 01222)-47-1-B-B-B x 4287 {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-14-4-9-B-5]-20-1-3
2	[((843B x ICMP5 900-9-3-2-2)-41-2-5-5 S2-34-1-2-3 x B-line bulk]-8-B-B-1-B-B-B-1 x (ICMB 01666xICMB 01222)-12-2-B-1-B P1)-4-1-3-1-B X (Blast and DM Resistance B-com HS-29-3-1-1-3)]-8-4-5
3	A4 Thick Head B-composite-Early (RCE 24B / K16)-3-3-4-1
4	[((MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-3-2-5-B X (Blast and DM Resistance B-com HS-28-1-5-4-5)]-6-5-5
5	[((HHVDBC HS-246-1-2-1-2 x ICMB 99555)-1-3-3-1 x ((MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-18-2-1-B-B-1-1 X (Blast and DM Resistance B-com HS-28-1-5-4-5)]-4-4-2
6	[(((HHVDBC HS-246-1-2-1-2 x ICMB 99555)-1-3-3-1 x ((MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-18-2-1-B-B-1-1) X ((ICMB 03777 x ((MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-3-1)-21-4-4-1-4)]-2-4-4
7	[(((MC 94 S1-81-1-B x HHVBC)-4-4-1 x (MC 94 S1-81-1-B x HHVBC)-4-2-4-10-3-1--B-B-B x ICMB 02777)-3-3-B-2) X ((ICMB 95111 x (ICMB 96555 x IP 10437)-3]-7-2-1-B-2-15-1) x B-bulk (3981-3989/S06 G1))-3-2-4-B x ICMB 08999)-13]-B-12-1-1
8	[(((ICMB 95111 x (ICMB 96555 x IP 10437)-3]-7-2-1-B-2-15-1) x B-bulk (3981-3989/S06 G1))-3-2-4-B x ICMB 08999)-13] X ((ICMB 01333 x HHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-4)]-B-6-2-1
9	[((ICMB 94333 x ICMB 01222)-47-1-B-B-B x 4287 {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-14-4-9-B-5 X (ICMB 99111 x ICMB 98222)-6-2-5-1-B]-2-4-5
10	[(((ICMB01333xHHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-1x(HTBLN/95-98xICMB89111)-1-B-B-1-9-1-3-4-2xHHVDBC HS-120-1-2-1-1-3-B-4x(ICMB01333xHHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-4)-5-1)
11	[((HHVDBC HS-246-1-2-1-2 x ICMB 99555)-2-2-2-1 x ((MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-15-3-5-1
12	[((843B x ICMP5 900-9-3-8-2)-21-8-4 X (ICMB 01666 x ICMB 01222)-49-1-2-B-2]-5-2-5
13	[([(26B x (81B x SRL 50-1))-1-1-2 x 852B]-69-1-1 X (((81B x 4017-6-1-1)-3-1-4-3-4-1-2-1-B-2-2 x ICMB 05888)x (HHVDBC Medium HS-120-1-2-1-1-1-1 x HHVDBC Medium HS-15-1-1-1-2-2-4)]-21-2-1-3-1-4-2
14	[((EBC-S1-40-2-2-1 x B-bulk)-25-B-B X (SPF3/S91-327 x SPF3/S91-5)-6-2-2)-B-13-5-4
15	[((SRC II C3 S1-1-1-2 x HHVBC)-2-2-1-1-1-B-B x (81B x 4017-5-4-B)-12-3-1-3]-2-3-1-2-3X[((ICMB 94333 x ICMB 01222)-47-1-B-B-B x 4287 {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-14-4-9-B-5 X (MC 94 S1-34-1-B x HHVBC)-12-1-2-2-2-B-1-B-B-3-2-3-4)]-B-21]-B-1-5-4
16	[(((ICMB 95444 x ICMB 93333)-24-2-B-B X (MC 94 S1-34-1-B x HHVBC)-10-4-3-2-2-B-B-2)-2-1-1)] X (((ICMB 04999 x ICTP 8203 S1-250-3)-1-11-2-B)]-B-19-3-B-B
17	[((ICMB 04777 x ICMB 04111)-13-4-1-1-3X[((ICMB 94333 x ICMB 01222)-47-1-B-B-B x 4287 {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-14-4-9-B-5 X (MC 94 S1-34-1-B x HHVBC)-12-1-2-2-2-B-1-B-B-3-2-3-4)]-B-11]-B-6-4-B-B-B
18	[(((ICMB 96555 x IP 10437)-9-B-B-B-B-B x IP 14758-2-2)-19-1-B x (ICMB 96555 x IP 10437)-3-4-1-2-2-1-B-2-B-3]-3-3-2-1-5 X (ICMB 01666 x ICMB 01222)-27-3-B-3]-B-10-3-3-B-B
19	[(((B x B) F2 S1-109-2-3-3-1-4-2 X (ICMB 01666 x ICMB 01222)-27-3-B-3]-1-2-4]-B-2-4-1-3 X (((DMR 133 x HTBC 48-B-1-1-1-5)-19-2-B-B x ICMB 04111]-145-1-1-2-2 X (ICMB 01333 x HHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-1)-1-1-4]-B-1-4-2-4]-B-13-2-4-B-B
20	[ICMB 11222 X PE 05532 Super sosat]-17-3-3-1-4-B-B-B-B
21	[([78-7088/3/SER3 AD//B282/(3/4)EB x PBLN/S95-359]-7-4-B-B-2-B-BX(ICMB 03777 x ((MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-3-1)-6]-11-3-2
22	[([78-7088/3/SER3 AD//B282/(3/4)EB x PBLN/S95-359]-7-4-B-B-2-B-BX(EBC-Gen-S1-40-2-2-1 x B-bulk)-28-B-B-3-B-B-3]-20-5-1

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E. no.	Pedigree
23	[[[(ICMB 01333 x HHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-1 x [(DMR 133 x HTBC 48-B-1-1-1-5)-19-2-B-B x ICMB 04111]-145-1-2-3)-17-4-2-1]] X [[[(ICMR 312 S1-1-5-2-B x HHVBC)-10-2-1-2-3-B x HHVDBC HS-158-2-1-2-1-1-B]-9-2-3-1) x ((ICMB 99444xICMB 99222)-1-4-4-2-2-3-2-3)-9]]-B-1-1-B
24	[[[(IC-CZBC-C0-1-6-3-3-B X [(81B x 4017-6-1-1)-3-1-4-3-4-1-2-1-B-2-2 x ICMB 05888)x (HHVDBC Medium HS-120-1-2-1-1-1-1 x HHVDBC Medium HS-15-1-1-1-2-2-4)]-21-2-1-3-1-15-4]] X [(ICMB 12111)]-B-15-2-1
25	A4 Thick Head B-composite-Early (RCE 24B / K16)-8-2-3-2-2
26	A4 Thick Head B-composite-Late (RCE 24B / K16)-24-2-7-2-B
27	[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-3-6-4-2-3-BX[[[ICMV 88908-11-12-3-2-B x B-bulk]-8-B-3 x [(843B x ICMP5 900-9-3-2-2)-41-2-5-5 S2-34-1-2-1-1 x B-bulk]-5-B-B]-11-1-1-B-B x ICMB 04111]-127-1-3-4]-B-15-3-2-B
28	[[[(EEDBC S1-704-1-1-1-3-B-B-1xEBC 407 progenies bulk)-7-3-1 x NCD2S1-2-2-2-1-9-B-B-14-1-3-1-2 X ((843B x ICMP5 900-9-3-2-2)-41-2-5-5 S2-34-1-2-3 x B-line bulk)-8-B-B-1-B-B-B-1 x (ICMB 01666xICMB)01222)-12-2-B-1-B P1)-4-1-2-3-B)-1-5]-B-5-4-4 X Selection from KSU line BKM 2068]-B-12-1-4
29	[[[(D2BLN/95-93 x SPF1/K95-3213-20)-10 x (91777B x HHVBC)]-7-B-1-B-B-4-B-1 X (BSECBPT/91-38 x SPF3/S91-529)-10-1-7]-1-4-7]-B-4-7-2-SB X ((ICMB 01333 x HHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-1 x [(DMR 133 x HTBC 48-B-1-1-1-5)-19-2-B-B x ICMB 04111]-145-1-2-3)-13-3-2-B]-B-26-4-2
30	[[[(B x B) F2 S1-109-2-3-3-1-4-2 X (ICMB 01666 x ICMB 01222)-27-3-B-3]-1-2-1]-B-2-1-4-1 X Ankoutes X ICMB 04999-7-1]-B-6-3-1
31	[[[(B x B) F2 S1-109-2-3-3-1-4-2 X (ICMB 01666 x ICMB 01222)-27-3-B-3]-1-2-4]-B-2-4-1-3 X [[[(DMR 133 x HTBC 48-B-1-1-1-5)-19-2-B-B x ICMB 04111]-145-1-1-2-2 X (ICMB 01333 x HHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-1]-1-1-4]-B-1-4-2-4]-B-7-1-3
32	((7005x7001-7011)-14-7-1)
33	[[[(HHVDBC HS-45-2-3-1-2-3-4-B-1x[(EBC-Gen-S1-40-2-2-1xB-bulk)-1-B-B-2-B-B-BxICMB04111]-4-2-1-2X[(MC94S1-34-1-BxHHVBC)-10-4-3-2-2-B-B-2x(ICMR312S1-1-5-3-BxHHVBC)-7-1-1-1-B-B-B]-21-B-1-4-1-2-3-1x(ICMB01333xHHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-4)-2-5)
34	[[[(HHVDBC HS-246-1-2-1-2 x ICMB 99555)-2-2-2-1 x [(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-15-1-1-B
35	(ICMB 01666 x ICMB 01222)-49-1-2-B-2-5-P1
36	[[[(ICMB06555xICMB94444)-6-3-2-4-BX[(843BxICMP5900-9-3-2-2)-41-2-5-5S2-34-1-2-3xB-linebulk]-8-B-B-1-B-B-B-1x(ICMB01666xICMB)01222)-12-2-B-1-BP1)-4-1-2-3-B)-1-6)
37	[[[(ICMR 312 S1-1-5-2-B x HHVBC)-10-2-1-2-3-B x HHVDBC HS-158-2-1-2-1-1-B]-9-2-3-1) x ((ICMB 99444xICMB 99222)-1-4-4-2-2-3-2-3)-9
38	[(B x B) F2 S1-109-2-3-3-1-4-2 X (ICMB 01666 x ICMB 01222)-27-3-B-3]-1-10-4
39	[[[(843B x ICMP5 900-9-3-2-2)-41-2-5-5 S2-34-1-2-3 x B-line bulk]-8-B-B-1-B-B-B-1 x (ICMB 01666xICMB)01222)-12-2-B-1-B P1)-1-4-2-2-B) X [[[(MC 94 S1-34-1-B x HHVBC)-10-4-3-2-2-B-B-2 x (ICMR 312 S1-1-5-3-B x HHVBC)-7-1-1-1-B-B-B]-21-B-1-4-1-2-1-2-B]]-3
40	[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-3-2-5-B) X [(ICMB 03777 x [(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-3-1)-21-4-4-1-4]-4-3
41	[[[(HHVDBC HS-246-1-2-1-2 x ICMB 99555)-1-3-3-1 x [(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-18-2-1-B-B-1-1) X [[[(MC 94 S1-34-1-B x HHVBC)-10-4-3-2-2-B-B-2 x (ICMR 312 S1-1-5-3-B x HHVBC)-7-1-1-1-B-B-B]-21-B-1-4-1-2-1-2-B]]-1-1
42	[[[(843B x ICMP5 900-9-3-2-2)-41-2-5-5 S2-34-1-2-3 x B-line bulk]-8-B-B-1-B-B-B-1 x (ICMB 01666xICMB)01222)-12-2-B-1-B P1)-1-4-2-2-B) X [[[(MC 94 S1-34-1-B x HHVBC)-10-4-3-2-2-B-B-2 x (ICMR 312 S1-1-5-3-B x HHVBC)-7-1-1-1-B-B-B]-21-B-1-4-1-2-1-2-B]]-3-10-1-P3

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Table 2: Pedigree of entries in potential B-line nursery (PBLN) *kharif* - 2024

E. no.	Pedigree
43	[[[(HHVDBC HS-246-1-2-1-2 x ICMB 99555)-1-3-3-1 x {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-2-4)-18-2-1-B-B-1-1} X [(MC 94 S1-34-1-B x HHVBC)-10-4-3-2-2-B-B-2 x (ICMR 312 S1-1-5-3-B x HHVBC)-7-1-1-1-B-B-B]-21-B-1-4-1-2-1-2-B}]-1-3-4
44	[[[(843B x ICMP5 900-9-3-2-2)-41-2-5-5 S2-34-1-2-3 x B-line bulk]-8-B-B-1-B-B-B-1 x (ICMB 01666xICMB)01222)-12-2-B-1-B-P1)-1-4-2-2-B} X [(ICMB 03777 x {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-3-1)-21-4-4-1-4}]-5-3-1
45	[[[(843B x ICMP5 900-9-3-2-2)-41-2-5-5 S2-34-1-2-3 x B-line bulk]-8-B-B-1-B-B-B-1 x (ICMB 01666xICMB)01222)-12-2-B-1-B-P1)-1-4-2-2-B} X [(ICMB 03777 x {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-3-1)-21-4-4-1-4}]-3-3-4
46	A1 Thick panicle B-comp HS-104-5-1-4-1
47	A4 Thick Head B-composite-Late (RCE 24B / K16)-24-2-7-2-B-B
48	[(ICMB 03777 x {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-3-1)-21-4-4-1 X (ICMB 01666 x ICMB 01222)-27-3-B-3]-B-6-3-4-B
49	[(ICMB 93333 x ICMB 01222)-11-1-B-7-1 X (ICMB 01666 x ICMB 01222)-27-3-B-3]-B-4-4-4-B-B
50	[(ICMB 18444)] X [([(ICMB 96555 x IP 10437)-9-B-B-B-B-B x IP 14758-2-2)-19-1-B x (ICMB 96555 x IP 10437)-3-4-1-2-2-1-B-2-B-3]-1-1-1-1-1) x [(MC 94 S1-34-1-B x HHVBC)-16-1-3-1-2-2-B-B-2-B-B x ICMB 00444]-14-5-1-1xEarly D2/Med group lines x med maturity lines bulk (1301-28)-3-2-1]-8-1-2]-B-12-2-3-B
51	[(ICMB 18444)] X [([(ICMB 96555 x IP 10437)-9-B-B-B-B-B x IP 14758-2-2)-19-1-B x (ICMB 96555 x IP 10437)-3-4-1-2-2-1-B-2-B-3]-1-1-1-1-1) x [(MC 94 S1-34-1-B x HHVBC)-16-1-3-1-2-2-B-B-2-B-B x ICMB 00444]-14-5-1-1xEarly D2/Med group lines x med maturity lines bulk (1301-28)-3-2-1]-8-1-2]-B-22-3-3-B
52	[[[(ICMB 01333 x HHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-1 x [(DMR 133 x HTBC 48-B-1-1-1-5)-19-2-B-B x ICMB 04111]-145-1-2-3)-17-4-2-1] X [([(ICMR 312 S1-1-5-2-B x HHVBC)-10-2-1-2-3-B x HHVDBC HS-158-2-1-2-1-1-B]-9-2-3-1) x [(ICMB 99444xICMB 99222)-1-4-4-2-2-3-2-3)-9]-B-1-3-B-B
53	[(ICMB 01666 x ICMB 01222)-27-3-B-3] X [(ICMB 03777 x {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-3-1)-6}]-B-17-2-5-B-B-1
54	[[[ICMB 99555 x {78-7088/3/SER3 AD//B282/(3/4)EB x PBLN/S95-359]-10-2-B-2]-19-2-B-B-B-B] X [(ICMB 01666 x ICMB 01222)-27-3-B-3]-B-11-3-1-B-B-B
55	[(ICMB 01666 x ICMB 01222)-27-3-B-3] X [Blast and DM Resistance B-com HS-32-2-2-3-3]-B-5-1-3-B-B-B
56	ICMB 1604 (Stay Green Check)
57	ICMB 18111 (Thick Head Panicle Check)
58	ICMB 15111 (High Tillering Check)
59	ICMB 02333 (Thick and Compact Panicle Check)
60	ICMB 04999 (Check)

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Table 3: Pedigree of entries in potential R-line nursery (PRLN) *kharif* - 2024

E. no.	Pedigree
1	DMRRC /S19-HS-23-1-1-4-2
2	((((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-BxR-lines bulk (22720-22726/S11))-7-6-4-2 x ICMR 13888)-B-9-2-1-2-B
3	(Thorny composite-HS-S2-B-14-4-3 x HHVBC tall (C1) S1-33-3-1-1-1-2-B-B-3-3-1-7)-B-6-2-1-5-B
4	(MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-28-1-3
5	(((((SRC II C3 S1-19-3-2 x HHVBC)-3-5-1) x (IP 19626-4-1-1-1))-B-2-2-1-2-4-2-B-6-1-1-B x (((((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-18-2-3-2-2-BxAIMP 92901 S1-296-2-1-1-2-2)-B-18-1 x (((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-28-2-2-3-1-2xICMR 312 S1-3-2-3-2-1-1-B-B-B-B)-B-14-3)-2-2-1-4)-B-2-2-1-3-1
6	((((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-Bx (22720-22726/S11))-1-1-3-3 x (ICMR 312 S1-8-1-1-1-1-B-B-B-1-B x (20216-20249))-22-1-2-2-1-B)-B-13-3-1-1-B
7	{(((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-28-3-3-2-2}x{(MRC HS 225-3-5-2-B-B-B-B)-B-7-4-1-3-B-B
8	{(((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-1-1-2-1-2-B x (IPC 337 xSDMV 90031-S1-84-1-1-1-1)-12-5-2-4-B-B)-B-4-3-1-1-B
9	((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1 x ICMR15222)-B-21-1-1-1-B
10	((((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-Bx (22720-22726/S11))-1-1-3-3 x (AIMP 92901 S1-415-2-1-2-B-B-B-1-B x (20216-20249))-11-1-2-3-1-B)-B-1-2-1-3-B
11	((([MRC HS-130-2-2-1-B-B-3-B-B-B-1-3-1 X ICMV 96490-S1-15-1-2-1-3-1]-31) x ((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-2-2-2-64-2))-16-1-1-1-1-B
12	[ICMR 12555 x ICMV 221 S1-366-1]-B-2-7-6-1-B
13	(((((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-18-2-3-2-2-BxAIMP 92901 S1-296-2-1-1-2-2)-B-18-1 x (((((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-28-2-2-3-1-2xICMR 312 S1-3-2-3-2-1-1-B-B-B-B)-B-14-3)-2-2-1-4 x (((SRC II C3 S1-19-3-2 x HHVBC)-3-5-1) x (IP 19626-4-1-1-1))-B-2-2-1-2-4-2-B-6-1-1-B X (ICMR 312 S1-8-1-1-1-1-B-B-B-1-B x (20216-20249))-22-1-2-3-3-B x (((SRC II C3 S1-19-3-2 x HHVBC)-3-5-1) x (IP 19626-4-1-1-1))-B-2-2-1-2-4-2-B-6-1-1-B)-B-16-4-1
14	((([IAC-ISC TCP6 S1-9-1-2-B-4-2-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-11-3-1-B-B) / (((AIMP 92901 S1-488-2-1-1-2-B-1-B x R-lines bulk (20216-20249/K09))-6-4-1)-B-31-1-3
15	(ICMV 96490-S1-15-1-2-1-3-2-3-1-1x(MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-2-2-2 -G3-41)-B-16-1-4-B
16	((([MRC HS-130-2-2-1-B-B-3-B-B-B-1-3-1 X (((IP 12322-1-2)xB-Lines)-B-14) x (MRC S1-156-2-1-B))-B-1-3-3-B)x{(GB 8735-S1-15-3-1-1-3-4-2-2-2-1)-B-11-5-1-1-1]-20-1-B) X (ICMV 96490-S1-15-1-2-1-1))-B-2-1-1-1
17	[(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-34-4-1 X JBV 3 S1 -237-1-3-3-1-B]-B-10-2-4-1-1-B
18	[AIMP 92901 S1-15-1-2-3-B-2-B-13-3-1 x ICMR 12555]-SB-6-1-1-1-B
19	{(((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-Bx (22720-22726/S11))-1-1-1-1 x HTRC S1's -1095-1-7-4)x(((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-Bx (22720-22726/S11))-1-1-1-1 x (AIMP 92901 S1-415-2-1-2-B-B-B-1-B x (20216-20249))-11-1-2-3-1-B)-B-7-3-3
20	HTRC-Bulk-1084-1-5-4-2-BxJBV 3 S1-300-1-1-2-1-4-1)-B-2-1
21	(((((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x (22680-22692/S11))-4-5-1 x (15491-15506/S14)-15-4-2 x (((ICMV 88908-11-12-3-2-B x B-lines bulk)-8-B-3 x {(843B x ICMPs 900-9-3-2-2)-41-2-5-5 S2-34-1-2-1-1 x B-bulk}-5-B-B]-16-1-1-B-B)x(((ICMV-IS 94206-15)xB-Lines)-B-6-1-3-1)-B-8-5-2-1-1)-B-7-2-4-B-B-B
22	{((IPC 1617xSDMV 90031-S1-84-1-1-1-1)xAIMP 92901 S1-296-2-1-1-3-B-1]-3-1-1-4-2-B-B x [JBV 3 S1-300-1-1-2-2 x JBV 3 S1-18-1-3-3-2]-B-7-4x(((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-4-1-3-3-1-2-1-1-1-5)x((SDMV 90031-S1-86-4-2-1-1-B-2-3-B-B-Bx[MC 94 C2-S1-3-1-3-1-2-2-2-B-B-1 x (ICMV-IS 94206-7 x (SRC II C3 S1-1-1-2 x HHVBC)-1-3-3))-B-10-1-1-3-3-2]-B-18-1)-3-1-3-4 x [MC 94 C2-S1-3-1-3-1-2-2-2-B-B-1 x (ICMV-IS 94206-7 x (SRC II C3 S1-1-1-2 x HHVBC)-1-3-3))-B-10-1-1-4-3-1-1]-B-17-4-3-2-B)-B-5-1-1-B-B-B

CHAPTER I: BREEDING

Table 3: Pedigree of entries in potential R-line nursery (PRLN) *kharif* - 2024

E. no.	Pedigree
23	(SDMV 95045 S1-7-2-4-2-3-2-1-B-B-B-B-8-1-1-B-B) / (((MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-44-2-1) X (((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-28-3-1-2-2)x{(MRC HS 225-3-5-2-B-B-B-B)-B-4-2-1)-35-1-B)-B-22-3-3-B-B
24	(SDMV 95045 S1-7-2-4-2-3-2-1-B-B-B-B-8-1-1-B-B) / ([ICMV 96490-S1-15-1-2-2-2 X LaGrap C2-S1-14-4-1-3-4-4]-24-1-2-2-1-2)-B-15-3-2-B-B
25	{((IPC 107xSDMV 90031-S1-84-1-1-1-1)xAIMP 92901 S1-296-2-1-1-3-B-1]-3-2-2-2-1-B-2 X [(IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x(R-lines bulk (22669-22675/S11))-8-5-4-3-B-B)-B-8-2-3-B-B
26	(((((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x (22680-22692/S11))-5-6-1-5 x (SDMV 90031-S1-86-4-2-1-1-B-2-3-B-B-Bx[MC 94 C2-S1-3-1-3-1-2-2-2-B-B-1 x (ICMV-IS 94206-7 x (SRC II C3 S1-1-1-2 x HHVBC)-1-3-3))-B-10-1-1-3-3-2]-B-18-1)-3-1-1-3) X (Thorny composite-HS-S2-B-14-4-3 x (MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1))) -B-4-3-1-B-B
27	[A5 R-composite-Early-HS-122-1-1-3-1-1] X [(((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-28-2-2-3-1-2xICMR 312 S1-3-2-3-2-1-1-B-B-B-B)-B-17x(((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-28-3-4-3-1)x{RCB2 S1-19-2-5-1-1-2-3-3-B]-B-5-P1-3)-2-2-4]-B-10
28	((MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-17-4-3-2-B-BxR-lines bulk (22720-22726/S11))-5-5-4-1x(ICMS 7704-S1-127-5-1 x RCB-2 Tall)-B-19-3-4-5-3)-B-4-2-2-B
29	((MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-17-4-3-2-B-BxR-lines bulk (22720-22726/S11))-5-5-4-1x(ICMS 7704-S1-127-5-1 x RCB-2 Tall)-B-19-3-2-1-1-1-B)-B-13-4-1-B
30	ICMS 8511 S1-17-2-1-1-4-1-B-3-2-3-2-B-1-1-BX(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-23-2-1)-B-11-1-1-B
31	ICMS 8511 S1-17-2-1-1-4-1-B-3-2-3-2-B-1-1-BX(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-23-2-1)-B-13-2-1-B
32	(EERC-HS-29)-19-3X(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-23-2-1)-B-2-3-1-B
33	(EERC-HS-29)-19-3X(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-23-2-1)-B-6-1-2-B
34	(EERC-HS-29)-19-3X(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-23-2-1)-B-6-1-3-B
35	(EERC-HS-29)-19-3X(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-23-2-1)-B-11-4-3-B
36	JBV 3 S1-286-1-1-3-B-8-1-1-BX(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-23-2-1)-B-13-2-3-B
37	(MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-28-1-1-BX(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-23-2-1)-B-3-1-3-B
38	(MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-28-1-1-BX(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-23-2-1)-B-13-1-1-B
39	((EERC-HS-29)-19-3 x 10624-1-1-1-1-3-2-1)-14-2x(((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-37-1-1-1-2-B)-B-1-3-2
40	((EERC-HS-29)-19-3 x 10624-1-1-1-1-3-2-1)-14-2x(((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-37-1-1-1-2-B)-B-8-2-4
41	((EERC-HS-29)-19-3 x 10624-1-1-1-1-3-2-1)-14-2x(((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-37-1-1-1-2-B)-B-16-4-2
42	{(SRC II C3 S1-19-3-2 x HHVBC)-1-5-1)x{((96111B x 4017-6-1-1)-1-4-4-3) x (IP 19626-4-1-2-1))-B-6}-B-5-2-3-1-B-4-Bx{((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-37-1-1-1-2-B)-B-1-3-3
43	(ICMV 96490-S1-22-2-2-1-2 x 10624-1-1-1-1-3-2-2)-14-3x[JBV 3 S1-300-1-1-2-2 x JBV 3 S1-18-1-3-3-2]-B-7-4x{((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-4-1-3-3-1-2-1-1-1-3)-B-1-1-1
44	((EERC-HS-29)-19-3 x 10624-1-1-1-1-3-2-1)-14-2xHTRC S1's -2102-1-4-1-4-B)-B-9-1-4
45	((EERC-HS-29)-19-3 x 10624-1-1-1-1-3-2-1)-14-2xHTRC S1's -2102-1-4-1-4-B)-B-10-3-1

CHAPTER I: BREEDING

Table 3: Pedigree of entries in potential R-line nursery (PRLN) *kharif* - 2024

E. no.	Pedigree
46	((EERC-HS-29)-19-3 x 10624-1-1-1-3-2-1)-14-2xHTRC S1's -2102-1-4-1-4-B)-B-13-3-2
47	((EERC-HS-29)-19-3 x 10624-1-1-1-3-2-1)-14-2xHTRC S1's -2102-1-4-1-4-B)-B-13-3-3
48	((EERC-HS-29)-19-3 x 10624-1-1-1-3-2-1)-14-2xHTRC S1's -2102-1-4-1-4-B)-B-20-2-4
49	(ICMR 13333 x (((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x (22680-22692/S11))-5-6-1-5)-B-1-1-2
50	(ICMR 13333 x (((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x (22680-22692/S11))-5-6-1-5)-B-12-3-5
51	(ICMR 14333 x (((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x (22680-22692/S11))-5-6-1-5)-B-1-3-2
52	(ICMR 14333 x (((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x (22680-22692/S11))-5-6-1-5)-B-4-2-4
53	(ICMR 14333 x (((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x (22680-22692/S11))-5-6-1-5)-B-11-2-4
54	(ICMR 14333 x (((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x (22680-22692/S11))-5-6-1-5)-B-16-3-4
55	(ICMR 07444 x JBV 3 S1-18-2-2-1-3-2 x JBV 3 S1 -237-1-3-3-1-B-20 (long)-11-2)-B-3-4-2
56	(ICMR 11666 x (((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B]-B-6-1x (22680-22692/S11))-5-6-1-5)-B-21-1-4
57	IAC-ISC TCP5 S1-2-1-1-B-1-2-B-4-B
58	ICMR 10222 (Long Panicle Check)
59	ICMR 21555 (Thick Compact Panicle and Good seed Set Check)
60	ICMR 14888 (High Tillering Check)

CHAPTER I: BREEDING

Table 4: Pedigree of entries in drought tolerant restorer parent nursery (DTRPN) *kharif* - 2024

E. no.	Pedigree
1	(ICMB 97111 x PRLT 2/89-33)-5-1-1-1-B-2-3-B-B
2	(ICMB 97111 x PRLT 2/89-33)-7-4-1-1-2-2-4-B-B
3	(ICMB 04999 x PRLT 2/89-33)-3-5-1-1-1-1-4-B-B
4	HT Composite (B) 1184-1-4-5-3065-1-3-B-2184-1-B-1-B-3-3-B-B
5	HT Composite (B) 1171-1-3-4-3-4-5-B-2178-2-B-1-2-1-B-B
6	((EBC-S1-40-2-2-1 x B-bulk)-25-B-B X (SPF3/S91-933 x SPF3/S91-3)-8-1-1-B)-B-24-3-1-B-B-B-B
7	(ICMB 04999 X PRLT 2/89-33)-P1202-3-B-5-B-B-B-B-B
8	(ICMB 97111 x PRLT 2/89-33)-7-4-1-1-2-B-B-B-B
9	(ICMV 96490-S1-15-1-2-1-3-2-3-1-1x(MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-2-2-2 -G3-41)-B-16-1-4-B
10	((((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-Bx (22720-22726/S11))-4-6-2-3 x (ICMR 312 S1-8-1-1-1-1-B-B-B-1-B x (20216-20249))-22-1-2-2-1-B)-B-3-2-1-3-B
11	((MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-34-4-2-B-Bx(R-lines bulk (22669-22675/S11))-5-1-1-3-B-B x [(MC 94 C2-S1-3-1-1-2-3-2-B-1-B-B-B x R-lines bulk 20216-20249/K09)]-12-3-B)-B-12-2-1-B-B
12	(ICTP 8202 S1-99-2-1-B-B x ICTP 8203-S1-10-2-1-2-B)-B-20-3-2-B-B
13	((((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-BxR-lines bulk (22720-22726/S11))-7-6-4-2 x ICMR 13888)-B-9-2-1-2-B
14	(ICTP 8202 S1-99-2-1-B-B x ICTP 8203-S1-10-2-1-2-B)-B-20-3-1-B
15	(((((IP 12370-1-3 x B-Lines)-B-9-1-2-1-2-2 x MRC S1-191-2-1-5-B)-B-6-1x (22680-22692/S11))-10-6-1 x (15491-15506/S14)-9-1-2 x [MC 94 C2-S1-3-1-3-1-4-2-2-B-B-1 x (ICMV-IS 94206-7 x (SRC II C3 S1-1-1-2 x HHVBC)-1-3-3))-B-10-1-1-5-4-4-1(ICMV-IS 94206-7 x (SRC II C3 S1-1-1-2 x HHVBC)-1-3-3))-B-10-1-1-5-4-4-1]-B-5-4-4-3-B)-B-1-3-3-B-B
16	((((EERC-HS-29)-19-3 x [(MC 94 S1-34-1-B x HHVBC)-16-2-1] x (IP 19626-4-2-3))-B-1-1-2-3-2-B-1) X ((ICMS 7704-S1-127-5-1 x RCB-2 Tall)-B-19-3-2-1-1-1-B x (ICMR 11333) IAC-ISC TCP5 S1-2-1-1-B-1-2-B-4-B))-B-9-3-2-B
17	((((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-Bx (22720-22726/S11))-1-1-1-1 x (AIMP 92901 S1-415-2-1-2-B-B-B-1-B x (20216-20249))-11-1-2-3-1-B)x(((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-Bx (22720-22726/S11))-1-1-1-1 x A5 R-composite-Early-HS-123-1-1-2-2)-B-11-4-3-B-B
18	{ICMR 12555 X ((EERC-HS-8)-B-5-1-1-1 X PRLT 2/89-33)-P1698-2-B)-B-64-3-1-B
19	{ICMR 12555 X ((EERC-HS-8)-B-5-1-1-1 X PRLT 2/89-33)-P1698-2-B)-B-79-3-2-B
20	{ICMR 12555 X (PRLT 2/89-33 X RIB 3135/18)-P315-2-B)-B-43-1-3-B
21	{ICMR 12555 X (PRLT 2/89-33 X MRC S1-155-4-3-B-B-B-B-1-B-B-1)-P2175-3-B)-B-50-3-1-B
22	{ICMR 14888 X ((MRC S1-4-1-3-B-B-B-1x(20275-20291))-2-4-6-4 X PRLT 2/89-33)-P2399-3-B)-B-54-1-2-B
23	{ICMR 15222 X ((EERC-HS-6)-B-12-1-1-3-B X PRLT 2/89-33)-P2287-3-B)-B-16-2-2-B
24	{ICMR 12555 X ((MRC S1-4-1-3-B-B-B-1x(20275-20291))-2-4-6-4 X PRLT 2/89-33)-P2399-3-B)-B-8-2-1-B
25	{ICMR 12555 X (PRLT 2/89-33 X MRC S1-155-4-3-B-B-B-B-1-B-B-1)-P2038-1-B)-B-7-1-2-B
26	{ICMR 15222 X ((EERC-HS-23)-3-1-4 X PRLT 2/89-33)-P1500-3-B)-B-6-2-2-B
27	((((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-BxR-lines bulk (22720-22726/S11))-7-6-4-2 x ICMR 13888)-B-12-1-1-1-B
28	(((((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-2-2-1-3-1xMS group R-line bulk (20216-20249))-1-2-1-8-1 x (EERC-HS-6)-B-4-2-3-3-B)-B-9-1-4-B

CHAPTER I: BREEDING

Table 4: Pedigree of entries in drought tolerant restorer parent nursery (DTRPN) *kharif* - 2024

E. no.	Pedigree
29	(((((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-2-2-1-3-1xMS group R-line bulk (20216-20249))-1-2-1-8-1 x (EERC-HS-6)-B-4-2-3-3-B)-B-17-1-2-B
30	{ICMR 12555 X ((EERC-HS-8)-B-5-1-1-1 X PRLT 2/89-33)-P1698-2-B}-B-16-4-1-B
31	{ICMR 14888 X ((MRC S1-4-1-3-B-B-B-1x(20275-20291))-2-4-6-4 X PRLT 2/89-33)-P2399-3-B}-B-18-4-2-B
32	{ICMR 14888 X (MRC S1-155-4-3-B-B-B-B-1-B-B X PRLT 2/89-33)-P1893-3-B}-B-35-2-2-B
33	(((((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-2-2-1-3-1xMS group R-line bulk (20216-20249))-1-2-1-8-1 x (EERC-HS-6)-B-4-2-3-3-B)-8-2-1-B-B
34	(((((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-2-2-1-3-1xMS group R-line bulk (20216-20249))-1-2-1-8-1 x (EERC-HS-6)-B-4-2-3-3-B)-B-9-1-2-B-B
35	(((((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-2-2-1-3-1xMS group R-line bulk (20216-20249))-1-2-1-8-1 x (EERC-HS-6)-B-4-2-3-3-B)-B-12-2-4-B-B
36	(((((MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3))-B-2-2-1-3-1xMS group R-line bulk (20216-20249))-1-2-1-8-1 x (EERC-HS-6)-B-4-2-3-3-B)-B-13-5-2-B-B
37	{ICMR 12555 X ((EERC-HS-8)-B-5-1-1-1 X PRLT 2/89-33)-P1698-2-B}-B-64-3-1-B-B
38	{ICMR 12555 X ((EERC-HS-8)-B-5-1-1-1 X PRLT 2/89-33)-P1698-2-B}-B-94-3-4-B-B
39	{ICMR 12555 X (PRLT 2/89-33 X RIB 3135/18)-P315-2-B}-B-38-1-1-B-B
40	{ICMR 12555 X (PRLT 2/89-33 X RIB 3135/18)-P315-2-B}-B-43-1-1-B-B
41	{ICMR 12555 X (PRLT 2/89-33 X RIB 3135/18)-P315-2-B}-B-43-1-3-B-B
42	{ICMR 14888 X ((EERC-HS-23)-3-1-4 X PRLT 2/89-33)-P1584-1-B}-B-58-3-3-B-B
43	{ICMR 14888 X (PRLT 2/89-33 X RIB 3135/18)-P130-3-B}-B-71-4-2-B-B
44	{ICMR 14888 X (PRLT 2/89-33 X MRC S1-155-4-3-B-B-B-B-1-B-B-1)-P2038-1-B}-B-39-2-1-B-B
45	{ICMR 15222 X ((EERC-HS-6)-B-12-1-1-3-B X PRLT 2/89-33)-P2287-3-B}-B-16-2-2-B-B
46	{ICMR 12555 X ((MRC S1-4-1-3-B-B-B-1x(20275-20291))-2-4-6-4 X PRLT 2/89-33)-P2399-3-B}-B-8-3-3-B-B
47	{ICMR 12555 X (PRLT 2/89-33 X RIB 3135/18)-P130-3-B}-B-14-4-1-B-B
48	{ICMR 12555 X (PRLT 2/89-33 X MRC S1-155-4-3-B-B-B-B-1-B-B-1)-P2038-1-B}-B-7-1-1-B-B
49	PRLT 2/89-33 (Check)
50	H77/833-2 (Check)

CHAPTER I: BREEDING

Table 5: Pedigree of entries in blast resistant B & R line nursery (BRB&RLN) *kharif* - 2024

E. no.	Pedigree
1	{[(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6-3-2-5-B] X [(ICMB 03777 x {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-3-1)-21-4-4-1-4}]-3-5-3}
2	{[(ICMB 95111 x (ICMB 96555 x IP 10437)-3]-7-2-1-B-2-15-1] x B-bulk (3981-3989/S06 G1)}-3-2-4-B x ICMB 08999)-13] X [(ICMB 01333 x HHVDBC HS-10-1-2-1-1-1-3-B)-2-1-3-2-4]-B-6-4-2
3	{[(MC 94 S1-34-1-B x HHVBC)-10-4-3-2-2-B-B-2 x (ICMR 312 S1-1-5-3-B x HHVBC)-7-1-1-1-B-B-B]-21-B-1-4-1-2-1 x [(81B x 4017-6-1-1)-3-1-4-3-4-1-2-1-B-2-2 x ICMB 05888]x (HHVDBC Medium HS-120-1-2-1-1-1-1 x HHVDBC Medium HS-15-1-1-1-2-2-4)-19-2-5-3]-9-1-1-1-1-B
4	(ICMB 97111 x PRLT 2/89-33)-7-2-1-1-B
5	{[(81B x 4017-6-1-1)-3-1-4-3-4-1-2-1-B-2-2 x ICMB 05888]x[(ICMB 96111 x 4017-5-3-B)-4-2-1-5-B-2-B-3-B-1-B x ICMB 05888]-2-5-2-4
6	(ICMB 04999 x ICMB 92777)-9-5-1
7	EEBC S1-407-1-B-B-B-B-2-1-B-2-B-B-2-1-B-BxEarly D2/Med group lines x med maturity lines bulk (1301-28)-7-2-2
8	{[(NC D2 BC7F4-34-3-1-2-B-2-B x EEBC 407)-12-1-2-3xEEBC S1-2-1-1-1-1-1-1-B-B-1-4-B-B]-26-1-1-3
9	{[(MC 94 S1-67-1-B x HHVBC)-17-2-2-1-2-B-B-B-B-2-1-2 x [(DMR 133 x HTBC 48-B-1-1-1-5)-19-2-B-B x ICMB 04111]-145-1-2-3)-3-6-B-1
10	{[(EEBC S1-407-1-B-B-B-B-1-B-1-B-5-1x 3981-3989 G1)-2-1-1x(EEDBC S1-109-1-4-2-1-B-B-B-1-1x 3981-3989 G1)-4-2-6]-4-1-1-B
11	{[(ICMB 95111 x (ICMB 96555 x IP 10437)-3]-54-2-B-B-B-B-B x (HHVDBC HS-246-1-2-1-2 x ICMB 98444)-4-3-2-1)-7-8
12	[PE 05532 Super sosat X ICMB 08666]-3-2-1-2-3-3-B-B
13	[ICMB 11222 X PE 05532 Super sosat]-17-3-1-6-1-B-B-B
14	(ICMB 04999 X PRLT 2/89-33)-P1202-1-B-B-2-2-B-B
15	(Thorny composite-HS-S2-B-14-4-3 x HHVBC tall (C1) S1-33-3-1-1-1-2-B-B-3-3-1-7)-B-6-2-1-1
16	{[MRC HS-130-2-2-1-B-B-3-B-B-1-3-1 X {[(IP 12322-1-2)x(B-Lines)-B-14] x (MRC S1-156-2-1-B)]-B-1-3-3-B}x(GB 8735-S1-15-3-1-1-3-4-2-2-2-1)-B-11-5-1-1-1]-20-1-B X {(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-3-4-3-1}x(RCB2 S1-19-2-5-1-1-2-3-3-B)-B-5-P1-3]-B-1-3-3-1-B
17	{[(IPC 337xSDMV 90031-S1-84-1-1-1-1)xSDMV 95045 S1-7-2-4-2-3-2-2-2-1]-P1-1-4 x (ICMS 8506 S1-4-2-2-2-3-3-1-2-3-3-B-4-x20265x(20259-20274))-1-1-1-2-1-B)-B-4-2-1-B-B
18	ICMV 91059 S1-4-2-3-2-1-1-4-B-1-3-B-3
19	{[(MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-8-3-1-2-B-BxR-lines bulk (22720-22726/S11))-7-6-4-2 x ICMR 13888)-B-3-1-1-1-B
20	{ICMR 1202 X ICMR 08111}-B-1-2
21	{[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-3-3-3-2}x(MRC HS 225-3-5-2-B-B-B-B)-B-7-4-4 X [ICMR 12555 x ICMV 221 S1 - 366-1]-2-12-1)-B-1-2-3
22	{[(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-22-2-3-3-B-BxR-lines bulk (22680-22692/S11))-9-7-1-1-B X AIMP 92901]-B-1-3-1
23	{[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-18-2-3-2-2-BxAIMP 92901 S1-296-2-1-1-2-2)-B-25-4x(R-lines bulk (22669-22675/S11))-3-1-1-2-3-2-B X (EERC-HS-23)-B-3-1-2-4-B]-B-5-B
24	{[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-3-3-3-2}x(MRC HS 225-3-5-2-B-B-B-B)-B-7-4-1-3-B-B-B X {[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-2-2-3-1-2 x ICMR 312 S1-3-2-3-2-1-1-B-B-B-B)-B-4 x {(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-3-4-3-1} x {RCB2 S1-19-2-5-1-1-2-3-3-B)-B-5-P1-2)-2-4-4]-B-3-B

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Table 5: Pedigree of entries in blast resistant B & R line nursery (BRB&RLN) *kharif* - 2024

E. no.	Pedigree
25	[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-18-2-3-2-2-BxAIMP 92901 S1-296-2-1-1-2-2]-B-25-4x(R-lines bulk (22669-22675/S11)-3-1-1-2-3-2-B X [[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-2-2-3-1-2 x ICMR 312 S1-3-2-3-2-1-1-B-B-B-B]-B-4 x [(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-3-4-3-1} x {RCB2 S1-19-2-5-1-1-2-3-3-B}-B-5-P1-2)-2-4-4]-B-5-B
26	[MC 94 C2-S1-3-1-1-2-1-1-B-2-3-B-B X (ICMV 96490-S1-15-1-2-1-3-2x[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-2-2-3-1-2xICMR 312 S1-3-2-3-2-1-1-B-B-B-B]-B-17)-4-4-3]-B-14-B
27	[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-34-1-3-3-1-1-B-2-B X (ICMV 96490-S1-15-1-2-1-3-2x[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-2-2-3-1-2xICMR 312 S1-3-2-3-2-1-1-B-B-B-B]-B-17)-4-4-3]-B-11-B
28	[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-34-1-3-3-1-1-B-2-B X (ICMV 96490-S1-15-1-2-1-3-2x[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-2-2-3-1-2xICMR 312 S1-3-2-3-2-1-1-B-B-B-B]-B-17)-4-4-3]-B-17-B
29	[[[(MRC S1-156-1-1-1-B-3-B-B-B-8-1-1) X ((MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-34-1-1)-21-3-1-1-B-B X (ICMV 96490-S1-15-1-2-1-3-2x[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-2-2-3-1-2xICMR 312 S1-3-2-3-2-1-1-B-B-B-B]-B-17)-4-4-3]-B-7-B
30	[MC 94 C2-S1-3-1-1-2-1-1-B-2-3-B-B X ((ICMS 7704-S1-127-5-1 x RCB-2 Tall)-B-19-3-4-5-3 x DM/Blast R-Composte-HS(Early)-S1-1-1-2-4)-7-2 -B]-B-1-B
31	[MC 94 C2-S1-3-1-1-2-1-1-B-2-3-B-B X ((ICMS 7704-S1-127-5-1 x RCB-2 Tall)-B-19-3-4-5-3 x DM/Blast R-Composte-HS(Early)-S1-1-1-2-4)-7-2 -B]-B-11-B
32	[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-34-1-3-3-1-1-B-2-B X ((ICMS 7704-S1-127-5-1 x RCB-2 Tall)-B-19-3-4-5-3 x DM/Blast R-Composte-HS(Early)-S1-1-1-2-4)-7-2 -B]-B-1-B
33	[[[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-3-3-3-2}x{MRC HS 225-3-5-2-B-B-B-B]-B-7-4-1-3-B-B-B X ((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-2-2-3) X (LaGrap C2-S1-14-4-3-1-1-2)-27-1-1-3]-B-14-B
34	ICMB 95444 (Susceptible Check)
35	ICMR 06666 (Resistance Check)

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Table 6: Pedigree of entries in elite joint biofortification nursery (EJBFN) *kharif* - 2024

E. no.	Pedigree
1	{[(ICMB 94333 x ICMB 01222)-47-1-B-B-B-B X DMR1 S2-52-4-1-1-B)-1-3]} X {[(ICMB 99444xICMB 99222)-1-4-2-4-3 x {(EEDBC S1-425-2-1-2-3-B-2-2-4 x NCD2S1-20-7-2-4-1-4-2-3) x (HHVDBC Medium HS-120-1-2-1-1-1 x HHVDBC Medium HS-15-1-1-1-2-2-4)}-14-1-2-4]-6-2}]-B-3-4-B
2	{[(B x B) F2 S1-109-2-3-3-1-4-2 X (ICMB 01666 x ICMB 01222)-27-3-B-3)-1-2-2]} X {[(ICMB 99444xICMB 99222)-1-4-2-4-3 x {(EEDBC S1-425-2-1-2-3-B-2-2-4 x NCD2S1-20-7-2-4-1-4-2-3) x (HHVDBC Medium HS-120-1-2-1-1-1 x HHVDBC Medium HS-15-1-1-1-2-2-4)}-14-1-2-4]-6-2}]-B-7-2-2
3	{[(ICMB 94333 x ICMB 01222)-47-1-B-B-B-B X DMR1 S2-52-4-1-1-B)-1-3]} X {[(ICMR 312 S1-1-5-2-B x HHVBC)-10-2-1-2-3-B x HHVDBC HS-158-2-1-2-1-1-B]-9-2-3-1) x [(ICMB 99444xICMB 99222)-1-4-4-2-2-3-2-3)-7}]-B-3-2-5
4	{[(ICMB 94333 x ICMB 01222)-47-1-B-B-B-B X ((843B x ICMP5 900-9-3-2-2)-41-2-5-5 S2-34-1-2-3 x B-line bulk)-8-B-B-1-B-B-B-1 x (ICMB 01666xICMB)01222)-12-2-B-1-B-P1)-4-1-2-3-B)-1-1]} X {[(ICMB 99444xICMB 99222)-1-4-4-2-2-3-2-1-2-11-2-B}]-B-6-1-B
5	{[(ICMB 01888 x ICMB 01222)-15-2-B-2-3 X (ICMB 01666 x ICMB 01222)-27-3-B-3)-1-10-4]} X {[(ICMB 99444xICMB 99222)-1-4-4-2-2-3-2-1-2-11-2-B}]-B-17-1-B
6	{[(ICMB 14222)] X {[(AIMP 92901-S1-183-2-2-B-P08 X {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6)-16-1}]-B-19-1-5
7	{[(ICMB 14222)] X {[(AIMP 92901-S1-183-2-2-B-P08 X {(MC 94 S1-34-1-B x HHVBC)-16-2-1-1-1-1-B-B-5 x (MC 94 S1-34-1-B x HHVBC)-10-4-1-2-1-B-B-1-30-2-4-2-6)-16-1}]-B-24-2-B
8	{[(ICMB 17555)] X {[(ICMB 93333 x ICMB 01222)-20-2-B-5-B-1-B-2) x [(NC D2 BC7F4-34-3-1-2-B-2-B x EEBC 407)-12-1-2-3xEEDBC S1-2-1-1-1-1-1-B-B-1-4-B-B]-19-3-1-2)-45-B-B}]-B-1-4-2
9	{[(ICMB 18444)] X {[(ICMB 96555 x IP 10437)-9-B-B-B-B-B x IP 14758-2-2)-19-1-B x (ICMB 96555 x IP 10437)-3-4-1-2-2-1-B-2-B-3)-1-1-1-1-1]} X [(MC 94 S1-34-1-B x HHVBC)-16-1-3-1-2-2-B-B-2-B-B x ICMB 00444]-14-5-1-1xEarly D2/Med group lines x med maturity lines bulk (1301-28)-3-2-1)-8-1-2}]-B-21-2-B
10	{[(78-7088/3/SER3 AD/B282/(3/4)EB x PBLN/S95-359)-7-4-B-B-6-1-B-1-B-1-B-B-B X HHVDBC HS-120-1-2-1-1-3-B-4)-2-1-3]} X {[(ICMB 04999 x ICTP 8203 S1-250-3)-1-11-2-B}]-B-9-3-3
11	{[(78-7088/3/SER3 AD/B282/(3/4)EB x PBLN/S95-359)-7-4-B-B-6-1-B-1-B-1-B-B-B X HHVDBC HS-120-1-2-1-1-3-B-4)-2-1-3]} X {[(ICMR 312 S1-1-5-2-B x HHVBC)-10-2-1-2-3-B x HHVDBC HS-158-2-1-2-1-1-B]-9-2-3-1) x [(ICMB 99444xICMB 99222)-1-4-4-2-2-3-2-3)-9}]-B-9-3-B
12	{[(HHVBC S1-16-6-3-5-2-B X [(ICMV 88908-11-12-3-2-B x B-bulk)-8-B-3 x {(843B x ICMP5 900-9-3-2-2)-41-2-5-5 S2-34-1-2-1-1 x B-bulk)-5-B-B]-11-1-1-B-B x ICMB 04111]-67-5-2-1)-1-7]} X {[(ICMB 04999 x ICTP 8203 S1-250-3)-1-11-2-B}]-B-3-2-B
13	{[(IC-CZBC-C0-1-6-3-3-B X [(81B x 4017-6-1-1)-3-1-4-3-4-1-2-1-B-2-2 x ICMB 05888)x (HHVDBC Medium HS-120-1-2-1-1-1-1 x HHVDBC Medium HS-15-1-1-1-2-2-4)-21-2-1-3-1-15-4]} X [(ICMB 12111)-B-15-2-1
14	{[A1 Thick panicle B-comp HS-176-2-1-4]} X [(NC D2 S1-17-2-1-1-2-2-B-4}]-B-1-3-3
15	{[A1 Thick panicle B-comp HS-176-2-1-4]} X [(D2BLN/95-103 x EEBC C1-3)-6-B-B}]-B-2-3-2
16	{[A1 Thick panicle B-comp HS-176-2-1-4]} X [(ARD-288-1-10-1-2 (RM)-5-P1-A x 40258/S14-P11)-5-3-4-3}]-B-6-2-2
17	HiFeD2B comp 1701-S0-16-2-2
18	HiFeD2B comp 1701-S0-33-1-3
19	HiFeD2B comp 1701-S0-54-5-3
20	{[(ICMB 06111xICMB 98222)-6-4-2-1-1-4 x {(EEDBC S1-425-2-1-2-3-B-2-2-4 x NCD2S1-20-7-2-4-1-4-2-3) x (HHVDBC Medium HS-120-1-2-1-1-1-1 x HHVDBC Medium HS-15-1-1-1-2-2-4)}-14-1-2-4]-4-3-2]} X {[(ICMB 96555 x IP 10437)-9-B-B-B-B-B x IP 14758-2-2)-19-1-B x (ICMB 96555 x IP 10437)-3-4-1-2-2-1-B-2-B-3)-1-1-1-1-1]} X {[(ICMB 96555 x IP 10437)-9-B-B-B-B-B x IP 14758-2-2)-19-1-B x (ICMB 96555 x IP 10437)-3-4-1-2-2-1-B-2-B-3)-3-3-2-1-4]-3-2-2}]-B-6-2-B
21	{ICMR 1201 X ICMR 11003}-B-7-1-4-B-B
22	{AIMP 92901 S1-415-2-1-2-B-B-B-1-B x (20216-20249/K09))-11-1-2-3-1-B X AIMP 92901}-B-15-3-2-B
23	{ICMR 1505 X ICMR 08111}-B-2-1

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Table 6: Pedigree of entries in elite joint biofortification nursery (EJBFN) *kharif* - 2024

E. no.	Pedigree
24	(ICMR 1801 X ICMR 08111)-B-9-4
25	(ICMR 1802 X ICMR 08111)-B-13-3
26	(ICMR 1802 X ICMR 12222)-B-4-4
27	(ICMR 1804 X ICMR 08111)-B-16-1
28	(ICMR 1804 X ICMR 08111)-B-25-2
29	(ICMR 1805 X ICMR 08111)-B-5-3
30	(ICMR 1805 X ICMR 08111)-B-6-2
31	(ICMR 1809 X ICMR 10888)-B-22-2
32	(ICMR 1809 X ICMR 10888)-B-22-3
33	[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-3-4-3-1}x(RCB2 S1-19-2-5-1-1-2-3-3-B)-B-5-P1-5) X AIMP 92901-S1-183-2-2-B-P08-B)-8-1-1-B X ((EERC-HS-24)-B-2-3-2-1) x (ICMV 96490-S1-15-1-2-1-1))-3-2-1-1-1-B]-B-3-B
34	[(AIMP 92901 S1-15-1-2-3-B-2-B-13-3-1 X ICMR 12555)-19-2-B X ((EERC-HS-24)-B-2-3-2-1) x (ICMV 96490-S1-15-1-2-1-1))-3-2-1-1-1-B]-B-7-B
35	[(AIMP 92901 S1-15-1-2-3-B-2-B-13-3-1 X ICMR 12555)-19-2-B X ((EERC-HS-24)-B-2-3-2-1) x (ICMV 96490-S1-15-1-2-1-1))-3-2-1-1-1-B]-B-13-B
36	[[(AIMP 92901 S1-296-2-1-1-1-B-B-6-B-B) X ((MC 94 C2-S1-3-2-2-2-1-3-B-B x AIMP 92901 S1-488-2-1-1-4-B-B)-B-2-2-2)-6-3-1-4-1-B X ((EERC-HS-24)-B-2-3-2-1) x (ICMV 96490-S1-15-1-2-1-1))-3-2-1-1-1-B]-B-17-B
37	[AIMP 92901 S1-296-2-1-1-4-2-B-12-5-1-3-B-B X ((EERC-HS-24)-B-2-3-2-1) x (ICMV 96490-S1-15-1-2-1-1))-3-2-1-1-1-B]-B-15-B
38	[(ICMV 96490-S1-15-1-2-1-3-2 x {[(MC 94 S1-34-1-B x HHVBC)-16-2-1) x (IP 19626-4-2-3)]-B-28-2-2-3-1-2 x ICMR 312 S1-3-2-3-2-1-1-B-B-B)-B-17)-15-1-2-B X ((EERC-HS-24)-B-2-3-2-1) x (ICMV 96490-S1-15-1-2-1-1))-3-2-1-1-1-B]-B-1-B
39	[[(MC 94 C2-S1-3-2-2-2-1-3-B-B x ICMR 312 S1-3-2-3-2-1-1-B-B)-B-34-4-1 X JBV 3 S1 -237-1-3-3-1-B]-2-2-1-2 X ((EERC-HS-24)-B-2-3-2-1) x (ICMV 96490-S1-15-1-2-1-1))-3-2-1-1-1-B]-B-17-B
40	{HiFeRC-1401 (HS)-4}-1-3-2-1-3
41	{HiFeRC-1401 (HS)-122}-1-2-2-2-1
42	{HiFeRC-1401 (HS)-4}-1-3-2-1-3-B
43	ICMB 98222 (High Fe Check)
44	ICMB 92111 (Low Fe Check)
45	ICMR 1202 (High Fe Check)
46	150-SB-24
47	229-SB-24
48	217-SB-24
49	159-SB-24
50	171-SB-24
51	J-2553
52	JMSB 202211
53	JMSB 20216
54	JMSB 20213
55	JMSB 20202
56	MIR 1269
57	MIR 1374
58	MIR 1406
59	MIR 1410
60	MIR 1808

CHAPTER I: BREEDING

Table 7: Potential B-line nursery, across three locations- Aurangabad, Dhule and Jamnagar. (for Pedigree of entries see table 2).

Plot size: 1 row x 4 m x 2 reps.

E. no.	ABD							DHL							JMR							Grand Mean								
	DF	PH	HL	HD	ETPP	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS
1	70	68	20	2.6	1.5	3.5	3.5	67	91	21	1.0	1.0	-	6.0	2.0	62	103	18	3.0	3.0	0.5	1.0	66	87	20	2.2	1.8	-	3.3	2.2
2	66	60	20	2.7	1.8	2.5	3.0	76	100	19	0.8	1.0	3.0	3.0	1.5	59	126	23	2.6	4.5	1.5	2.0	67	95	21	2.0	2.4	3.0	2.3	2.2
3	70	72	17	2.6	1.0	2.0	3.5	73	79	18	0.9	1.0	3.0	4.5	1.5	68	116	20	2.4	2.5	1.0	2.5	70	89	18	2.0	1.5	3.0	2.5	2.5
4	70	58	19	2.5	1.3	3.5	3.5	77	106	21	0.9	2.0	3.0	4.0	1.5	63	95	19	3.0	3.0	0.5	3.0	70	86	20	2.1	2.1	3.0	2.7	2.7
5	67	62	15	2.2	1.0	3.0	2.0	71	111	29	1.1	3.0	3.0	4.0	1.0	64	120	19	2.9	3.0	1.0	2.0	67	98	21	2.1	2.3	3.0	2.7	1.7
6	68	62	16	2.3	1.5	4.0	3.0	73	105	23	1.0	2.0	3.0	4.5	1.5	57	100	18	4.6	2.5	2.0	2.0	66	89	19	2.6	2.0	3.0	3.5	2.2
7	67	59	13	2.2	1.3	3.5	3.0	66	88	22	0.9	1.5	3.0	6.5	1.5	57	119	17	3.0	2.0	2.5	1.0	63	89	17	2.0	1.6	3.0	4.2	1.8
8	67	62	15	2.4	1.5	3.0	3.0	73	98	21	0.7	2.0	3.0	4.0	1.0	64	100	22	3.0	2.5	0.5	1.5	68	87	19	2.0	2.0	3.0	2.5	1.8
9	66	57	17	2.6	1.5	2.5	4.0	69	85	19	0.9	2.5	3.0	6.5	1.5	60	95	19	3.0	3.0	1.5	1.0	65	79	18	2.2	2.3	3.0	3.5	2.2
10	66	68	20	2.3	1.5	3.5	4.0	71	103	21	1.0	2.0	3.0	3.0	1.5	68	101	24	3.0	2.0	0.5	2.0	68	91	22	2.1	1.8	3.0	2.3	2.5
11	69	66	17	2.5	1.0	3.0	3.5	66	103	22	1.0	3.0	3.0	3.0	1.5	67	90	21	3.0	2.5	1.0	2.0	67	86	20	2.2	2.2	3.0	2.3	2.3
12	67	57	22	2.6	1.3	4.5	3.0	70	88	14	0.7	1.0	3.0	7.0	1.5	62	118	26	3.0	3.0	1.0	2.0	66	88	21	2.1	1.8	3.0	4.2	2.2
13	67	82	15	2.3	1.0	4.0	2.0	68	122	25	1.0	1.5	3.0	4.0	1.0	59	122	19	2.8	2.5	1.5	1.0	65	109	20	2.0	1.7	3.0	3.2	1.3
14	69	68	19	2.2	1.8	2.0	3.5	79	76	18	0.8	1.0	3.0	2.0	1.5	63	132	21	3.0	2.0	2.0	2.5	70	92	19	2.0	1.6	3.0	2.0	2.5
15	69	63	23	2.2	1.3	2.5	3.0	65	97	18	0.8	2.0	3.0	2.0	2.0	59	121	34	2.5	2.5	0.5	2.0	64	94	25	1.8	1.9	3.0	1.7	2.3
16	71	64	22	2.1	1.3	2.5	2.5	66	121	23	1.0	1.5	-	7.5	1.5	60	152	29	2.6	2.0	1.0	3.0	66	112	25	1.9	1.6	-	3.7	2.3
17	68	64	19	2.3	1.0	4.0	3.0	72	85	20	0.8	2.0	-	7.0	1.0	59	113	20	3.0	2.0	1.5	1.0	66	87	20	2.0	1.7	-	4.2	1.7
18	69	87	16	2.3	1.5	4.5	3.0	69	100	16	0.8	1.0	3.0	5.5	2.0	64	117	19	3.0	3.5	2.0	2.0	67	101	17	2.0	2.0	3.0	4.0	2.3
19	67	68	20	2.3	1.3	6.0	3.0	65	90	14	0.8	2.0	3.0	7.0	2.0	57	111	24	3.0	3.0	0.5	2.0	63	90	19	2.0	2.1	3.0	4.5	2.3
20	67	59	22	1.9	1.0	4.5	2.0	69	91	27	0.9	2.0	3.0	2.5	2.5	57	143	27	3.0	2.0	0.5	1.0	64	98	25	1.9	1.7	3.0	2.5	1.8
21	67	74	17	2.8	1.8	2.0	4.0	71	88	17	0.9	2.5	3.0	3.5	1.0	66	120	18	3.2	2.0	1.0	2.0	68	94	17	2.3	2.1	3.0	2.2	2.3
22	64	67	20	2	1.8	4.5	3.0	69	120	23	0.9	2.0	3.0	1.5	2.0	62	100	26	3.0	2.5	0.5	2.0	65	96	23	2.0	2.1	3.0	2.2	2.3
23	67	62	20	2.2	1.5	3.0	4.0	65	105	16	0.8	2.5	3.0	3.5	1.0	63	97	20	3.0	2.0	1.5	2.0	65	88	19	2.0	2.0	3.0	2.7	2.3
24	69	62	14	2.4	1.3	5.0	3.5	62	102	27	1.0	2.0	3.0	6.5	1.0	59	101	14	2.9	2.5	2.0	1.0	63	88	18	2.1	1.9	3.0	4.5	1.8
25	71	67	15	1.9	1.3	3.5	3.0	78	91	18	1.0	1.5	3.0	2.0	1.5	70	116	17	2.3	2.0	1.5	1.0	73	91	17	1.7	1.6	3.0	2.3	1.8
26	72	78	22	2.4	1.0	2.0	3.0	75	101	19	0.8	1.0	3.0	2.5	1.0	66	97	25	2.7	3.0	1.0	2.0	71	92	22	2.0	1.7	3.0	1.8	2.0
27	68	68	16	2.2	1.5	1.0	4.0	67	96	18	0.9	1.5	3.0	1.0	1.5	62	121	18	3.0	2.5	1.5	2.0	66	95	17	2.0	1.8	3.0	1.2	2.5
28	68	77	17	2.3	1.8	3.5	3.0	72	99	20	1.0	1.0	3.0	4.5	1.5	61	110	20	2.0	3.5	1.5	1.0	67	95	19	1.8	2.1	3.0	3.2	1.8
29	69	72	11	2.2	1.0	6.0	3.0	69	102	25	1.0	1.5	3.0	3.0	1.0	59	93	17	2.6	2.5	2.0	1.5	66	89	18	1.9	1.7	3.0	3.7	1.8
30	68	68	21	2.2	1.0	3.0	3.0	73	94	22	0.9	2.5	3.0	6.0	1.5	58	114	21	3.0	2.5	2.0	2.0	66	92	21	2.0	2.0	3.0	3.7	2.2

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Table 7: Potential B-line nursery, across three locations- Aurangabad, Dhule and Jamnagar. (for Pedigree of entries see table 2).

Plot size: 1 row x 4 m x 2 reps.

E. no.	ABD							DHL							JMR							Grand Mean								
	DF	PH	HL	HD	ETPP	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS
31	66	58	14	2.3	1.0	4.5	3.0	64	101	17	0.8	2.0	3.0	4.5	2.0	56	104	18	3.0	2.0	0.5	2.0	62	88	16	2.0	1.7	3.0	3.2	2.3
32	67	63	13	1.8	1.0	1.0	3.0	71	99	23	0.9	2.0	-	4.5	1.0	66	96	17	2.0	3.5	0.5	1.0	68	86	18	1.6	2.2	-	2.0	1.7
33	69	67	21	2.4	1.5	5.0	3.0	72	106	29	1.0	2.0	3.0	6.5	1.0	60	110	22	2.9	3.5	2.0	1.0	67	94	24	2.1	2.3	3.0	4.5	1.7
34	70	68	21	2.3	1.0	3.5	3.5	68	110	23	1.0	3.0	-	4.5	2.5	60	97	17	3.0	2.5	1.0	1.0	66	92	20	2.1	2.2	-	3.0	2.3
35	70	51	17	2.5	1.0	4.5	2.0	74	105	17	0.8	2.0	3.0	6.0	1.0	62	91	18	3.0	3.0	2.0	1.0	69	82	17	2.1	2.0	3.0	4.2	1.3
36	70	77	17	2.3	1.3	3.0	3.0	72	113	20	0.9	1.0	3.0	6.0	1.0	58	117	21	2.8	4.0	3.0	3.0	67	102	19	2.0	2.1	3.0	4.0	2.3
37	68	59	19	1.9	1.5	4.0	3.0	72	119	25	1.0	1.5	3.0	3.0	1.0	60	97	20	2.0	2.0	1.5	1.0	67	92	21	1.6	1.7	3.0	2.8	1.7
38	69	60	18	2	1.3	2.5	3.5	69	91	17	0.7	2.0	3.0	5.5	1.0	56	102	18	2.0	2.5	1.5	1.0	65	84	18	1.6	1.9	3.0	3.2	1.8
39	69	62	15	2.5	1.0	1.0	2.5	76	106	21	0.9	1.0	-	5.0	1.0	62	88	19	2.7	2.0	1.5	2.0	69	85	18	2.0	1.3	-	2.5	1.8
40	67	43	17	2.5	1.5	1.0	3.0	72	113	20	1.0	2.0	3.0	3.5	1.5	64	106	19	3.0	3.0	2.0	1.0	68	87	19	2.2	2.2	3.0	2.2	1.8
41	68	58	14	2	1.3	4.5	2.5	71	89	20	0.9	2.0	3.0	2.5	1.5	58	93	22	3.0	3.0	2.5	1.5	66	80	19	2.0	2.1	3.0	3.2	1.8
42	66	63	15	2.1	1.0	3.0	4.0	66	86	21	0.8	2.0	3.0	3.0	1.0	54	85	17	2.0	2.5	5.0	1.0	62	78	18	1.6	1.8	3.0	3.7	2.0
43	69	52	12	2.2	1.0	5.0	3.0	70	101	24	0.9	1.0	-	7.0	1.0	60	79	15	3.0	3.0	1.0	1.0	66	77	17	2.0	1.7	-	4.3	1.7
44	69	77	20	2.2	1.5	1.5	3.0	75	100	21	1.0	1.5	-	5.5	1.0	65	88	20	3.0	3.0	1.0	2.0	70	88	20	2.1	2.0	-	2.7	2.0
45	67	82	21	2.3	1.0	2.0	3.0	75	92	17	0.7	1.5	3.0	7.0	1.0	63	102	24	3.0	3.0	0.5	2.0	68	92	21	2.0	1.8	3.0	3.2	2.0
46	70	77	24	2.2	1.8	3.0	3.5	63	93	25	0.8	1.5	3.0	4.0	1.0	62	105	28	2.0	2.0	1.5	1.0	65	92	26	1.7	1.8	3.0	2.8	1.8
47	67	72	20	1.9	1.0	4.0	3.0	76	110	19	0.7	2.0	3.0	4.5	1.0	69	102	23	2.8	3.0	1.0	2.0	71	95	21	1.8	2.0	3.0	3.2	2.0
48	70	72	15	2.1	1.5	2.0	3.0	72	97	27	0.9	2.0	-	5.5	1.5	64	117	14	2.7	3.5	3.0	2.0	69	95	19	1.9	2.3	-	3.5	2.2
49	69	86	17	2.6	1.8	3.5	3.0	69	122	19	1.1	1.5	3.0	7.0	1.5	59	108	16	3.0	2.5	1.5	2.0	66	105	17	2.2	1.9	3.0	4.0	2.2
50	69	64	20	2.5	1.3	1.5	3.5	85	91	20	1.0	1.0	3.0	5.0	1.0	65	108	21	3.0	3.0	0.5	1.0	73	88	20	2.2	1.8	3.0	2.3	1.8
51	69	90	20	2.9	1.8	2.0	4.5	81	99	20	1.0	1.0	3.0	2.5	1.0	57	128	23	2.7	2.0	1.0	2.0	69	106	21	2.2	1.6	3.0	1.8	2.5
52	68	89	21	2.8	1.8	1.5	3.0	74	117	20	1.0	1.5	3.0	2.0	1.0	70	142	22	3.0	3.0	1.0	4.0	71	116	21	2.3	2.1	3.0	1.5	2.7
53	66	58	16	2.1	1.3	3.5	2.5	74	89	23	1.0	1.0	3.0	1.5	1.0	64	98	17	2.4	2.0	2.5	1.0	68	82	19	1.8	1.4	3.0	2.5	1.5
54	72	72	21	2.6	1.0	-	2.0	74	98	22	0.9	1.0	3.0	3.0	1.5	69	103	19	3.0	2.5	1.0	2.0	72	91	21	2.2	1.5	3.0	2.0	1.8
55	69	120	20	2.2	1.0	2.0	2.5	65	97	20	1.0	1.5	3.0	3.0	1.5	59	158	21	2.9	3.5	0.5	1.0	64	125	20	2.0	2.0	3.0	1.8	1.7
56	69	82	13	1.8	1.5	3.5	3.0	73	95	17	0.8	3.0	3.0	4.5	1.5	58	129	15	2.7	4.0	1.0	1.0	67	102	15	1.8	2.8	3.0	3.0	1.8
57	69	59	18	2.3	1.0	2.0	3.0	78	118	27	1.0	2.0	3.0	3.0	1.0	60	100	19	3.0	2.0	3.0	1.0	69	92	21	2.1	1.7	3.0	2.7	1.7
58	69	67	15	2.1	1.5	3.0	2.5	79	94	18	0.8	3.0	3.0	4.0	1.0	62	101	16	2.0	4.5	1.5	1.0	70	87	16	1.6	3.0	3.0	2.8	1.5
59	65	65	14	2.2	6.0	6.0	2.0	66	100	15	0.7	2.0	-	6.0	1.0	53	125	14	2.9	2.0	3.5	1.5	61	97	14	1.9	3.3	-	5.2	1.5
60	68	57	15	1.5	1.0	5.0	3.0	70	96	19	0.9	1.5	-	5.5	1.0	55	97	16	2.0	2.5	4.0	2.0	64	83	17	1.5	1.7	-	4.8	2.0

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Table 8: Potential R-line nursery, across five locations- Aurangabad, Dhule, Jamnagar, Mandor and New Delhi. (for Pedigree of entries see table 3).

Plot size: 1 row x 4 m x 2 reps.

E. no.	ABD							DHL							JMR							
	DF	PH	HL	HD	ETPP	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	BS	AS
1	70	92	17	2.5	1.3	2.0	4.0	62	149	20	1.0	2.5	3.0	4.5	2.0	57	160	21	3.5	3.0	5.0	2.0
2	68	78	16	2.0	1.8	4.5	3.0	62	129	23	1.0	3.0	3.0	3.5	1.5	57	136	21	3.0	3.0	1.5	2.5
3	71	92	17	2.2	1.3	3.0	3.5	63	135	20	0.9	2.0	3.0	2.5	2.5	58	137	20	3.0	2.5	2.5	3.0
4	68	59	16	2.0	1.0	1.5	2.5	74	124	25	1.0	2.0	-	7.0	1.0	57	133	25	2.9	2.0	3.5	2.0
5	68	78	15	2.5	1.8	4.0	3.0	69	122	17	0.9	2.0	3.0	4.0	2.0	58	131	20	3.4	2.0	3.0	2.5
6	68	87	19	2.4	1.0	3.5	2.5	66	116	21	0.9	1.5	3.0	3.0	1.5	65	141	23	3.2	4.0	2.5	3.0
7	70	92	20	2.5	1.5	3.0	3.0	68	132	21	0.7	1.0	3.0	5.5	1.0	60	137	23	2.6	3.5	1.5	1.5
8	67	87	17	2.4	1.0	-	3.0	68	139	19	1.0	2.0	3.0	1.0	1.0	66	118	17	3.2	4.0	1.5	1.0
9	68	87	14	2.4	1.0	2.0	2.5	66	143	19	0.9	2.5	-	6.5	1.5	58	134	17	2.9	3.0	1.0	3.0
10	69	72	14	2.1	1.0	3.5	3.5	65	142	22	0.9	2.5	3.0	2.0	2.0	55	124	25	2.6	3.0	3.5	2.0
11	64	77	15	2.0	1.5	3.0	3.0	64	141	23	0.9	1.0	-	7.0	1.0	55	117	20	2.6	2.5	4.0	1.0
12	64	67	16	2.5	1.5	5.0	2.0	59	96	17	0.8	2.0	3.0	2.0	1.0	56	115	17	2.6	3.0	1.0	2.0
13	70	67	17	2.6	1.0	2.5	3.5	62	139	18	0.9	2.0	3.0	1.0	2.0	64	132	22	3.2	3.5	0.5	3.5
14	68	83	16	2.3	1.5	4.5	3.0	66	155	19	1.0	2.0	3.0	4.5	2.0	63	144	16	2.9	2.5	2.5	2.0
15	67	67	13	2.0	1.0	5.0	2.0	70	130	23	0.9	1.5	3.0	5.0	1.0	60	96	17	2.6	2.0	1.5	1.0
16	70	94	16	2.0	1.5	3.5	2.5	72	141	17	0.9	2.0	3.0	3.0	1.5	69	127	17	2.2	3.0	1.5	3.0
17	71	92	18	2.4	1.5	1.0	4.0	67	164	19	0.9	3.0	3.0	3.5	1.5	65	148	19	2.8	2.0	1.5	2.0
18	62	95	19	2.5	1.0	7.0	2.5	64	162	33	0.9	2.5	3.0	6.0	1.5	54	134	16	2.2	4.0	2.5	2.5
19	67	108	19	2.5	1.0	7.0	2.5	66	139	18	0.9	2.5	-	3.5	2.0	60	130	18	2.7	3.5	1.5	3.0
20	69	87	16	1.9	1.3	4.0	3.5	60	156	21	0.8	2.5	3.0	2.5	1.0	60	146	22	2.6	3.5	1.5	3.0
21	67	127	22	2.4	1.8	5.0	3.0	70	131	21	0.8	1.0	3.0	1.5	1.0	71	192	22	2.8	3.0	1.5	2.0
22	70	101	26	1.9	1.4	4.5	3.5	62	104	22	0.9	1.0	3.0	1.0	1.0	64	166	24	2.4	2.0	2.0	2.0
23	69	67	15	2.2	1.0	2.5	3.5	62	112	16	0.8	3.0	-	9.0	1.0	56	107	15	2.5	2.0	3.0	1.5
24	69	73	12	2.2	1.0	3.5	2.5	68	114	17	1.0	2.5	3.0	4.0	1.0	58	129	17	3.2	3.0	2.0	3.0
25	71	82	13	2.4	1.5	4.0	3.0	67	130	18	1.0	1.5	-	8.0	1.0	62	138	17	3.1	2.0	6.5	1.0
26	68	92	24	2.0	1.5	5.0	3.0	73	117	23	0.8	2.5	3.0	4.0	1.5	60	128	28	2.8	3.5	1.0	2.0
27	70	87	15	1.8	1.3	3.5	2.5	71	119	17	0.8	2.0	3.0	2.5	1.0	70	154	18	2.5	4.0	1.5	2.0
28	70	97	21	2.6	1.8	3.0	3.5	69	140	19	0.9	3.0	3.0	1.0	2.0	68	175	20	2.8	3.5	1.5	2.0
29	69	88	16	2.3	1.8	4.5	2.5	61	135	22	0.9	1.5	3.0	2.5	1.0	65	169	20	2.9	4.0	0.5	2.0
30	65	88	18	2.4	1.5	2.5	2.0	61	168	22	1.0	2.5	3.0	1.5	2.0	64	149	23	2.2	2.5	0.5	2.0

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Table 8: Potential R-line nursery, across five locations- Aurangabad, Dhule, Jamnagar, Mandor and New Delhi. (for Pedigree of entries see table 3).

Plot size: 1 row x 4 m x 2 reps.

E. no.	ABD							DHL							JMR							
	DF	PH	HL	HD	ETPP	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	BS	AS
31	68	89	19	2.3	1.5	5.0	2.0	59	147	19	0.9	2.0	3.0	1.0	1.0	64	162	22	2.6	3.0	3.0	2.0
32	66	122	16	2.6	2.0	6.0	2.0	62	131	21	1.0	1.0	3.0	1.5	2.5	58	131	33	3.1	2.5	3.5	2.0
33	72	58	19	2.6	1.3	3.5	2.5	72	99	20	1.0	1.0	3.0	3.5	1.0	62	138	24	3.1	2.5	1.5	1.5
34	66	83	20	2.3	1.0	7.0	2.5	66	145	27	1.0	1.5	-	5.5	2.0	62	143	26	2.9	2.0	3.0	2.0
35	68	68	23	2.1	1.6	6.5	2.0	59	118	23	1.0	2.5	3.0	2.5	1.0	59	143	33	2.8	2.5	2.0	2.0
36	67	72	18	2.1	1.3	2.0	3.0	65	125	18	0.8	2.5	3.0	3.0	1.5	59	135	21	2.7	3.0	3.0	2.0
37	68	63	16	2.0	1.0	5.0	2.5	69	143	19	0.9	2.0	3.0	5.0	1.5	57	112	21	2.9	3.0	2.0	2.0
38	70	89	20	2.6	1.0	5.0	3.0	71	126	25	0.9	1.5	3.0	1.0	2.0	62	130	25	3.2	3.0	1.0	2.0
39	71	92	16	2.2	1.0	2.0	3.0	70	146	23	0.8	1.5	3.0	2.5	1.0	67	171	20	2.4	3.5	0.5	2.0
40	69	93	27	2.5	1.3	3.0	3.0	58	121	24	1.0	2.0	3.0	4.0	1.5	63	140	29	3.0	3.0	3.0	2.5
41	69	87	24	2.3	1.8	5.0	4.0	72	124	25	0.9	2.5	3.0	3.5	1.0	64	108	28	2.7	2.5	1.5	1.0
42	70	92	38	2.1	1.5	-	3.0	66	155	27	0.9	1.5	3.0	1.0	1.0	69	185	43	2.5	3.0	1.0	1.0
43	66	87	26	1.9	1.5	-	3.5	60	124	24	0.9	2.0	3.0	3.0	1.5	65	94	30	1.9	3.0	1.0	2.0
44	70	61	17	2.4	1.0	3.5	3.0	59	125	25	1.0	2.0	3.0	3.5	2.0	64	119	24	2.5	2.5	2.5	2.0
45	69	52	15	2.4	1.0	3.0	2.0	67	95	23	1.0	1.0	-	8.0	1.0	65	92	20	2.3	2.0	5.5	1.0
46	66	68	19	2.2	1.0	4.0	3.5	73	144	28	0.9	1.0	-	7.5	1.5	62	139	32	2.9	3.0	3.0	1.0
47	65	57	16	2.3	4.0	4.0	2.0	57	156	25	0.9	2.5	3.0	1.0	2.0	60	130	25	3.1	2.5	2.5	2.0
48	70	78	20	2.1	1.3	5.0	2.0	73	145	25	0.9	1.5	3.0	3.5	1.0	62	147	25	2.7	3.0	2.5	1.0
49	69	92	19	2.5	1.0	5.5	2.5	68	127	23	1.0	3.0	3.0	1.5	3.0	56	122	20	2.8	2.5	2.5	2.0
50	69	73	18	2.2	2.0	2.0	4.0	59	129	20	1.0	1.0	3.0	-	3.0	64	136	51	3.4	2.0	1.5	3.0
51	70	118	23	2.4	1.8	5.0	2.0	68	155	22	0.9	1.0	3.0	4.0	1.0	68	132	23	2.4	3.0	1.0	2.0
52	70	79	18	2.6	1.5	4.0	2.0	76	163	21	0.9	1.5	3.0	2.0	1.5	67	101	20	2.1	3.5	1.0	1.0
53	68	78	18	2.4	1.3	4.5	3.0	79	112	18	0.9	1.0	-	8.5	1.0	63	126	15	2.5	2.5	6.0	1.0
54	70	84	17	2.1	2.0	3.0	3.0	70	170	23	0.9	3.5	3.0	3.0	2.5	63	137	21	2.3	3.5	0.5	3.0
55	69	83	15	2.3	1.5	2.0	3.5	59	146	33	0.9	1.5	3.0	1.5	1.0	68	153	21	2.4	2.5	2.0	1.0
56	68	57	20	2.3	1.0	5.0	2.0	66	125	21	0.8	2.0	-	7.0	1.0	60	145	29	2.6	3.5	3.5	1.0
57	70	77	17	2.4	1.0	1.0	4.0	62	133	21	0.9	1.0	3.0	1.0	1.0	66	152	22	2.5	2.5	3.5	1.5
58	69	93	27	2.0	1.0	2.0	3.5	59	135	25	0.8	3.0	-	7.0	1.0	62	178	31	1.9	2.5	4.5	1.0
59	70	93	22	2.1	1.3	-	2.5	68	165	20	1.0	3.0	3.0	1.0	3.0	70	103	18	2.2	2.5	0.5	2.0
60	68	79	14	2.1	2.5	4.5	3.5	58	134	16	0.9	3.0	3.0	4.0	1.0	59	144	16	2.3	4.0	2.0	2.0

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Table 8: Potential R-line nursery, across five locations- Aurangabad, Dhule, Jamnagar, Mandor and New Delhi. (for Pedigree of entries see table 3).

Plot size: 1 row x 4 m x 2 reps.

E. no.	MDR							NDL							Grand Mean								
	DF	PH	HL	HD	ETPP	SG	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS
1	62	158	21	3.7	2.0	3.0	5.0	70	152	16	2.8	3.0	1.0	9.0	2.0	64	142	19	2.7	2.4	2.3	5.1	3.0
2	58	135	23	3.1	2.5	3.0	5.0	69	154	21	2.8	3.0	2.0	5.0	4.5	63	126	21	2.4	2.7	2.7	3.6	3.3
3	67	108	18	2.7	2.0	2.0	4.0	68	162	21	2.6	3.0	2.5	5.0	3.5	65	127	19	2.3	2.2	2.5	3.3	3.3
4	62	92	24	2.6	1.0	3.0	4.0	68	148	25	2.7	3.0	1.0	6.5	3.0	66	111	23	2.2	1.8	2.0	4.6	2.5
5	64	106	13	2.7	1.0	2.0	4.0	68	152	16	3.4	3.5	2.5	5.0	3.5	65	118	16	2.6	2.1	2.5	4.0	3.0
6	68	106	19	2.7	1.0	2.0	4.0	76	169	22	3.3	3.0	3.0	3.0	3.0	69	124	21	2.5	2.1	2.7	3.0	2.8
7	67	131	19	2.2	1.0	2.0	4.0	72	173	24	2.3	3.0	2.0	5.0	4.0	67	133	22	2.1	2.0	2.3	3.8	2.7
8	68	95	15	3.1	2.0	2.0	4.5	69	145	15	3.2	3.0	2.0	5.0	3.0	68	117	17	2.6	2.4	2.3	2.5	2.5
9	66	127	17	2.5	2.0	2.5	4.0	71	165	18	2.7	3.5	2.0	5.0	4.5	66	131	17	2.3	2.4	2.3	3.6	3.1
10	65	90	22	2.8	1.0	2.5	4.0	69	139	25	2.5	3.0	1.5	5.0	3.5	64	113	21	2.2	2.1	2.3	3.5	3.0
11	57	132	18	2.6	2.0	3.0	4.5	56	159	21	2.8	3.0	2.0	5.0	2.0	59	125	19	2.2	2.0	2.5	4.8	2.3
12	59	102	16	2.8	1.0	2.5	4.0	68	127	18	2.4	3.5	2.0	5.0	3.0	61	101	17	2.2	2.2	2.5	3.3	2.4
13	66	98	15	2.7	2.0	2.5	4.5	73	150	19	3.4	3.5	3.0	4.0	3.5	67	117	18	2.6	2.4	2.8	2.0	3.4
14	66	116	19	2.7	2.0	2.0	4.0	71	170	18	3.0	3.5	2.5	5.0	4.0	67	134	18	2.4	2.3	2.5	4.1	3.0
15	65	93	16	2.6	1.5	2.0	3.0	70	131	17	2.7	3.0	2.0	5.0	3.0	66	103	17	2.1	1.8	2.3	4.1	2.0
16	NG	-	-	-	-	-	-	74	148	16	2.4	4.0	3.0	1.0	2.5	71	128	17	1.9	2.6	3.0	2.3	2.4
17	68	109	16	2.4	1.0	2.5	4.0	69	177	19	2.7	3.0	2.0	5.0	4.0	68	138	18	2.2	2.1	2.5	2.8	3.1
18	57	131	16	2.4	2.0	3.0	5.0	60	161	17	2.6	3.0	2.5	4.0	3.5	59	137	20	2.1	2.5	2.8	4.9	3.0
19	66	106	19	2.6	1.5	2.0	4.0	69	152	19	2.6	3.5	2.5	4.0	4.0	66	127	19	2.2	2.4	2.3	4.0	3.1
20	64	108	16	2.3	1.5	2.5	4.5	74	230	20	2.5	3.5	3.0	4.0	3.5	65	145	19	2.0	2.5	2.8	3.0	3.1
21	68	130	20	2.2	1.0	2.0	4.5	75	225	20	2.5	3.5	1.5	5.0	3.0	70	161	21	2.1	2.1	2.2	3.3	2.7
22	66	159	28	3.2	1.5	3.0	4.5	71	203	23	2.6	3.0	1.5	6.0	3.5	67	146	25	2.2	1.8	2.5	3.4	2.9
23	61	109	17	2.7	1.5	2.0	4.0	60	120	17	2.0	3.0	1.0	9.0	1.5	61	103	16	2.0	2.1	1.5	5.9	2.3
24	62	115	16	2.6	1.5	2.0	4.0	69	140	15	2.9	3.5	2.0	5.0	3.0	65	114	15	2.4	2.3	2.3	3.6	2.7
25	61	148	20	3.3	2.0	3.0	5.0	68	151	17	2.8	3.0	1.0	9.0	1.5	66	130	17	2.5	2.0	2.0	6.9	2.3
26	65	155	31	2.9	2.0	3.0	5.0	67	205	29	3.1	3.0	3.0	3.0	3.5	66	139	27	2.3	2.5	3.0	3.3	3.0
27	NG	-	-	-	-	-	-	78	187	18	2.5	3.0	2.5	5.0	2.0	72	137	17	1.9	2.6	2.8	3.1	1.9
28	66	151	21	2.5	2.0	3.0	5.0	70	199	22	2.6	3.5	2.5	4.0	3.5	69	152	21	2.3	2.8	2.8	2.4	3.2
29	NG	-	-	-	-	-	-	71	211	19	2.8	3.5	3.0	3.0	3.5	66	151	19	2.2	2.7	3.0	2.6	2.3
30	65	102	19	2.9	1.0	2.5	4.5	70	156	21	2.7	3.5	2.5	4.0	3.0	65	133	21	2.2	2.2	2.7	2.1	2.7

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Table 8: Potential R-line nursery, across five locations- Aurangabad, Dhule, Jamnagar, Mandor and New Delhi. (for Pedigree of entries see table 3).

Plot size: 1 row x 4 m x 2 reps.

E. no.	MDR							NDL							Grand Mean								
	DF	PH	HL	HD	ETPP	SG	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS
31	68	103	15	2.3	2.0	2.0	4.0	74	189	17	3.0	3.5	3.0	2.0	3.0	67	138	18	2.2	2.4	2.7	2.8	2.4
32	65	108	19	2.7	1.5	2.0	4.0	68	169	25	3.2	3.0	2.5	5.0	3.5	64	132	23	2.5	2.0	2.5	4.0	2.8
33	63	112	19	2.5	1.0	2.0	4.0	69	170	27	2.2	3.0	2.0	5.0	4.0	67	115	22	2.3	1.8	2.3	3.4	2.6
34	64	116	25	2.8	1.0	3.0	4.0	68	145	27	2.8	3.5	1.5	5.5	3.5	65	126	25	2.4	1.8	2.3	5.3	2.8
35	63	121	30	2.4	1.0	2.0	4.0	69	165	28	3.1	3.5	2.5	5.0	3.5	63	123	27	2.3	2.2	2.5	4.0	2.5
36	60	127	19	2.8	2.0	3.0	4.5	71	178	22	2.7	3.0	3.0	4.0	3.5	64	127	20	2.2	2.4	3.0	3.0	2.9
37	66	96	18	2.7	1.5	2.5	3.5	69	154	23	2.8	3.0	1.5	5.5	3.5	66	114	19	2.3	2.1	2.3	4.4	2.6
38	62	107	22	3.3	2.0	3.0	4.5	68	149	20	3.3	3.0	2.5	4.0	3.5	66	120	23	2.6	2.1	2.8	2.8	3.0
39	68	116	18	2.4	2.0	3.0	4.5	76	216	24	3.0	3.0	3.0	3.0	3.0	70	148	20	2.1	2.2	3.0	2.0	2.7
40	65	119	24	2.7	1.5	3.0	5.0	70	172	27	2.7	3.0	2.0	5.0	2.0	65	129	26	2.4	2.2	2.7	3.8	2.8
41	64	124	27	2.5	1.0	2.0	4.0	73	160	23	2.5	3.0	2.0	4.0	3.0	68	120	25	2.2	2.2	2.3	3.5	2.6
42	67	176	31	2.5	2.0	3.0	5.0	76	216	26	2.6	3.0	3.0	3.0	2.5	70	165	33	2.1	2.2	3.0	1.7	2.5
43	68	108	24	1.7	1.0	2.0	4.0	77	205	27	2.5	3.5	3.0	3.0	2.5	67	123	26	1.8	2.2	2.7	2.3	2.7
44	67	119	21	2.5	1.5	3.0	4.5	77	174	22	2.6	3.0	1.5	5.0	2.5	67	119	22	2.2	2.0	2.5	3.6	2.8
45	65	144	22	2.8	1.0	2.5	4.5	70	116	18	2.6	3.5	1.0	8.0	1.5	67	100	19	2.2	1.7	1.8	6.1	2.0
46	62	125	27	3.0	1.5	2.5	4.5	70	155	28	2.8	3.5	1.0	6.0	3.0	67	126	27	2.4	2.0	1.8	5.1	2.7
47	59	110	23	2.7	2.0	2.5	4.5	68	147	25	2.7	3.0	2.0	5.0	3.0	62	120	23	2.3	2.8	2.5	3.1	2.7
48	66	98	17	2.2	1.5	2.5	4.0	70	191	25	2.7	3.0	2.0	5.0	2.5	68	132	22	2.1	2.1	2.5	4.0	2.1
49	64	112	19	3.1	1.5	2.5	4.5	69	150	18	3.3	3.0	2.0	5.0	3.5	65	121	20	2.5	2.2	2.5	3.6	3.1
50	67	104	18	2.9	1.0	2.0	4.0	72	157	28	3.3	3.0	3.0	3.0	3.5	66	120	27	2.5	1.8	2.7	2.2	3.5
51	NG	-	-	-	-	-	-	74	163	23	2.7	4.0	3.0	3.0	2.5	70	142	23	2.1	2.5	3.0	3.3	1.9
52	67	114	16	2.3	1.5	2.5	4.5	70	165	19	2.4	4.0	1.5	5.0	3.5	70	124	19	2.1	2.4	2.3	3.0	2.5
53	66	154	20	2.9	1.0	2.5	4.5	74	133	12	2.2	4.0	1.0	9.0	1.0	70	120	17	2.2	2.0	1.8	7.0	2.1
54	68	113	24	2.4	1.5	2.0	4.0	76	170	21	2.6	3.0	3.0	3.0	3.0	69	135	21	2.0	2.7	2.7	2.4	3.1
55	68	132	18	2.4	1.5	3.0	4.5	74	219	22	2.8	3.0	3.0	5.0	4.0	68	146	22	2.1	2.0	3.0	2.6	2.8
56	67	103	20	2.5	1.0	2.0	3.0	70	166	21	2.4	3.5	1.0	5.0	2.0	66	119	22	2.1	2.2	1.5	5.1	1.8
57	NG	-	-	-	-	-	-	74	167	12	2.1	4.0	1.0	7.0	1.0	68	132	18	2.0	2.1	2.0	3.1	1.9
58	61	205	41	3.1	1.0	3.0	5.0	65	203	25	2.3	3.5	2.5	4.0	3.0	63	163	30	2.0	2.2	2.8	4.4	2.7
59	67	125	23	2.9	2.5	3.0	4.5	70	167	21	3.0	3.0	3.0	5.0	4.5	69	130	21	2.2	2.5	3.0	2.2	3.3
60	63	106	15	2.2	2.0	2.0	4.0	69	184	15	2.5	3.0	1.5	5.0	4.0	63	129	15	2.0	2.9	2.2	3.9	2.9

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Table 9: Drought tolerant restorer parent nursery, across two locations- Mandor and Bikaner. (for Pedigree of entries see table 4)

Plot size: 1 row x 4 m x 2 reps.

E. no.	MDR						BKR				Grand Mean					
	DF	PH	HL	HD	ETPP	AS	DF	PH	HL	HD	DF	PH	HL	HD	ETPP	AS
1	56	124	16	2.5	1.5	3.5	60	115	20	2.2	58	120	18	2.4	1.5	3.5
2	54	126	14	2.4	1.5	5.0	62	100	18	2.2	58	113	16	2.3	1.5	5.0
3	NG	-	-	-	-	-	NG	-	-	-	NG	-	-	-	-	-
4	63	102	14	3.2	1.0	3.5	54	130	16	1.2	58	116	15	2.2	1.0	3.5
5	60	103	15	2.9	1.0	4.0	NG	-	-	-	60	103	15	2.9	1.0	4.0
6	57	105	16	2.3	1.0	3.5	NG	-	-	-	57	105	16	2.3	1.0	3.5
7	55	92	15	2.3	1.0	3.5	NG	-	-	-	55	92	15	2.3	1.0	3.5
8	53	117	15	2.3	2.0	4.0	NG	-	-	-	53	117	15	2.3	2.0	4.0
9	61	98	14	2.3	1.0	3.5	NG	-	-	-	61	98	14	2.3	1.0	3.5
10	59	113	17	2.7	2.0	4.5	NG	-	-	-	59	113	17	2.7	2.0	4.5
11	63	101	17	2.8	1.0	4.0	NG	-	-	-	63	101	17	2.8	1.0	4.0
12	60	122	18	3.0	1.5	4.5	52	130	24	2.2	56	126	21	2.6	1.5	4.5
13	58	126	16	2.5	1.5	5.0	54	115	19	2.0	56	121	18	2.3	1.5	5.0
14	57	113	20	2.7	1.0	3.5	NG	-	-	-	57	113	20	2.7	1.0	3.5
15	61	124	20	2.1	1.0	4.0	NG	-	-	-	61	124	20	2.1	1.0	4.0
16	62	129	21	2.2	1.0	4.0	60	135	22	2.3	61	132	21	2.3	1.0	4.0
17	53	119	17	2.6	2.0	5.0	53	112	23	2.6	53	116	20	2.6	2.0	5.0
18	56	142	17	2.6	1.5	4.5	61	133	19	2.3	58	137	18	2.4	1.5	4.5
19	52	128	14	2.3	2.0	4.0	59	105	15	1.9	55	116	14	2.1	2.0	4.0
20	59	124	18	2.5	1.0	4.5	53	100	17	2.5	56	112	18	2.5	1.0	4.5
21	57	131	18	2.9	1.5	4.5	60	148	21	2.7	58	139	19	2.8	1.5	4.5
22	62	141	19	5.5	1.5	4.5	55	140	18	2.7	59	141	19	4.1	1.5	4.5
23	55	155	17	2.8	1.5	5.0	58	123	17	2.8	56	139	17	2.8	1.5	5.0
24	58	122	16	2.5	2.0	5.0	62	135	21	2.1	60	129	19	2.3	2.0	5.0
25	59	104	15	2.4	1.5	4.0	55	100	18	2.5	57	102	16	2.5	1.5	4.0
26	53	146	17	2.6	2.0	5.0	58	115	16	3.2	55	130	16	2.9	2.0	5.0
27	56	126	24	2.9	1.0	5.0	60	110	24	2.7	58	118	24	2.8	1.0	5.0
28	54	109	18	2.2	1.5	4.5	NG	-	-	-	54	109	18	2.2	1.5	4.5
29	57	118	19	2.2	1.5	4.5	54	145	21	3.1	55	132	20	2.7	1.5	4.5
30	53	115	17	2.4	1.5	4.0	60	118	17	2.1	57	116	17	2.2	1.5	4.0
31	60	135	16	2.3	2.0	4.0	57	145	25	1.8	58	140	20	2.0	2.0	4.0
32	55	103	16	2.2	1.0	3.5	57	110	20	2.2	56	107	18	2.2	1.0	3.5
33	62	147	15	2.2	1.5	4.5	NG	-	-	-	62	147	15	2.2	1.5	4.5
34	53	106	16	2.2	2.0	4.0	53	130	19	3.0	53	118	17	2.6	2.0	4.0
35	54	123	19	2.5	2.0	5.0	64	100	20	2.0	59	111	19	2.3	2.0	5.0
36	57	108	16	2.2	1.5	4.0	57	113	17	2.2	57	110	16	2.2	1.5	4.0
37	56	99	12	2.2	1.0	4.0	51	120	21	2.4	54	109	16	2.3	1.0	4.0
38	53	121	14	2.4	1.5	4.0	55	130	15	1.9	54	125	15	2.2	1.5	4.0
39	60	109	18	2.9	1.0	4.5	52	105	17	2.5	56	107	17	2.7	1.0	4.5
40	59	131	19	2.8	1.0	5.0	63	150	21	2.6	61	140	20	2.7	1.0	5.0
41	61	126	19	2.8	1.0	4.0	57	105	20	2.4	59	115	20	2.6	1.0	4.0
42	64	122	14	2.3	2.0	4.5	59	135	19	2.2	61	128	16	2.2	2.0	4.5
43	61	111	18	2.5	1.5	3.5	58	120	17	2.5	60	116	18	2.5	1.5	3.5
44	54	151	21	2.4	2.0	5.0	51	180	24	2.1	53	165	22	2.3	2.0	5.0
45	60	128	17	2.4	1.5	4.5	60	123	18	2.5	60	125	17	2.4	1.5	4.5
46	57	113	14	2.5	1.5	3.5	57	100	16	1.8	57	106	15	2.2	1.5	3.5
47	62	114	24	2.5	2.0	5.0	NG	-	-	-	62	114	24	2.5	2.0	5.0
48	54	161	20	2.5	2.0	4.5	57	153	26	2.5	55	157	23	2.5	2.0	4.5
49	52	120	14	3.2	2.0	3.0	57	140	19	2.5	55	130	16	2.9	2.0	3.0
50	51	125	15	1.6	2.5	4.0	59	128	20	2.1	55	126	17	1.8	2.5	4.0

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Table 10: Blast resistant B & R line nursery, across six locations- Hyderabad, Aurangabad, Ananthapuram, Dhule, New Delhi and Gwalior. (for Pedigree of entries see table 5).
Plot size: 1 row x 4 m x 2 reps.

E. no.	HYD								ABD						APR							
	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	AS	DF	PH	HL	HD	ETPP	SG	BS	AS
1	53	111	24	3.0	1.0	1.5	1.5	1.5	NG	-	-	-	-	-	47	110	28	2.8	3.2	3.0	5.5	3.5
2	55	108	19	2.5	-	2.5	4.5	2.5	65	88	19	2.5	3.0	4.0	44	108	25	2.6	2.7	3.0	4.5	4.0
3	71	116	22	2.9	-	2.0	4.0	3.5	NG	-	-	-	-	-	44	130	25	2.6	2.6	3.0	3.5	3.0
4	50	126	21	3.0	1.0	2.5	2.5	2.5	59	90	15	2.5	1.0	2.0	43	111	25	2.6	2.4	1.0	5.0	4.5
5	55	116	21	2.9	1.5	2.0	1.5	1.0	58	92	19	2.1	1.0	5.0	40	110	24	2.5	2.2	3.0	3.5	4.0
6	54	123	17	2.5	2.5	2.0	1.0	3.0	61	64	13	2.1	1.0	2.0	47	124	25	2.6	4.0	3.0	3.5	3.0
7	52	102	17	2.7	2.0	2.0	1.0	3.0	55	68	11	1.8	2.0	3.0	44	108	24	2.9	1.7	1.0	6.5	4.5
8	50	116	18	3.0	1.0	2.0	1.0	1.0	60	72	13	2.3	1.0	4.0	41	107	24	2.4	1.7	1.0	5.5	5.0
9	54	111	18	2.9	1.0	2.0	3.0	2.0	48	42	12	1.8	2.0	3.0	47	110	25	2.7	2.5	1.0	7.5	4.5
10	51	119	19	3.4	-	2.5	1.0	2.5	NG	-	-	-	-	-	47	105	20	3.1	2.4	1.0	6.0	4.5
11	51	134	23	2.8	1.0	2.0	1.0	3.0	56	72	18	2.6	1.0	4.0	45	122	23	2.7	2.8	3.0	4.5	3.0
12	58	95	23	2.6	1.0	1.5	0.5	2.5	NG	-	-	-	-	-	45	96	27	2.5	3.0	1.0	7.0	5.0
13	40	104	20	2.7	-	1.5	1.0	2.0	61	63	18	2.5	1.0	4.0	45	109	26	3.3	2.5	1.0	5.5	3.5
14	50	100	21	2.9	1.0	3.0	2.5	3.0	61	72	25	2.5	2.0	4.0	41	111	26	2.9	2.5	1.0	4.5	4.0
15	54	124	21	2.8	-	2.0	1.0	2.0	68	122	15	2.9	2.0	4.0	49	129	27	2.3	1.4	1.0	4.0	3.0
16	52	150	21	2.8	-	2.5	1.0	2.5	NG	-	-	-	-	-	46	130	26	2.5	2.4	1.0	6.0	3.5
17	57	149	21	2.5	-	1.5	2.0	3.0	61	123	20	2.2	1.0	3.0	43	123	26	2.7	3.4	1.0	6.0	3.0
18	57	130	20	2.1	-	2.0	1.0	2.5	63	72	9	1.9	2.0	3.0	46	124	26	2.3	3.0	1.0	4.0	2.0
19	53	151	25	2.8	1.0	2.0	1.0	2.0	64	102	17	2.6	2.0	4.0	45	124	28	3.0	2.8	1.0	5.5	4.0
20	54	141	21	2.8	1.0	1.5	1.0	1.0	48	90	18	2.7	1.0	4.0	45	110	26	2.7	2.6	1.0	6.0	5.0
21	56	210	30	2.5	1.0	1.5	1.0	1.0	58	162	26	2.4	1.0	3.0	44	104	30	3.0	2.9	3.0	2.0	1.0
22	57	144	22	3.1	1.0	2.0	1.0	1.0	48	122	17	2.5	2.0	3.0	45	127	29	3.1	2.4	3.0	4.5	2.5
23	55	158	21	2.8	1.5	2.5	1.0	2.5	63	102	14	1.7	1.0	3.0	42	132	25	2.8	3.6	3.0	3.0	3.0
24	51	148	23	2.8	2.0	2.0	1.0	2.5	NG	-	-	-	-	-	46	134	27	2.9	2.8	1.0	6.5	2.5
25	57	136	22	2.8	-	3.5	2.5	3.0	68	52	15	2.1	4.0	2.0	45	123	25	2.5	2.5	1.0	5.0	3.0
26	56	171	24	3.1	1.0	2.0	1.5	2.0	61	132	19	2.5	2.0	4.0	47	135	26	2.9	2.4	1.0	5.5	2.0
27	52	172	23	2.6	-	2.5	1.0	1.0	64	72	17	2.4	2.0	4.0	45	137	27	2.7	2.6	1.0	4.5	2.5
28	57	153	20	2.9	1.0	1.5	1.3	1.0	64	86	18	2.0	1.0	3.0	43	133	28	2.8	2.4	3.0	3.0	2.5
29	57	146	20	2.8	-	2.0	1.0	1.5	65	122	15	2.6	2.0	5.0	45	127	28	2.6	3.8	3.0	4.0	2.5
30	55	194	25	2.9	1.0	2.0	2.5	1.5	61	154	22	2.0	1.0	3.0	50	137	28	3.0	2.7	3.0	3.0	1.0
31	56	213	24	3.0	1.0	1.5	1.0	1.0	67	152	23	3.1	1.0	5.0	44	135	28	2.8	3.5	3.0	5.0	2.0
32	55	181	20	2.8	1.5	2.0	5.0	2.0	69	92	15	2.1	1.0	3.0	49	135	26	2.7	2.6	1.0	4.0	2.5
33	57	175	21	2.7	1.0	1.5	3.0	1.5	60	105	20	2.6	2.0	4.0	44	136	26	2.6	3.4	3.0	4.5	2.0
34	46	95	16	1.7	3.0	1.0	9.0	3.5	NG	-	-	-	-	-	40	101	23	2.4	2.5	1.0	8.0	5.0
35	68	114	14	2.4	-	2.0	2.0	3.5	65	52	15	1.6	1.0	2.0	43	115	26	2.8	2.5	1.0	4.5	4.0

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Table 10: Blast resistant B & R line nursery, across six locations- Hyderabad, Aurangabad, Ananthapuram, Dhule, New Delhi and Gwalior. (for Pedigree of entries see table 5)

Plot size: 1 row x 4 m x 2 reps.

E. no.	DHL								NDL							
	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS
1	67	103	26	1.0	2.5	3.0	2.0	1.0	76	100	18	2.9	3.0	2.0	5.0	3.0
2	58	119	26	1.1	2.5	3.0	4.5	2.0	67	140	21	3.3	3.0	1.0	5.0	3.0
3	72	116	26	1.0	2.0	3.0	2.5	2.0	59	150	25	2.8	3.0	1.0	4.0	3.0
4	54	141	21	1.1	2.5	-	7.5	1.0	55	199	23	2.8	2.5	2.5	6.0	3.0
5	61	144	20	0.9	2.5	3.0	3.5	3.0	60	168	23	3.1	2.5	1.0	4.0	3.0
6	61	150	21	0.8	3.5	3.0	3.5	1.5	63	177	21	2.3	3.0	1.0	3.0	4.0
7	58	94	18	0.9	2.5	-	7.5	1.0	52	123	17	2.9	3.0	1.5	5.0	3.5
8	56	131	20	1.0	1.5	3.0	4.0	1.5	53	135	17	2.5	2.5	1.0	4.0	3.5
9	58	103	18	0.9	2.5	3.0	5.0	1.0	66	134	17	2.8	3.0	1.0	5.0	4.0
10	53	107	19	1.1	2.0	-	5.0	1.0	61	125	16	3.3	2.5	1.5	5.0	3.0
11	55	139	25	1.1	4.0	3.0	6.0	2.0	60	228	25	3.0	3.0	1.0	5.0	3.5
12	59	108	23	0.9	1.5	3.0	4.0	2.0	68	136	22	2.6	3.0	1.0	4.0	3.0
13	66	119	24	1.0	2.0	3.0	2.0	3.0	79	133	23	3.1	2.5	1.0	4.0	3.0
14	52	123	24	0.9	4.0	3.0	5.0	1.5	62	124	22	2.7	2.5	1.5	4.0	3.0
15	63	111	19	0.9	2.0	3.0	2.0	2.0	63	142	22	2.8	3.0	1.5	5.0	3.0
16	59	133	24	1.0	3.0	3.0	5.5	1.5	66	151	20	2.3	2.5	1.0	4.0	3.5
17	58	154	29	1.1	2.0	3.0	1.0	3.0	63	190	22	2.4	2.5	1.0	5.0	4.0
18	65	147	22	0.8	2.0	3.0	1.5	2.0	68	150	17	2.1	2.5	1.0	4.0	3.0
19	60	143	27	1.0	1.5	3.0	2.0	2.0	59	191	28	3.0	2.5	1.5	4.0	5.0
20	63	119	19	0.9	2.0	3.0	3.0	2.0	68	201	23	3.2	3.0	1.0	4.0	3.0
21	64	183	28	1.0	3.0	3.0	4.0	1.5	62	231	32	2.7	2.5	1.5	3.0	5.0
22	64	143	26	1.2	2.0	3.0	3.5	2.5	69	147	23	2.9	2.0	1.5	4.0	3.0
23	61	176	24	0.8	2.5	-	6.5	1.0	60	169	22	2.6	2.5	1.0	3.0	3.5
24	60	148	26	1.0	2.0	3.0	4.5	2.0	63	163	26	2.6	2.0	1.5	4.0	4.0
25	67	139	27	1.0	2.5	3.0	2.5	2.0	70	165	25	3.1	2.5	1.0	3.0	3.5
26	62	169	26	1.0	1.5	3.0	2.5	2.5	63	187	24	3.2	3.0	1.5	4.0	3.5
27	63	178	19	0.9	1.5	3.0	4.0	2.0	63	172	21	2.5	2.5	1.0	3.0	4.0
28	62	157	19	0.9	1.0	3.0	4.0	3.0	67	186	18	3.4	2.5	1.0	3.0	3.5
29	62	154	25	1.0	1.5	3.0	3.0	2.0	69	192	26	3.3	2.0	1.0	5.0	3.0
30	68	201	26	1.1	2.5	3.0	4.5	2.5	62	184	25	2.7	2.5	1.0	4.0	3.0
31	57	171	25	1.0	1.5	3.0	1.5	3.0	62	194	26	2.9	3.0	1.0	4.0	3.0
32	64	171	26	1.1	1.0	-	6.5	1.0	64	212	21	2.8	3.0	2.5	5.0	3.5
33	62	147	24	1.0	2.5	3.0	2.0	2.0	64	222	19	2.5	3.0	1.5	5.0	3.5
34	59	88	21	0.9	3.5	-	7.5	1.0	61	91	13	1.5	3.0	2.0	4.5	4.0
35	63	131	22	1.0	3.5	3.0	3.5	1.0	67	175	18	2.6	2.0	1.0	3.0	4.0

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Table 10: Blast resistant B & R line nursery, across six locations- Hyderabad, Aurangabad, Ananthapuram, Dhule, New Delhi and Gwalior. (for Pedigree of entries see table 5)

Plot size: 1 row x 4 m x 2 reps.

E. no.	GLR								Grand Mean							
	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS
1	69	126	22	2.7	2.3	3.5	5.0	3.0	62	110	23	2.5	2.4	2.6	3.8	2.4
2	65	134	20	2.1	2.3	1.5	2.0	2.0	59	116	22	2.3	2.7	2.2	4.1	2.9
3	68	157	26	2.5	1.7	3.0	4.0	3.5	63	134	25	2.4	2.3	2.4	3.6	3.0
4	55	148	16	2.4	1.7	1.5	6.0	2.0	53	136	20	2.4	1.9	1.9	5.4	2.5
5	54	146	25	2.7	2.8	2.0	3.5	3.0	55	129	22	2.4	2.1	2.2	3.2	3.2
6	49	142	16	1.4	1.7	2.5	0.0	4.0	56	130	19	1.9	2.6	2.3	2.2	2.9
7	47	124	16	2.5	2.5	2.5	8.5	2.5	51	103	17	2.3	2.3	1.8	5.7	2.9
8	52	131	16	2.2	1.4	3.0	0.0	3.0	52	115	18	2.2	1.5	2.0	2.9	3.0
9	66	138	20	2.5	2.3	2.5	3.0	2.5	56	106	18	2.3	2.2	1.9	4.7	2.8
10	52	120	15	2.2	1.1	1.5	0.0	3.0	53	115	18	2.6	2.0	1.6	3.4	2.8
11	58	165	22	2.4	3.2	2.5	5.0	3.0	54	143	23	2.4	2.5	2.3	4.3	3.1
12	69	110	18	2.0	1.0	2.0	0.0	1.0	60	109	22	2.1	1.9	1.7	3.1	2.7
13	66	130	21	2.4	1.8	2.5	0.0	4.0	60	110	22	2.5	2.0	1.8	2.5	3.3
14	48	146	24	2.2	2.3	1.5	3.5	1.5	52	113	24	2.4	2.4	2.0	3.9	2.8
15	68	141	19	1.9	1.5	1.5	2.5	2.5	61	128	21	2.3	2.0	1.8	2.9	2.8
16	65	151	19	2.0	2.8	2.5	0.0	5.0	58	143	22	2.1	2.7	2.0	3.3	3.2
17	59	182	25	2.2	3.9	2.0	4.5	3.5	57	154	24	2.2	2.6	1.7	3.7	3.3
18	65	147	20	1.7	1.1	2.0	0.0	2.0	61	128	19	1.8	2.1	1.8	2.1	2.4
19	57	160	24	2.5	1.9	2.0	6.0	3.5	56	145	25	2.5	2.0	1.9	3.7	3.4
20	60	156	22	2.4	1.7	1.5	2.5	2.5	56	136	21	2.4	1.9	1.6	3.3	2.9
21	61	202	32	2.2	2.1	3.0	3.0	4.5	57	182	30	2.3	2.1	2.4	2.6	2.7
22	55	157	22	2.8	2.0	2.5	5.5	3.0	56	140	23	2.6	1.9	2.4	3.7	2.5
23	59	176	22	2.2	2.2	2.0	7.0	2.0	57	152	21	2.2	2.2	2.1	4.1	2.5
24	55	178	23	2.2	2.7	3.0	0.0	3.5	55	154	25	2.3	2.3	2.1	3.2	2.9
25	63	135	23	2.2	2.3	2.5	0.0	1.0	62	125	23	2.3	2.8	2.2	2.6	2.4
26	59	174	23	2.3	2.5	2.0	0.0	4.0	58	161	24	2.5	2.1	1.9	2.7	3.0
27	61	171	19	2.3	2.2	3.0	0.0	5.0	58	150	21	2.2	2.2	2.1	2.5	3.1
28	61	172	20	2.5	1.9	2.5	4.5	3.5	59	148	21	2.4	1.6	2.2	3.2	2.8
29	66	165	22	2.5	2.4	2.5	1.0	4.5	61	151	23	2.5	2.3	2.3	2.8	3.1
30	66	216	23	2.5	2.4	3.0	4.5	4.0	60	181	25	2.4	2.0	2.4	3.7	2.5
31	66	217	27	2.6	2.9	2.5	3.0	4.5	59	180	25	2.6	2.2	2.2	2.9	3.1
32	60	179	22	2.4	2.1	1.5	6.0	2.0	60	162	22	2.3	1.9	1.8	5.3	2.3
33	57	167	22	2.3	2.4	2.5	5.0	2.0	57	159	22	2.3	2.4	2.3	3.9	2.5
34	48	97	12	1.5	2.0	1.0	6.0	1.5	51	94	17	1.6	2.8	1.3	7.0	3.0
35	67	166	17	2.1	1.4	2.0	2.0	2.0	62	126	19	2.1	2.1	1.8	3.0	2.8

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Table 11: Elite joint biofortification nursery, across eight locations- Malnoor, Dhule, Jamnagar, Mandor, Jaipur, New Delhi, Vijayapur and Ludhiana. (for Pedigree of entries see table 6)

Plot size: 1 row x 4 m x 2 reps

E. no.	MLR								DHL								JMR								MDR							
	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	BS	AS	DF	PH	HL	HD	ETPP	SG	AS	Fe	Zn
1	52	141	20	3.7	1.8	3.0	2.0	3.5	63	108	22	1.0	2.5	3.0	2.5	2.0	59	106	19	2.8	3.5	4.0	2.5	62	117	23	2.6	2.0	2.5	4.5	84	48
2	53	141	18	3.8	1.4	2.5	2.0	2.5	67	105	18	0.9	1.5	-	5.5	1.0	59	123	20	2.1	2.0	6.0	1.5	NG	-	-	-	-	-	-	-	-
3	49	152	22	3.6	2.4	2.0	2.5	2.0	65	127	23	1.0	3.0	3.0	1.0	1.5	60	125	24	2.5	2.5	2.0	2.5	63	78	26	2.5	1.0	2.0	4.0	41	29
4	53	103	16	3.5	1.4	2.5	4.5	1.5	61	119	18	0.8	3.0	3.0	6.0	2.0	57	103	17	2.6	3.0	4.5	2.5	63	87	19	2.6	2.0	2.0	4.0	56	34
5	51	160	22	3.7	2.2	2.0	2.5	3.0	67	78	20	0.8	1.5	3.0	2.0	1.0	63	132	23	2.5	3.0	2.0	2.5	NG	-	-	-	-	-	-	-	-
6	49	145	17	4.1	2.0	3.0	0.0	3.0	62	116	19	1.1	3.5	3.0	2.0	2.0	59	127	21	2.7	3.0	1.5	2.0	65	117	20	3.4	2.0	3.0	4.5	86	48
7	50	127	19	4.2	1.2	2.5	0.5	2.0	69	111	21	1.0	2.5	3.0	1.0	1.5	60	115	18	2.8	4.0	2.0	2.5	64	98	19	2.6	1.0	2.0	4.0	81	45
8	51	138	14	3.2	2.0	3.0	0.5	2.5	77	104	16	0.9	3.5	3.0	1.5	1.0	55	115	19	2.5	4.0	1.5	1.0	NG	-	-	-	-	-	-	-	-
9	49	134	19	3.4	2.3	1.5	6.5	1.5	78	91	21	0.9	1.5	3.0	5.0	1.0	58	73	17	1.7	2.5	1.5	1.5	NG	-	-	-	-	-	-	-	-
10	50	137	17	3.7	2.6	1.5	4.5	4.5	60	107	17	0.9	3.0	3.0	1.5	3.0	60	107	18	2.6	3.0	4.0	2.0	63	90	17	2.7	1.5	2.5	4.0	101	57
11	52	167	18	3.5	1.8	2.5	3.5	2.0	71	101	19	0.7	2.0	-	5.5	1.0	61	115	18	2.3	3.0	3.0	2.5	65	94	19	2.5	2.5	3.0	4.5	48	31
12	53	161	17	3.3	2.1	3.0	0.5	1.0	57	110	20	0.8	3.0	3.0	2.5	1.0	60	132	18	2.5	3.0	2.0	2.0	63	104	20	2.7	2.0	3.0	4.0	49	32
13	52	163	16	3.6	1.4	2.5	3.0	2.0	63	108	20	1.0	3.5	3.0	3.0	2.0	60	105	16	2.7	3.5	5.5	1.5	62	93	15	2.8	2.0	2.0	4.0	81	45
14	50	137	18	4.0	2.3	1.5	7.5	2.0	61	105	21	0.9	2.5	3.0	5.5	1.5	59	99	22	2.5	3.5	3.0	1.0	63	108	24	3.0	2.0	3.0	5.0	51	40
15	51	149	17	3.8	2.1	2.5	5.5	4.0	64	109	18	0.9	2.5	3.0	3.0	2.0	60	104	17	2.6	3.0	5.0	2.0	63	91	16	2.9	2.0	3.0	5.0	47	38
16	52	126	16	3.6	1.7	2.0	6.0	1.5	69	117	21	1.0	1.0	-	5.0	1.0	67	113	21	2.8	2.5	2.0	1.5	NG	-	-	-	-	-	-	-	-
17	49	125	17	3.4	1.8	1.0	4.5	1.5	73	84	17	0.8	1.5	3.0	3.0	1.0	61	69	19	2.5	2.5	1.5	1.5	NG	-	-	-	-	-	-	-	-
18	52	141	21	3.7	1.9	3.0	1.0	3.5	61	127	23	0.9	3.5	3.0	2.5	2.0	61	116	20	2.6	3.5	2.5	2.5	61	98	22	3.0	2.5	3.0	5.0	64	43
19	51	148	16	3.6	1.6	1.0	7.5	1.5	65	116	19	1.0	2.5	3.0	3.0	2.0	58	101	17	2.6	3.0	2.0	2.0	63	77	16	2.8	2.0	3.0	5.0	50	34
20	50	158	19	4.2	1.9	3.0	5.5	2.5	70	115	24	1.1	2.5	3.0	2.0	1.5	59	124	22	3.0	3.5	1.0	2.0	65	108	20	3.0	2.0	2.5	4.5	49	37
21	51	201	19	2.4	1.9	2.5	0.0	3.0	62	155	24	1.0	2.0	3.0	3.0	1.0	54	149	25	3.3	2.5	2.0	2.0	65	111	22	2.7	1.0	2.0	3.5	86	49
22	52	134	15	3.3	2.3	2.0	2.5	1.5	55	127	19	0.9	3.0	3.0	1.0	2.0	57	118	16	2.8	3.0	2.0	2.5	63	103	19	3.0	1.5	2.0	4.5	73	38
23	52	136	18	2.9	1.5	2.0	0.0	1.5	64	145	21	0.9	1.5	3.0	1.5	1.0	57	140	18	2.5	2.0	0.5	2.0	63	117	18	2.8	1.0	2.0	3.5	74	44
24	50	151	16	3.5	1.7	2.5	1.0	2.0	67	150	20	1.0	2.0	3.0	1.5	1.5	56	140	18	3.1	3.0	1.5	2.5	NG	-	-	-	-	-	-	-	-
25	51	134	20	3.4	3.0	1.5	2.0	1.5	60	145	22	1.0	2.5	3.0	3.5	1.5	56	148	24	3.4	3.5	1.5	2.0	65	100	22	2.6	1.0	2.0	4.0	59	44
26	52	139	13	3.8	1.5	1.0	2.0	1.0	70	118	17	1.0	3.0	3.0	3.0	1.0	60	141	18	3.8	3.0	1.0	1.0	66	106	17	3.1	1.5	2.0	3.5	68	47
27	52	159	17	3.4	1.1	2.5	1.5	1.0	63	153	19	1.0	2.0	3.0	3.5	1.0	57	130	20	2.5	2.0	2.5	3.0	65	106	18	2.7	2.0	3.0	5.0	113	48
28	52	151	19	3.4	1.9	1.5	3.0	1.0	64	110	20	0.9	1.0	3.0	4.5	1.0	58	130	20	3.0	2.0	3.5	3.0	63	88	19	2.7	2.0	2.0	4.0	62	42
29	52	161	19	3.8	2.1	2.5	5.5	1.5	60	141	23	1.0	1.5	-	4.5	1.0	57	143	22	2.7	1.5	4.5	2.5	64	128	22	2.9	2.0	3.0	5.0	85	52
30	52	215	16	4.0	1.8	1.5	8.0	1.5	61	113	17	0.8	1.5	-	2.5	1.0	62	101	18	2.8	3.0	2.0	2.0	64	90	17	3.0	1.0	2.5	4.0	79	43

CHAPTER I: BREEDING

Table 11: Elite joint biofortification nursery, across eight locations- Malnoor, Dhule, Jamnagar, Mandor, Jaipur, New Delhi, Vijayapur and Ludhiana. (for Pedigree of entries see table 6)

Plot size: 1 row x 4 m x 2 reps

E. no.	MLR								DHL								JMR								MDR							
	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	DF	PH	HL	HD	ETPP	BS	AS	DF	PH	HL	HD	ETPP	SG	AS	Fe	Zn
31	50	118	15	3.9	1.8	1.5	0.0	1.5	72	135	19	1.1	2.0	3.0	2.5	1.0	58	153	18	3.4	2.0	4.0	2.5	NG	-	-	-	-	-	-	-	-
32	50	172	17	3.5	2.9	2.5	8.0	1.5	72	126	16	0.9	1.5	-	3.0	1.0	57	166	16	2.7	2.0	3.0	3.0	NG	-	-	-	-	-	-	-	-
33	47	178	16	3.8	1.7	1.5	2.5	3.0	60	156	20	1.1	2.5	3.0	3.5	2.0	54	153	14	3.3	2.0	2.5	2.0	64	121	17	2.8	1.5	2.0	4.0	83	53
34	52	182	21	3.6	1.1	1.5	5.5	1.5	54	127	21	1.0	4.0	3.0	3.5	1.5	58	133	23	2.6	2.5	7.0	2.0	62	111	19	2.6	1.5	2.5	4.5	62	42
35	50	158	18	3.5	2.0	1.5	2.0	1.5	58	150	22	0.9	2.5	3.0	2.5	1.5	59	135	21	2.3	2.5	4.0	2.5	61	116	17	2.4	1.5	2.0	4.0	83	42
36	51	136	18	3.6	2.1	1.5	4.5	2.5	66	142	23	1.1	2.5	3.0	3.0	1.0	56	111	17	3.0	2.0	1.5	2.5	65	113	19	3.0	2.0	3.0	4.5	67	47
37	52	140	13	3.5	1.7	2.5	5.5	2.0	62	125	19	1.1	3.0	3.0	2.5	1.5	57	138	18	3.2	2.0	5.0	2.5	64	102	16	2.8	1.5	2.0	4.0	106	50
38	51	159	18	3.6	2.2	1.5	6.0	1.5	55	148	22	1.0	2.0	3.0	2.0	2.5	58	145	20	2.6	2.5	2.5	2.0	64	129	23	2.9	2.0	3.0	4.0	70	45
39	49	133	18	3.8	1.9	2.5	0.0	2.0	54	147	22	1.0	1.5	3.0	1.5	2.5	59	138	21	3.2	3.0	1.0	2.5	64	128	15	2.9	1.0	3.0	4.5	86	49
40	50	147	17	3.7	1.9	2.0	0.5	1.5	61	152	22	0.9	2.0	3.0	3.5	1.0	56	134	23	2.4	2.5	1.5	4.0	62	141	18	2.6	2.0	3.0	5.0	79	52
41	50	148	17	3.4	1.1	1.5	5.5	1.5	68	151	22	1.0	1.0	-	3.0	1.0	65	155	21	3.1	3.0	7.0	4.0	NG	-	-	-	-	-	-	-	-
42	49	120	16	3.7	1.5	2.5	4.5	3.0	66	133	20	0.9	3.0	3.0	4.0	1.0	56	148	22	3.1	2.0	5.5	3.0	65	83	18	2.4	1.5	2.5	4.0	77	36
43	49	151	17	4.1	2.0	1.5	8.0	2.0	54	153	20	1.1	2.5	-	5.0	1.5	59	115	13	3.3	2.5	7.5	2.5	NG	-	-	-	-	-	-	-	-
44	52	161	19	3.5	2.1	1.5	5.0	2.5	51	128	22	1.0	5.0	3.0	6.5	1.5	56	118	19	2.1	4.0	6.5	2.0	54	128	16	2.6	2.0	2.5	4.0	47	45
45	54	190	25	4.2	1.4	2.0	5.5	3.0	62	152	22	1.0	2.0	3.0	3.0	2.5	59	149	30	3.2	2.5	2.5	3.0	64	113	22	2.5	2.0	2.5	4.0	83	48
46	51	162	16	3.4	2.2	2.0	3.0	2.0	59	126	26	0.9	1.0	3.0	5.0	2.0	55	116	20	3.0	2.5	3.5	1.0	64	91	15	2.5	1.0	2.0	4.0	64	45
47	49	152	18	2.7	2.5	1.5	7.5	2.5	55	111	18	0.4	4.0	3.0	3.0	1.0	57	119	18	2.5	3.0	3.0	2.0	61	122	17	1.9	2.0	3.0	4.5	36	43
48	53	163	15	3.6	1.5	1.0	5.5	3.5	56	150	16	0.9	3.0	3.0	1.5	2.5	55	141	16	2.5	3.0	2.5	2.0	61	122	18	2.4	1.5	3.0	4.5	54	47
49	52	152	21	3.5	2.6	2.5	4.5	3.0	51	168	22	1.0	2.0	3.0	3.0	2.0	57	164	19	3.1	3.5	3.5	3.0	54	169	22	2.8	2.0	3.0	5.0	54	44
50	50	168	14	3.7	1.3	1.0	5.5	2.0	63	136	21	1.0	1.0	3.0	5.0	2.0	57	128	17	3.2	2.0	6.5	1.0	64	102	15	2.7	2.0	2.5	4.5	67	44
51	51	159	22	3.7	2.7	1.5	8.0	4.5	53	142	25	1.1	2.0	3.0	1.0	2.5	60	134	21	2.9	3.0	2.5	3.0	59	156	22	2.9	1.5	3.0	5.0	39	22
52	50	153	23	3.1	1.5	1.5	7.5	3.0	55	153	24	0.9	3.0	-	6.0	1.5	58	133	22	2.4	2.0	4.5	2.0	62	140	20	2.2	2.0	3.0	5.0	34	32
53	52	163	13	2.8	3.2	1.5	5.0	1.5	56	135	18	0.7	5.5	3.0	2.0	1.5	56	114	15	1.7	4.0	3.0	1.0	59	120	15	1.9	2.0	2.5	4.0	40	37
54	49	151	22	3.2	2.6	2.0	2.5	2.0	64	155	22	0.9	2.5	3.0	2.0	2.0	58	144	24	2.2	3.5	1.5	3.0	60	174	23	2.6	2.0	3.0	5.0	44	33
55	49	131	20	2.8	2.6	1.5	5.5	1.0	57	146	22	0.4	5.0	3.0	1.5	1.0	56	156	24	1.5	2.5	1.5	2.0	62	132	20	1.9	2.0	3.0	4.0	46	38
56	49	153	17	3.1	2.9	1.0	6.0	1.5	54	136	21	0.8	2.0	-	8.0	1.0	54	144	19	2.5	3.5	5.0	2.0	59	142	18	2.3	2.0	3.0	5.0	39	32
57	51	175	21	4.1	1.6	1.0	8.5	3.0	59	130	23	1.0	2.0	3.0	5.5	1.0	57	135	22	3.0	3.0	4.0	2.0	61	115	19	2.8	2.0	3.0	5.0	50	44
58	50	175	25	3.1	2.2	2.0	7.5	1.5	77	120	24	0.9	1.5	-	8.0	1.0	66	117	31	2.6	1.5	2.0	1.0	65	113	34	2.6	1.0	2.5	4.0	60	36
59	47	161	19	6.7	1.9	1.0	4.5	3.0	54	150	25	0.9	1.5	3.0	-	3.0	57	133	24	2.7	2.0	4.0	2.0	61	125	20	2.6	2.0	3.0	4.0	44	25
60	52	177	15	3.9	2.2	1.5	8.0	2.0	56	123	17	1.0	1.0	-	7.5	1.5	55	129	17	3.2	2.0	6.0	1.0	NG	-	-	-	-	-	-	-	-

CHAPTER I: BREEDING

Table 11: Elite joint biofortification nursery, across eight locations- Malnoor, Dhule, Jamnagar, Mandor, Jaipur, New Delhi, Vijayapur and Ludhiana. (for Pedigree of entries see table 6)

Plot size: 1 row x 4 m x 2 reps

E.	JPR							NDL									VYP								
no.	DF	PH	HL	HD	ETPP	SG	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	Fe	Zn	DF	PH	HL	HD	ETPP	SG	BS	AS
1	57	128	22	3.1	2.5	1.0	4.0	65	131	19	2.6	2.5	1.5	5.0	4.0	86	42	47	146	22	2.4	2.7	3.0	5.5	4.0
2	65	88	19	2.4	2.0	3.0	3.5	71	105	21	2.4	2.5	1.5	6.0	3.5	106	68	48	144	22	2.2	2.3	1.0	5.5	3.0
3	69	84	22	2.2	1.0	3.0	3.5	70	154	25	2.6	2.5	2.0	5.0	4.5	111	49	47	131	22	2.2	2.4	3.0	5.5	3.0
4	65	100	17	2.3	1.5	1.0	4.0	66	140	16	2.5	2.5	2.0	5.5	4.0	77	41	47	123	21	2.3	2.3	1.0	7.0	3.0
5	76	79	20	2.3	1.0	1.0	3.0	68	131	22	2.2	2.5	2.0	5.5	3.0	107	41	48	127	24	2.2	2.2	3.0	5.0	3.5
6	62	136	21	3.8	2.0	3.0	4.0	64	150	20	2.4	2.5	2.5	4.0	4.0	101	55	48	135	23	2.1	4.1	3.0	6.0	4.0
7	70	74	16	1.8	1.5	3.0	3.0	63	141	19	3.1	2.5	3.0	4.0	4.5	108	43	46	143	24	2.2	2.6	3.0	5.5	3.5
8	77	92	20	3.1	3.0	3.0	3.5	72	119	18	3.0	2.5	3.0	2.0	2.5	119	70	47	147	22	2.4	2.3	3.0	5.5	4.0
9	77	85	23	2.9	1.0	3.0	3.5	70	105	21	2.4	2.5	1.0	6.5	3.0	132	59	46	150	23	2.2	2.4	1.0	7.0	4.0
10	61	98	19	2.3	2.0	1.0	3.5	60	116	17	2.7	3.0	2.0	5.5	4.5	68	45	46	150	23	2.3	2.4	3.0	4.0	3.5
11	71	72	18	1.8	1.5	1.0	3.0	70	146	22	2.3	3.0	2.0	5.5	3.0	78	48	48	164	24	2.6	2.4	3.0	6.0	3.5
12	66	97	19	2.2	1.0	3.0	3.0	69	149	20	2.9	2.5	2.0	5.0	5.0	51	35	48	112	25	2.4	2.4	1.0	7.0	2.0
13	64	91	16	2.6	1.0	1.0	3.5	66	116	16	2.1	3.0	1.5	5.5	4.0	87	46	47	126	23	2.2	2.4	3.0	5.5	3.0
14	63	109	19	3.0	2.0	3.0	4.5	70	110	22	2.5	2.5	1.0	6.0	3.0	69	39	48	118	19	2.1	2.4	1.0	7.0	2.0
15	61	97	17	2.2	1.0	1.0	3.0	60	147	13	2.5	3.0	1.0	6.5	3.5	89	45	49	133	24	2.2	2.4	3.0	5.5	4.0
16	64	119	20	2.9	1.5	3.0	3.5	68	130	17	2.6	2.0	1.0	6.5	3.5	88	49	49	145	23	2.2	2.3	3.0	5.5	3.0
17	63	98	20	2.7	2.0	3.0	3.0	74	88	17	2.3	3.0	3.0	4.0	2.5	103	65	47	130	23	2.1	3.2	3.0	5.5	3.0
18	62	104	22	3.1	1.0	1.0	3.5	63	132	21	2.7	2.5	2.0	5.5	4.5	75	48	47	133	24	2.3	2.4	3.0	7.0	3.0
19	64	90	16	2.6	1.0	1.0	4.0	65	109	17	2.9	2.5	1.5	5.5	3.0	82	38	49	145	24	2.5	2.5	3.0	7.0	2.5
20	65	95	21	2.9	1.5	3.0	3.5	73	127	23	2.4	2.5	2.0	4.0	4.5	82	23	45	144	24	2.4	3.1	3.0	5.5	4.0
21	73	96	13	1.8	2.5	1.0	2.5	69	174	26	3.2	2.5	3.0	5.0	3.5	153	67	48	123	20	2.2	1.7	3.0	7.0	2.0
22	56	91	14	2.2	1.0	3.0	3.5	67	139	16	3.0	2.0	2.0	5.0	3.0	120	29	47	148	24	2.3	2.5	3.0	5.5	3.5
23	56	186	23	2.6	2.0	3.0	3.5	64	155	22	2.8	2.0	3.0	3.0	4.0	110	39	48	138	22	2.2	2.5	1.0	7.0	3.0
24	67	107	15	2.9	1.5	3.0	3.0	69	164	16	2.7	2.0	3.0	1.0	4.5	96	41	50	131	20	2.1	1.6	3.0	5.0	2.5
25	63	68	13	1.7	2.0	1.0	3.5	66	142	26	2.0	3.0	2.0	5.0	3.0	103	33	49	125	21	2.1	1.5	3.0	5.0	2.5
26	63	128	23	3.1	2.0	3.0	3.5	73	142	15	3.4	3.0	3.5	4.0	3.5	128	43	50	134	21	2.1	1.5	1.0	5.5	2.0
27	65	144	21	2.8	2.5	3.0	3.5	68	155	20	3.1	2.5	1.0	6.0	3.5	111	54	46	137	23	2.2	2.4	3.0	7.0	3.0
28	70	106	16	2.9	1.0	1.0	2.5	65	129	19	2.9	2.5	2.0	5.0	4.5	115	45	47	149	23	2.2	2.3	3.0	5.5	2.5
29	56	117	19	2.5	1.0	3.0	3.0	70	174	20	3.3	2.0	2.0	5.0	3.0	96	45	48	113	18	1.6	1.6	1.0	7.0	3.0
30	56	119	18	2.6	2.0	1.0	2.5	70	149	19	3.0	2.5	3.0	5.0	3.5	123	49	48	147	23	2.3	1.5	1.0	7.0	2.0

CHAPTER I: BREEDING

Table 11: Elite joint biofortification nursery, across eight locations- Malnoor, Dhule, Jamnagar, Mandor, Jaipur, New Delhi, Vijayapur and Ludhiana. (for Pedigree of entries see table 6)

Plot size: 1 row x 4 m x 2 reps

E.	JPR							NDL									VYP								
no.	DF	PH	HL	HD	ETPP	SG	AS	DF	PH	HL	HD	ETPP	SG	BS	AS	Fe	Zn	DF	PH	HL	HD	ETPP	SG	BS	AS
31	71	137	20	3.3	1.5	3.0	4.0	73	147	17	3.6	2.5	3.0	3.0	3.0	135	50	48	132	24	2.3	1.8	1.0	5.5	2.5
32	59	162	22	3.3	2.5	3.0	3.5	72	172	15	2.4	2.5	4.0	4.0	3.0	145	65	47	144	24	2.2	1.6	3.0	5.0	3.0
33	55	157	18	3.0	1.0	3.0	3.0	68	175	18	3.2	2.5	3.0	4.0	4.5	134	62	48	135	22	2.0	1.3	1.0	7.0	2.0
34	57	130	19	3.1	1.0	1.0	2.5	50	151	21	2.4	2.5	1.0	6.5	3.5	109	54	50	136	24	2.2	2.0	1.0	7.0	3.0
35	56	128	20	2.2	1.5	1.0	3.5	67	166	18	3.0	2.5	2.0	5.0	3.5	104	50	49	135	22	2.2	1.3	1.0	6.5	2.5
36	63	161	21	2.5	2.0	1.0	4.0	72	184	21	3.5	3.0	3.0	2.5	3.5	136	60	48	126	22	2.2	1.6	3.0	5.0	3.0
37	63	136	20	2.9	1.0	3.0	4.0	72	149	17	3.2	3.0	3.0	5.5	3.5	128	67	48	141	22	2.2	1.4	3.0	5.5	2.5
38	53	162	22	2.3	1.0	1.0	3.5	65	158	21	2.7	2.5	2.0	5.0	3.5	87	54	48	119	20	2.0	1.4	1.0	7.0	2.0
39	56	133	30	2.6	1.5	1.0	3.0	66	154	18	3.4	2.5	3.0	4.0	3.0	112	50	49	134	24	2.3	1.9	1.0	6.5	2.0
40	63	163	22	3.2	2.5	3.0	3.5	73	175	18	2.3	3.0	3.0	2.0	2.5	144	68	47	128	21	2.1	1.8	1.0	5.0	3.0
41	67	149	21	2.8	2.5	3.0	4.5	68	162	16	2.8	2.5	1.5	6.0	3.5	95	56	48	129	22	2.4	2.4	1.0	9.0	3.0
42	64	133	22	2.7	2.0	3.0	4.0	71	155	21	3.0	2.5	2.0	4.0	3.5	110	46	49	145	24	2.2	2.0	3.0	7.0	2.5
43	56	148	20	2.7	2.0	1.0	3.5	58	143	18	3.4	2.0	1.0	7.0	3.0	110	62	47	134	21	2.2	1.3	1.0	7.0	2.0
44	49	117	13	2.9	2.5	1.0	3.0	53	179	18	2.4	2.5	1.5	5.0	3.0	90	61	47	134	24	2.2	1.3	1.0	7.0	2.0
45	57	142	27	3.5	1.5	3.0	4.0	64	147	28	3.5	3.0	3.5	5.0	4.0	147	43	48	133	24	2.3	1.6	1.0	7.0	2.0
46	64	119	20	3.1	1.0	1.0	3.0	67	132	17	1.9	2.5	2.5	5.0	3.0	94	50	49	149	24	2.3	1.7	1.0	7.0	3.0
47	50	126	20	1.7	2.5	1.0	3.0	61	150	20	1.5	3.0	1.0	6.0	3.0	54	39	47	108	17	1.8	2.2	1.0	7.0	2.0
48	55	159	20	2.2	2.0	1.0	3.5	66	156	13	2.2	3.0	1.5	5.0	3.0	85	51	50	145	24	2.5	1.5	3.0	5.5	2.5
49	49	161	23	2.9	2.0	1.0	3.0	53	186	23	2.5	2.5	3.0	4.0	3.5	82	52	47	139	23	2.3	2.4	3.0	5.5	3.5
50	64	100	16	3.2	1.0	3.0	2.5	63	140	20	3.6	3.0	1.5	6.0	4.5	106	74	46	147	23	2.2	1.6	3.0	5.0	2.5
51	53	168	21	3.6	1.5	1.0	3.0	64	194	21	3.1	2.5	2.5	5.0	4.0	75	30	46	141	24	2.3	1.5	1.0	7.0	2.0
52	58	130	23	2.3	1.0	1.0	3.0	65	185	22	2.2	2.5	2.5	5.0	4.0	44	34	48	138	24	2.4	1.4	1.0	5.0	2.5
53	51	113	16	1.5	2.5	1.0	2.5	53	138	14	1.4	2.0	2.0	4.0	3.0	46	38	48	132	21	2.4	1.4	3.0	5.0	2.0
54	57	186	31	3.2	2.0	3.0	3.5	67	156	20	2.2	2.0	3.0	3.0	3.5	49	23	47	131	22	2.4	1.4	3.0	5.5	2.0
55	56	151	19	1.5	2.5	1.0	3.0	68	185	26	1.4	2.5	3.0	3.0	3.5	53	36	47	122	19	1.9	2.0	1.0	6.5	2.5
56	49	143	22	2.1	2.5	1.0	3.5	62	178	18	2.4	2.5	1.0	6.0	3.0	68	54	46	109	18	1.9	2.1	1.0	5.0	2.0
57	56	137	21	3.3	1.0	1.0	3.5	65	125	24	2.8	3.0	2.0	5.5	3.5	59	35	49	155	24	2.3	1.5	3.0	5.0	2.5
58	67	139	26	2.4	1.0	3.0	3.0	72	100	24	1.5	2.5	1.0	7.0	2.0	143	56	47	151	24	2.2	1.4	1.0	5.5	2.0
59	53	108	15	3.0	1.5	1.0	2.5	64	165	23	2.6	2.5	2.5	5.0	4.0	98	36	48	150	24	2.4	1.6	1.0	5.5	2.0
60	56	132	14	2.4	1.0	1.0	3.0	49	138	18	3.1	3.0	1.0	7.0	3.0	111	67	49	142	21	2.3	1.4	1.0	5.5	2.0

CHAPTER I: BREEDING

Table 11: Elite joint biofortification nursery, across eight locations- Malnoor, Dhule, Jamnagar, Mandor, Jaipur, New Delhi, Vijayapur and Ludhiana. (for Pedigree of entries see table 6)

Plot size: 1 row x 4 m x 2 reps

E. no.	LDN										Grand Mean									
	DF	PH	HL	HD	ETPP	SG	BS	AS	Fe	Zn	DF	PH	HL	HD	ETPP	SG	BS	AS	Fe	Zn
1	46	123	23	0.9	2.2	-	3.3	3.0	111	63	56	125	21	2.4	2.5	2.3	3.7	3.4	94	51
2	71	110	21	0.9	2.7	-	3.1	2.0	110	78	62	116	20	2.1	2.0	2.0	4.7	2.4	108	73
3	69	123	26	0.8	3.1	-	2.7	3.0	91	68	61	122	24	2.2	2.2	2.5	3.1	3.0	81	49
4	62	108	21	0.9	2.5	3.0	2.5	2.0	67	56	59	110	18	2.2	2.3	2.1	5.0	2.9	67	44
5	72	98	24	0.9	2.5	3.0	2.8	2.0	84	65	63	115	22	2.1	2.1	2.3	3.3	2.6	96	53
6	60	120	21	1.1	3.0	3.0	1.7	2.0	111	64	59	131	20	2.6	2.8	2.9	2.5	3.2	99	56
7	61	120	27	1.0	3.4	-	2.7	4.0	127	88	60	116	20	2.3	2.3	2.8	2.6	3.1	105	59
8	77	114	21	0.8	3.7	3.0	1.5	4.0	105	71	65	118	19	2.3	3.0	3.0	2.1	2.6	112	71
9	69	103	22	0.9	2.9	-	2.5	3.0	95	75	64	106	21	2.0	2.2	1.9	4.8	2.5	114	67
10	43	113	20	0.9	1.7	-	1.2	2.0	73	51	55	115	18	2.3	2.4	2.2	3.5	3.4	80	51
11	69	118	22	0.9	3.5	3.0	3.0	4.0	57	44	63	122	20	2.1	2.5	2.4	4.4	2.9	61	41
12	70	118	22	0.9	2.5	3.0	2.4	2.0	61	53	60	123	20	2.2	2.3	2.6	3.2	2.5	53	40
13	50	110	19	0.9	3.5	3.0	1.2	3.0	75	54	58	114	18	2.2	2.5	2.3	4.0	2.9	81	48
14	71	108	27	1.0	2.9	-	1.8	3.0	58	48	61	112	21	2.4	2.5	2.1	5.1	2.8	59	43
15	43	110	18	0.9	3.9	-	2.0	2.0	51	34	56	118	17	2.3	2.5	2.3	4.6	3.2	62	39
16	69	105	22	0.8	2.0	-	2.5	2.0	67	62	62	122	20	2.3	1.9	2.3	4.6	2.3	78	55
17	75	73	19	0.9	2.4	3.0	1.5	2.0	85	68	63	95	19	2.1	2.3	2.7	3.3	2.1	94	66
18	60	123	30	0.9	3.1	3.0	3.5	3.0	74	72	58	122	23	2.4	2.5	2.6	3.7	3.4	71	54
19	69	98	20	0.8	2.2	-	3.5	2.0	65	55	60	110	18	2.4	2.2	2.1	4.8	2.8	66	43
20	62	95	21	1.0	3.7	3.0	2.9	3.0	89	67	61	121	22	2.5	2.6	2.8	3.5	3.2	73	42
21	65	140	19	0.9	2.2	-	2.5	2.0	139	133	61	144	21	2.2	2.0	2.4	3.3	2.4	126	83
22	79	124	19	0.8	2.7	-	0.8	2.0	100	65	59	123	18	2.3	2.2	2.5	2.8	2.8	98	44
23	66	158	28	1.0	2.3	-	1.8	2.0	58	49	59	147	21	2.2	1.8	2.3	2.3	2.6	81	44
24	58	115	18	0.9	4.0	-	1.8	3.0	82	69	59	137	18	2.3	2.2	2.9	2.0	2.7	89	55
25	64	110	21	0.9	2.3	-	2.3	2.0	97	57	59	121	21	2.1	2.4	2.1	3.2	2.5	86	45
26	-	-	-	-	-	-	1.5	-	-	-	62	130	18	2.9	2.2	2.3	2.8	2.2	98	45
27	62	130	19	0.9	2.4	3.0	2.2	2.0	125	70	60	139	20	2.3	2.1	2.6	3.8	2.8	116	58
28	-	-	-	-	-	-	3.0	-	-	-	60	123	19	2.6	1.8	2.1	4.1	2.6	89	43
29	55	140	23	1.1	2.9	3.0	2.0	3.0	94	61	58	140	21	2.4	1.8	2.4	4.8	2.8	92	53
30	-	-	-	-	-	-	2.5	-	-	-	59	133	18	2.6	1.9	1.8	4.5	2.4	101	46

CHAPTER I: BREEDING

Table 11: Elite joint biofortification nursery, across eight locations- Malnoor, Dhule, Jamnagar, Mandor, Jaipur, New Delhi, Vijayapur and Ludhiana. (for Pedigree of entries see table 6)

Plot size: 1 row x 4 m x 2 reps

E. no.	LDN										Grand Mean									
	DF	PH	HL	HD	ETPP	SG	BS	AS	Fe	Zn	DF	PH	HL	HD	ETPP	SG	BS	AS	Fe	Zn
31	44	123	15	1.0	3.9	-	2.3	2.0	125	80	59	135	18	2.6	2.2	2.3	2.9	2.4	130	65
32	78	128	19	0.8	2.5	3.0	2.0	2.0	-	-	62	153	18	2.3	2.2	3.1	4.2	2.4	145	65
33	64	163	19	1.0	1.9	-	2.2	2.0	110	66	57	155	18	2.5	1.8	2.3	3.6	2.8	109	60
34	52	130	22	0.8	4.0	-	1.2	3.0	79	54	54	137	21	2.3	2.3	1.7	5.1	2.7	83	50
35	47	128	22	0.9	2.6	-	2.3	2.0	103	62	56	139	20	2.2	2.0	1.8	3.7	2.6	97	51
36	73	118	21	0.9	3.9	3.0	2.2	4.0	82	70	61	136	20	2.5	2.4	2.5	3.1	3.1	95	59
37	61	140	19	0.9	2.2	-	2.4	2.0	102	70	60	134	18	2.5	2.0	2.8	4.4	2.8	112	63
38	53	130	23	1.0	3.7	-	2.5	4.0	74	55	56	144	21	2.3	2.2	1.9	4.2	2.9	77	51
39	65	148	21	0.9	2.4	3.0	0.8	2.0	104	58	58	139	21	2.5	2.0	2.4	2.3	2.7	100	53
40	64	140	19	0.8	2.4	-	1.5	2.0	101	71	59	147	20	2.2	2.3	2.5	2.3	2.8	108	64
41	78	139	19	0.9	3.3	3.0	3.3	3.0	100	84	63	147	20	2.3	2.3	2.0	5.6	2.9	98	70
42	63	140	19	0.8	2.9	-	0.9	3.0	76	57	60	132	20	2.3	2.2	2.7	4.3	3.0	88	46
43	64	118	17	0.9	2.0	-	2.4	2.0	94	62	55	137	18	2.5	2.0	1.1	6.2	2.4	102	62
44	49	125	18	0.8	1.7	-	2.0	2.0	105	87	51	136	19	2.2	2.6	1.8	5.3	2.5	81	64
45	53	163	21	0.9	4.0	3.0	1.9	4.0	69	55	57	148	25	2.7	2.3	2.6	4.2	3.3	100	48
46	53	132	18	0.8	2.7	-	3.2	3.0	55	54	58	128	20	2.2	1.8	1.9	4.5	2.6	71	50
47	49	150	22	0.7	3.9	-	2.0	3.0	59	57	53	130	19	1.6	2.9	1.8	4.8	2.6	50	46
48	48	138	20	0.8	1.7	-	2.1	2.0	-	-	55	147	18	2.1	2.2	2.1	3.7	2.9	70	49
49	77	153	22	0.9	2.4	3.0	1.3	2.0	76	68	55	161	22	2.4	2.4	2.6	3.6	3.1	71	55
50	69	108	16	0.9	2.6	-	1.6	2.0	80	51	59	128	18	2.6	1.8	2.3	4.9	2.6	84	56
51	55	128	18	0.8	2.4	-	1.9	2.0	51	38	55	153	22	2.5	2.1	2.0	4.2	3.3	55	30
52	56	153	21	0.8	2.0	-	1.8	2.0	34	42	56	148	22	2.0	1.9	1.8	5.0	2.9	37	36
53	49	110	16	0.7	2.3	-	3.0	2.0	64	61	53	128	16	1.6	2.9	2.2	3.7	2.2	50	45
54	50	150	21	0.8	3.4	3.0	1.8	3.0	58	45	56	156	23	2.2	2.4	2.9	2.7	3.0	50	34
55	61	178	25	0.7	2.7	-	2.1	2.0	38	38	57	150	22	1.5	2.7	2.1	3.4	2.4	46	38
56	49	135	22	0.8	2.3	-	2.9	2.0	53	63	52	143	19	2.0	2.5	1.4	5.5	2.5	53	50
57	50	148	20	0.9	3.7	-	3.2	3.0	93	71	56	140	22	2.5	2.2	2.2	5.3	2.9	67	50
58	70	128	24	0.8	2.3	-	2.4	2.0	55	49	64	130	26	2.0	1.7	1.9	5.4	2.1	86	47
59	54	130	26	0.9	2.4	-	2.2	2.0	56	42	55	140	22	2.7	1.9	1.9	4.2	2.8	66	35
60	50	93	17	0.8	1.4	-	1.8	1.0	57	61	52	133	17	2.4	1.7	1.1	6.0	1.9	84	64

**CRP
BIOFORTIFICATION
PROJECT**

Mean performance of entries for different traits in CRP Biofortification Parental Line Trial (CRPB PLT) *Kharif-2024*

The trial was conducted using 40 entries including two checks across 6 locations viz., Mandor, Jaipur, New Delhi, Jamnagar, Dhule and Hisar. The performance for days to 50% flowering, plant height (cm), Effective tillers /plant, head length (cm), head girth (cm), seed set (%), and agronomic score. The days to 50% flowering ranged from 44 (Dhanshakti) to 69 (RIB 15185 and RIB 15186). The plant height ranged from 106 cm (ICMB 98222 and DHL CRP 01) to 175 cm (150 SB 24). Effective tillers per plant was 1.8 (RIB 15183, RIB 15185 and PPMI 1322) to 3.7 (HSR 24-1). Head length ranged from 14 cm (MIR 1406) to 28 cm (JMSB 20229). Head girth ranged from 1.6 cm (MIR 1806) to 3.6 cm (RIB 15185). The seed set (%) under open pollination condition ranged from 50 (HSR 24-4) to 82 (RIB 15184 and Dhanshakti (C)). Agronomic score ranged from 1.9 (HSR 24-4) to 3.5 (DHL CRP 03). Grain sample of all test location collected and analyzed for grain nutrient content at ICAR-IIMR Hyderabad. Grain iron content ranged (36-97ppm) JMSB 20227(97ppm) recorded higher iron content compared to best check ICMB 98222 (82ppm). Grain zinc content ranged (32-55 ppm) JMSB 20227 (55ppm) recorded higher zinc content compared to best check ICMB 98222 (53ppm).

Centre wise brief progress report of CRP Biofortification project *kharif 2024*

Name of Centre	Activity performed
ICAR-AICRP-PM, Jodhpur	➤ CRP Biofortification Parental Line Trial (CRPBPLT) comprising (40 ent. x 1row x 2 rep.) constituted and distributed to associated centers and being conducted at Mandor location during kharif-2024. ➤ A total of 120 entries including checks were tested in 2 Initial Station Hybrid Trials during kharif 2024. Days to 50% flowering ranged from 44 to 47 and grain yield ranged from 2396 kg/ha to 3042 kg/ha and 12 entries found superior in comparison to best check MPMH 17 (2350 kg/ha). ➤ Harvested grain sample of selected entries were analyzed for grain iron and zinc content and sample ranged from 21ppm to 44.5 ppm for iron and from 32.4ppm to 57ppm for zinc content. ➤ 65 R-lines having high iron and zinc content were maintained for use in different breeding programmes. ➤ In kharif 2024, generation advancement activity for 9 RxR combinations were advanced from F₈ to F₉ and 7 RxR combinations were advanced from F₂ to F₃ and F₁ developed during summer 24 using 6 promising restorers were planted and new RXR crosses are being attempted using 6 entries. ➤ 34 promising A/B pairs are being maintained and seed is multiplied during <i>kharif 2024</i>. ➤ Hybrid development programme conducted for early and medium maturity group using 3 promising male sterile lines namely ICMA 93333, ICMA 97111 and ICMA 92777, using 45restorer lines having high iron and zinc content. A total of 135 F₁ were developed which are being tested in station hybrid trial <i>kharif 2025</i>. ➤ 34 grain samples of pearl millet including hybrids, varieties and landraces for proximate analysis at NIN, Hyderabad. ➤ Biofortified hybrids/varieties were demonstrated in National demonstration <i>kharif 2024</i>.

	➤ Seed increase of promising parental lines with high iron and zinc was done to include in future breeding programs. <u>Technical Programme 2024</u> ➤ Composition and distribution of CRP Biofortification Parental Line Trial (CRPBPLT) <i>kharif</i> 2025 to associated centers. ➤ CRP Biofortification parental Line Trial conducted and observation on different aspects will be recorded. ➤ Selection and screening activity will be carried out. ➤ Maintenance programme will be carried out for available high Fe and Zn lines and station and national repository A/B Pairs. ➤ Newly developed hybrids will be evaluated along with standard checks in Station hybrid trials and promising hybrid will be selected and advanced. ➤ Under hybrid development activity more number of A x R crosses attempted, generation advancement activity for RxR crosses will be carried out. ➤ Demonstration of biofortified hybrids/variety along with other in National demonstration <i>kharif</i> 2025 and seed increase programme for proposed hybrids will be carried out.
ICAR-IARI, New Delhi	➤ Pusa 1801 (MH 2417) a dual purpose biofortified hybrid with high grain and dry stover yields as well as high iron and zinc content was released and notified (S.O. 4388(E), dated October 8, 2024) for NCT of Delhi. ➤ 5 entries namely PPMI 1322, PPMI 1323, PPMI 1324, PPMI 1325 and PPMI 1326 were nominated to CRP-Bio-fortification Parental Line Trial conducted during <i>Kharif</i> 2024. ➤ 111 bio-fortified hybrids were evaluated and one hundred twenty new hybrids having high iron and zinc content were developed during <i>kharif</i> 2024. ➤ CRP-Biofortification Parental Line Trial (CRPB-PLT) comprising of forty entries evaluated in two replications during <i>Kharif</i> 2024. ➤ In Intermediate Station Trial; one hundred eleven hybrids were tested at IARI, New Delhi during <i>Kharif</i> 2024. Nine hybrids appearing at plot no. 4024 (ICMA 08666 x CTPRLT 17/14), 4028 (ICMA 11222 x HFeIT 17/2), 4042 (ICMA 11222 x KSU 20 Seln-1), 4050 (ICMA 14222 x ICFD 14-R-61), 4075 (ICMA 08666 x CTPRLT 17/22), 4080 (ICMA 11222 x ICFD-16-FZ-11), 4081 (ICMA 11222 x ICFD 14-R-61), 4170 (ICMA 08666 x PPMI 1251) and 4186 (ICMA 11222 x CHI 19/14) were found promising on the basis of yield, iron and zinc content. Range of average grain yield of promising hybrids was 4121 kg/ha to 4883 kg/ha. Iron and zinc content among these hybrids was more than 61 ppm and 37 ppm, respectively. ➤ Genetic variability for biochemical parameters influencing rancidity of pearl millet- A set 255 accessions was evaluated to explore genotypic variations related to biochemical parameters influencing rancidity. ➤ 436 families of cream grain colour and 106 of high iron and zinc content were advanced to F6 generation. ➤ 12 A/B pairs and 279 restorers having high Fe and Zn were maintained and multiplied. <u>Technical Programme 2024</u> ➤ Screening of pearl millet lines for iron and zinc. ➤ Evaluation of Fe and Zn enriched hybrids developed in <i>kharif</i> 2024 involving parental lines possessing high iron and Zinc content.

	➤ More number of hybrids will be generated in kharif 2025 using diverse and high Fe and Zn restorers and A/B pairs. ➤ Nomination of iron and zinc enriched lines will be made to biofortification trials constituted by AICRP-PM.
JAU, Jamnagar	➤ CRP Biofortification Parental Line Trial K-24(CRPB-PLT) consisted of 40 coded breeding lines conducted successfully. ➤ The 7 (2 B lines and 5 R lines) seed contributed for CRP Biofortification Parental Line Trial (CRPB-PLT)i ➤ Under breeding materials generation three R×R and two B×B crosses evaluated and selected progenies will be evaluated in the next season. ➤ The total 110 lines of breeding materials generated and maintained at this station were screened for their Fe and Zn content in which found 101 breeding line having more than 42 ppm Fe and 94 breeding lines having more than 32 ppm Zn. The range observed for iron from 35 to 106 ppm and for zinc from 23 to 89 ppm. ➤ Total six hybrids, tested along with high Fe and Zn content checks at four diverse locations of Gujarat were selected on the basis of yield during summer 2024 (total no. of samples 6 entry × 3 rep × 4 locations = 72 samples) and analyzed for their Fe and Zn content. The range observed in these selected hybrids for iron from 31.0 to 113.0 ppm and for zinc from 19.0 to 59.0 ppm. ➤ During kharif 2024, total nine hybrids, tested along with high Fe and Zn content checks at seven diverse locations of Gujarat were selected on the basis of yield and its grain samples (total no. of samples 9 entry × 3 rep × 7 locations = 189 samples) for nutrients (Fe and Zn) analysis submitted to ICRISAT, Hyderabad. ➤ Total 1163 kg parental lines breeder seed of biofortified hybrid produced and distributed as per the indent. ➤ Total 821 kg TL hybrid seed of biofortified hybrids produced and distributed to farmers. ➤ Under scaling-up activity total 50 FLD's (20 hectare) on biofortified pearl millet hybrids GHB 1129 were conducted. <u>Technical Programme 2025</u> ➤ New hybrids developed based on high Fe and Zn content parental lines will be evaluated at the station and other locations and promising hybrids based on yield and their Fe and Zn level will be promoted or released. ➤ Field trial/nurseries of CRPBPLT breeding lines as per the technical program finalized by sub group leader will be conducted and yield and related traits will be recorded and grain as well as straw samples for Fe and Zn determination will be submitted. ➤ The seed of promising B and R lines having higher content of Fe and Zn will be contribute to sub group leader for the testing in parental line multilocation trial. ➤ The breeding materials generation R × R and B × B crosses will be carried out and existing breeding materials and advanced generation material will evaluated and bulk/progenies selected and screened for Fe and Zn content. ➤ Scaling up activities for released biofortified hybrids will be carried out through conducting FLDs during summer and kharif2025. ➤ The seed increase program during off-season summer nurseries will be undertaken for the promising initial and advanced level hybrids for evaluate them.

ICAR-AICRP-PM, RARI, Jaipur	➤ Trial consisted of 40 lines including checks was conducted successfully during kharif 2024. The observation on different traits was taken and data along with grain samples for analysis was submitted to PC unit. ➤ Ten entries viz., RIB 15178, RIB 15183, RIB 15179, RIB 15184, RIB 15180, RIB 15185, RIB 15181, RIB 15186, RIB 15182 and RIB 15187 also contributed. ➤ Total 49 frontline demonstrations (FLDs) conducted on biofortified hybrids like RHB 233 and RHB 234 at different locations. All the biofortified hybrids recorded higher grain yield over the farmers preferred hybrids. RHB 234 (24.6%) and RHB 233 (20.2 %) recorded higher grain yield over the farmers preferred hybrids. ➤ Maintenance and screening of all available breeding material for quality parameters. ➤ 8 promising A/B pairs viz., ICMA98444 A &B, ICMA92777 A &B, ICMA88004 A &B , ICMA94333 A &B, ICMA98222 A &B, ICMA97111 A &B, ICMA843-22 A &B, ICMA96666 A &B, maintained at the centre. ➤ Maintenance of 60 designated R lines having high iron zinc content. ➤ New hybrids: 120 F1 crosses made and planted in Kharif 2024 ➤ R x R Crosses: 100 crosses made in Summer 2024, F1 planted in Kharif 2024 ➤ B x B Crosses: 24 crosses made in Summer 2024, F1 planted in Kharif 2024 ➤ R x R Advancement for high-Fe and Zn : 15 F2 crosses & 25 F3 progenies planted and selfed in Kharif 2024 ➤ High-Fe and Zn F4 Progenies: 15 progenies grown and selfed in Kharif 2024. <u>Technical Programme 2024</u> ➤ Evaluation of Fe and Zn rich hybrids, Screening of parental lines and more number of hybrids will be generated by using diverse and high Fe and Zn restorers and male sterile lines. ➤ Further evaluation of the segregating materials. ➤ Maintenance activity for available male sterile lines and established restorers having high grain iron and zinc will be carried out. ➤ Nomination of iron and zinc enriched lines will be made to bio-fortification trials.
ICAR-AICRP-PM, MPKV, Dhule	➤ A total of 40 entries were evaluated in CRP Biofortification Parental Trial (CRPB-PLT) in two replications during kharif 2024. ➤ 6 entries were contributed by Dhule center in CRPB PLT K-24. ➤ In all, eleven local Germplasm lines for blast resistant, long ear head, more ear head girth, no. of tillers with high Fe and Zn content were collected. ➤ Breeding material was evaluated during Kharif 2024 and Nine B lines and Thirty four R lines were selected for high Fe (>75 ppm) and Zn (>35 ppm). ➤ Five hybrids were promising over eight locations of state and two promising hybrids were tested in Kharif 2024. ➤ 6 male sterile lines and 10 restorers were maintained by sib mating having > 75 ppm Fe and > 35 ppm Zn. ➤ 120 hybrids were tested in Station trial-I to Station trial-VI in kharif 2024. Twenty two hybrids from different sets were found promising and yielded more than 15 per cent , Fe content >75 ppm and Zn content >35 ppm over recent hybrid check AHB-1200. ➤ Promising 3 biofortified hybrids were tested in University Multi location Trial in kharif 2024 at three locations of MPKV, Jurisdiction, Three hybrids viz, DHBH-

	21075, DHBH-23058 , DHBH-23036 were gave > 18 per cent more yield with Fe > 75 ppm and Zn >35 ppm than check AHB-1200. ➤ Six advanced stage biofortified CMS lines were sown for their maintenance and were freshly included in hybrid development programme. ➤ Four pairs of BC1 ,5 pairs of BC2, six pairs of BC3 and 5 pairs of BC4 backcross generations were evaluated and advanced. ➤ Development of Biofortified B line DHLB-16 B x ICMB-10899, ICMB-98222 x DHLB-28 B, ICMB-13444 x DHLB-23 B, DHLB-10B x ICMB-10899 and DHLB-23 B x ICMB-875. ➤ Advancement of Segregating material B line development programme: 7 F₁s derived from biofortified B X B crosses were raised. Six F₂s, Three F₃s, Three F₄s, Three F₅s derived from biofortified B X B crosses were evaluated and four promising advanced biofortified lines from B X B generations were selected for conversion programme to develop new biofortified CMS lines. <u>Technical Programme 2024</u> ➤ Maintenance of B and R-lines by sib mating, respectively. ➤ Generation advancement of different RxR crosses made by using biofortified parental lines will be carried out during <i>kharif</i> 2025. ➤ Development of experimental hybrids: Hybrid will be developed utilizing biofortified male sterile lines and restorers will be tested in <i>kharif</i> 2025 in Station trials, UMLT and SMLT trials. ➤ Advancement of breeding material – B and R improvement: Growing of F₁, F₂, F₃, F₄ generations.
ICAR AICRP-PM, CCS HAU, Hisar	➤ Breeding material derived from A/B x B, R x R and A x R crosses were advanced/evaluated in kharif 2024 and desirable plants/entries selected for further evaluation. ➤ Effect of different processing treatments such as blanching, malting and fermentation on biofortified pearl millet hybrids, namely, HHB 299 and HHB 311 revealed that crude protein increased in all the treatments as compared to the control. The ash content decreased in malting but increased in blanching and fermentation as compared to control. ➤ A total of 9 lectures/trainings/demonstration activities were carried out to popularize value-added products of pearl millet during the period under report. ➤ 2 non-exclusive licensing (NEL) agreements were entered into with private seed companies for production, sale and marketing of pearl millet hybrid HHB 67 Improved 2. ➤ Evaluation of CRP Biofortification Parental Trial: This trial was planted during kharif 2024 comprising of 40 entries in two replications on 11.07.2024. However, the trial had very less germination and treated as failed. ➤ B x B crosses: F₂s evaluated during k-2023 were planted in 10 row each in kharif 2024 and desirable plants selected. ➤ R x R crosses: Five new R x R F₁ crosses developed earlier were selfed to produce respective F₂s. These F₂s were planted in 10 row each in kharif 2024 and desirable plants selected. ➤ A x R crosses: Seven selected hybrids with checks were evaluated in LST trial in kharif 2024.

	➤ All FLDs conducted with biofortified hybrid HHB 299. ➤ Screening of germplasm for different traits. <u>Technical Programme 2025</u> ➤ Development of pearl millet genotypes/hybrids for high iron/zinc and other micronutrients. ➤ The main focus will be to screen available pearl millet germplasm for different nutritional traits in pearl millet. for e.g. mineral traits like Ca, Mg, Fe, Zn, P, K etc. ➤ Screening of germplasm for different traits
CCS HAU, Hisar	Under the project objective 5 and 6 i.e Development of value added products, ready to cook and multigrain mixtures suitable for mid day meal schemes and Socio-Impact studies for assessment of consumer knowledge, preference and preparedness for biofortified products and sensitization and popularization of biofortified products following activities were performed. ➤ Pearl millet hybrids viz. HHB 311 and HHB 299 were used to find out the effect of different processing methods like blanching, malting and fermentation of sprouts on nutritional composition of pearl millet on dry weight basis. ➤ Ash content of unprocessed pearl millet flour was 2.57 (HHB 299) and 2.39 (HHB 311) per cent. ➤ Malting (48, 60 and 72 hours of germination) resulted in 4.82 to 7.78 per cent reduction of ash in HHB 299 and 4.60 to 7.53 per cent reduction in HHB 311 variety. ➤ The ash content of blanched pearl millet flour was 2.69 (HHB 299) and 2.48 (HHB 311) per cent and that of fermented pearl millet flour was 2.85 (HHB 299) and 2.61 (HHB 311) per cent. ➤ Compared to control, ash content of blanched and fermented flour was significantly higher and it was observed that the ash content of malted flours decreased by 4.60 to 7.78 per cent. On overall mean (variety) basis, ash content of fermented flour (2.73%) was significantly higher, followed by blanched (2.59%), unprocessed (2.48%) and malted flour (2.29 to 2.36%). ➤ A significant decrease was observed in crude protein content of malted flour (72 h) from 10.46 percent to 10.21 percent in HHB 299 and 11.48 percent to 11.24 per cent in HHB 311 variety. However, the crude protein content of all other types of processed flours increased by 3.70 to 7.30 per cent, compared to control in both the varieties. ➤ Currently, multi-millet (Pearl millet, Finger millet and Foxtail millet) traditional recipes such as <i>Halwa</i> and <i>Suhali</i> are being standardized.

- **Technology Intervention given to student, farmers and rural ladies through lectures, trainings and demonstrations**



Technical Programme 2025

- Development of value added products, ready to cook and multigrain mixtures by utilization of biofortified and non-biofortified pearl millet hybrids/ varieties for product development.
- Nutritional analysis of developed value-added products.
- Trainings, lectures, demonstrations, surveys etc. for popularization of pearl millet products.
- Socio-Impact studies for assessment of consumer knowledge, preference and preparedness for biofortified products and sensitization and popularization of biofortified products.

CHAPTER I: BREEDING

Table 1: CRP Biofortification parental line trial (CRPB-PLT) *kharif*-2024 across 6 locations- Mandor, Jaipur, Hisar*, New Delhi, Jamnagar and Dhule.

S. No.	Entry name	Location																													
		Mandor										Jaipur										New Delhi									
		DF	PH	PP	HL	HD	SS	AS	Fe	Zn	DF	PH	PP	HL	HD	AS	Fe	Zn	DF	PH	PP	HL	HD	SS	AS	Fe	Zn				
1	PPMI 1322	61	118	1.5	22	1.9	73	3.3	35.4	31.8	63	104	1.0	13	2.7	3.0	31.6	37.9	59	159	2.7	16	2.9	75	5.0	66.9	45.9				
2	PPMI 1323	48	148	2.5	21	2.3	73	3.3	52.7	39.1	57	164	3.3	19	2.8	4.0	41.1	40.4	58	183	2.6	19	2.2	73	4.0	72.7	46.6				
3	PPMI 1324	61	110	1.8	15	2.3	55	2.3	70.9	48.1	53	131	3.0	19	2.5	3.0	52.2	45.7	64	159	3.0	19	2.4	75	4.5	73	44.6				
4	PPMI 1325	56	150	2.5	21	3.2	65	3.5	57.3	45	59	159	3.0	25	3.2	4.0	43.4	41.6	64	168	3.0	17	2.7	75	4.0	73	53.1				
5	PPMI 1326	62	135	1.8	21	2.4	55	2.5	54.5	43.9	59	145	2.0	22	2.2	4.0	41.3	38.2	56	164	2.7	20	2.6	78	4.0	91.7	57.4				
6	HSR 24-1	52	122	3.0	13	1.9	73	4.3	29.5	25.2	41	132	3.6	19	1.4	3.0	32.3	27.4	45	165	2.7	19	1.6	80	4.0	43.3	31.9				
7	HSR 24-2	61	105	1.5	16	4.0	76	3.0	40.1	39.6	60	125	2.3	14	3.3	4.0	71	52.1	60	126	3.0	17	3.2	78	3.5	60.6	53.5				
8	HSR 24-3	59	105	2.3	14	3.2	68	2.3	41.3	29.6	48	117	3.3	19	2.6	3.0	48.6	34.1	51	139	3.0	19	2.7	73	3.5	53.3	29.6				
9	HSR 24-4	58	105	2.0	11	2.6	48	1.8	52.9	42	52	127	3.0	10	1.6	2.0	63.3	45.9	48	168	2.3	17	2.4	78	3.0	60.8	46.2				
10	150 SB 24	55	145	3.5	17	3.0	60	3.3	61.7	44.3	47	166	4.0	21	2.6	4.0	44.6	50.6	54	200	3.0	26	3.2	78	3.0	57.8	37.6				
11	159 SB 24	55	123	2.0	18	2.1	48	2.3	33.3	33.4	61	121	5.0	27	2.1	4.0	34.3	44.1	63	179	3.0	21	2.2	75	4.5	58.3	45.9				
12	171 SB 24	52	135	2.0	21	2.3	63	2.3	39.8	33.6	52	177	3.0	28	1.7	3.0	41	35.6	64	181	3.0	25	2.3	75	3.0	34.5	29.9				
13	217 SB 24	61	108	1.5	20	2.4	47	2.3	40.8	30.7	68	128	3.3	20	3.3	3.0	44.3	39.2	57	170	2.3	25	3.0	73	4.5	67.3	31.5				
14	229 SB 24	55	148	2.3	27	2.9	53	2.0	49.6	33.4	68	137	2.6	22	2.6	3.0	55.8	47.7	57	205	3.0	27	3.2	78	3.5	71.8	42.3				
15	JMSB 20213	60	117	2.8	21	2.9	60	2.3	48.9	37.1	75	83	3.0	22	3.5	2.0	52	45.4	60	139	3.0	21	2.4	79	3.5	59.9	46.5				
16	JMSB 20227	64	85	3.0	16	3.8	80	3.3	74.6	38.4	-	-	-	-	-	-	-	-	75	103	3.0	13	2.4	73	3.0	121	72.3				
17	JMSB 20229	64	163	2.8	35	3.2	70	2.3	43.4	33.8	71	204	3.0	23	2.1	3.0	60.4	56.4	67	118	2.4	28	2.7	82	3.0	68.3	41.7				
18	DHL CRP 01	55	85	2.0	11	2.7	40	2.0	58.9	38.5	-	-	-	-	-	-	-	-	53	121	3.0	15	2.4	75	3.0	89.2	47.3				
19	DHL CRP 02	61	138	2.5	17	3.1	44	2.5	51.5	41.6	58	162	6.0	27	2.9	3.0	58.8	50.9	57	188	3.0	22	2.8	78	4.0	62.6	43				
20	DHL CRP 03	63	143	2.5	20	3.4	63	4.3	59.2	40.5	52	120	4.0	22	3.4	3.0	-	-	57	178	2.7	23	3.2	78	4.0	106	69.4				
21	DHL CRP 04	62	148	2.3	21	3.5	50	3.3	60.2	41.6	53	164	5.3	21	3.2	3.0	70.2	40.2	63	201	2.8	25	3.1	78	4.0	70	36.6				
22	DHL CRP 05	63	153	2.0	23	3.6	55	2.3	51	32.5	60	151	5.0	24	3.6	3.0	64	45.8	57	179	3.0	23	3.3	78	3.5	87.7	41.8				
23	DHL CRP 06	60	153	3.0	23	3.5	55	2.3	51	41.5	60	152	3.0	29	3.2	3.0	56.8	49.2	62	214	3.0	22	3.3	79	3.0	60.3	42.3				
24	RIB 15178	58	105	1.5	15	2.6	50	2.3	53.5	35.5	-	-	-	-	-	-	-	-	62	170	2.6	21	2.7	73	3.5	71.5	49.8				
25	RIB 15179	64	105	1.5	16	3.0	80	2.3	56.8	39.4	60	138	3.3	27	2.5	3.0	44	37.9	68	168	2.8	25	2.7	78	3.0	49	31.3				
26	RIB 15180	57	103	2.3	17	3.0	50	2.3	44.4	34.8	-	-	-	-	-	-	-	-	67	135	3.0	20	3.1	73	3.0	86.7	44				
27	RIB 15181	65	133	2.5	19	3.1	48	2.3	38	45.1	48	145	4.0	21	3.1	2.0	42.8	46.1	69	170	3.0	21	2.3	70	3.0	44.3	35.3				
28	RIB 15182	51	135	2.5	19	3.2	73	2.3	26.5	27.5	56	131	1.0	25	2.6	3.0	25	37.6	59	174	2.3	23	2.6	73	4.0	41.1	33.6				
29	RIB 15183	64	128	1.5	19	2.4	33	2.3	42.2	33.2	58	92	1.0	18	2.8	2.0	-	-	74	159	3.0	19	2.9	70	2.5	58.8	48.5				
30	RIB 15184	59	155	2.5	24	2.9	75	3.3	56.7	36.4	-	-	-	-	-	-	-	-	74	169	3.0	22	2.4	78	3.0	63.3	41.9				
31	RIB 15185	64	113	1.8	19	3.8	85	3.8	58.2	44.7	68	103	1.0	22	3.8	2.0	79.6	48.1	72	119	2.5	22	3.6	73	3.0	80.4	50.1				
32	RIB 15186	65	100	2.0	18	3.9	75	3.0	54.1	35.5	-	-	-	-	-	-	-	-	72	116	3.0	17	3.1	70	2.5	80	46				
33	RIB 15187	57	138	2.3	20	3.6	65	2.8	44.5	35.8	75	74	1.0	14	1.6	2.0	62.8	43.7	55	133	3.0	18	2.3	77	3.5	54.5	40.3				
34	MIR 1117	64	125	3.0	18	1.8	85	3.3	53.1	39.1	53	133	1.0	17	1.6	2.0	56.1	68.4	57	148	2.6	20	1.7	79	4.0	57.1	35.6				
35	MIR 1406	55	103	2.3	12	3.3	70	3.5	60.3	56.3	56	87	1.0	12	2.7	2.0	49.8	55.9	58	156	3.0	19	2.7	75	3.5	47.6	56.6				
36	MIR 1716	54	130	4.0	19	1.9	83	4.0	37.1	34.7	56	145	2.0	23	1.7	3.0	-	-	62	249	3.0	27	1.8	77	3.5	47.9	43				
37	MIR 1806	53	120	3.8	22	2.0	80	4.0	52.5	39.8	75	113	2.3	15	1.1	2.0	49	54.4	71	194	2.8	18	1.4	77	3.0	49.5	47.2				
38	MIR 1907	53	105	2.8	12	3.4	88	4.5	43.7	41.7	45	122	3.0	21	2.7	2.0	81.2	58.6	57	151	2.5	16	2.8	83	4.0	49.9	62.3				
39	ICMB 98222 (C)	53	89	2.3	20	2.7	63	3.3	51.8	37.7	65	89	2.0	13	2.0	2.0	85.5	64.9	53	118	3.0	15	3.2	75	3.0	105	70.6				
40	Dhanshakti (C)	45	162	2.8	23	2.8	88	4.0	65.9	42.1	41	122	2.0	17	2.2	2.0	72.8	47.3	45	229	3.0	25	2.5	75	3.5	106	67.5				

* Trial vitiated at Hisar

cont...

CHAPTER I: BREEDING

Table 1: CRP Biofortification parental line trial (CRPB-PLT) *kharif*-2024 across 6 locations- Mandor, Jaipur, Hisar*, New Delhi, Jamnagar and Dhule.

S. No.	Entry name	Location																									
		Jamnagar							Dhule								Grand Mean										
		DF	PH	PP	SS	AS	Fe	Zn	DF	PH	PP	HL	HD	SS	AS	Fe	Zn	DF	PH	PP	HL	HD	SS	AS	Fe	Zn	
1	PPMI 1322	58	134	2.0	55	2.0	46	45	57	149	2.0	16	2.8	100	2.0	46.5	32.7	60	133	1.8	17	2.5	76	3.1	45.3	38.7	
2	PPMI 1323	58	154	2.2	75	3.3	52	48	58	189	2.5	21	3.0	88	1.5	54.3	44.4	56	167	2.6	20	2.6	77	3.2	54.5	43.6	
3	PPMI 1324	58	129	2.0	55	2.3	65	56	56	150	2.5	21	2.6	83	1.5	66.5	53.3	58	136	2.5	18	2.5	67	2.7	65.4	49.5	
4	PPMI 1325	58	148	2.2	65	2.8	53	50	54	165	2.5	23	3.3	95	2.5	53.2	36.5	58	158	2.6	21	3.1	75	3.4	56	45.3	
5	PPMI 1326	57	135	2.2	55	2.3	49	46	52	178	2.5	22	2.9	83	2.0	70.3	39.4	57	151	2.2	21	2.5	68	3.0	61.4	44.9	
6	HSR 24-1	47	117	5.1	45	1.5	42	39	45	156	4.0	19	2.1	45	1.0	54.4	38.6	46	138	3.7	17	1.7	61	2.8	40.3	32.3	
7	HSR 24-2	60	131	2.7	55	2.5	54	40	61	152	2.0	20	3.6	100	2.0	55.5	44.1	60	128	2.3	16	3.5	77	3.0	56.2	45.8	
8	HSR 24-3	52	115	2.7	45	2.3	51	40	51	135	1.5	20	3.0	88	1.5	45.6	31.4	52	122	2.6	18	2.9	68	2.5	47.9	32.9	
9	HSR 24-4	50	120	3.1	35	1.8	81	56	45	157	3.5	21	2.9	40	1.0	74.4	43.7	51	135	2.8	15	2.4	50	1.9	66.5	46.8	
10	150 SB 24	48	156	3.5	78	2.8	64	48	52	210	2.5	26	3.3	100	2.0	55.3	42.4	51	175	3.3	23	3.0	79	3.0	56.7	44.5	
11	159 SB 24	59	138	2.8	75	2.8	30	40	56	164	1.5	22	2.2	93	2.0	33.1	39.1	59	145	2.9	22	2.2	73	3.1	37.7	40.5	
12	171 SB 24	56	159	2.4	78	3.3	36	28	54	165	3.0	30	2.8	93	2.5	44	35.7	55	163	2.7	26	2.3	77	2.8	38.9	32.6	
13	217 SB 24	55	141	2.2	75	3.3	49	34	53	162	1.0	25	3.2	100	3.0	47.6	32.9	59	142	2.1	22	3.0	74	3.2	49.8	33.6	
14	229 SB 24	55	140	1.9	75	3.0	54	38	54	165	1.5	24	3.3	98	2.5	52.4	30.9	58	159	2.3	25	3.0	76	2.8	56.8	38.5	
15	JMSB 20213	58	120	1.9	60	2.8	59	46	59	145	2.0	20	3.2	88	1.5	61.3	38.2	62	121	2.5	21	3.0	72	2.4	56.3	42.6	
16	JMSB 20227	66	89	2.0	30	2.0	112	64	68	154	2.0	25	2.5	78	1.0	81.1	46.4	68	108	2.5	18	2.9	65	2.3	97.2	55.3	
17	JMSB 20229	66	135	1.5	35	2.0	64	48	68	143	1.5	26	2.9	83	1.0	48.8	33.5	67	152	2.2	28	2.7	67	2.3	57	42.7	
18	DHL CRP 01	54	95	1.7	30	1.5	67	44	52	125	2.5	20	3.3	68	1.5	84.6	26.9	54	106	2.3	15	2.8	53	2.0	75	39.1	
19	DHL CRP 02	55	156	2.1	60	3.0	41	36	54	179	2.5	23	3.5	95	2.5	67.2	37.1	57	164	3.2	22	3.1	69	3.0	56.3	41.8	
20	DHL CRP 03	54	142	2.3	60	3.0	59	44	56	186	2.0	25	3.5	90	3.0	68.7	50	56	154	2.7	23	3.4	73	3.5	73.1	50.9	
21	DHL CRP 04	56	168	2.2	80	3.0	66	43	63	182	2.0	24	3.3	95	2.0	55.6	33	59	172	2.9	23	3.3	76	3.1	64.3	38.9	
22	DHL CRP 05	60	145	1.5	60	2.8	56	38	58	172	2.0	26	3.4	95	2.0	60.2	35.4	59	160	2.7	24	3.5	72	2.7	63.8	38.8	
23	DHL CRP 06	61	139	2.1	75	3.0	61	47	57	186	2.5	24	3.4	100	1.5	56.7	36.1	60	169	2.7	25	3.4	77	2.6	57.2	43.1	
24	RIB 15178	61	127	1.7	55	2.3	83	51	51	175	2.5	27	2.9	90	2.0	64.1	32.9	58	144	2.1	21	2.7	67	2.5	67.9	42.2	
25	RIB 15179	62	115	1.6	60	2.8	88	38	57	143	1.0	18	2.9	58	1.5	55.3	37.4	62	134	2.0	21	2.8	69	2.5	58.6	36.8	
26	RIB 15180	59	98	1.8	53	1.8	80	39	60	98	1.5	21	3.0	98	1.5	63.9	35.4	61	108	2.1	19	3.0	68	2.1	68.7	38.4	
27	RIB 15181	67	137	1.8	50	2.5	50	44	58	169	2.5	28	2.9	85	2.5	41.3	31.2	61	151	2.8	22	2.8	63	2.5	43.3	40.4	
28	RIB 15182	56	137	1.8	60	2.5	50	44	59	167	2.0	26	3.1	90	2.0	39	34	56	149	1.9	23	2.9	74	2.8	36.4	35.3	
29	RIB 15183	68	144	1.6	60	2.5	43	41	64	165	2.0	25	3.0	80	1.5	56	33.8	65	137	1.8	20	2.8	61	2.2	50	39.2	
30	RIB 15184	66	162	2.3	88	3.3	58	51	65	167	1.0	22	3.3	88	1.0	62.3	41.4	66	163	2.2	23	2.9	82	2.6	60.1	42.6	
31	RIB 15185	69	133	2.0	40	2.3	80	54	71	109	1.5	21	3.3	78	1.0	55	35.9	69	115	1.8	21	3.6	69	2.4	70.6	46.6	
32	RIB 15186	69	113	1.7	48	2.8	73	49	69	103	2.5	18	3.3	83	1.0	97.3	52	69	108	2.3	17	3.4	69	2.3	74.9	48.5	
33	RIB 15187	54	130	2.0	40	2.3	61	42	51	157	3.0	24	2.9	63	1.0	86.7	49.1	58	126	2.3	19	2.6	61	2.3	61.9	42.2	
34	MIR 1117	59	140	3.5	70	2.5	52	40	57	150	2.0	20	2.0	73	1.0	39.7	36.9	58	139	2.4	19	1.8	77	2.6	51.6	44.1	
35	MIR 1406	56	110	2.5	50	2.1	62	52	55	147	3.0	14	3.1	85	1.0	53.6	46.4	56	120	2.4	14	2.9	70	2.4	54.7	53.5	
36	MIR 1716	56	154	3.8	65	2.6	45	45	50	184	4.0	26	2.2	83	1.0	42.8	41.6	55	172	3.4	24	1.9	77	2.8	43.1	41	
37	MIR 1806	58	137	5.3	55	2.1	49	51	59	167	3.0	25	1.8	63	1.0	51	40.4	63	146	3.4	20	1.6	69	2.4	50.1	46.6	
38	MIR 1907	58	120	3.3	55	2.5	72	49	58	132	2.0	16	2.9	90	1.5	54.4	50.9	54	126	2.7	16	2.9	79	2.9	60.2	52.6	
39	ICMB 98222 (C)	53	115	1.6	55	2.3	89	49	59	118	1.0	14	2.9	95	1.0	78.5	42.7	56	106	2.0	15	2.7	72	2.3	81.9	52.9	
40	Dhanshakti (C)	46	161	2.4	70	2.8	85	51	45	174	2.5	24	3.0	95	2.0	67.2	35.8	44	169	2.5	22	2.6	82	2.9	79.4	48.6	

DF: Days to 50% flowering, PH: Plant height (cm), PP: Panicle/Plant, HL: Head length (cm), HD: Head diameter, SS: seed set (%), AS: Agronomic Score, Fe (ppm) Zn (ppm)

TRIALS MONITORING REPORT

CHAPTER I: BREEDING

ICAR-AICRP on Pearl millet Monitoring Report-Kharif 2024

Team No.	Monitoring Team	Name of Centre	Date of Monitoring	Remarks/Comments	Overall Remarks
Team 5	Dr. R. S. Choudhary, ICAR-AICRP on Pearl millet, Jodhpur	CCS HAU, Hisar	26.09.2024	Breeding: All allotted trials were conducted as per approved technical programme CRP Biofortification Trials ICAR-ICRISAT Trials Agronomy: All 5 allotted trials were conducted as per approved technical programme Pathology: All 8 pathological trials successfully conducted as per technical programme	Good
	Dr. Dr. Ruchika Bhardwaj, Breeder, PAU, Ludhiana			Breeding: All allotted trials were conducted as per approved technical programme	Good
Team 2.A.	Dr. Vikas Khandelwal, Breeder, ICAR-AICRP on Pearl millet, Jodhpur- Convenor	RRS, CCS HAU , Bawal	27.09.2024	Breeding: All allotted trials were conducted as per approved technical programme	Good
		ARS, SKRAU, Bikaner	29.09.2024	Breeding- All 5 allotted trials were conducted as per approved technical programme Two Station Trials conducted Agronomy- All 5 allotted trials were conducted as per approved technical programme	Good All the experiments are maintained well.
Team 2.B.	Dr. Manoj Kumar, Assistant Professor (Agronomy), AICRP on Pearl millet, Jodhpur- Convenor	ARSS, Nagaur	29.09.2024	Breeding- Both allotted trials were conducted as per approved technical programme	Good
		ARS, Fathehpur Shekhawati,	27.09.2024	Breeding- Both allotted trials were conducted as per approved technical programme Entomology- All 8 allotted trials were conducted as per approved technical programme	Good
Team 3.	Dr. J. P. Bisnoi Assistant Professor (Pathology) AICRP on Pearl millet, Jodhpur - Member	SKNCOA, SKNAU	28.09.2024	Breeding- Both allotted trials were conducted as per approved technical programme	Good
	Dr. R. K. Pandya, Professor (Plant Pathology), ICAR- AICRP-PM, MRS, Gwalior- Convenor	ICAR-IARI, New Delhi	28.09.2024	Breeding- Both allotted trials were conducted as per approved technical programme CRPB-PLT Pathology: One AICRP and 1 PMPTVN trial conducted successfully	Good
	Dr. Susma Tiwari, Principal Scientist (Breeding), ICAR- AICRP-PM, MRS, Gwalior	PAU, Ludhiana	27.09.2024	Breeding- Both allotted trials were conducted as per approved technical programme One EIJBFT & 2 Station trail	Good

CHAPTER I: BREEDING

Team No.	Monitoring Team	Name of Centre	Date of Monitoring	Remarks/Comments	Overall Remarks
		Kaveri Seed, Alwar	29.09.2024	Breeding- Allotted trial was conducted as per approved technical programme	Good
Team 4.	Dr. Dev Vart, Senior Scientist (PB), CCSHAU, Hisar Dr. Vinod Malik, Assistant Professor-Pathology, CCSHAU, Hisar	RARI, Durgapura Jaipur	30.09.2023	Breeding- All 5 allotted trials were conducted as per approved technical programme CPB-PLT, 2 Station trial	Good
				Agronomy- All 5 allotted trials were conducted as per approved technical programme	All the experiments are maintained well.
				Entomology- All 7 allotted trials were conducted as per approved technical programme	Good
				Plant Pathology- All 8 pathological trials successfully conducted as per technical programme	Satisfactory
				Plant Physiology - All trials Failed	Failed
		ARSS, Tabiji Ajmer	By Video calling monitored	Breeding- All allotted trials were conducted as per approved technical programme	Good
		Jaipur, SeedWorks	30.09.2024	Breeding- Both allotted trials were conducted as per approved technical programme	Good
Team 6.A.	Dr. S. P. Singh, Principal Scientist (GPB), IARI, New Delhi- Convenor Dr. Minakshi Grover, Principal Scientist (Microbiology), IARI, New Delhi- Member	Mahindra, Agra	30.09.2024	Breeding- Allotted Trial was conducted as per approved technical programme	Good
		Hytech Seed India, Aligarh	30.09.2024	Breeding- Both allotted trials were conducted as per approved technical programme	Good
		Kaveri Seed Company Ltd., Bichpuri	30.09.2024	Breeding- Allotted trial were conducted as per approved technical programme	Good
		Kamadgiri Crop Sci. Ltd., Raipura	30.09.2024	Breeding- Both allotted trials were conducted as per approved technical programme	Good
Team 6.B.	Dr. Nirupama Singh, Principal Scientist (GPB), IARI, New Delhi- Convenor	Ganga Kaveri, Alwar	04.10.2024	Breeding- Allotted trial were conducted as per approved technical programme	Good
		Nuziveedu	04.10.2024	Breeding- Allotted trial were conducted as per approved technical programme	Good

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Team No.	Monitoring Team	Name of Centre	Date of Monitoring	Remarks/Comments	Overall Remarks
	Dr. R. S. Bana Principal Scientist (GPB), IARI, New Delhi- Convenor	Seeds, Bharatpur		approved technical programme	
Team 7.	Dr. S.K Jain, Assoc. Prof. (PB&G) & Incharge ICAR- AICRP-PM, RARI, Durgapura Jaipur- Convenor	RVSKVV, Gwalior and Morena	07-08, 10.2024	At RVSKVV, Gwalior Breeding- All 5 allotted coordinated trials were conducted as per approved technical programme Station Trials 04 Station trials conducted	Good
	Dr. Seema Sharma, Assoc. Prof. (Agronomy), RARI, Durgapura Jaipur- Member			Pathology- All 8 coordinated trials successfully Conducted as per approved technical programme	
	Dr. R.S. Bajia, Asstt. Prof. (Entomology), RARI, Durgapura Jaipur- Member		07-08, 10.2024	At Morena- Allotted coordinated trial (2) were conducted as per approved technical programme *RLBCAU, Jhansi crop harvested at the time of visit.	Good
Team 9.	Dr. C.B. Patil, Pearl Millet Agronomist, AICRP-PM, NARP, Aurangabad-Member Dr. D.G. Hingole, Pathology, AICRP-PM, NARP, Aurangabad-Member Dr. D. K. Patil, Breeder AICRP-PM, NARP, Aurangabad-Member	MRS, Jamnagar	09.10.2024	Breeding- All 5 allotted coordinated trials were conducted as per approved technical programme One station Trial	Good
				Agronomy- All 5 allotted trials were conducted as per approved technical programme	Satisfactory
				Plant Pathology- All 8 coordinated trials successfully Conducted as per approved technical programme	Good
				Plant Physiology- All 4 trials allotted were conducted as per technical programme	-
				Entomology- All 9 trials conducted as per approved technical programme.	Good
Team 8.	Dr. P.S. Shekhawat, Director Research, SKRAU, Bikaner Dr. P. C. Gupta, Breeder SKRAU, Bikaner	RRS, Anand	Not Monitored	Breeding- One trial allotted was conducted as per technical programme	-
		ARSS, Talaja		Entomology- All 4 allotted trials were conducted as per approved technical programme	-
		Ahmadabad, Biostadt		Breeding- One allotted trial was conducted as per approved technical programme	-

CHAPTER I: BREEDING

Team No.	Monitoring Team	Name of Centre	Date of Monitoring	Remarks/Comments	Overall Remarks
		Dehgam, Kaveri Seed		Breeding- All 2 allotted trials were conducted as per approved technical programme	-
		MRS, Deesa		Breeding- All 3 allotted trials were conducted as per approved technical programme	-
Team 12.	Dr. K. Iyanar, Professor (PBG), AICRP-PM, TNAU, Coimbatore -Convener	RARS, Vijayapur	15.10.2024	Breeding- All 6 trials allotted were conducted as per approved technical programme 12 Station trials	Satisfactory
				Agronomy- All 5 allotted trials were conducted as per approved technical programme	Satisfactory
	Dr. V. Vasuki, Assoc. Prof., (Agronomy), TNAU Coimbatore - Member	ARS, Malnoor	16.10.2024	Breeding- All 4 trials allotted were conducted as per approved technical programme	Good
		KSSC, Dharwad, Karnataka	15.10.2024	Breeding- Trial allotted was conducted as per approved technical programme	Good
	Dr. I. Johnson, Assoc. Prof., (Pathology), TNAU, Coimbatore - Member	ARS, Anantpuram	17.10.2024	Breeding- All 6 trials allotted were conducted as per approved technical programme	Good
Team 14.	Dr. K.K. Barhate, Professor (Pearl Millet Breeding) AICRP on Pearl Millet, Bajra Research Scheme, COA,(MPKV), Dhule - Convenor	TNAU, Coimbatore	05.10.2024	Breeding- All 6 trials allotted were conducted as per approved technical programme 1 IIMR & 1 Station trial	Good
				Agronomy- All 5 allotted trials were conducted as per approved technical programme	Well managed
				Plant Pathology- All 5 coordinated trials Conducted as per approved technical programme	Good
	Dr. C.S.Thakre, Asstt. Prof.(Pathology.) AICRP-PM,COA, Dhule - Member Sh. R.T. Suryavanshi, Asstt. Prof. (Agronomy.) AICRP-PM,COA, Dhule-Member	UOM, Mysore	07.10.2024	Plant Pathology- All 8 coordinated trials Conducted as per approved technical programme	Good
Team 13.	Dr. Babar Sadhana R., Scientist, (Agronomy) &	ARS, Perumallapalle	06.10.2024	Breeding- All 2 trials allotted were conducted as per approved technical programme	Good

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Team No.	Monitoring Team	Name of Centre	Date of Monitoring	Remarks/Comments	Overall Remarks
	Incharge AICRP-PM, RRS, Vijaypur - Covener Dr. B.K. Athoni, Jr. Breeder, AICRP on Pearl Millet, RRS, Vijaypur - Member			Agronomy- One allotted trials was conducted as per approved technical programme.	Good
				Plant Pathology- All 2 coordinated trials and 1 Epidemiology trial, 1 PMBVNconducted as per approved technical programme	Maintained properly
		ARS, Vizianagaram	05.10.2024	Breeding- All 3 trials allotted were conducted as per approved technical programme	Good
				Plant Pathology- All 2 coordinated trials Conducted as per approved technical programme. PMBVN trial	Maintained properly
		RARS, Palem	05.10.2024	Breeding- All 4 trials allotted were conducted as per approved technical programme	Good
		Toopran Medak, NU Genes	05.10.2024	Breeding- One allotted trial were conducted as per approved technical programme.	Good
Team 10.	Dr. Chandra Nayak, Professor (Patholgy), AICRP-PM, Mysore – Convenor Dr. L Madhavalatha, Breeder, AICRP-PM, Anantpuram Member	NARP, Aurangabad	15.10.2024	Breeding- All 6 trials allotted were conducted as per approved technical programme 3 ICRISAT and one station trial	Satisfactory
				Agronomy- All 5 allotted trials were conducted as per approved technical programme	Managed properly
				Entomology- 4 Trials were harvested before the team's visit	Good
				Plant Pathology- All 8 coordinated trials Conducted as per approved technical programme	Satisfactory
		Nath Seeds, Paithan	14.10.2024	Breeding- Two trials allotted were conducted as per approved technical programme	Satisfactory
		Aurangabad, Seed Works	14.10.2024	Breeding- All 2 trials allotted were conducted as per approved technical programme	Satisfactory
Team 11.	Dr. H. M. Bhuva, Agronomist, RS Bajra, Jamnagar – Convener	COA, Dhule	25.09.2024	Breeding- All 6 Coordinated trials allotted were conducted as per approved technical programme	Satisfactory
	Dr. S. K. Parmar, RS Bajra, Jamnagar-Member			Agronomy- All 4 allotted trials were conducted as per approved technical programme	Good
	Dr. R. J. Chaudhari, RS Bajra, Jamnagar-Member			Plant Pathology- All 8 coordinated trials Conducted as per approved technical programme	Satisfactory