Hybrid Rice

Excellent progress has been made in hybrid rice research and development in our country. As a result of concerted efforts over the last three decades, 137 hybrids have been released for commercial cultivation in different rice growing states across the country. Among these, 42 hybrids have been developed by the public sector, while the remaining 95 have been developed by the private sector. Important role is being played by the private sector seed companies in hybrid rice research and development in the country. During the year 2022, hybrid rice was planted in an area of 3.5 m. ha. and more than 80% of the total hybrid rice area is in the states of Uttar Pradesh, Jharkhand, Chhattisgarh, Madhya Pradesh, Odisha and Haryana. During this year (2022-23), four rice hybrids *viz.*, AZ 8433 DT, DRRH 4, PAC 837 plus and NPH 242 were released and notified by the (Central Sub Committee on Crop Standards, Notification & Release of Varieties (CSCCSN & RV) for commercial cultivation in different parts of the country. Among these AZ 8433 DT (released for Haryana, Punjab, Uttar Pradesh, Bihar, Jharkhand, Odisha, Madhya Pradesh, Chhattisgarh, Telangana, Andhra Pradesh, Tamil Nadu, and Karnataka and DRRH 4 (released for Punjab, Odisha, Chhattisgarh, Tripura, Gujarat), are central releases; PAC 837 plus and NPH 242 are state (Assam) releases.

For identification of high yielding and widely adaptable hybrids, a national level three-tier system of evaluation is being adopted. In this system, the hybrids developed by constituent funded and voluntary centres of All India Coordinated Research project on Rice (AICRPR), and those developed by private sector seed companies, having their own R&D are pooled together based on maturity groups in early (<120 days), mid early (121-130 days) and medium (131-140 days) trials. In addition, one more trial is also constituted aiming to develop and evaluate medium slender (MS) grain type hybrids. IHRTs are conducted in approximately 30 or more locations across the country and these trials consist of test hybrids, national varietal/hybrid checks, zonal and local varietal checks in the respective maturity and grain type groups.

The location data is considered for analysis and the hybrids are promoted to the next stage of testing i.e., Advance Varietal Trial-1 (AVT-1) based on criterion mentioned in the proceeding of 56th ARGM (p14-15).

1. The significance of the trial is determined based on F-value. If the F value at individual location is not significant, data from such locations are not considered for assessment of entries.

2. 'Minimum experimental mean yield of 4 t/ha, for inbreds and 5 t/ha for hybrid trial is a requirement for inclusion of location data for assessment of entries'. However, it has been slightly modified this year to include the yield data up to 4 t/ha for IHRTs as many locations were getting dropped, if 5 t/ha limit is applied.

3. CV for trial acceptance is in the range of 5-20%.

4. CD @ 5% is considered as a criterion for promotion of entries.

During Kharif 2022, four hybrid trials were conducted and evaluated, and test locations are given in Table-1 and Table-2 respectively.

Table-1: Details of Initial Hybrid Rice Trials conducted during Kharif 2022

S. No	Name of the trial	No. of hybrids evaluated		No. of test locations
		Public	Private	
1.	Initial Hybrid Rice Trial - Early	5	16	36
2.	Initial Hybrid Rice Trial - Mid Early	6	21	35
3.	Initial Hybrid Rice Trial - Medium	6	16	37
4.	Initial Hybrid Rice Trial - Medium Slender	7	5	31

Table 2: Zone wise test centers for Initial Hybrid Rice Trials, Kharif 2022

Zone	No. of Locations	Name of Locations
Zone I (North Western Hills)	1	Malan (MLN)
Zone II (Northern)	5	**Public Sector:** ICAR-IARI New Delhi (ND), Kaul (KUL), Ludhiana (LDN), Nagina (NGN), Pantnagar (PNT)
Zone III (Eastern)	11	**Public Sector:** Chinsurah (CHN), Chiplima (CHP), ICAR-NRRI Cuttack (CTK), Dhangain (DNG),Masodha (MSD), Ranchi (RCI), Varanasi (VRN) **Private Sector:** RasiSeeds (RAS)**,**Syngenta (SGA), Trimurthi Seeds (TMT), Limagrain (LIG),
Zone IV (North Eastern)	2	**Public Sector:** Titabar (TTB), Arundhutinagar (ARD)
Zone V (Central)	8	**Public Sector:** Jabalpur (JBP), Raipur (RPR), Sakoli (SKL), Sindewahi (SND),Waraseoni (WRS) **Private Sector:** VNR Seeds (VNR), Ankur Seeds (ANK), Rasi Seeds (RAS)
Zone VI (Western)	9	**Public Sector:** Dabhoi (DBI), Karjat (KJT), Navsari (NVS),Nawagam (NWG), Phondaghat (PDG), Radhanagari (RDN), Shirgaon (SHR), VadgaonMaval (VDG), Waraseoni (WRS)
Zone VII (Southern)	12	**Public Sector:** Aduthurai (ADT),Bapatla (BPT),Brahmavar (BRM), Coimbatore (CBT), ICAR-IIRRHyderabad (IIRR), Karaikal (KRK),Mandya (MND), Maruteru (MTU), Ragolu (RGL),Warangal (WGL) **Private Sector:** Bayer Seeds (BAY), Tierra Seeds (TIE)

1. Initial Hybrid Rice Trial - Early (IHRT-E)

Twenty one test hybrids (16 and 5 from private and public sector respectively) were evaluated in 36 locations comprising Zone I, II, III, IV, V, VI and VII along with national hybrid check (US 314), national varietal check (CO-51), zonal varietal checks (PR-124 - Zone II; NDR-97 - Zone III; Luit - Zone IV; Shabhagidhan - Zone V & VI; MTU-1153 - Zone VII) and local varietal checks of their respective locations. The details of the composition of the trial are given in Table 3.

Table 3: Composition of Initial Hybrid Rice Trial - Early (IHRT-E), Kharif 2022

S. No.	IET No.	Name	Nominating Agency
1	30554	TMRH-101	Trimurthi Seeds, Hyderabad
2	29686	CPR414 (Repeat)	CP Seeds, Bangalore
3	30555	RRX-3276	Rasi Seeds, Hyderabad
4	30556	NPH-X4	Nuziveedu Seeds, Hyderabad
5	30557	VNR-231	VNR Seeds, Raipur
6	30558	NPH-X69	Nuziveedu Seeds, Hyderabad
7	30559	KJTRH-2106	RARS, Karjat
8	30560	PHI-22103	Pioneer, Hyderabad
9	30561	JKRH-1170	JK Seeds, Hyderabad
10	30562	NRH-307	Nirmal Seeds, Jalgaon
11	30563	JRH-135	JNKVV, Jabalpur
12	29722	RNRH-15 (Repeat)	RRC, PJTSAU, Hyderabad
13	30564	JGLH-337	RARS, Jagtial
14	30565	KAVERI-7374	Kaveri Seeds, Hyderabad
15	30566	Suryanath-999	Shinex UQ Genetic, Hyderabad
16	30567	MEPH-167	MAHYCO, Hyderabad
17	30568	Bio-271	Bio-seeds, Hyderabad
18	30569	PHI-22101	Pioneer, Hyderabad
19	30570	LG-90204	Limagrain, Hyderabad
20	30571	PHI-22102	Pioneer, Hyderabad
21	30572	IIRRH-164	ICAR-IIRR, Hyderabad
	-	US-314 (NCH)	National Check Hybrid
	-	CO-51 (NCV)	National Check Variety
	-	PR-124/Luit/NDR-97/ Sahbhagidhan/MTU-1153 (ZCV)	Zonal Check Variety
	-	Local Check Variety (LCV)	Local Check Variety

Northern: PR-124; North Eastern: Luit; Eastern: NDR-97; Central and Western: Sahbhagidhan; Southern: MTU-1153

The detailed location wise and zone wise performance for grain yield and days to 50% flowering (DFF) is given in Appendix 1&2 respectively. The overall DFF ranged from 80 to 97 days. The national varietal check (CO-51) had overall mean of 88 days, zonal check of 89 days, local check of 90 days and national hybrid check (US 314) of 89 days. The grain quality characteristics of test entries are given in Appendix 3.

Based on the overall mean, 14 hybrids *viz.*, PHI 22103, PHI 22101, KAVERI 7374, JKRH 1170, RRX 3276, NPH-X4, NPH-X69, LG 90204, VNR 231, IIRRH 164, CPR 414, PHI 22102, Bio 271 and JRH 135 significantly out yielded the best varietal and hybrid checks (Table 4). Besides these, based on zonal means, two hybrids *viz.*, MEPH 167 (Zone II) and KJTRH 2106 (Zone VII) were found promising. Of these 16 hybrids, six hybrids *viz.*, RRX 3276, LG 90204, VNR 231, IIRRH-164, Bio 271 and MEPH 167 are promoted to AVT-1-E-

TP. The remaining 10 hybrids *viz.*, PHI 22103, PHI 22101, KAVERI 7374, JKRH 1170, NPH-X4, NPH-X69, CPR 414, PHI 22102, JRH 135 and KJTRH 2106 are not meeting grain quality requirements / exceeding the DFF limit of 90 days. Among these two hybrids *viz.*, KAVERI 7374 and JKRH 1170 were observed to have the permissible DFF limits in the Zones, they were found promising: KAVERI 7374 - Zone II (91 days); Zone V (90 days); JKRH 1170 - Zone V (91 days). Hence, by giving benefit of doubt, these two hybrids are also promoted to AVT-1-E-TP. Remaining eight hybrids were dropped from further evaluation.

Table 4: Promising hybrids identified in IHRT-E, Kharif 2022

S. No	Hybrid	IET No	DFF	Grain Type	Mean Yield (kg/ha)						Remarks
					Over all	Zone II	Zone III	Zone V	Zone VI	Zone VII	
1	PHI-22103	30560	97	LB	7192 *#	7617 *#	6841	5815 *#	6811 *#	8763 *#	Dropped high DFF, low HRR - 50.0
2	PHI-22101	30569	93	LB	6985 *#	8118 *#	7063 *#	5596	6720	7931 *#	Dropped high DFF
3	KAVERI-7374	30565	92	SB	6868 *#	7765 *#	6290	6232 *#	6237	8315 *#	Promoted to AVT-1-E-TP
4	JKRH-1170	30561	94	LB	6771 *#	7802 *#	6207	5751 *#	5679	8199 *#	Promoted to AVT-1-E-TP
5	RRX-3276	30555	91	LB	6725 *#	8122 *#	7090 *#	5536	5915	8136 *#	Promoted to AVT-1-E-TP
6	NPH-X4	30556	97	LB	6594 *#	7054	6121	6093 *#	6184	8162 *#	Dropped high DFF, low HRR - 46.3
7	NPH-X69	30558	96	SB	6557 *#	6374	6121	5775	6380	8192 *#	Dropped high DFF
8	LG-90204	30570	91	LS	6526 *#	7507	6518	5647	6018	7444 *#	Promoted to AVT-1-E-TP
9	VNR-231	30557	88	LS	6449 *#	7838 *#	6363	5334	5428	7495 *#	Promoted to AVT-1-E-TP
10	IIRRH-164	30572	91	MS	6419 *#	6667	6349	5593	6094	7374	Promoted to AVT-1-E-TP
11	CPR 414 (Repeat)	29686	93	LS	6392 *#	7036	6346	5399	5919	7910 *#	Dropped high DFF, low HRR - 47.1, low AC - 14.63
12	PHI-22102	30571	92	LS	6322 *#	7806 *#	6628	5005	5653	7249	Dropped high DFF, low AC - 15.51
13	Bio-271	30568	85	LS	6314 *#	7310	6603	5503	5530	6924	Promoted to AVT-1-E-TP
14	JRH-135	30563	93	LB	6248 *#	6940	6326	5340	5767	7401 *#	Dropped high DFF
15	MEPH-167	30567	87	LS	6166	7701 *#	6302	5126	5003	7436 *#	Promoted to AVT-1-E-TP
16	KJTRH-2106	30559	93	LS	5795	5983	5875	4606	5275	7403 *#	Dropped high DFF, low HRR - 51.1
	US 314	NCH	89	MS	6069	6830	5689	5168	6238	7010	
	CO 51	NCV	88	MS	5546	5502	6438	4606	4900	6279	
		ZCV	89	LB	5866	7040	5195	5437	4806	7073	
		LCV	90	SB	5824	7000	5412	5154	5233	6728	
CD (0.05)					151	488	568	300	546	328	
HC + CD (0.05)					6220	7318	6257	5468	6784	7338	
BVC+ CD (0.05)					6017	7528	7006	5737	5779	7401	

#: Denotes superior to Hybrid Check; *: Denotes superior to Best Varietal Check.

2. Initial Hybrid Rice Trial - Mid Early (IHRT-ME)

Mid Early trial comprising of 27 hybrids and four checks *viz.*, Gontra Bidhan-3 (national varietal check); US 312 (national hybrid check); zonal checks - PR 113 (Zone II); Lalat (Zone III); Karjat-7 (Zone V&VI); MTU 1010 (Zone VII) and respective local checks were conducted at 35 locations. Among the 27 hybrids evaluated, 21 were from private sector and six from public sector. The composition of the trial is given in Table 5.

Table 5: Composition of Initial Hybrid Rice Trial - Mid Early (IHRT-ME), Kharif 2022

S. No.	IET No.	Name	Nominating Agency
1	30573	SRH-333	Srikar Biotech. (P) Ltd. Hyderabad
2	30574	RRX-3366	Rasi Seeds, Hyderabad
3	30575	RALLIS-21304	Rallis (I) Ltd., Hyderabad
4	30576	ADVRH-162108	UPL, Hyderabad
5	30577	HRI-216	Bayer Bioscience, Hyderabad
6	30578	RNC-0752	Syngenta, Hyderabad
7	30579	JKRH-1135	JK Seeds, Hyderabad
8	30580	KJTRH-2107	RARS, Karjat
9	30581	JRH-136	JNKVV, Jabalpur
10	30582	PHI-22104	Pioneer, Hyderabad
11	30583	IRH-134	IGKV, Raipur
12	30584	MPTH-1403	Mahindra Agri., Mumbai
13	30585	KAVERI-7344	Kaveri Seeds, Hyderabad
14	30586	MPTH-2071	Mahindra Agri., Mumbai
15	30587	SRPH-123	Sri Rama Agri. Genetics, Kurnool
16	30588	Sudha Gold-3355	Invicta Agritech, Hyderabad
17	30589	MEPH-168	MAHYCO, Hyderabad
18	30590	TNRH-301	TNAU, Coimbatore
19	30591	MEPH-169	MAHYCO, Hyderabad
20	30592	US-323	Seed Works, Hyderabad
21	30593	LG-90303	Limagrain, Hyderabad
22	30594	PHI-22105	Pioneer, Hyderabad
23	30595	US-350	Seed Works, Hyderabad
24	30596	Ankur-6077	Ankur Seeds, Nagpur
25	30597	PHI-22106	Pioneer, Hyderabad
26	30598	Pusa RH-65	IARI, New Delhi
27	30599	IIRRH-165	ICAR-IIRR, Hyderabad
	-	US-312 (NCH)	National Check Hybrid
	-	Gontra Bidhan-3 (NCV)	National Check Variety
	-	PR-113/Lalat/ Karjat-7/MTU-1010 (ZCV)	Zonal Check Variety
	-	Local Check Variety (LCV)	Local Check Variety

North Zone: PR 113; East Zone: Lalat; West Zone: Karjat-7; South Zone: MTU-1010

Performance of the hybrids with respect to grain yield and days to 50% flowering (DFF) are given in Appendix 4&5 respectively. The grain quality characteristics of the test entries are given in Appendix 6.

Performance of promising hybrids identified in different zones is given in Table 6. In the trial, mean DFF of checks ranged from 91 to 101 days, the hybrid check US 312 had mean DFF of 96 days. The varietal checks *viz.*, national, zonal and local checks had mean DFF of 94, 95 and 96 days respectively.

Table 6: Promising hybrids identified in IHRT-ME, Kharif 2022

S. No	Hybrid	IET No	DFF	Grain Type	Mean Yield (kg/ha)							Remarks
					Over All	Zone II	Zone III	Zone IV	Zone V	Zone VI	Zone VII	
1	PHI-22104	30582	98	LB	7132 *#	7369 *#	7510 *#	5360	6649 *#	6669 *#	7709 *#	Dropped low HRR - 34.6
2	HRI-216	30577	97	MS	7083 *#	7128 *#	7407 *#	5643	5972	6460 *#	8339 *#	Promoted to AVT-1-ME
3	KAVERI-7344	30585	99	SB	6959 *#	6382	6993	6142	6306	7163 *#	7820 *#	Dropped low HRR - 40.9
4	RNC-0752	30578	98	LB	6951 *#	7263 *#	7140 *#	5962	6526	6643 *#	7356	Promoted to AVT-1-ME
5	RALLIS-21304	30575	100	SB	6908 *#	6345	7317 *#	5678	6108	6411	7996 *#	Promoted to AVT-1-ME
6	PHI-22105	30594	98	SB	6901 *#	7102 *#	7147 *#	5772	6175	5714	8130 *#	Dropped low HRR - 35.8
7	SRPH-123	30587	93	LS	6892 *#	7534 *#	6821	6183	6356	6131	7712 *#	Promoted to AVT-1-ME
8	ADVRH-162108	30576	92	MS	6799 *#	7284 *#	7076	5433	5883	6000	7828 *#	Promoted to AVT-1-ME
9	MEPH-168	30589	95	LB	6732 *#	6348	6724	6848 *#	5946	6386	7755 *#	Promoted to AVT-1-ME
10	SRH-333	30573	92	LB	6716 *#	6533	7156 *#	5348	6322	6276	7258	Promoted to AVT-1-ME
11	PHI-22106	30597	95	MS	6700 *#	6356	6819	5842	5929	5363	8378 *#	Dropped low HRR - 30.2
12	LG-90303	30593	96	LB	6655 *#	6544	6748	6440	5859	6073	7656 *#	Promoted to AVT-1-ME
13	RRX-3366	30574	91	LS	6576 *#	8302 *#	6629	4882	5705	5685	7319	Promoted to AVT-1-ME
14	JKRH-1135	30579	96	LB	6535	6458	7168 *#	5758	5551	5935	7233	Promoted to AVT-1-ME
15	KJTRH-2107	30580	100	LB	6414	5890	6902	6727 *#	5708	5790	7029	Promoted to AVT-1-ME
	US-312	NCH	96	MS	6365	5683	6751	6050	5598	5983	7236	
	Gontra Bidhan-3	NCV	94	SB	6370	6455	6408	5332	6207	5706	7075	
		ZCV	95	LS	5153	4894	5946	4798	4352	4300	5680	
		LCV	96	LB	5785	6240	5802	5182	5165	4981	6668	
	CD (0.05)				175	421	385	482	336	432	361	
	HC + CD (0.05)				6540	6104	7136	6532	5934	6415	7597	
	BVC + CD (0.05)				6545	6876	6793	5814	6543	6138	7436	

#: Denotes superior to Hybrid Check; *: Denotes superior to Best Varietal Check.

Based on the overall mean, 13 hybrids *viz.*, PHI-22104, HRI-216, KAVERI-7344, RNC-0752, RALLIS-21304, PHI-22105, SRPH-123, ADVRH-162108, MEPH-168, SRH-333, PHI-22106, LG-90303, RRX-3366 and based on zonal means, two hybrids *viz.*, JKRH 1135 (Zone III) and KJTRH 2107 (Zone IV) were found promising. Of these 15 hybrids, eleven hybrids *viz.*, HRI-216, RNC-0752, RALLIS-21304, SRPH-123, ADVRH-162108, MEPH-168, SRH-333, LG-90303, RRX-3366, JKRH-1135 and KJTRH-2107 are promoted to AVT-1-ME-TP. The remaining four hybrids *viz.*, PHI-22104, KAVERI-7344, PHI-22105 and PHI-22106 (as they are falling short of quality requirements) were dropped from further evaluation.

3. Initial Hybrid Rice Trial - Medium (IHRT-M)

The IHRT-M, conducted at 37 locations with 22 hybrids along with four checks *viz.*, HRI-174 (national hybrid check); NDR-359 (national varietal check); zonal varietal checks (PR-121 - Zone II; CR Dhan 300 - Zone III and IV; IR 64 - Zone V; Akshayadhan - Zone VI; Jaya - Zone VII) and local checks of their respective locations. Among the 22 test hybrids evaluated, 16 are from private sector and six from public sector. The composition of the trial is given in Table 7.

Table 7: Composition of Initial Hybrid Rice Trial - Medium (IHRT-M), Kharif2022

S. No.	IET No.	Name	Nominating Agency
1	29616	MALI-484	Mali Agri. Tech., Hyderabad
2	30600	RRX-3484	Rasi Seeds, Hyderabad
3	30601	ADVRH-190518	UPL, Hyderabad
4	30602	ADVRH-191788	UPL, Hyderabad
5	30603	RNE-0456	Syngenta, Hyderabad
6	30604	Indam 200-055	Indo-American, Hyderabad
7	30605	RNE-0463	Syngenta, Hyderabad
8	30606	MPTH-1070	Mahindra Agri., Mumbai
9	30607	KAVERI-7428	Kaveri Seeds, Hyderabad
10	30608	MEPH-170	MAHYCO, Hyderabad
11	30609	US-362	Seed Works, Hyderabad
12	30610	PHI-22107	Pioneer, Hyderabad
13	30611	MEPH-171	MAHYCO, Hyderabad
14	30612	VNR-232	VNR Seeds, Raipur
15	30613	CRHR-169	ICAR-NRRI, Cuttack
16	30614	PHI-22108	Pioneer, Hyderabad
17	30615	CRHR-174	ICAR-NRRI, Cuttack
18	30616	IIRRH-166	ICAR-IIRR, Hyderabad
19	30617	CRHR-175	ICAR-NRRI, Cuttack
20	30618	IIRRH-167	ICAR-IIRR, Hyderabad
21	30619	IIRRH-168	ICAR-IIRR, Hyderabad
22	30620	PHI-22109	Pioneer, Hyderabad
	-	HRI-174 (NCH)	National Check Hybrid
	-	NDR-359 (NCV)	National Check Variety
	-	PR-121/CR Dhan-300/ IR-64 Akshayadhan/Jaya (ZCV)	Zonal Check Variety
	-	Local Check Variety (LCV)	Local Check Variety

Northern: PR-121; Eastern and North Eastern: CR Dhan-300; Central: IR-64; Western: Akshayadhan and Southern: Jaya

The location wise mean data of grain yield and DFF are given in Appendix 7&8 respectively. The grain quality characteristics of test entries are given in Appendix 9.

The list of promising hybrids along with yield advantages over the best checks in their respective zones is given in Table 8.

Table 8: Promising hybrids identified in IHRT-M, Kharif 2022

S. No	Hybrid	IET No	DFF	Grain Type	Mean Yield (kg/ha)							Remarks
					Over all	Zone II	Zone III	Zone IV	Zone V	Zone VI	Zone VII	
1	RNE-0456	30603	102	LS	7323 *#	7444 *#	7874 *#	6461 *#	7230	7446 *#	7087	Promoted to AVT-1-M
2	PHI-22107	30610	97	LB	7124 *#	7000	6922	5821	7008	6957 *#	7735 *#	Dropped low HRR - 43.1
3	PHI-22109	30620	98	LB	7105 *#	7504 *#	7182	5951	6730	6659	7728 *#	Promoted to AVT-1-M
4	ADVRH-191788	30602	100	LS	7023 *#	7691 *#	7033	5472	6608	6688	7682 *#	Promoted to AVT-1-M
5	Indam 200-055	30604	105	LB	6971 *#	4312	7647 *#	6074	6778	7045 *#	7324	Promoted to AVT-1-M
6	MEPH-170	30608	97	LS	6742	7154 *#	7425 *#	5062	6246	5793	7429	Promoted to AVT-1-M
7	PHI-22108	30614	99	LB	6929	7901 *#	7009	4635	7239	6332	7295	Promoted to AVT-1-M
8	RRX-3484	30600	97	LB	6785	6879	7875 *#	4780	6469	6235	6971	Promoted to AVT-1-M
9	RNE-0463	30605	102	LS	6538	6127	7380 *#	5672	6683	6086	6392	Promoted to AVT-1-M
10	CRHR-169	30613	108	LB	6641	6833	7696 *#	5396	6412	5469	6992	Promoted to AVT-1-M
11	CRHR-175	30617	104	LB	6129	4367	7656 *#	5664	5185	5442	6407	Promoted to AVT-1-M
12	MALI-484	29616	105	LB	6634		6825	5809	6257	7162 *#	6619	Promoted to AVT-1-M
	HRI-174	NCH	101	LB	6790	6014	6886	5323	6936	6216	7427	
	NDR-359	NCV	99	LB	5631	4791	6362	5008	5278	4294	6459	
		ZCV	100	SB	5450	4843	5561	4828	4857	5461	6023	
		LCV	101	SB	5960	6540	6036	5792	5650	5201	6476	
	CD (0.05)				177	479	442	375	366	542	244	
	NCH + CD (0.05)				6967	6493	7328	5698	7302	6758	7671	
	BVC+ CD (0.05)				6137	7019	6804	6167	6016	6003	6720	

#: Denotes superior to Hybrid Check; *: Denotes superior to Best Varietal Check.

Based on the overall mean, five hybrids *viz.*,RNE-0456, PHI-22107, PHI-22109, ADVRH-191788 and Indam 200-055; based on zonal means, seven hybrids*viz.*,MEPH-170 (Zone II & III); PHI-22108 (Zone II); RRX-3484, RNE-0463, CRHR-169, CRHR-175 (Zone III); and MALI-484 (Zone VI) were found to be promising with required yield advantage over the varietal and hybrid checks. Of these 12 hybrids, 11 hybrids *viz.*, RNE-0456, PHI-22109, ADVRH-191788, Indam 200-055, MEPH-170, PHI-22108, RRX-3484, RNE-0463, CRHR-169, CRHR-175 and MALI-484 are promoted to AVT-1-M-TP trial. The remaining one hybrid *viz.*, PHI-22107 (as it is falling short of quality requirements) was dropped from further evaluation.

4. Initial Hybrid Rice Trial - Medium Slender (IHRT-MS), Kharif 2022

The trial consisting of 12 hybrids (seven from public and five from private sector) was conducted at 31 locations. It has four checks *viz.*, national hybrid check (27P63); national varietal checks (BPT 5204 and WGL-14); zonal checks (Improved Samba Mahsuri - Zone III and V; Karjat-6 - Zone VI; Ketekejoha - Zone IV; ADT-49 - Zone VII). The details about the composition of the trial are given in Table 9.

Table 9: Composition of Initial Hybrid Rice Trial - Medium Slender (IHRT-MS), Kharif 2022

S. No.	IET No.	Name	Nominating Agency
1	30621	CRHR-173	ICAR-NRRI, Cuttack
2	30622	HRI-215	Bayer Bioscience, Hyderabad
3	30623	RALLIS-20609	Rallis (I) Ltd., Hyderabad
4	30624	NPH-X60	Nuziveedu Seeds, Hyderabad
5	30625	KAVERI-7605	Kaveri Seeds, Hyderabad
6	30626	MEPH-172	MAHYCO, Hyderabad
7	30627	RNRH-203	RRC, PJTSAU, Hyderabad
8	30628	CRHR-167	ICAR-NRRI, Cuttack
9	30629	CRHR-168	ICAR-NRRI, Cuttack
10	30630	IRH-120	IGKV, Raipur
11	30631	IIRRH-169	ICAR-IIRR, Hyderabad
12	29758	KRH-11 (Repeat)	RARS, Mandya
	-	27P63 (NCH)	National Check Hybrid
	-	WGL-14 (NCV-1)	National Check Variety-1
	-	BPT-5204 (NCV-2)	National Check Variety-2
	-	Improved Samba Mahsuri/ Ketekejoha/Karjat-6/ADT-49 (ZCV)	Zonal Check Variety

Eastern and Central: Improved Samba Mahsuri; North East: Ketekejoha; Western: Karjat-6 and Southern: ADT-49

The location wise mean data of grain yield and DFF are given in Appendix10&11 respectively. The grain quality characteristics of test entries are given in Appendix 12.

Based on overall mean, one hybrid *viz.*, RALLIS-20609 and on zonal mean basis, three hybrids *viz.*, CRHR-168 (Zone III); HRI-215, NPH-X60 (Zone IV) were found promising with required yield advantage over the varietal and hybrid checks (Table 10). Of these four hybrids, three *viz.*, RALLIS-20609, CRHR-168 and HRI-215 are promoted to AVT-1 MS trial. Remaining one hybrid *viz.*, NPH-X60 (low HRR and non-MS grain type) is dropped from further evaluation, as it is falling short on account of quality parameters.

Table10: Promising hybrids identified in IHRT-MS, Kharif 2022

S. No	Hybrid	IET No	DFF	Grain Type	Mean Yield (kg/ha)						Remarks
					Over all	Zone III	Zone IV	Zone V	Zone VI	Zone VII	
1	RALLIS-20609	30623	98	MS	6714 *#	7700	4986	5944 *#	6318	7250 *#	Promoted to AVT-1-MS
2	CRHR-168	30629	105	MS	5976	8057 *#	4637	5303	5141	6015	Promoted to AVT-1-MS
3	HRI-215	30622	100	MS	6258	6699	5857 *#	5269	5937	6865	Promoted to AVT-1-MS
4	NPH-X60	30624	93	SB	6397	7542	5886 *#	5339	5825	6824	Dropped low HRR - 34.9, non-MS GT
5	27P63	NCH	101	MS	6357	7387	4937	5407	6115	6790	
6	WGL-14	NCV-1	105	MS	5937	7284	4631	5049	5966	5960	
7	BPT-5204	NCV-2	102	MS	5294	6441	4179	5016	4653	5457	
8		ZCV	105	MS	4888	6647	4414	4627	3840	4807	
	CD (0.05)				204	538	287	437	485	317	
	NCH + CD (0.05)				6561	7925	5224	5844	6600	7107	
	BVC+ CD (0.05)				6141	7822	4918	5486	6451	6277	

#: Denotes superior to Hybrid Check; *: Denotes superior to Best Varietal Check.

Appendix- 1: Grain Yield (kg/ha) of hybrids in IHRT-Early, Kharif 2022

S No.	IET No.	Name	Zone-I	Zone-II								Zone-III contd..					
			MLN	ND	DL-Z2 (1)	KUL	HR-Z2 (1)	LDH	PB-Z2 (1)	@NGN	Z2 (3)	@SGA	RCI	TMTR	JH-Z3 (2)	CTK	OR-Z3 (1)
1	30554	TMRH-101	3951	6295	6295	4900	4900	2948	2948	5344	4714	6341	4760	5830	5295	5945	5945
2	29686	CP R414 (Repeat)	7284	7505	7505	8500	8500	5102	5102	4990	7036	5920	4620	6464	5542	6078	6078
3	30555	RRX-3276	8313	8459	8459	8000	8000	7906	7906	6441	8122	7808	7840	6854	7347	7354	7354
4	30556	NPH-X4	8230	7741	7741	7267	7267	6155	6155	8252	7054	7137	6720	5319	6020	7048	7048
5	30557	VNR-231	10164	9434	9434	7367	7367	6714	6714	6254	7838	5963	4480	7591	6035	6668	6668
6	30558	NPH-X69	8354	7311	7311	6567	6567	5245	5245	5991	6374	7451	5600	6997	6299	7800	7800
7	30559	KJTRH-2106	7243	6850	6850	6100	6100	4998	4998	4623	5983	6766	4900	5949	5424	6821	6821
8	30560	PHI-22103	11317	7966	7966	9467	9467	5418	5418	6717	7617	6996	6113	6343	6228	7754	7754
9	30561	JKRH-1170	11646	8716	8716	9067	9067	5622	5622	5812	7802	7313	6207	6554	6380	6291	6291
10	30562	NRH-307	7490	7206	7206	6767	6767	4846	4846	5573	6273	7569	6487	6304	6396	5662	5662
11	30563	JRH-135	7613	7657	7657	7433	7433	5730	5730	6763	6940	6761	4993	6517	5755	6951	6951
12	29722	RNRH-15 (Repeat)	9589	7013	7013	5967	5967	5479	5479	5307	6153	7004	6813	7016	6915	5676	5676
13	30564	JGLH-337	6749	5812	5812	5200	5200	5236	5236	5574	5416	7311	4433	6179	5306	5466	5466
14	30565	KAVERI-7374	9259	8569	8569	7533	7533	7191	7191	6838	7765	7331	6160	6901	6530	7061	7061
15	30566	Suryanath-999	4321	5215	5215	4933	4933	3255	3255	4451	4468	6156	4993	9152	7072	4316	4316
16	30567	MEPH-167	6502	8428	8428	8333	8333	6342	6342	5031	7701	7064	7140	6305	6722	5762	5762
17	30568	Bio-271	8955	9015	9015	6933	6933	5982	5982	6909	7310	6865	5973	7255	6614	4746	4746
18	30569	PHI-22101	9877	9387	9387	8200	8200	6766	6766	5632	8118	7162	6533	7304	6919	7088	7088
19	30570	LG-90204	9588	8480	8480	7733	7733	6307	6307	6633	7507	5587	6487	6924	6705	6685	6685
20	30571	PHI-22102	9547	8632	8632	7933	7933	6853	6853	5732	7806	7028	6953	6530	6742	6645	6645
21	30572	IIRRH-164	9054	6651	6651	7800	7800	5549	5549	8169	6667	6291	6113	6829	6471	7384	7384
22	US-314 (NCH)		8601	7715	7715	7700	7700	5076	5076	6613	6830	5116	4760	6080	5420	5419	5419
23	CO-51 (NCV)		6008	6494	6494	5100	5100	4911	4911	5114	5502	6140	8960	5886	7423	5852	5852
24	PR-124/Luit/NDR-97/ Sahbhagidhan/MTU-1153 (RCV)		8642	6782	6782	9033	9033	5306	5306	4714	7040	5356	5087	5143	5115	5945	5945
25	Local Check Variety (LCV)		4198	6143	6143	6933	6933	7924	7924	4335	7000	5007	4993	6123	5558	5153	5153
Exp. Mean			8100	7579	7579	7231	7231	5714	5714	5912	6841	6618	5925	6574	6249	6303	6303
CD (0.05)			895	1110	1110	972	972	853	853	341	488	1793	1252	1415	950	1264	1264
CV (%)			6.77	8.97	8.97	8.23	8.23	9.14	9.14	3.53	4.37	16.59	12.94	13.18	9.31	12.28	12.28
F val			**	**	**	**	**	**	**	**	**	ns	**	**	**	**	**
NHC+CD (0.05)											7318						
BVC+CD (0.05)											7528						
D/S			4.6.22	7.6.22		6.6.22		4.6.22		17.6.22		26.6.22	21.6.22	27.6.22		20.6.22	
D/P			1.7.22	7.7.22		3.7.22		10.7.22		18.7.22		25.7.22	2.8.22	24.7.22		24.7.22	
Gross Plot Size (Sq.m)			4.05	10		10		7.69		10		10	10	12.6		8.64	
Net Plot Size (Sq.m)			4.05	10		10		6.12		7.99		10		10.8		6.2	
Local Check Variety			HPR 2143	IR 64		HKR-48		PR 126		NDR 97		Jarasandh	Sahbhagidhan	Shatayu		Annada	

Note: @ Data of Nagina (NGN) and Syngenta (SGA) are not included in the analysis due to Low CV and non significant F Value respectively. **-Highly Significant; *-significant; ns-not significant

Appendix-1 (contd.): Grain Yield (kg/ha) of hybrids in IHRT-Early, Kharif 2022

S No.	IET No.	Name	Zone-III contd..							Zone-IV					Zone-V			
			@MSD	RAS	TMTB	UP-Z3 (2)	CHN	WB-Z3 (1)	Z3 (6)	TTB	AS-Z4 (1)	ARD	TR-Z4 (1)	Z4 (2)	RPR	RAS	VNR	CG-Z5 (3)
1	30554	TMRH-101	4167	3662	5120	4648	5068	5068	5168	6153	6153	3533	3533	4843	4574	2574	5275	4433
2	29686	CP R414 (Repeat)	6618	7316	6553	6844	7368	7368	6346	4770	4770	3637	3637	4203	4518	4682	6436	5335
3	30555	RRX-3276	6618	8652	6144	6949	6199	6199	7090	5477	5477	3077	3077	4277	5656	5538	6781	6142
4	30556	NPH-X4	6781	5149	6206	5787	5887	5887	6121	4667	4667	2837	2837	3752	6206	4248	7414	6265
5	30557	VNR-231	6495	6458	6881	6654	6160	6160	6363	6580	6580	3633	3633	5107	5078	4960	5090	5096
6	30558	NPH-X69	6475	3838	6287	5366	5419	5419	6121	4770	4770	4850	4850	4810	5483	3516	7729	5953
7	30559	KJTRH-2106	6679	3826	6038	5434	6823	6823	5875	5550	5550	3950	3950	4750	4261	4500	6712	5260
8	30560	PHI-22103	6373	5952	6431	6480	7992	7992	6841	7533	7533	4840	4840	6187	4351	3936	9364	6205
9	30561	JKRH-1170	6691	6151	5844	5878	6238	6238	6207	5207	5207	6343	6343	5775	5191	4954	7294	5991
10	30562	NRH-307	6614	6853	5594	6056	8109	8109	6480	5557	5557	4193	4193	4875	5059	3994	7835	5890
11	30563	JRH-135	6266	4506	6606	5785	7719	7719	6326	5643	5643	4127	4127	4885	4564	4226	5653	4952
12	29722	RNRH-15 (Repeat)	5494	5730	6306	6131	7485	7485	6565	5713	5713	5847	5847	5780	4044	5201	5308	4824
13	30564	JGLH-337	4902	3852	5470	4849	5185	5185	5179	4603	4603	3893	3893	4248	3794	2808	4181	3731
14	30565	KAVERI-7374	6377	5274	6191	5767	5770	5770	6290	4923	4923	4723	4723	4823	5757	4495	8081	6394
15	30566	Suryanath-999	4330	4374	8442	7278	5458	5458	6276	4703	4703	5467	5467	5085	3154	2256	6208	4160
16	30567	MEPH-167	6226	4084	6394	5720	7252	7252	6302	4560	4560	6477	6477	5518	5348	4271	5796	5230
17	30568	Bio-271	3881	5103	8142	7121	7876	7876	6603	4457	4457	6453	6453	5455	4609	4430	4917	4708
18	30569	PHI-22101	6377	6274	7393	7080	7563	7563	7063	6150	6150	6200	6200	6175	4950	4902	6922	5665
19	30570	LG-90204	6209	6870	6214	6474	5926	5926	6518	6460	6460	3497	3497	4978	5542	4406	7258	5979
20	30571	PHI-22102	6577	4813	6619	5822	7563	7563	6628	4357	4357	5553	5553	4955	5483	4769	6842	5820
21	30572	IIRRH-164	6005	4899	6119	5791	6043	6043	6349	7283	7283	3653	3653	5468	4547	4714	6407	5272
22	US-314 (NCH)		4698	5806	6169	6244	5770	5770	5689	4627	4627	4367	4367	4497	4846	4222	6350	5281
23	CO-51 (NCV)		4453	4556	5176	4950	7602	7602	6438	4933	4933	5860	5860	5397	4085	3540	4693	4214
24	PR-124/Luit/NDR-97/ Sahbhagidhan/MTU-1153 (RCV)		5270	5364	4433	4660	5263	5263	5195	4647	4647	4173	4173	4410	3815	4381	8407	5654
25	Local Check Variety (LCV)		3770	3160	6031	5040	6043	6043	5412	6617	6617	7190	7190	6903	4630	4046	6147	5111
Exp. Mean			5774	5301	6272	5952	6551	6551	6218	5438	5438	4735	4735	5086	4782	4223	6524	5343
CD (0.05)			418	1119	1130	1204	1353	1353	568	451	451	495	495	304	794	480	1091	568
CV (%)			4.44	10.23	11.03	12.39	12.65	12.65	5.59	5.08	5.08	6.4	6.4	3.66	10.16	5.51	10.24	6.51
F val			**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)									6257					4801				
BVC+CD (0.05)									7006					7207				
D/S			14.6.22	17.6.22	14.6.22		17.6.22			29.6.22		8.7.22			28.6.22	15.6.22	11.6.22	
D/P			15.7.22	20.7.22	11.7.22		21.7.22			25.7.22		27.7.22			23.7.22	8.7.22	1.7.22	
Gross Plot Size (Sq.m)			10	10.8	12.6		10.39			10		10			14.19	11.1	625	
Net Plot Size (Sq.m)			8.16	10.1	10.8		8.55			10		10			11.07	10.3	7.02	
Local Check Variety			NDR 97	Surju 52	Shatayu		Ajit			Lachit		-			Indira Barani Dhan 1	MTU 1010	MTU 1010	

Note: @ Data of Masoda (MSD) not included in the analysis due to Low CV. **-Highly Significant; *-significant; ns-not significant

Appendix-1 (contd.): Grain Yield (kg/ha) of hybrids in IHRT-Early, Kharif 2022

S No.	IET No.	Name	Zone-V contd..								Zone-VI								
			ANK	SKL	SND	MH-Z5 (3)	JBP	WRS	MP-Z5 (2)	Z5 (8)	DHB	@NVS	NWG	GJ-Z6 (2)	KJT	RDN	VAD	MH-Z6 (3)	Z6 (5)
1	30554	TMRH-101	5364	6884	3936	5395	4817	3395	4106	4703	3284	3254	6560	4360	4247	4199	3898	4115	4271
2	29686	CP R414 (Repeat)	5543		6337	5940	6383	3658	5021	5399	4216	3577	6676	5036	5764	6443	6767	6325	5919
3	30555	RRX-3276	5214	4255	5827	5099	6613	4374	5494	5536	5614	3885	7058	6083	5650	6201	5495	5782	5915
4	30556	NPH-X4	5987	5403	7881	6423	6717	4181	5449	6093	5438	3509	7874	6264	6066	6287	6039	6131	6184
5	30557	VNR-231	6162		5274	5718	6280	4284	5282	5334	5020	2999	7604	5898	4515	5244	5617	5125	5428
6	30558	NPH-X69	5804	4316	6916	5679	7267	4247	5757	5775	6046	4584	8590	6896	6250	6153	5716	6040	6380
7	30559	KJTRH-2106	5283	3421	3707	4137	5320	3663	4491	4606	5588	3267	5814	5680	4984	4964	5262	5070	5275
8	30560	PHI-22103	5898	4631	5095	5208	7270	5292	6281	5815	6219	4186	7366	6583	7252	6736	6676	6888	6811
9	30561	JKRH-1170	6113	4484	5641	5413	6783	5164	5974	5751	4696	3435	8154	5804	5168	5205	6232	5535	5679
10	30562	NRH-307	5702	4255	3761	4573	5920	3432	4676	5038	5003	2875	5990	5343	4902	5268	5648	5273	5337
11	30563	JRH-135	5777	5382	6070	5743	6263	4317	5290	5340	6494	2415	6395	6490	5035	5813	5308	5385	5767
12	29722	RNRH-15 (Repeat)	5507	5340	4819	5222	6583	4012	5298	5105	5817	2672	5820	5796	5466	4914	5958	5446	5578
13	30564	JGLH-337	5682	5924	4500	5369	6303	5041	5672	4875	4853	2608	4524	4776	5043	6116	5151	5437	5189
14	30565	KAVERI-7374	5665	7155	5099	5973	7460	5527	6493	6232	5980	3253	6712	6224	5073	7343	6102	6173	6237
15	30566	Suryanath-999	4473	6091	3958	4840	7483	3362	5423	4728	5719	2973	4671	5397	6620	5607	5195	5807	5653
16	30567	MEPH-167	6142	4240	5237	5206	6047	3696	4871	5126	4526	3124	5558	4892	4832	4359	6032	5074	5003
17	30568	Bio-271	5507	7301	4747	5851	7390	4667	6028	5503	5294	2703	5612	5400	4756	5843	6200	5600	5530
18	30569	PHI-22101	5723	5402	5536	5554	8043	3070	5556	5596	6503	4328	7416	6884	7155	5844	6926	6642	6720
19	30570	LG-90204	5527	7092	4090	5570	6933	3839	5386	5647	5539	3827	6496	5874	6057	6456	5610	6041	6018
20	30571	PHI-22102	5252	4214	3677	4381	5883	3823	4853	5005	5523	3686	7218	6115	4814	5634	5624	5357	5653
21	30572	IIRRH-164	6191	4977	6484	5884	7267	3860	5564	5593	5229	3692	6546	5597	6678	8404	3962	6348	6094
22	US-314 (NCH)		5662	6174	3944	5260	5980	3840	4910	5168	5451	2928	6038	5645	5410	8591	5669	6556	6238
23	CO-51 (NCV)		5059	6175	4215	5149	5503	3206	4354	4606	5310	3161	4604	5048	4315	4524	5663	4834	4900
24	PR-124/Luit/NDR-97/ Sahbhagidhan/MTU-1153 (RCV)		5096	7231	4405	5577	5770	4078	4924	5437	4967	2732	4996	4982	5353	4779	4187	4773	4806
25	Local Check Variety (LCV)		5267	4255	5560	5027	7030	3905	5468	5154	5817	3321	5938	5852	4591	5104	4943	4879	5233
Exp. Mean			5584	5417	5069	5368	6532	4077	5305	5327	5366	3320	6409	5717	5440	5841	5595	5625	5673
CD (0.05)			659	980	877	475	914	581	581	300	756	657	1622	921	890	1301	861	594	546
CV (%)			7.23	11.08	10.59	5.42	8.56	8.72	6.71	3.45	8.62	12.12	12.26	9.87	10.02	13.64	9.42	6.46	5.89
F val			**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)										5468									6784
BVC+CD (0.05)										5737									5779
D/S			25.6.22	30.6.22	25.6.22		15.6.22	17.6.22			8.6.22	14.6.22	18.6.22		11.6.22	15.6.22			
D/P			30.7.22	11.8.22	20.7.22		10.7.22	22.7.22			14.7.22	11.7.22	18.7.22		6.7.22	14.7.22			
Gross Plot Size (Sq.m)			10.08	10	10		10	10			12.96	8.51	7.83		4.5	6.08	12.6		
Net Plot Size (Sq.m)			8.19	7.99	7.48		7.99	8.1			10.2	6.3	5.67		2.88	6.08	10.14		
Local Check Variety			MTU 1010	Sakoli-6	SYE-1		MTU 1010	JR 206			Mahisagar	GR 17 (Sardar)	Mahisagar (3022)		Karjat 7	Phule Radha	Phule Radha		

Note: @ Data of Navsari (NVS) not included in the analysis due to Low mean yield. **-Highly Significant; *-significant; ns-not significant

Appendix- 1 (contd.): Grain Yield (kg/ha) of hybrids in IHRT-Early, Kharif 2022

S. No.	IET No.	Name	Zone-VII												Overall Mean (32)
			BAY	MTU	AP-Z7 (2)	MND	KA-Z7 (1)	HYD	WGL	TE-Z7 (2)	ADT	CBT	TN-Z7 (2)	Z7 (7)	
1	30554	TMRH-101	6440	5366	5903	7960	7960	4404	4970	4687	7267	6829	7048	6177	5042
2	29686	CP R414 (Repeat)	9753	7571	8662	10286	10286	7171	7762	7467	6059	6771	6415	7910	6392
3	30555	RRX-3276	8747	7474	8110	10663	10663	7494	6661	7078	8193	7723	7958	8136	6725
4	30556	NPH-X4	11137	6932	9034	9103	9103	7447	6855	7151	8101	7561	7831	8162	6594
5	30557	VNR-231	8830	5947	7389	8902	8902	5734	6537	6136	8518	7995	8256	7495	6449
6	30558	NPH-X69	10963	6665	8814	10669	10669	7694	5456	6575	7905	7995	7950	8192	6557
7	30559	KJTRH-2106	7673	6403	7038	11254	11254	5847	6721	6284	7875	6044	6960	7403	5795
8	30560	PHI-22103	10943	7941	9442	9831	9831	8415	8819	8617	8378	7013	7696	8763	7192
9	30561	JKRH-1170	10453	7415	8934	11326	11326	5849	6552	6200	7767	8034	7901	8199	6771
10	30562	NRH-307	8177	5900	7038	7563	7563	6753	6874	6814	7165	6382	6773	6973	5972
11	30563	JRH-135	8967	7150	8058	7583	7583	7315	5957	6636	8234	6601	7418	7401	6248
12	29722	RNRH-15 (Repeat)	8590	7237	7914	7199	7199	5193	6645	5919	8061	6974	7517	7128	6190
13	30564	JGLH-337	9640	6080	7860	8057	8057	4902	6670	5786	7042	6684	6863	7011	5533
14	30565	KAVERI-7374	10850	5973	8412	9214	9214	8044	7815	7929	7752	8556	8154	8315	6868
15	30566	Suryanath-999	7193	5516	6355	5932	5932	5835	6111	5973	8139	5448	6794	6311	5485
16	30567	MEPH-167	8970	6462	7716	9051	9051	6540	6073	6306	7457	7499	7478	7436	6166
17	30568	Bio-271	7903	5867	6885	8609	8609	5138	7047	6092	7670	6237	6954	6924	6314
18	30569	PHI-22101	9677	7298	8487	7810	7810	8847	7586	8216	8035	6263	7149	7931	6985
19	30570	LG-90204	8963	7152	8058	7752	7752	7100	6384	6742	7165	7591	7378	7444	6526
20	30571	PHI-22102	8090	6889	7489	7979	7979	7167	6088	6628	8061	6469	7265	7249	6322
21	30572	IIRRH-164	9923	5960	7942	8233	8233	6761	8132	7446	7089	5518	6303	7374	6419
22	US-314 (NCH)		9227	5899	7563	6121	6121	5696	5804	5750	7380	8945	8163	7010	6069
23	CO-51 (NCV)		7453	5386	6420	7044	7044	4393	5163	4778	7485	7026	7255	6279	5546
24	PR-124/Luit/NDR-97/ Sahbhagidhan/MTU-1153 (RCV)		8230	6561	7396	8791	8791	6136	6121	6128	7042	6627	6834	7073	5866
25	Local Check Variety (LCV)		9140	6724	7932	4386	4386	5541	6074	5808	8234	6995	7615	6728	5824
Exp. Mean			9037	6551	7794	8453	8453	6457	6595	6526	7683	7031	7357	7401	6234
CD (0.05)			833	875	661	1086	1086	1763	723	906	768	560	452	328	151
CV (%)			5.64	8.18	5.19	7.87	7.87	16.72	6.71	8.51	6.12	4.87	3.76	2.72	1.49
F val			**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)														7338	6220
BVC+CD (0.05)														7401	6017
D/S			27.6.22	25.6.22		21.7.22		17.6.22	28.6.22		17.6.22	23.6.22			
D/P			14.7.22	26.7.22		11.8.22		20.7.22	3.8.22		18.7.22	14.7.22			
Gross Plot Size (Sq.m)			10	10.89				6.73	10.08		8	9.45			
Net Plot Size (Sq.m)			10	8.37		5.13		5.19	10.08		8	7.61			
Local Check Variety			RNR 15048	MTU 1156		Raksha		Rasi	WGL 962		-	-			

Appendix-2 : Days to 50% Flowering (DFF) of hybrids in IHRT-Early, Kharif 2022

S No.	IET No.	Name	Zone-I			Zone-II									Zone-III				
			MLN	HP-Z1 (1)	Z1 (1)	ND	DL-Z2 (1)	KUL	HR-Z2 (1)	LDH	PB-Z2 (1)	@NGN	UP-Z2 (1)	Z2 (3)	@SGA	BR-Z3 (1)	RCI	TMT	JH-Z3 (2)
1	30554	TMRH-101	84	84	84	79	79	74	74	84	84	95	95	79	80	80	96	74	85
2	29686	CP R414 (Repeat)	102	102	102	94	94	91	91	97	97	105	105	94	85	85	113	87	100
3	30555	RRX-3276	102	102	102	89	89	88	88	95	95	107	107	91	78	78	105	84	94
4	30556	NPH-X4	106	106	106	96	96	93	93	99	99	116	116	96	95	95	113	95	104
5	30557	VNR-231	95	95	95	88	88	81	81	89	89	102	102	86	80	80	103	83	93
6	30558	NPH-X69	105	105	105	94	94	90	90	98	98	107	107	94	93	93	113	90	101
7	30559	KJTRH-2106	101	101	101	102	102	95	95	97	97	112	112	98	90	90	107	88	98
8	30560	PHI-22103	101	101	101	103	103	96	96	103	103	116	116	101	92	92	110	91	100
9	30561	JKRH-1170	102	102	102	93	93	88	88	96	96	117	117	92	91	91	113	89	101
10	30562	NRH-307	99	99	99	100	100	97	97	99	99	116	116	99	89	89	109	93	101
11	30563	JRH-135	101	101	101	101	101	96	96	97	97	107	107	98	80	80	106	94	100
12	29722	RNRH-15 (Repeat)	99	99	99	94	94	88	88	94	94	116	116	92	82	82	108	89	98
13	30564	JGLH-337	90	90	90	94	94	82	82	87	87	104	104	88	88	88	102	86	94
14	30565	KAVERI-7374	101	101	101	94	94	88	88	92	92	112	112	91	89	89	107	86	96
15	30566	Suryanath-999	97	97	97	90	90	87	87	93	93	98	98	90	85	85	100	78	89
16	30567	MEPH-167	95	95	95	87	87	81	81	87	87	103	103	85	81	81	100	86	93
17	30568	Bio-271	88	88	88	86	86	81	81	85	85	101	101	84	80	80	99	82	90
18	30569	PHI-22101	102	102	102	91	91	90	90	96	96	108	108	92	89	89	111	91	101
19	30570	LG-90204	98	98	98	92	92	88	88	93	93	107	107	91	62	93	106	79	93
20	30571	PHI-22102	99	99	99	95	95	90	90	92	92	105	105	92	83	83	438	86	262
21	30572	IIRRH-164	96	96	96	103	103	92	92	96	96	111	111	97	81	81	105	90	97
22	US-314 (NCH)		91	91	91	89	89	86	86	87	87	105	105	87	80	80	100	89	95
23	CO-51 (NCV)		84	84	84	92	92	82	82	86	86	103	103	87	82	82	103	84	94
24	PR-124/Luit/NDR-97/ Sahbhagidhan/MTU-1153 (RCV)		104	104	104	102	102	98	98	100	100	99	99	100	80	80	94	72	83
25	Local Check Variety (LCV)		88	88	88	100	100	87	87	91	91	97	97	93	80	80	99	74	87
Exp. Mean			97	97	97	94	94	88	88	93	93	107	107	92	84	85	118	86	102

Appendix- 2 (contd.): Days to 50% Flowering (DFF) of hybrids in IHRT-Early, Kharif 2022

S No.	IET No.	Name	Zone-III contd.									Zone-IV				
			CTK	OR-Z3 (1)	@MSD	RAS	TMT	UP-Z3 (2)	CHN	WB-Z3 (1)	Z3 (8)	TTB	AS-Z4 (1)	ARD	TR-Z4 (1)	Z4 (2)
1	30554	TMRH-101	82	82	73	80	76	77	83	83	82	64	64	89	89	76
2	29686	CP R414 (Repeat)	87	87	72	98	89	92	90	90	94	86	86	95	95	90
3	30555	RRX-3276	85	85	85	94	84	88	90	90	90	85	85	84	84	85
4	30556	NPH-X4	94	94	86	102	92	95	100	100	99	91	91	94	94	92
5	30557	VNR-231	89	89	78	94	84	88	87	87	90	84	84	94	94	89
6	30558	NPH-X69	95	95	98	100	93	95	95	95	97	85	85	95	95	90
7	30559	KJTRH-2106	90	90	76	102	91	95	95	95	95	88	88	94	94	91
8	30560	PHI-22103	96	96	84	102	94	97	98	98	98	90	90	96	96	93
9	30561	JKRH-1170	89	89	79	102	92	96	95	95	96	81	81	97	97	89
10	30562	NRH-307	94	94	75	102	90	94	97	97	97	88	88	94	94	91
11	30563	JRH-135	95	95	73	101	91	94	90	90	96	88	88	94	94	91
12	29722	RNRH-15 (Repeat)	85	85	76	98	86	90	90	90	92	76	76	97	97	87
13	30564	JGLH-337	89	89	74	92	83	86	87	87	90	75	75	95	95	85
14	30565	KAVERI-7374	91	91	74	96	83	87	90	90	92	86	86	96	96	91
15	30566	Suryanath-999	88	88	77	92	75	80	87	87	86	80	80	96	96	88
16	30567	MEPH-167	84	84	84	90	83	86	87	87	88	65	65	96	96	80
17	30568	Bio-271	86	86	70	87	79	82	85	85	86	67	67	96	96	81
18	30569	PHI-22101	84	84	78	98	88	92	95	95	94	81	81	94	94	88
19	30570	LG-90204	89	89	71	96	80	85	89	89	89	76	76	98	98	87
20	30571	PHI-22102	90	90	78	94	88	90	90	90	147	80	80	96	96	88
21	30572	IIRRH-164	87	87	77	96	92	93	90	90	93	85	85	94	94	90
22	US-314 (NCH)		86	86	73	96	86	90	88	88	91	84	84	91	91	88
23	CO-51 (NCV)		95	95	74	87	81	83	89	89	90	69	69	95	95	82
24	PR-124/Luit/NDR-97/ Sahbhagidhan/MTU-1153 (RCV)		88	88	66	86	74	78	81	81	82	69	69	95	95	82
25	Local Check Variety (LCV)		91	91	71	104	76	85	90	90	88	64	64	94	94	79
Exp. Mean			89	89	77	96	85	89	90	90	94	79	79	94	94	87

Appendix-2 (contd.): Days to 50% Flowering (DFF) of hybrids in IHRT-Early, Kharif 2022

S No.	IET No.	Name	Zone-V												Zone-VI			
			RPR	RAS	VNS	CG-Z5 (3)	ANK	SKL	SND	MH-Z5 (3)	JBP	WRS	MP-Z5 (2)	Z5 (8)	DHB	@NVS	NWG	GJ-Z6 (2)
1	30554	TMRH-101	79	74	73	76	83	74	77	78	87	83	85	79	78	76	74	77
2	29686	CP R414 (Repeat)	89	85	83	86	93		88	91	100	96	98	91	95	91	90	93
3	30555	RRX-3276	89	84	79	84	92	92	93	92	96	93	95	90	95	91	88	92
4	30556	NPH-X4	93	88	84	88	98	99	96	98	105	101	103	96	95	94	94	94
5	30557	VNR-231	88	83	78	83	86		84	85	92	90	91	86	88	88	88	88
6	30558	NPH-X69	92	88	86	89	95	98	96	96	105	98	101	95	95	93	94	94
7	30559	KJTRH-2106	88	85	81	85	90	86	93	90	100	93	96	90	97	90	91	95
8	30560	PHI-22103	92	88	83	88	93	97	92	94	105	100	102	94	90	93	94	92
9	30561	JKRH-1170	92	87	81	86	91	94	89	92	100	93	97	91	95	92	90	93
10	30562	NRH-307	89	86	83	86	91	90	93	92	104	91	98	91	97	90	88	94
11	30563	JRH-135	88	87	78	84	93	92	88	91	103	99	101	91	95	89	90	93
12	29722	RNRH-15 (Repeat)	89	84	80	85	93	95	88	92	98	92	95	90	131	92	94	118
13	30564	JGLH-337	83	80	73	79	90	92	80	88	95	91	93	86	88	84	80	85
14	30565	KAVERI-7374	89	84	80	84	91	95	87	91	100	92	96	90	93	90	89	91
15	30566	Suryanath-999	80	80	77	79	83	85	83	84	92	87	90	84	86	85	82	85
16	30567	MEPH-167	84	78	75	79	88	90	86	88	94	91	92	86	85	84	78	83
17	30568	Bio-271	82	78	74	78	82	87	80	83	92	89	91	83	86	82	78	84
18	30569	PHI-22101	92	86	80	86	92	87	94	91	101	95	98	91	90	92	91	91
19	30570	LG-90204	87	84	81	84	92	88	89	90	98	92	95	89	93	92	92	92
20	30571	PHI-22102	88	82	81	84	93	90	90	91	98	94	96	90	95	89	94	94
21	30572	IIRRH-164	87	82	82	84	91	97	86	91	100	95	98	90	94	89	89	93
22	US-314 (NCH)		84	80	73	79	91	89	84	88	94	91	92	86	94	84	84	91
23	CO-51 (NCV)		86	78	75	80	91	90	89	90	96	89	92	87	87	83	80	84
24	PR-124/Luit/NDR-97/ Sahbhagidhan/MTU-1153 (RCV)		86	84	80	83	89	92	86	89	98	95	97	89	93	90	88	92
25	Local Check Variety (LCV)		89	82	81	84	89	85	93	89	99	91	95	89	96	89	89	94
Exp. Mean			87	83	79	83	90	91	88	90	98	93	95	89	93	89	87	91

Appendix- 2 (contd.): Days to 50% Flowering (DFF) of hybrids in IHRT-Early, Kharif 2022

S No.	IET No.	Name	Zone-VII																Overall Mean (32)
			KJT	RDN	VAD	MH-Z6 (3)	Z6 (6)	BAY	MTU	AP-Z7 (2)	MND	KA-Z7 (1)	HYD	WGL	TE-Z7 (2)	ADT	CBT	TN-Z7 (2)	Z7 (7)	
1	30554	TMRH-101	82	88	84	85	82	76	74	75	80	80	87	74	80	80	77	78	78	80
2	29686	CP R414 (Repeat)	92	85	93	90	91	91	85	88	98	98	100	94	97	113	93	103	96	93
3	30555	RRX-3276	85	94	88	89	90	89	87	88	96	96	95	94	94	111	89	100	95	91
4	30556	NPH-X4	88	108	99	98	97	93	89	91	103	103	107	99	103	81	93	87	95	97
5	30557	VNR-231	87	88	82	86	87	85	81	83	88	88	91	94	93	107	89	98	91	88
6	30558	NPH-X69	95	97	98	97	96	89	93	91	102	102	103	96	99	113	95	104	99	96
7	30559	KJTRH-2106	86	98	88	91	92	83	89	86	83	83	91	96	94	118	84	101	92	93
8	30560	PHI-22103	95	99	95	96	95	90	93	91	95	95	102	100	101	119	92	106	99	97
9	30561	JKRH-1170	95	99	92	95	94	86	85	86	97	97	99	93	96	120	90	105	96	94
10	30562	NRH-307	85	96	90	90	91	84	90	87	82	82	92	99	96	105	83	94	91	93
11	30563	JRH-135	87	90	91	89	90	84	90	87	86	86	91	98	95	118	87	102	93	93
12	29722	RNRH-15 (Repeat)	87	97	91	92	100	84	90	87	92	92	93	93	93	114	88	101	94	93
13	30564	JGLH-337	86	87	83	85	85	80	85	82	84	84	90	89	90	105	80	92	88	87
14	30565	KAVERI-7374	90	100	85	91	91	84	89	87	94	94	98	90	94	113	89	101	94	92
15	30566	Suryanath-999	85	96	84	88	87	82	83	82	81	81	90	84	87	83	79	81	83	86
16	30567	MEPH-167	84	90	82	85	84	81	87	84	88	88	91	85	88	102	82	92	88	87
17	30568	Bio-271	86	86	82	85	84	81	85	83	84	84	86	89	88	100	79	89	86	85
18	30569	PHI-22101	86	100	95	94	93	89	90	90	101	101	100	95	98	112	91	102	97	93
19	30570	LG-90204	87	99	86	91	91	83	88	86	93	93	99	95	97	113	89	101	94	91
20	30571	PHI-22102	87	99	95	94	94	84	89	87	93	93	92	92	92	100	88	94	91	92
21	30572	IIRRH-164	86	98	92	92	92	84	90	87	86	86	91	96	93	80	84	82	87	91
22	US-314 (NCH)		86	98	85	89	90	81	87	84	84	84	91	91	91	114	81	98	90	89
23	CO-51 (NCV)		87	98	85	90	88	81	86	84	86	86	90	90	90	108	81	95	89	88
24	PR-124/Luit/NDR-97/ Sahbhagidhan/MTU-1153 (RCV)		87	89	83	86	88	84	89	86	88	88	92	96	94	108	88	98	92	89
25	Local Check Variety (LCV)		86	95	90	90	91	105	90	98	81	81	88	99	94	120	80	100	95	90
Exp. Mean			87	95	89	90	91	85	87	86	90	90	94	93	93	106	86	96	92	91

Appendix-3: Quality characteristics of IHRT-Early Kharif 2022

S. No.	IET No.	Name	Hull	Mill	HRR	KL	KB	L/B	Grain Type	Grain Chalk	ASV	AC	GC
1	30554	TMRH-101	80.7	68.3	43.2	6.32	2.08	3.03	LS	VOC	4.0	25.54	22
2	29686	CP R414 (Repeat)	82.2	69.4	47.1	6.59	2.03	3.24	LS	VOC	4.1	14.63	100
3	30555	RRX-3276	82.4	73.4	57.3	6.36	2.26	2.81	LB	VOC	7.0	22.90	28
4	30556	NPH-X4	81.5	65.9	46.3	6.43	2.32	2.77	LB	VOC	4.0	26.57	70
5	30557	VNR-231	80.6	71.0	58.6	6.86	1.99	3.44	LS	VOC	7.0	23.23	25
6	30558	NPH-X69	82.3	70.6	59.5	5.76	2.56	2.25	SB	OC	4.0	25.40	32
7	30559	KJTRH-2106	81.5	67.4	51.7	6.86	1.95	3.51	LS	VOC	7.0	24.75	47
8	30560	PHI-22103	82.0	69.0	50.0	6.14	2.32	2.64	LB	VOC	3.6	23.93	30
9	30561	JKRH-1170	80.5	70.4	60.6	6.32	2.56	2.46	LB	OC	4.0	24.31	25
10	30562	NRH-307	76.6	62.8	41.2	6.97	2.05	3.40	LS	VOC	7.0	25.52	69
11	30563	JRH-135	82.1	71.9	56.4	6.44	2.25	2.86	LB	VOC	4.0	20.73	79
12	29722	RNRH-15 (Repeat)	81.4	74.1	68.1	6.89	2.03	3.39	LS	VOC	7.0	24.96	22
13	30564	JGLH-337	81.2	70.4	55.7	6.45	2.19	2.94	LB	OC	4.0	24.49	73
14	30565	KAVERI-7374	82.2	73.4	65.4	5.69	2.40	2.37	SB	OC	4.0	22.79	22
15	30566	Suryanath-999	81.7	65.9	45.2	6.80	2.07	3.28	LS	VOC	4.8	26.84	22
16	30567	MEPH-167	81.5	68.9	58.7	7.15	2.16	3.31	LS	VOC	4.0	24.37	22
17	30568	Bio-271	82.9	71.8	59.3	6.94	2.04	3.40	LS	VOC	4.0	25.31	65
18	30569	PHI-22101	81.1	67.3	34.6	6.30	2.17	2.90	LB	VOC	7.0	24.66	22
19	30570	LG-90204	83.1	71.4	55.3	7.17	2.04	3.51	LS	VOC	7.0	24.40	40
20	30571	PHI-22102	81.7	73.6	65.7	7.04	1.99	3.53	LS	VOC	3.0	15.51	73
21	30572	IIRRH-164	83.5	71.1	55.1	5.85	2.01	2.91	MS	VOC	4.0	23.73	25
22	US-314 (NCH)		79.7	67.7	55.2	5.82	2.15	2.70	MS	VOC	5.3	22.99	55
23	CO-51 (NCV)		78.9	70.9	64.9	5.43	2.00	2.71	MS	VOC	4.0	26.34	63
24	MTU-1153 (ZCV)		81.8	72.2	63.6	6.39	2.14	2.98	LB	VOC	3.0	21.88	56
25	Rasi (LCV)		81.1	69.0	55.1	5.29	2.28	2.32	SB	VOC	7.0	26.01	24

Hull: Hulling %; Mill: Milling %; HRR: Head rice recovery; KL: Kernel length; KB: Kernel breadth; L/B: L/B ratio; ASV: Alkali spreading value; AC: Amylose content; GC: Gel consistency

Appendix-4: Grain yield (kg/ha) of hybrids in IHRT Mid early, Kharif 2022

S. No.	IET No	Name	Zone-II									Zone-III						
			ND	DL-Z2 (1)	KUL	HR-Z2 (1)	LDH	PB-Z2 (1)	NGN	UP-Z2 (1)	Z2 (4)	DNG	SGA	BR-Z3 (2)	LIG	RCI	JH-Z3 (2)	CHP
1	30573	SRH-333	8155	8155	7467	7467	5500	5500	5011	5011	6533	6424	7881	7153	11064	4853	7959	6017
2	30574	RRX-3366	9213	9213	8700	8700	7585	7585	7710	7710	8302	5548	7341	6444	10377	4333	7355	5219
3	30575	RALLIS-21304	6959	6959	7633	7633	3983	3983	6804	6804	6345	8511	8272	8392	11164	5113	8139	5107
4	30576	ADVRH-162108	8503	8503	7100	7100	6966	6966	6567	6567	7284	7416	7391	7404	10373	6110	8242	6218
5	30577	HRI-216	8042	8042	9300	9300	6233	6233	4935	4935	7128	6902	7723	7312	11222	5720	8471	5143
6	30578	RNC-0752	9091	9091	8967	8967	6446	6446	4547	4547	7263	7774	8366	8070	11175	5677	8426	4449
7	30579	JKRH-1135	8653	8653	7733	7733	4768	4768	4677	4677	6458	8486	6877	7682	9721	5547	7634	5385
8	30580	KJTRH-2107	8226	8226	5967	5967	4872	4872	4497	4497	5890	7534	7858	7696	8566	5330	6948	5408
9	30581	JRH-136	7665	7665	7233	7233	4495	4495	7126	7126	6630	7190	6940	7065	8524	5417	6970	6142
10	30582	PHI-22104	9625	9625	7600	7600	5826	5826	6425	6425	7369	9566	7358	8462	9535	5373	7454	7482
11	30583	IRH-134	6791	6791	4967	4967	4881	4881	4368	4368	5252	6097	7847	6972	7090	6283	6687	5228
12	30584	MPTH-1403	8526	8526	7633	7633	5184	5184	4172	4172	6379	7233	6717	6975	10300	5070	7685	5022
13	30585	KAVERI-7344	8154	8154	7633	7633	4282	4282	5457	5457	6382	7169	8016	7592	10978	5677	8327	4870
14	30586	MPTH-2071	8452	8452	8633	8633	6446	6446	3095	3095	6656	6453	7326	6889	8390	6153	7272	4811
15	30587	SRPH-123	8969	8969	8500	8500	6948	6948	5720	5720	7534	7190	5913	6551	9773	5027	7400	5860
16	30588	Sudha Gold-3355	7015	7015	7100	7100	3732	3732	5303	5303	5788	6731	2746	6909	8712	6890	7801	5161
17	30589	MEPH-168	6577	6577	7367	7367	4872	4872	6575	6575	6348	7274	7661	7468	10387	6110	8248	5851
18	30590	TNRH-301	6215	6215	5467	5467	3407	3407	4581	4581	4917	4936	7315	6125	8302	5157	6729	4726
19	30591	MEPH-169	9727	9727	8533	8533	4386	4386	3851	3851	6624	8273	7002	7638	9026	5590	7308	6617
20	30592	US-323	8112	8112	7733	7733	4295	4295	3313	3313	5863	7119	7315	7217	11005	5200	8103	5116
21	30593	LG-90303	8216	8216	7133	7133	6537	6537	4288	4288	6544	7598	7467	7532	9436	6500	7968	4677
22	30594	PHI-22105	9440	9440	7100	7100	4993	4993	6875	6875	7102	9110	7822	8466	9949	5893	7921	5434
23	30595	US-350	6412	6412	7167	7167	4126	4126	4977	4977	5671	5630	7039	6335	9093	5157	7125	5752
24	30596	Ankur-6077	8456	8456	5633	5633	4634	4634	3154	3154	5469	7886	7090	7488	10030	4897	7463	5296
25	30597	PHI-22106	8941	8941	8300	8300	3659	3659	4526	4526	6356	8169	6604	7386	10413	4420	7416	6147
26	30598	Pusa RH-65	3362	3362	3667	3667	1556	1556	3880	3880	3116	4302	7540	5921	5961	5980	5970	4332
27	30599	IIRRH-165	6460	6460	7000	7000	4252	4252	7585	7585	6324	6424	7360	6892	8418	5113	6766	5040
28	US-312 (NCH)		7025	7025	6533	6533	3806	3806	5369	5369	5683	7503	7334	7418	9755	4290	7022	4988
29	Gontra Bidhan-3 (NCV)		9463	9463	6800	6800	6073	6073	3483	3483	6455	5773	7079	6426	9748	5287	7517	5031
30	PR-113/Lalat/ Karjat-7/MTU-1010 (ZCV)		6261	6261	5867	5867	3897	3897	3550	3550	4894	5556	6943	6250	7072	4810	5941	5318
31	Local Check Variety (LCV)		6163	6163	7500	7500	6316	6316	4981	4981	6240	5132	5402	5267	8594	4463	6528	5815
Experimental Mean			7835	7835	7225	7225	4999	4999	5077	5077	6284	6997	7147	7142	9489	5401	7445	5408
CD(0.05)			1087	1087	906	906	989	989	381	381	421	798	1627	636	1959	1027	1046	679
CV(%)			8.5	8.5	7.68	7.68	12.12	12.12	4.59	4.59	4.1	6.98	13.94	5.46	12.64	11.65	8.6	7.68
F-Value			**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)											6104							
BVC+CD (0.05)											6876							
D/S			7.6.22		4.6.22		3.6.22		17.6.22			20.6.22	26.6.22		22.6.22	21.6.22		19.7.22
D/P			7.7.22		1.7.22		9.6.22		19.7.22			24.7.22	25.7.22		15.7.22	4.8.22		6.9.22
Gross Plot Size (Sq. m)			10		10		7.69		10			10.08	10			10		9.75
Net Plot Size (Sq. m)			10		10		6.12		7.99			9.36	10		10			7.44
Local Check Variety			Pusa 44		HKR-47		PR 126		-			Sabour Harshit	Gangotri		MTU 1010	IR-64 drt-1		MTU 1156

Note: **-Highly Significant; *-significant; ns-not significant

Appendix-4 (contd.): Grain yield (kg/ha) of hybrids in IHRT Mid early, Kharif 2022

S. No.	IET No	Name	Zone-III contd…								Zone-IV					Zone-V		
			CTK	OR-Z3 (2)	MSD	RAS	UP-Z3 (2)	CHN	WB-Z3 (1)	Z3 (9)	TTB	AS-Z4 (1)	ARD	TR-Z4 (1)	Z4 (2)	RPR	RAS	VNR
1	30573	SRH-333	7319	6668	6863	7602	7068	6511	6511	7156	6603	6603	4093	4093	5348	5428	5752	9090
2	30574	RRX-3366	6165	5692	6842	9203	7653	5575	5575	6629	6383	6383	3380	3380	4882	5873	8548	6684
3	30575	RALLIS-21304	7466	6286	6454	8042	6970	6004	6004	7317	6437	6437	4920	4920	5678	5584	6790	9293
4	30576	ADVRH-162108	7873	7046	6908	5622	6512	5146	5146	7076	5023	5023	5843	5843	5433	6233	5554	8398
5	30577	HRI-216	7035	6089	7067	8386	7432	7836	7836	7407	7197	7197	4090	4090	5643	5234	5585	8252
6	30578	RNC-0752	5437	4943	7169	5965	6696	7758	7758	7140	7167	7167	4757	4757	5962	5304	6076	9807
7	30579	JKRH-1135	7860	6622	6952	6776	6858	6784	6784	7168	6860	6860	4657	4657	5758	5738	5846	7306
8	30580	KJTRH-2107	7339	6373	6985	6414	6734	6472	6472	6902	7953	7953	5500	5500	6727	6002	5030	7463
9	30581	JRH-136	5488	5815	7014	7766	7301	6238	6238	6703	4813	4813	5443	5443	5128	5871	4848	6397
10	30582	PHI-22104	6468	6975	6846	7006	6884	7719	7719	7510	7140	7140	3580	3580	5360	5395	6344	9242
11	30583	IRH-134	5367	5298	4984	5466	5049	5575	5575	6014	4683	4683	3897	3897	4290	5750	4066	4615
12	30584	MPTH-1403	6268	5645	6675	7488	6924	6355	6355	6770	6780	6780	5077	5077	5928	5592	5925	7042
13	30585	KAVERI-7344	6238	5554	6944	5202	6309	7213	7213	6993	7183	7183	5100	5100	6142	5237	7291	9450
14	30586	MPTH-2071	5278	5044	7047	4458	6122	6355	6355	6340	5420	5420	5397	5397	5408	4511	5655	8124
15	30587	SRPH-123	7209	6534	7108	5520	6548	7329	7329	6821	6847	6847	5520	5520	6183	6115	6016	7761
16	30588	Sudha Gold-3355	6078	5620	7190	5464	6682	6043	6043	6675	5960	5960	4950	4950	5455	5173	6244	8851
17	30589	MEPH-168	6822	6336	6373	4058	5652	5146	5146	6724	7890	7890	5807	5807	6848	5444	5568	7179
18	30590	TNRH-301	5184	4955	6577	5796	6364	7057	7057	6137	4667	4667	3820	3820	4243	4134	3720	7094
19	30591	MEPH-169	6985	6801	6577	5564	6215	6394	6394	6940	5183	5183	4600	4600	4892	5337	5186	8829
20	30592	US-323	6852	5984	6740	5860	6508	5770	5770	6818	6940	6940	5953	5953	6447	5179	5444	7618
21	30593	LG-90303	6839	5758	5985	6973	6318	5341	5341	6748	7423	7423	5457	5457	6440	5352	5451	8226
22	30594	PHI-22105	5544	5489	6417	7056	6666	7018	7018	7147	6903	6903	4640	4640	5772	5666	6456	9511
23	30595	US-350	7273	6512	5535	7967	6312	6979	6979	6657	4690	4690	4093	4093	4392	5403	5481	8796
24	30596	Ankur-6077	8340	6818	6524	5305	6123	7329	7329	7030	7703	7703	4620	4620	6162	5957	6386	6827
25	30597	PHI-22106	5120	5634	6618	6450	6562	7213	7213	6819	6840	6840	4843	4843	5842	4929	6305	9244
26	30598	Pusa RH-65	5304	4818	5678	7342	6266	5731	5731	5739	4943	4943	6023	6023	5483	3252	2716	4430
27	30599	IIRRH-165	4957	4998	6144	5936	6113	5458	5458	6112	4643	4643	4980	4980	4812	5368	5405	8078
28	US-312 (NCH)		7076	6032	6806	6074	6637	6589	6589	6751	7380	7380	4720	4720	6050	5164	4926	7988
29	Gontra Bidhan-3 (NCV)		4977	5004	6903	6514	6777	6355	6355	6408	5993	5993	4670	4670	5332	5545	6424	8500
30	PR-113/Lalat/ Karjat-7/MTU-1010 (ZCV)		5544	5431	6904	5527	6499	5692	5692	5946	4390	4390	5207	5207	4798	4296	3250	3857
31	Local Check Variety (LCV)		5401	5608	6965	4538	6170	5380	5380	5802	5133	5133	5230	5230	5182	4576	4314	5793
Experimental Mean			6358	5883	6638	6366	6546	6399	6399	6722	6231	6231	4867	4867	5549	5311	5568	7734
CD(0.05)			1113	525	523	672	807	1274	1274	385	570	570	714	714	482	944	934	1263
CV(%)			10.72	5.46	4.82	5.17	7.55	12.19	12.19	3.5	5.61	5.61	8.99	8.99	5.31	10.88	8.22	10
F-Value			**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)										7136					6532			
BVC+CD (0.05)										6793					5814			
D/S			20.6.22		15.6.22	17.6.22		17.6.22			16.6.22		11.7.22			28.6.22	15.6.22	11.6.22
D/P			24.7.22		17.7.22	19.6.22		13.7.22			14.7.22		30.7.22			23.7.22	11.7.22	1.7.22
Gross Plot Size (Sq. m)			8.1		10	10.8		10.39			10		10			12.18	11.1	625
Net Plot Size (Sq. m)			5.76		8.16	10.1		8.55			10		10			11.76	10.3	7.17
Local Check Variety			Naveen		NDR 3112-1	Surju 52		Khitish			Chilarai		-			Durgeshwari (IGKV R2)	MTU 1010	MTU 1010

Note: **-Highly Significant; *-significant; ns-not significant

Appendix-4 (contd.): Grain yield (kg/ha) of hybrids in IHRT Mid early, Kharif 2022

S. No.	IET No	Name	Zone-V contd…								Zone-VI							
			CG-Z5 (3)	ANK	SND	MH-Z5 (2)	JBP	WRS	MP-Z5 (2)	Z5 (7)	DHB	NVS	NWG	GJ-Z6 (3)	KJT	RDN	MH-Z6 (2)	Z6 (5)
1	30573	SRH-333	6863	6777	6087	6432	6153	4852	5503	6322	6209	4273	8244	5892	6792	6613	6702	6276
2	30574	RRX-3366	6804	5726	4296	5011	5280	4498	4889	5705	5846	3939	6714	5269	6591	5808	6199	5685
3	30575	RALLIS-21304	7307	6585	3957	5271	5987	4810	5398	6108	6307	4811	8602	6210	7642	5435	6538	6411
4	30576	ADVRH-162108	6868	5855	4706	5280	5733	4620	5177	5883	5212	4482	6718	5251	7380	6454	6917	6000
5	30577	HRI-216	6490	6618	4563	5590	6110	5346	5728	5972	6111	4454	8820	6056	7148	6639	6894	6460
6	30578	RNC-0752	7191	6838	5045	5941	6310	6266	6288	6526	6193	4561	9338	6223	7298	6893	7095	6643
7	30579	JKRH-1135	6248	6870	3258	5064	5953	4122	5038	5551	5228	4539	5880	5043	7990	6099	7045	5935
8	30580	KJTRH-2107	6337	6215	5708	5962	5263	4046	4655	5708	6020	3671	7307	5391	6450	6047	6248	5790
9	30581	JRH-136	5915	6138	5994	6066	5700	3819	4759	5583	5735	3906	6988	5257	5538	5957	5747	5513
10	30582	PHI-22104	7089	6699	5962	6331	6460	6367	6414	6649	6320	4557	8460	6089	7769	6971	7370	6669
11	30583	IRH-134	4967	5714	4345	5030	5350	3591	4470	4816	2196	2991	6104	3702	5076	8541	6809	5243
12	30584	MPTH-1403	6279	6038	5134	5586	5813	3510	4662	5567	4899	4765	8052	5565	7786	6691	7239	6307
13	30585	KAVERI-7344	7357	6557	5601	6079	6400	3996	5198	6306	6340	5033	7872	6177	8177	8773	8475	7163
14	30586	MPTH-2071	6169	6247	6929	6588	5940	4578	5259	6014	4993	4415	6278	5035	6589	5980	6284	5584
15	30587	SRPH-123	6770	6331	6671	6501	6580	4835	5708	6356	5183	4776	7473	5527	7467	6391	6929	6131
16	30588	Sudha Gold-3355	6862	6237	6800	6519	5897	3916	4906	6162	5761	3708	7488	5338	5747	6204	5975	5646
17	30589	MEPH-168	6159	5934	6903	6418	5537	4869	5203	5946	6046	4784	7982	6012	7399	6284	6842	6386
18	30590	TNRH-301	5266	5490	3957	4724	4713	3637	4175	4742	6095	2503	5360	4543	7217	5838	6528	5399
19	30591	MEPH-169	6710	6190	4786	5488	4843	4114	4479	5638	6167	4936	6594	5725	6048	5110	5579	5714
20	30592	US-323	6248	6361	4496	5429	5323	4211	4767	5533	5676	4388	7479	5557	7510	6220	6865	6151
21	30593	LG-90303	6517	6476	5762	6119	5617	3920	4768	5859	6287	4391	6865	5690	6445	6741	6593	6073
22	30594	PHI-22105	7267	5547	5428	5488	6227	4494	5360	6175	5484	4995	4362	4983	7537	5651	6594	5714
23	30595	US-350	6747	6085	4782	5433	5340	5510	5425	5954	5118	4481	7480	5365	7302	5785	6544	5900
24	30596	Ankur-6077	6397	7106	6154	6630	6100	3143	4622	5937	5696	5201	4942	5304	8640	5272	6956	6033
25	30597	PHI-22106	6917	6170	4911	5540	6133	3979	5056	5929	4448	4670	5730	4789	7004	5062	6033	5363
26	30598	Pusa RH-65	3606	3940	3832	3886	6607	3287	4947	4085	3758	2034	5208	3388	5510	5024	5267	4246
27	30599	IIRRH-165	6496	5554	6078	5816	6357	5553	5955	6103	5866	3861	7698	5464	5434	5293	5363	5461
28	US-312 (NCH)		6161	5963	4866	5414	5497	4566	5031	5598	5372	4812	6802	5460	6291	6894	6592	5983
29	Gontra Bidhan-3 (NCV)		6906	6752	4737	5744	6553	4941	5747	6207	4150	4451	8194	5125	7181	5479	6330	5706
30	PR-113/Lalat/ Karjat-7/MTU-1010 (ZCV)		3936	5621	5133	5377	5170	2633	3902	4352	3301	2317	4456	3159	5270	6160	5715	4300
31	Local Check Variety (LCV)		4936	6015	5637	5826	5240	4316	4778	5165	4814	3782	7696	5059	4651	4949	4800	4981
Experimental Mean			6316	6150	5243	5696	5812	4398	5105	5757	5382	4209	7006	5279	6803	6170	6486	5834
CD(0.05)			685	644	746	471	955	529	540	336	838	627	1331	515	890	1424	865	432
CV(%)			6.65	6.41	8.71	5.06	10.06	7.37	6.48	3.58	9.54	9.12	9.3	5.98	8.01	14.14	8.17	4.53
F-Value			**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)										5934								6415
BVC+CD (0.05)										6543								6138
D/S				25.6.22	25.6.22		15.6.22	17.6.22			8.6.22	13.6.22	18.6.22		11.6.22	15.6.22		
D/P				30.7.22	19.7.22		11.7.22	16.7.22			16.7.22	11.7.22	27.7.22		5.7.22	14.7.22		
Gross Plot Size (Sq. m)				10.08	10		10	10			12.96	8.51	6.75		5.4	6.08		
Net Plot Size (Sq. m)				8.19	7.48		7.99	7.9			10.2	6.3	4.83		3.47	4.68		
Local Check Variety				IR 64	PKV Ganesh		JR 206	JR 206			Mahisagar	GNR-3	Mahisagar (3128)		Karjat 3	Phule Radha		

Note: **-Highly Significant; *-significant; ns-not significant

Appendix-4 (contd.): Grain yield (kg/ha) of hybrids in IHRT Mid early, Kharif 2022

S. No.	IET No	Name	Zone-VII													Overall Mean (35)
			BAY	MTU	RGL	AP-Z7 (3)	MND	KA-Z7 (1)	HYD	TIE	WGL	TE-Z7 (3)	CBT	TN-Z7 (1)	Z7 (8)	
1	30573	SRH-333	6970	7123	7403	7165	10578	10578	4659	9213	4480	6118	7635	7635	7258	6716
2	30574	RRX-3366	8273	6009	6807	7030	10377	10377	6954	7455	4898	6435	7778	7778	7319	6576
3	30575	RALLIS-21304	11877	6942	7067	8629	10643	10643	7391	6018	6090	6500	7936	7936	7996	6908
4	30576	ADVRH-162108	9747	6102	5568	7139	11391	11391	7330	8632	5394	7119	8460	8460	7828	6799
5	30577	HRI-216	11913	7749	6462	8708	9571	9571	6889	6995	7814	7233	9317	9317	8339	7083
6	30578	RNC-0752	10760	7186	6934	8294	5998	5998	7987	6064	7613	7221	6307	6307	7356	6951
7	30579	JKRH-1135	9323	6190	7484	7666	9103	9103	7370	5585	5866	6274	6942	6942	7233	6535
8	30580	KJTRH-2107	10070	6316	5062	7149	10000	10000	6663	6219	6731	6537	5175	5175	7029	6414
9	30581	JRH-136	9493	7087	5015	7198	8466	8466	5796	7031	4425	5751	6063	6063	6672	6211
10	30582	PHI-22104	11000	7693	8289	8994	8726	8726	7434	7467	5654	6851	5407	5407	7709	7132
11	30583	IRH-134	7123	5869	4972	5988	7349	7349	6562	5858	4497	5639	6027	6027	6032	5490
12	30584	MPTH-1403	9093	6613	5640	7115	8577	8577	7689	5709	7003	6800	7656	7656	7248	6486
13	30585	KAVERI-7344	11043	7856	6752	8550	10734	10734	7212	6625	6225	6687	6116	6116	7820	6959
14	30586	MPTH-2071	10440	5849	5998	7429	9532	9532	8572	5791	4445	6269	7693	7693	7290	6379
15	30587	SRPH-123	10413	6892	6875	8060	9877	9877	7752	7755	5048	6852	7079	7079	7712	6892
16	30588	Sudha Gold-3355	10007	6951	5444	7467	11332	11332	7273	7231	5705	6736	5376	5376	7415	6426
17	30589	MEPH-168	9347	7042	5198	7195	10942	10942	7124	8485	6070	7226	7831	7831	7755	6732
18	30590	TNRH-301	8703	5747	4308	6253	8694	8694	5944	6315	4714	5658	6408	6408	6354	5559
19	30591	MEPH-169	8163	6850	5768	6927	5075	5075	5916	8241	4668	6275	4048	4048	6091	6158
20	30592	US-323	10033	6141	6322	7499	10617	10617	6664	7512	4623	6266	7661	7661	7447	6488
21	30593	LG-90303	9990	7289	5768	7682	9987	9987	6933	7931	5138	6667	8212	8212	7656	6655
22	30594	PHI-22105	10367	7924	6722	8338	10819	10819	7057	9264	6779	7700	6111	6111	8130	6901
23	30595	US-350	10120	7048	5641	7603	10474	10474	6841	7506	4724	6357	6540	6540	7362	6334
24	30596	Ankur-6077	9733	6758	3533	6675	10942	10942	7480	6523	5438	6481	5465	5465	6984	6434
25	30597	PHI-22106	9953	8132	6943	8343	12794	12794	7608	8822	5809	7413	6963	6963	8378	6700
26	30598	Pusa RH-65	6877	5647	4768	5764	4178	4178	4703	2691	4692	4029	4534	4534	4761	4656
27	30599	IIRRH-165	9577	6529	5138	7081	9370	9370	5758	6372	5540	5890	6098	6098	6798	6132
28	US-312 (NCH)		8623	6713	4789	6708	10416	10416	7970	7305	4272	6516	7799	7799	7236	6365
29	Gontra Bidhan-3 (NCV)		8370	6465	5355	6730	8811	8811	8451	7928	6128	7502	5095	5095	7075	6370
30	PR-113/Lalat/ Karjat-7/MTU-1010 (ZCV)		5440	6362	5041	5614	6173	6173	4995	6889	4628	5504	5910	5910	5680	5153
31	Local Check Variety (LCV)		6140	7001	5790	6310	8681	8681	6541	6923	6996	6820	5270	5270	6668	5785
Experimental Mean			9322	6777	5899	7332	9362	9362	6888	7044	5552	6494	6610	6610	7182	6399
CD(0.05)			967	859	500	486	1289	1289	1465	1216	949	634	609	609	361	175
CV(%)			6.35	7.76	5.19	4.06	8.43	8.43	13.03	10.57	10.46	5.98	5.65	5.65	3.08	1.67
F-Value			**	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)															7997	6540
BVC+CD (0.05)															7436	6545
D/S			18.6.22	25.6.22	2.7.22		21.7.22		19.6.22	20.6.22	21.6.22		9.6.22			
D/P			7.8.22	26.7.22	28.7.22		11.8.22		20.7.22	20.7.22	16.7.22		5.7.22			
Gross Plot Size (Sq. m)			10	10.89	10.23				6.73		7.8		8.1			
Net Plot Size (Sq. m)			10	8.37	7.83		5.13		5.19	5	7.8		6.3			
Local Check Variety			MTU 1010	MTU 1121	MTU 1121		IR-64		Varadhan	3T32	RNR 15048		ADT 39			

Note: **-Highly Significant; *-significant; ns-not significant

Appendix-5: Days to 50% Flowering (DFF) of hybrids in IHRT-Mid early, Kharif 2022

S. No.	IET No	Name	Zone-II									Zone-III											
			ND	DL-Z2 (1)	KUL	HR-Z2 (1)	LDH	PB-Z2 (1)	NGN	UP-Z2 (1)	Z2 (4)	DNG	SGA	BR-Z3 (2)	LIG	RCI	JH-Z3 (2)	CHP	CTK	OR-Z3 (2)	MSD	RAS	UP-Z3 (2)
1	30573	SRH-333	93	93	85	85	89	89	105	105	93	95	92	93	86	114	100	100	96	98	92	94	92
2	30574	RRX-3366	92	92	84	84	89	89	104	104	92	91	90	91	85	113	99	102	95	98	88	96	91
3	30575	RALLIS-21304	109	109	97	97	107	107	119	119	108	98	94	96	95	111	103	107	103	105	106	98	104
4	30576	ADVRH-162108	93	93	87	87	89	89	105	105	93	92	92	92	85	115	100	101	95	98	93	95	94
5	30577	HRI-216	101	101	93	93	99	99	113	113	102	93	94	94	91	113	102	106	104	105	98	104	100
6	30578	RNC-0752	95	95	92	92	97	97	117	117	100	98	93	95	92	113	103	100	96	98	105	108	106
7	30579	JKRH-1135	91	91	87	87	98	98	112	112	97	95	95	95	91	113	102	106	95	101	93	100	95
8	30580	KJTRH-2107	104	104	98	98	105	105	124	124	108	98	94	96	95	111	103	110	104	107	99	116	104
9	30581	JRH-136	98	98	90	90	100	100	120	120	102	96	94	95	92	110	101	108	95	101	98	104	100
10	30582	PHI-22104	108	108	97	97	101	101	117	117	106	98	95	96	93	114	104	107	95	101	107	106	107
11	30583	IRH-134	88	88	78	78	85	85	103	103	89	93	89	91	84	115	100	102	96	99	87	92	89
12	30584	MPTH-1403	92	92	90	90	97	97	107	107	96	99	95	97	91	111	101	101	101	101	93	98	95
13	30585	KAVERI-7344	102	102	94	94	104	104	122	122	106	97	96	97	92	114	103	104	98	101	104	108	106
14	30586	MPTH-2071	94	94	89	89	97	97	108	108	97	99	94	96	87	114	101	107	101	104	100	98	99
15	30587	SRPH-123	93	93	85	85	96	96	106	106	95	94	93	94	87	106	96	101	98	99	90	98	93
16	30588	Sudha Gold-3355	104	104	93	93	107	107	123	123	107	97	32	97	94	108	101	107	101	104	102	104	103
17	30589	MEPH-168	98	98	92	92	99	99	106	106	99	94	95	94	92	114	103	103	99	101	99	108	102
18	30590	TNRH-301	97	97	90	90	101	101	112	112	100	93	93	93	91	108	99	101	95	98	92	102	95
19	30591	MEPH-169	101	101	92	92	102	102	111	111	102	92	94	93	88	111	100	100	101	101	100	104	101
20	30592	US-323	94	94	85	85	96	96	107	107	95	93	91	92	86	115	100	101	96	98	91	100	94
21	30593	LG-90303	97	97	93	93	99	99	114	114	101	92	93	93	91	110	101	107	98	103	97	102	99
22	30594	PHI-22105	102	102	95	95	107	107	120	120	106	95	95	95	95	110	102	107	100	104	106	97	103
23	30595	US-350	105	105	96	96	103	103	115	115	105	94	95	94	90	111	101	105	104	104	106	103	105
24	30596	Ankur-6077	100	100	92	92	102	102	114	114	102	95	93	94	91	111	101	104	95	100	97	103	99
25	30597	PHI-22106	100	100	93	93	105	105	114	114	103	93	93	93	91	114	102	105	95	100	90	104	94
26	30598	Pusa RH-65	103	103	94	94	114	114	124	124	109	100	95	98	96	110	103	106	103	104	88	112	96
27	30599	IIRRH-165	100	100	95	95	104	104	117	117	104	96	94	95	93	113	103	109	96	103	105	113	108
28	US-312 (NCH)		98	98	93	93	100	100	113	113	101	98	93	96	92	111	102	104	101	102	97	98	97
29	Gontra Bidhan-3 (NCV)		92	92	86	86	87	87	114	114	95	93	93	93	88	114	101	104	93	98	91	96	93
30	PR-113/Lalat/ Karjat-7/ MTU-1010 (ZCV)		103	103	98	98	106	106	127	127	108	100	98	99	96	111	103	109	95	102	109	114	111
31	Local Check Variety (LCV)		108	108	97	97	104	104	117	117	107	92	90	91	90	110	100	106	93	99	96	104	99
Experimental Mean			99	99	91	91	100	100	114	114	101	95	92	94	91	112	101	105	98	101	97	103	99

Appendix-5 (contd.): Days to 50% Flowering (DFF) of hybrids in IHRT-Mid early, Kharif 2022

S. No.	IET No	Name	Zone-III contd….			Zone-IV					Zone-V										
			CHN	WB-Z3 (1)	Z3 (9)	TTB	AS-Z4 (1)	ARD	TR-Z4 (1)	Z4 (2)	RPR	RAS	VNSR	CG-Z5 (3)	ANK	SND	MH-Z5 (2)	JBP	WRS	MP-Z5 (2)	Z5 (7)
1	30573	SRH-333	90	90	96	93	93	96	96	94	101	86	80	90	95	90	93	100	92	96	92
2	30574	RRX-3366	91	91	95	87	87	82	82	84	101	90	79	90	92	88	90	102	92	97	92
3	30575	RALLIS-21304	95	95	101	102	102	94	94	98	106	97	89	97	102	98	100	112	105	108	101
4	30576	ADVRH-162108	87	87	95	81	81	88	88	84	101	88	81	90	94	93	93	107	96	101	95
5	30577	HRI-216	93	93	99	100	100	93	93	96	103	96	85	94	99	93	96	107	100	104	97
6	30578	RNC-0752	94	94	100	95	95	93	93	94	105	96	87	96	98	96	97	111	101	106	99
7	30579	JKRH-1135	94	94	98	97	97	91	91	94	102	96	87	95	98	95	96	105	100	102	98
8	30580	KJTRH-2107	97	97	102	102	102	90	90	96	106	102	90	99	102	97	99	112	99	106	101
9	30581	JRH-136	91	91	98	102	102	84	84	93	101	94	83	93	95	89	92	104	93	98	94
10	30582	PHI-22104	92	92	100	97	97	90	90	94	104	95	88	96	99	93	96	107	100	104	98
11	30583	IRH-134	92	92	95	83	83	93	93	88	98	87	75	87	92	85	88	100	91	95	90
12	30584	MPTH-1403	93	93	98	96	96	95	95	95	102	93	86	94	98	96	97	109	96	102	97
13	30585	KAVERI-7344	92	92	100	102	102	89	89	96	104	102	87	97	99	95	97	110	97	104	99
14	30586	MPTH-2071	88	88	99	94	94	96	96	95	105	94	82	94	97	93	95	109	94	102	96
15	30587	SRPH-123	86	86	95	97	97	95	95	96	102	92	83	92	97	94	95	104	94	99	95
16	30588	Sudha Gold-3355	91	91	100	102	102	94	94	98	104	94	83	94	98	91	95	105	100	102	97
17	30589	MEPH-168	91	91	99	95	95	91	91	93	103	93	86	94	99	92	96	105	91	98	96
18	30590	TNRH-301	91	91	96	103	103	95	95	99	102	92	81	92	99	92	95	103	90	96	94
19	30591	MEPH-169	91	91	98	102	102	92	92	97	100	92	82	91	94	88	91	101	93	97	93
20	30592	US-323	87	87	95	93	93	91	91	92	100	92	80	91	94	91	92	103	93	98	93
21	30593	LG-90303	92	92	98	97	97	91	91	94	102	94	85	94	98	92	95	109	97	103	97
22	30594	PHI-22105	95	95	100	102	102	98	98	100	104	96	86	95	100	96	98	107	97	102	98
23	30595	US-350	96	96	100	99	99	91	91	95	104	98	88	97	102	96	99	109	99	104	100
24	30596	Ankur-6077	92	92	98	99	99	91	91	95	104	93	84	94	92	92	92	104	95	100	95
25	30597	PHI-22106	91	91	97	101	101	78	78	90	103	94	84	94	98	91	95	104	97	100	96
26	30598	Pusa RH-65	91	91	100	104	104	89	89	96	108	102	93	101	104	90	97	113	101	107	101
27	30599	IIRRH-165	94	94	101	99	99	92	92	96	104	95	85	95	97	94	96	107	97	102	97
28	US-312 (NCH)		91	91	98	101	101	93	93	97	104	94	87	95	101	93	97	108	97	103	98
29	Gontra Bidhan-3 (NCV)		85	85	95	92	92	96	96	94	104	94	83	94	96	93	95	107	95	101	96
30	PR-113/Lalat/ Karjat-7/ MTU-1010 (ZCV)		96	96	103	109	109	92	92	100	96	86	80	88	89	86	88	97	92	95	90
31	Local Check Variety (LCV)		93	93	97	102	102	92	92	97	99	87	81	89	100	95	98	103	93	98	94
Experimental Mean			92	92	98	98	98	91	91	95	103	94	84	94	97	92	95	106	96	101	96

Appendix-5 (contd.): Days to 50% Flowering (DFF) of hybrids in IHRT-Mid early, Kharif 2022

S. No.	IET No	Name	Zone-VI								Zone-VII													Overall Mean (35)
			DHB	NVS	NWG	GJ-Z6 (3)	KJT	RDN	MH-Z6 (2)	Z6 (5)	BAY	MTU	RGL	AP-Z7 (3)	MND	KA-Z7 (1)	HYD	TIE	WGL	TE-Z7 (3)	CBT	TN-Z7 (1)	Z7 (8)	
1	30573	SRH-333	99	92	96	96	85	97	91	94	79	88	79	82	94	94	90	93	82	88	90	90	87	92
2	30574	RRX-3366	95	90	94	93	92	89	90	92	78	84	79	80	93	93	94	95	83	91	91	91	87	91
3	30575	RALLIS-21304	103	99	102	101	88	105	96	99	87	95	89	91	98	98	101	97	95	98	96	96	95	100
4	30576	ADVRH-162108	94	91	92	93	92	100	96	94	79	82	79	80	97	97	96	94	82	91	93	93	88	92
5	30577	HRI-216	102	95	98	99	92	100	96	97	83	94	81	86	93	93	101	95	90	96	95	95	92	97
6	30578	RNC-0752	100	96	100	99	98	98	98	98	86	93	84	88	103	103	104	96	92	98	97	97	94	98
7	30579	JKRH-1135	100	98	103	100	99	99	99	99	86	93	84	88	97	97	100	95	88	94	97	97	93	96
8	30580	KJTRH-2107	104	97	98	100	98	98	98	99	87	97	90	91	97	97	104	98	97	100	100	100	96	100
9	30581	JRH-136	101	94	98	97	92	91	92	95	80	92	82	85	86	86	94	95	83	91	92	92	88	95
10	30582	PHI-22104	101	93	102	98	98	96	97	98	85	93	86	88	98	98	99	96	87	94	96	96	93	98
11	30583	IRH-134	90	88	94	90	89	91	90	90	77	84	74	78	87	87	92	95	83	90	89	89	85	90
12	30584	MPTH-1403	95	96	100	96	92	100	96	96	87	95	89	90	99	99	103	96	94	98	97	97	95	97
13	30585	KAVERI-7344	101	97	104	100	98	101	100	100	86	92	87	88	98	98	99	96	92	96	96	96	93	99
14	30586	MPTH-2071	103	94	98	98	93	97	95	97	83	89	82	85	97	97	96	97	83	92	95	95	90	96
15	30587	SRPH-123	93	93	94	93	85	101	93	93	80	92	79	84	95	95	95	96	86	92	93	93	90	93
16	30588	Sudha Gold-3355	103	91	103	98	92	96	94	97	81	91	81	85	87	87	95	94	86	92	92	92	89	97
17	30589	MEPH-168	103	95	100	99	88	92	90	95	85	94	84	88	88	88	98	94	84	92	93	93	90	95
18	30590	TNRH-301	101	93	98	97	89	94	92	95	81	91	80	84	89	89	97	94	85	92	92	92	88	94
19	30591	MEPH-169	99	92	96	96	86	90	88	92	80	87	74	80	82	82	90	92	83	88	86	86	84	93
20	30592	US-323	96	93	95	94	87	91	89	92	81	85	79	82	87	87	93	97	82	91	91	91	87	92
21	30593	LG-90303	101	96	104	99	86	100	93	97	82	90	83	85	94	94	98	96	85	93	95	95	90	96
22	30594	PHI-22105	105	97	103	101	98	64	97	100	84	93	84	87	92	92	99	94	92	95	96	96	92	98
23	30595	US-350	96	98	101	98	99	103	101	99	86	92	85	88	96	96	99	97	90	95	96	96	93	98
24	30596	Ankur-6077	102	93	103	99	92	97	94	97	81	93	83	86	93	93	95	96	86	92	94	94	90	96
25	30597	PHI-22106	101	95	103	99	87	95	91	96	84	95	82	87	89	89	97	94	87	93	94	94	90	95
26	30598	Pusa RH-65	112	99	104	105	98	102	100	103	93	100	83	92	102	102	103	98	97	100	101	101	97	101
27	30599	IIRRH-165	105	95	103	101	89	94	92	97	83	94	91	89	94	94	96	95	88	93	95	95	92	98
28	US-312 (NCH)		96	93	102	96	92	95	93	95	84	92	84	87	94	94	99	97	90	95	94	94	92	96
29	Gontra Bidhan-3 (NCV)		92	93	94	93	92	103	98	95	80	86	79	82	102	102	97	96	82	92	95	95	90	94
30	PR-113/Lalat/ Karjat-7/ MTU-1010 (ZCV)		89	94	94	92	92	94	93	92	77	87	78	81	85	85	89	93	85	89	87	87	85	95
31	Local Check Variety (LCV)		85	93	94	90	85	91	88	89	76	108	97	94	88	88	101	96	104	100	100	100	96	96
Experimental Mean			99	94	99	97	92	96	94	96	83	92	83	86	93	93	97	95	88	94	94	94	91	96

Appendix-6: Quality characteristics of IHRT-Mid-Early, Kharif 2022

S. No.	IET No.	Name	Hull	Mill	HRR	KL	KB	L/B	Grain Type	Grain Chalk	ASV	AC	GC
1	30573	SRH-333	82.7	64.4	55.4	6.64	2.25	2.95	LB	OC	7.0	27.80	53
2	30574	RRX-3366	82.4	68.9	60.7	7.17	2.12	3.38	LS	VOC	5.0	24.78	22
3	30575	RALLIS-21304	82.2	68.6	57.0	5.78	2.45	2.35	SB	VOC	4.0	27.92	44
4	30576	ADVRH-162108	81.6	68.5	57.3	5.86	2.33	2.51	MS	VOC	4.0	24.20	22
5	30577	HRI-216	81.5	74.9	65.6	5.88	2.31	2.54	MS	OC	7.0	24.61	22
6	30578	RNC-0752	82.8	69.4	55.9	6.60	2.27	2.90	LB	OC	7.0	24.81	23
7	30579	JKRH-1135	83.0	68.9	58.4	6.39	2.15	2.97	LB	VOC	4.6	24.20	25
8	30580	KJTRH-2107	80.4	62.1	56.9	6.52	2.22	2.93	LB	VOC	4.3	24.08	29
9	30581	JRH-136	81.4	67.1	41.2	6.39	2.12	3.01	LS	VOC	4.0	24.75	22
10	30582	PHI-22104	81.7	62.8	34.6	6.61	2.30	2.87	LB	VOC	5.1	20.91	22
11	30583	IRH-134	81.9	69.3	50.8	6.82	2.02	3.37	LS	VOC	5.6	25.10	22
12	30584	MPTH-1403	81.1	70.4	48.3	6.32	2.24	2.82	LB	VOC	4.1	16.63	80
13	30585	KAVERI-7344	81.2	68.3	40.9	5.74	2.56	2.24	SB	OC	5.6	24.61	24
14	30586	MPTH-2071	82.0	73.0	57.7	6.66	2.31	2.88	LB	VOC	5.1	22.70	25
15	30587	SRPH-123	82.7	67.7	55.8	6.98	2.28	3.06	LS	VOC	7.0	24.81	22
16	30588	Sudha Gold-3355	82.2	64.4	26.3	6.19	2.18	2.83	LB	VOC	4.0	23.29	60
17	30589	MEPH-168	80.8	67.2	58.6	6.06	2.42	2.48	LB	VOC	4.0	26.98	42
18	30590	TNRH-301	82.1	73.1	59.1	5.90	2.00	2.95	MS	VOC	4.8	21.82	25
19	30591	MEPH-169	82.3	70.8	37.0	5.56	2.19	2.53	MS	VOC	5.6	25.13	22
20	30592	US-323	81.9	67.4	44.0	6.14	2.24	2.74	LB	VOC	3.0	23.40	23
21	30593	LG-90303	81.4	69.0	55.7	6.22	2.18	2.85	LB	OC	5.5	20.91	25
22	30594	PHI-22105	80.6	69.6	35.8	5.74	2.48	2.31	SB	VOC	4.0	24.37	22
23	30595	US-350	81.3	69.9	30.8	5.78	2.34	2.47	SB	VOC	4.5	16.54	61
24	30596	Ankur-6077	82.8	68.1	45.9	6.24	2.34	2.70	LB	VOC	3.0	22.88	55
25	30597	PHI-22106	82.1	66.7	30.2	5.96	2.33	2.55	MS	VOC	4.0	24.99	42
26	30598	Pusa RH-65	81.7	71.6	65.1	7.02	1.98	3.54	LS	VOC	5.5	24.66	49
27	30599	IIRRH-165	81.4	69.7	39.3	5.71	2.05	2.78	MS	VOC	4.0	26.07	65
28	US-312 (NCH)		81.4	70.8	55.9	5.74	2.06	2.78	MS	VOC	5.0	23.32	44
29	Gontra Bidhan-3 (NCV)		80.5	70.7	55.8	5.34	2.32	2.30	SB	VOC	4.0	26.25	48
30	MTU-1010 (ZCV)		80.1	66.1	55.2	6.32	1.96	3.22	LS	VOC	7.0	24.52	67
31	Varadhan (LCV)		80.2	71.2	64.6	6.41	2.29	2.79	LB	VOC	5.0	26.84	65

Hull: Hulling %; Mill: Milling %; HRR: Head rice recovery; KL: Kernel length; KB: Kernel breadth; L/B: L/B ratio; ASV: Alkali spreading value; AC: Amylose content; GC: Gel consistency

Appendix-7: Grain yield (kg/ha) of hybrids in IHRT Medium, Kharif 2022

S. No.	IET No	Name	Zone-II							Zone-III								
			KUL	HR-Z2 (1)	LDH	PB-Z2 (1)	@PNT	@NGN	Z2 (2)	DNG	SGA	BR-Z3 (2)	RCI	JH-Z3 (1)	CTK	OR-Z3 (1)	MSD	RAS
1	**29616**	MALI-484					3595	6070		7563	8098	7830	5356	5356	7300	7300	7230	3886
2	30600	RRX-3484	8600	8600	5158	5158	3599	3830	6879	7770	6976	7373	8549	8549	7407	7407	6822	9266
3	30601	ADVRH-190518	7833	7833	4989	4989	1630	4205	6411	8189	7190	7689	5717	5717	6897	6897	6659	6052
4	30602	ADVRH-191788	8433	8433	6948	6948	3136	4514	7691	7643	7727	7685	4120	4120	7720	7720	7108	4936
5	30603	RNE-0456	9067	9067	5822	5822	1476	3930	7444	9298	7345	8322	6798	6798	7307	7307	7149	7820
6	30604	Indam 200-055	5733	5733	2891	2891	569	6809	4312	7982	7694	7838	8137	8137	6444	6444	7271	8671
7	30605	RNE-0463	8400	8400	3853	3853	2860	7050	6127	8322	6732	7527	7365	7365	7071	7071	7271	5810
8	30606	MPTH-1070	7800	7800	3013	3013	2251	4965	5406	7469	7167	7318	5562	5562	7410	7410	6536	6681
9	30607	KAVERI-7428	4867	4867	2926	2926	1925	6500	3896	6858	6824	6841	3863	3863	8396	8396	5555	4885
10	30608	MEPH-170	8100	8100	6207	6207	2511	3563	7154	8031	7079	7555	5408	5408	7570	7570	7006	7912
11	30609	US-362	7767	7767	4638	4638	2151	3442	6202	8448	7070	7759	4635	4635	7707	7707	7189	5906
12	30610	PHI-22107	8967	8967	5032	5032	2906	6809	7000	7335	6554	6944	4275	4275	6807	6807	7230	8072
13	30611	MEPH-171	7567	7567	4178	4178	2730	4047	5872	6371	7182	6777	4378	4378	7353	7353	7120	4428
14	30612	VNR-232	7733	7733	3555	3555	2213	3509	5644	7793	6801	7297	4893	4893	7876	7876	6740	5900
15	30613	CRHR-169	6833	6833			1064	3087	6833	9380	7531	8455	5459	5459	9475	9475	6863	5103
16	30614	PHI-22108	9933	9933	5869	5869	4386	2849	7901	8706	6901	7803	4687	4687	6647	6647	6720	5870
17	30615	CRHR-174	4267	4267	1916	1916	702	3342	3091	8401	7165	7783	4017	4017	8905	8905	6699	5059
18	30616	IIRRH-166	6867	6867	4417	4417	3999	8594	5642	7355	7061	7208	5511	5511	6374	6374	6703	5308
19	30617	CRHR-175	4367	4367			270	3358	4367	8765	7055	7910	8755	8755	8363	8363	7198	5546
20	30618	IIRRH-167	5100	5100	2519	2519	3282	3767	3809	5628	6185	5906	4996	4996	6717	6717	6700	6557
21	30619	IIRRH-168	4900	4900	3871	3871	3204	6804	4385	7269	6942	7106	5665	5665	6591	6591	6699	5518
22	30620	PHI-22109	8333	8333	6675	6675	4747	6671	7504	7505	6601	7053	5099	5099	7737	7737	6209	7556
23	HRI-174 (NCH)		7967	7967	4061	4061	3806	3567	6014	7782	6627	7204	6489	6489	6827	6827	6740	4101
24	NDR-359 (NCV)		6167	6167	3416	3416	1904	3458	4791	6742	7120	6931	5202	5202	6344	6344	4779	7654
25	PR-121/CR Dhan-300/ IR 64 /Akshayadhan/Jaya ZCV)		5200	5200	4486	4486	913	4314	4843	6794	6938	6866	3914	3914	6444	6444	5351	3826
26	Local Check Variety (LCV)		7700	7700	5380	5380	1284	4347	6540	6555	6372	6463	4996	4996	5943	5943	5433	6042
Experimental Mean			7140	7140	4427	4427	2427	4746	5830	7690	7036	7363	5532	5532	7294	7294	6653	6091
CD(0.05)			880	880	836	836	3173	282	479	726	832	554	998	998	1711	1711	560	1231
CV(%)			7.55	7.55	11.57	11.57	80.05	3.64	5.03	5.78	7.24	4.61	11.05	11.05	14.36	14.36	5.15	7.77
F-Value			**	**	**	**	ns	**	**	**	*	**	**	**	*	*	**	**
NHC+CD (0.05)									6493									
BVC+CD (0.05)									7019									
D/S			3.6.22		1.6.22		13.6.22	17.6.22		20.6.22	26.6.22		21.6.22		20.6.22		14.6.22	17.6.22
D/P			2.7.22		7.7.22		3.8.22	20.7.22		24.7.22	26.7.22		5.8.22		29.7.22		16.7.22	21.7.22
Gross Plot Size (Sq.m)			10		7.69		10.13	10		10.08	10		10		7.98		10	10.8
Net Plot Size (Sq.m)			10		6.12		7.56	7.99		9.36	10				5.68		8.16	10.1
Local Check Variety			HKR 128		PR 126		Pant Dhan-4	-		Sabour Shree	Mugdha		IR-64 drt-1		CR Dhan 316		NDR 2065	Surju 52

Note: @ Data of Nagina (NGN) not included in the analysis due to Low CV,: Data of Pant Nagar (PNT) non included in the analysis due to low mean yield, high CV and non-significant F-value; **-Highly Significant; *-significant; ns-not significant

Appendix-7 (contd.): Grain yield (kg/ha) of hybrids in IHRT Medium, Kharif 2022

S. No.	IET No	Name	Zone-III contd..				Zone-IV					Zone-V						
			VRN	UP-Z3 (3)	@CHN	Z3 (7)	TTB	AS-Z4 (1)	ARD	TR-Z4 (1)	Z4 (2)	RPR	RAS	VNSR	CG-Z5 (3)	ANK	SND	MH-Z5 (2)
1	**29616**	MALI-484	7318	6529	6939	6825	6977	6977	4641	4641	5809	5062	5200	9988	6970	7273	4507	5890
2	30600	RRX-3484	8707	8108	8577	7875	4433	4433	5127	5127	4780	5375	8585	7258	6743	7517	6461	6989
3	30601	ADVRH-190518	8041	7093	6823	7024	5037	5037	5740	5740	5388	5643	6084	8685	6875	7082	6529	6805
4	30602	ADVRH-191788	9293	7473	7135	7033	5477	5477	5466	5466	5472	6103	5482	8610	6981	7847	5605	6726
5	30603	RNE-0456	9457	8185	8499	7874	7370	7370	5552	5552	6461	5462	5956	9897	7321	7717	6792	7255
6	30604	Indam 200-055	7809	7778	8499	7647	6563	6563	5584	5584	6074	6419	8346	8390	7665	7428	5846	6637
7	30605	RNE-0463	8432	7445	7719	7380	6127	6127	5217	5217	5672	5061	6617	9661	7189	7412	5871	6641
8	30606	MPTH-1070	9493	7728	7758	7212	6037	6037	4993	4993	5515	5671	6746	7526	6641	7277	5588	6433
9	30607	KAVERI-7428	7544	6201	7251	6354	6617	6617	5461	5461	6039	5881	5871	8182	6757	7407	4216	5812
10	30608	MEPH-170	9102	7988	7018	7425	4567	4567	5558	5558	5062	5902	5234	6374	5887	7037	6741	6889
11	30609	US-362	9267	7702	7680	7246	5927	5927	3938	3938	4932	5940	6428	7790	6782	7078	5368	6223
12	30610	PHI-22107	8595	7964	7563	6922	6233	6233	5409	5409	5821	5673	6152	9126	7179	7753	6107	6930
13	30611	MEPH-171	8315	6972	7641	6551	4670	4670	4343	4343	4506	5524	4888	7619	6138	7111	5689	6400
14	30612	VNR-232	7409	6849	7251	6811	5263	5263	4526	4526	4895	5340	5662	9917	7242	7302	5972	6637
15	30613	CRHR-169	9194	7378	7368	7696	6483	6483	4309	4309	5396	5427	5588	9904	7171	7530	6093	6811
16	30614	PHI-22108	9051	7457	7797	7009	6167	6167	3103	3103	4635	6145	6412	8990	7309	7163	7223	7193
17	30615	CRHR-174	5670	5950	6706	6646	5007	5007	4694	4694	4850	4555	3800	6018	4891	6133	4342	5238
18	30616	IIRRH-166	7708	6798	6940	6648	6383	6383	4725	4725	5554	6091	5976	8739	7110	7074	3887	5480
19	30617	CRHR-175	7102	6807	7251	7656	6160	6160	5167	5167	5664	5082	3199	6425	5148	6699	4759	5729
20	30618	IIRRH-167	8044	7182	6628	6405	4413	4413	5529	5529	4971	5173	4986	6516	5654	7049	2745	4897
21	30619	IIRRH-168	8013	6978	6706	6732	5473	5473	5103	5103	5288	5757	5586	7648	6410	6504	3163	4834
22	30620	PHI-22109	9666	7900	8031	7182	6703	6703	5198	5198	5951	5187	5658	9410	6905	7513	4815	6164
23	HRI-174 (NCH)		8694	6915	7875	6886	6430	6430	4216	4216	5323	5747	6745	10132	7675	7387	5218	6303
24	NDR-359 (NCV)		7177	6350	7213	6362	4477	4477	5539	5539	5008	5045	3348	5678	4858	6549	4495	5522
25	PR-121/CR Dhan-300/ IR-64/ Akshayadhan/Jaya (ZCV)		5031	4879	6628	5561	4520	4520	5135	5135	4828	4125	4462	6088	4982	5641	4798	5219
26	Local Check Variety (LCV)		6971	6134	6277	6036	6027	6027	5557	5557	5792	5248	4475	6729	5687	6361	5267	5814
Experimental Mean			8120	7106	7376	6961	5752	5752	4993	4993	5372	5486	5672	8127	6545	7109	5311	6210
CD(0.05)			970	675	1375	442	572	572	490	490	375	819	1498	1229	702	956	808	672
CV(%)			7.32	5.82	11.41	3.88	6.09	6.09	6.01	6.01	4.27	9.15	10.15	9.26	6.57	8.23	9.32	6.63
F-Value			**	**	ns	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)						7328					5698							
BVC+CD (0.05)						6804					6167							
D/S			7.6.22		14.6.22		16.6.22		18.7.22			28.6.22	15.6.22	11.6.22		25.6.22	25.6.22	
D/P			28.6.22		21.7.22		19.6.22		6.8.22			6.8.22	11.7.22	2.7.22		30.7.22	20.7.22	
Gross Plot Size (Sq.m)			10		10.39		10		10			12.18	11.1	625		10.08	10	
Net Plot Size (Sq.m)			9.8		8.55		10		10			11.76	10.3	7.29		8.19	7.48	
Local Check Variety			HUR-105		Pratiksha		Shraboni		-			Maheshwari (IGKV R1244)	MTU 1010	Mahamaya		MTU 1001	SYE-2001	

Note: @ Data of Chinsurah (CHN) not included in the analysis due non-significant F-Value. **-Highly Significant; *-significant; ns-not significant

Appendix-7 (contd.): Grain yield (kg/ha) of hybrids in IHRT Medium, Kharif 2022

S. No.	IET No	Name	Zone-V contd..				Zone-VI									Zone-VII		
			JBP	WRS	MP-Z5 (2)	Z5 (7)	DHB	NVS	NWG	GJ-Z6 (3)	KJT	PDG	SHR	MH-Z6 (3)	Z6 (6)	BAY	MTU	RGL
1	**29616**	MALI-484	6011	5340	5676	6257	6961	7450	8930	7590	8395	5746	6150	6764	7162	8857	6593	7853
2	30600	RRX-3484	6629	4305	5467	6469	5327	5767	8297	6202	6931	5528	6222	6227	6235	7200	7345	7191
3	30601	ADVRH-190518	7852	6208	7030	6913	7386	6638	8763	7365	7687	5557	5048	6097	6711	9650	7286	7960
4	30602	ADVRH-191788	6955	5219	6087	6608	6373	6025	8194	6620	6866	6522	6688	6692	6688	8647	7851	8048
5	30603	RNE-0456	7259	7101	7180	7230	7386	6484	10740	7757	9025	5955	6354	7111	7446	9033	7049	7762
6	30604	Indam 200-055	6437	5140	5788	6778	7386	7046	8886	7522	7324	6071	6328	6574	7045	8953	6310	4587
7	30605	RNE-0463	6788	5311	6050	6683	5523	5844	7744	6126	7602	5855	4404	5954	6086	9623	7365	7913
8	30606	MPTH-1070	7384	6158	6771	6621	4151	7104	6739	5869	7596	5701	5298	6198	6052	11143	7400	7797
9	30607	KAVERI-7428	7555	6095	6825	6484	5065	5858	6858	5770	6715	5333	5749	5932	5881	8673	6662	7492
10	30608	MEPH-170	7326	4810	6068	6246	5915	5679	6741	5990	7192	4727	4821	5580	5793	8067	7526	6881
11	30609	US-362	7184	5136	6160	6432	6863	6635	8233	7100	7630	4896	4878	5801	6397	9870	5830	7937
12	30610	PHI-22107	8156	5695	6925	7008	6569	6853	6801	6741	8767	6669	6008	7148	6957	8230	6442	6964
13	30611	MEPH-171	7359	4802	6080	6206	6683	4816	6801	5978	5551	5548	4283	5128	5557	8033	5939	7496
14	30612	VNR-232	6955	5657	6306	6744	5049	5031	6698	5441	6655	5447	5515	5873	5683	8457	7500	7131
15	30613	CRHR-169	5077	5044	5060	6412	5853	3933	7594	5455	7271	4005	4933	5403	5469	9700	6383	7937
16	30614	PHI-22108	7872	6667	7270	7239	6340	6619	7518	6751	7455	4779	5578	5937	6332	9170	7458	7909
17	30615	CRHR-174	5991	3863	4927	5010	4183	3655	5321	4165	6799	2515	4152	4488	4368	7383	5819	6032
18	30616	IIRRH-166	6554	5791	6172	6329	5846	5803	7060	6100	4054	5587	5348	4996	5524	9390	5564	7428
19	30617	CRHR-175	4806	4606	4706	5185	6536	4748	6482	5834	7367	3088	4803	5086	5442	9357	5904	7667
20	30618	IIRRH-167	6859	5632	6245	5596	5915	3839	5963	5143	5528	4892	4152	4857	5014	8237	5632	7809
21	30619	IIRRH-168	6633	5866	6250	5906	5425	7588	6294	6439	5516	4792	4722	5010	5673	8363	5249	5246
22	30620	PHI-22109	7313	6846	7080	6730	5849	5886	6922	6098	8182	5951	7182	7105	6659	8377	7875	7948
23	HRI-174 (NCH)		6967	6308	6638	6936	6634	6267	6326	6415	6948	5103	6054	6035	6216	9000	7349	7766
24	NDR-359 (NCV)		6466	4685	5576	5278	4804	4152	3428	4220	5489	3892	3598	4326	4294	6363	6557	5452
25	PR-121/CR Dhan-300/ IR-64/ Akshayadhan/Jaya (ZCV)		4890	3834	4362	4857	4967	4631	6170	5055	7316	4877	5129	5774	5461	6807	6462	7417
26	Local Check Variety (LCV)		6350	4698	5524	5650	5621	5827	5838	5717	5548	3302	5407	4752	5201	7597	6644	7270
Experimental Mean			6755	5416	6085	6300	5946	5776	7128	6133	6977	5090	5339	5802	5975	8622	6692	7265
CD(0.05)			999	459	562	366	831	1238	2687	773	1968	598	1129	750	542	857	778	537
CV(%)			9.06	5.19	5.66	3.56	8.56	13.12	14.5	7.72	17.27	7.2	12.95	7.92	5.55	6.09	7.12	4.53
F-Value			**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)						7302									6758			
BVC+CD (0.05)						6016									6003			
D/S			18.6.22	17.6.22			8.6.22	11.6.22	18.6.22		11.6.22	9.6.22	14.6.22			18.6.22	25.6.22	2.7.22
D/P			13.7.22	21.7.22			14.7.22	29.6.22	27.7.22		6.7.22	3.7.22	8.7.22			7.9.22	26.7.22	28.7.22
Gross Plot Size (Sq.m)			10	10.8			12.96	10.08	6.75		8.1	10.24	6.75			10	10.89	10.8
Net Plot Size (Sq.m)			7.99	7.99			10.2	8.1	4.83		5.67	7.67	4.73			10	8.37	8.4
Local Check Variety			Kranti	JR 206			GAR-13	GNR-3	GAR-13 (3204)		Karjat-5	Karjat-9	Ratnagiri-4			MTU 1121	MTU 1239	MTU 1210

Appendix-7 (contd.): Grain yield (kg/ha) of hybrids in IHRT Medium, Kharif 2022

S. No.	IET No	Name	Zone-VII contd…													Overall Mean (34)
			AP-Z7 (3)	BRM	MND	KA-Z7 (2)	KRK	PY-Z7 (1)	HYD	TIEH	WGL	TE-Z7 (3)	CBT	TN-Z7 (1)	Z7 (10)	
1	**29616**	MALI-484	7768	6291	3535	4459	4048	4048	7591	6807	6285	6894	8196	8196	6619	6634
2	30600	RRX-3484	7245	4879	7109	6379	5952	5952	7197	7633	5813	6881	8660	8660	6971	6785
3	30601	ADVRH-190518	8299	5939	7161	6885	5476	5476	7712	6735	6093	6847	8367	8367	7285	6887
4	30602	ADVRH-191788	8182	5800	7753	7157	7857	7857	8057	7933	6554	7515	7595	7595	7682	7023
5	30603	RNE-0456	7948	5000	4741	4790	5952	5952	7772	6585	6626	6994	9639	9639	7087	7323
6	30604	Indam 200-055	6617	5115	7920	7036	7778	7778	8553	7369	6221	7381	9584	9584	7324	6971
7	30605	RNE-0463	8300	4564	3719	4056	4207	4207	6879	6498	5287	6221	7237	7237	6392	6538
8	30606	MPTH-1070	8780	5345	8966	7793	5793	5793	7943	5049	5321	6105	9069	9069	7454	6747
9	30607	KAVERI-7428	7609	5848	8132	7406	8214	8214	8506	6015	5439	6653	7771	7771	7328	6416
10	30608	MEPH-170	7491	6364	6385	6342	7222	7222	7952	6731	6396	7026	10411	10411	7429	6742
11	30609	US-362	7879	4994	5684	5466	6746	6746	8098	5896	6318	6771	10534	10534	7276	6736
12	30610	PHI-22107	7212	3242	10224	7920	6429	6429	8249	8461	7410	8040	10103	10103	7735	7124
13	30611	MEPH-171	7156	4939	8127	7032	7143	7143	6695	7670	6118	6827	8588	8588	7143	6316
14	30612	VNR-232	7696	3697	9069	7192	5238	5238	8094	7702	5141	6979	9201	9201	7242	6540
15	30613	CRHR-169	8006	5242	6483	6069	4841	4841	7245	5379	6537	6387	9560	9560	6992	6641
16	30614	PHI-22108	8179	6024	8069	7264	5421	5421	7832	7535	5092	6820	8035	8035	7295	6929
17	30615	CRHR-174	6411	4939	2793	3549	5659	5659	5213	4958	4992	5054	6337	6337	5421	5224
18	30616	IIRRH-166	7461	3727	2540	2926	4762	4762	4630	8032	4959	5874	8213	8213	5998	6066
19	30617	CRHR-175	7643	4848	3483	3938	5635	5635	7457	5389	5086	5977	8694	8694	6407	6129
20	30618	IIRRH-167	7226	5797	8023	7446	5476	5476	5884	6894	5477	6085	7078	7078	6657	5825
21	30619	IIRRH-168	6286	4939	7931	6974	4762	4762	6090	6956	4669	5905	8937	8937	6362	6038
22	30620	PHI-22109	8067	4818	8960	7638	5238	5238	8728	8346	6229	7768	9748	9748	7728	7105
23	HRI-174 (NCH)		8038	4879	8994	7623	7698	7698	7148	6127	6722	6666	7727	7727	7427	6790
24	NDR-359 (NCV)		6124	4879	7155	6391	5159	5159	7808	6328	5738	6625	8524	8524	6459	5631
25	PR-121/CR Dhan-300/ IR-64/ Akshayadhan/Jaya (ZCV)		6895	2988	4787	4085	6667	6667	6527	5210	5771	5836	6474	6474	6023	5450
26	Local Check Variety (LCV)		7170	4515	7230	6379	5555	5555	4207	7041	5596	5614	8429	8429	6476	5960
Experimental Mean			7526	4985	6730	6161	5959	5959	7233	6741	5842	6606	8566	8566	6931	6483
CD(0.05)			481	1284	680	1213	655	655	1571	910	743	598	721	721	244	177
CV(%)			3.92	9.91	6.18	12.05	6.73	6.73	13.3	8.26	7.78	5.54	5.16	5.16	2.15	1.67
F-Value			**	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)															7671	6967
BVC+CD (0.05)															6720	6137
D/S				15.6.22	16.7.22		30.8.22		17.6.22	17.6.22	17.6.22		2.6.22			
D/P				13.7.22	3.8.22		5.10.22		20.7.22	18.7.22	16.7.22		27.6.22			
Gross Plot Size (Sq.m)				10			10.4		6.73		7.02		8.78			
Net Plot Size (Sq.m)				8.25	5.8		4.2		5.19	5	7.02		6.93			
Local Check Variety				MO-4	Thanu		VGD-1		DRR Dhan 38	3TH-4322	WGL 347 (Somnath)		-			

Appendix-8 : Days to 50% Flowering (DFF) of hybrids in IHRT-Medium, Kharif 2022

S. No	IET No	Name	KUL	HR-Z2 (1)	LDH	PB-Z2 (1)	@PNT	UK-Z2 (1)	@NGN	UP-Z2 (1)	Z2 (4)	DNG	SGA	BR-Z3 (2)	RCI	JH-Z3 (1)	CTK	OR-Z3 (1)	MSD	RAS
1	**29616**	MALI-484					129	129	130	130		103	95	99	114	114	101	101	83	116
2	30600	RRX-3484	100	100	106	106	119	119	128	128	103	95	95	95	119	119	99	99	93	100
3	30601	ADVRH-190518	101	101	108	108	79	79	131	131	104	95	95	95	115	115	103	103	104	98
4	30602	ADVRH-191788	104	104	107	107	81	81	120	120	106	97	95	96	117	117	101	101	89	98
5	30603	RNE-0456	103	103	109	109	40	40	124	124	106	96	95	96	117	117	103	103	94	104
6	30604	Indam 200-055	118	118	123	123	45	45	123	123	121	103	95	99	117	117	99	99	99	114
7	30605	RNE-0463	103	103	110	110	81	81	122	122	106	96	94	95	119	119	99	99	106	103
8	30606	MPTH-1070	108	108	114	114	84	84	125	125	111	97	93	95	123	123	100	100	86	107
9	30607	KAVERI-7428	104	104	110	110	41	41	118	118	107	94	93	94	116	116	103	103	87	100
10	30608	MEPH-170	94	94	98	98	40	40	118	118	96	92	96	94	112	112	102	102	89	100
11	30609	US-362	101	101	110	110	42	42	452	452	106	97	96	96	115	115	101	101	93	104
12	30610	PHI-22107	101	101	109	109	80	80	115	115	105	90	95	92	114	114	104	104	91	98
13	30611	MEPH-171	96	96	102	102	76	76	118	118	99	88	94	91	114	114	100	100	93	96
14	30612	VNR-232	101	101	106	106	40	40	130	130	103	97	97	97	115	115	98	98	103	102
15	30613	CRHR-169	119	119			45	45	123	123	119	108	96	102	127	127	103	103	89	116
16	30614	PHI-22108	103	103	110	110	120	120	126	126	106	95	95	95	119	119	98	98	103	100
17	30615	CRHR-174	113	113	124	124	132	132	125	125	118	103	94	98	118	118	100	100	87	114
18	30616	IIRRH-166	100	100	108	108	114	114	119	119	104	89	95	92	112	112	95	95	99	96
19	30617	CRHR-175	121	121			86	86	119	119	121	106	92	99	118	118	100	100	87	108
20	30618	IIRRH-167	110	110	114	114	125	125	121	121	112	99	92	95	121	121	95	95	92	104
21	30619	IIRRH-168	99	99	106	106	116	116	122	122	102	90	95	93	119	119	98	98	93	100
22	30620	PHI-22109	101	101	107	107	114	114	116	116	104	91	96	94	114	114	98	98	89	98
23	HRI-174 (NCH)		102	102	109	109	41	41	132	132	105	97	95	96	116	116	101	101	105	102
24	NDR-359 (NCV)		99	99	104	104	115	115	120	120	102	91	95	93	122	122	100	100	99	102
25	PR-121/CR Dhan-300/ IR-64 Akshayadhan/Jaya (ZCV)		105	105	109	109	41	41	122	122	107	93	93	93	128	128	107	107	89	120
26	Local Check Variety (LCV)		104	104	107	107	78	78	119	119	105	104	97	101	120	120	101	101	93	100
Experimental Mean			104	104	109	109	81	81	135	135	107	96	95	96	118	118	100	100	94	104

Appendix-8 (contd.) : Days to 50% Flowering (DFF) of hybrids in IHRT-Medium, Kharif 2022

S. No	IET No	Name	VRN	UP-Z3 (3)	@CHN	WB-Z3 (1)	Z3 (8)	TTB	AS-Z4 (1)	ARD	TR-Z4 (1)	Z4 (2)	RPR	RAS	VNR	CG-Z5 (3)	ANK	SND	MH-Z5 (2)	JBP
1	**29616**	MALI-484	117	103	117	117	103	117	117	94	94	105	101	111	109	107	106	104	105	119
2	30600	RRX-3484	92	94	105	105	99	104	104	97	97	100	104	100	90	97	105	98	101	108
3	30601	ADVRH-190518	97	100	103	103	101	101	101	94	94	97	108	99	91	99	107	100	104	111
4	30602	ADVRH-191788	97	94	109	109	99	110	110	94	94	102	108	101	92	100	109	102	105	112
5	30603	RNE-0456	101	99	107	107	101	106	106	94	94	100	117	103	92	104	109	103	106	112
6	30604	Indam 200-055	102	103	114	114	103	109	109	96	96	102	113	108	102	108	112	105	108	120
7	30605	RNE-0463	95	101	105	105	102	111	111	95	95	103	115	104	93	104	109	104	107	112
8	30606	MPTH-1070	103	97	110	110	101	107	107	93	93	100	118	106	98	108	111	104	108	115
9	30607	KAVERI-7428	102	96	109	109	99	108	108	97	97	102	108	102	93	101	108	100	104	114
10	30608	MEPH-170	92	93	101	101	97	94	94	99	99	96	105	96	89	97	107	99	103	107
11	30609	US-362	104	100	105	105	101	99	99	94	94	96	109	100	94	101	108	100	104	114
12	30610	PHI-22107	93	93	103	103	98	101	101	103	103	102	105	96	91	98	106	98	102	108
13	30611	MEPH-171	91	93	98	98	97	108	108	99	99	103	104	96	90	96	108	98	103	106
14	30612	VNR-232	97	100	101	101	101	107	107	97	97	102	105	98	92	98	108	101	104	107
15	30613	CRHR-169	113	104	116	116	107	119	119	101	101	110	119	112	104	112	112	111	112	121
16	30614	PHI-22108	98	100	103	103	101	109	109	96	96	102	106	98	91	98	108	100	104	111
17	30615	CRHR-174	100	98	108	108	102	121	121	93	93	107	118	108	100	109	113	108	111	120
18	30616	IIRRH-166	88	94	102	102	96	121	121	90	90	106	100	92	89	94	103	96	99	104
19	30617	CRHR-175	102	98	120	120	102	122	122	96	96	109	119	111	105	112	113	107	110	123
20	30618	IIRRH-167	93	95	105	105	99	108	108	92	92	100	108	100	93	101	107	103	105	117
21	30619	IIRRH-168	93	94	102	102	98	104	104	93	93	99	103	98	92	98	105	100	103	109
22	30620	PHI-22109	94	93	103	103	97	110	110	93	93	101	106	99	92	99	108	99	104	109
23	HRI-174 (NCH)		93	100	105	105	101	109	109	99	99	104	108	100	93	100	108	102	105	112
24	NDR-359 (NCV)		92	97	104	104	100	104	104	95	95	99	109	101	91	100	108	102	105	112
25	PR-121/CR Dhan-300/ IR-64 Akshayadhan/Jaya (ZCV)		115	106	129	129	106	122	122	98	98	110	101	117	82	97	101	92	96	100
26	Local Check Variety (LCV)		108	100	113	113	104	103	103	91	91	97	110	90	88	97	113	101	107	111
Experimental Mean			99	98	108	108	101	109	109	95	96	102	109	102	94	101	108	101	105	112

Appendix-8 (contd.) : Days to 50% Flowering (DFF) of hybrids in IHRT-Medium, Kharif 2022

S. No	IET No	Name	WRS	MP-Z5 (2)	Z5 (7)	DHB	NVS	NWG	GJ-Z6 (3)	KJT	PDG	SHR	MH-Z6 (3)	Z6 (6)	BAY	MTU	RGL	AP-Z7 (3)	BRM	MND
1	**29616**	MALI-484	113	116	109	116	114	112	114	99	107	106	104	109	96	103	94	98	70	84
2	30600	RRX-3484	103	106	101	103	89	96	96	92	93	92	93	94	85	96	90	90	65	88
3	30601	ADVRH-190518	105	108	103	103	80	100	93	93	95	95	94	94	84	97	89	90	66	94
4	30602	ADVRH-191788	111	112	105	103	96	99	100	88	97	100	95	97	88	99	91	93	67	98
5	30603	RNE-0456	108	110	107	103	93	102	99	99	100	101	100	100	92	101	89	94	69	100
6	30604	Indam 200-055	117	118	111	115	102	112	109	99	97	106	101	105	98	109	97	101	68	90
7	30605	RNE-0463	108	110	107	103	92	105	99	99	100	102	100	100	92	98	91	94	68	100
8	30606	MPTH-1070	111	113	109	110	97	105	104	98	103	103	101	102	97	103	97	99	67	97
9	30607	KAVERI-7428	107	110	105	111	95	102	103	92	96	98	96	99	89	98	91	93	69	93
10	30608	MEPH-170	103	105	101	100	86	101	95	98	93	93	95	95	83	97	104	95	68	96
11	30609	US-362	107	110	105	106	95	104	101	98	100	101	100	101	92	101	91	95	67	98
12	30610	PHI-22107	103	106	101	101	85	102	95	88	93	91	91	93	86	93	87	89	67	91
13	30611	MEPH-171	103	104	101	104	86	104	97	99	93	94	95	96	84	94	89	89	68	91
14	30612	VNR-232	107	107	103	106	90	102	99	99	96	92	96	97	87	95	91	91	74	92
15	30613	CRHR-169	116	119	114	120	97	113	109	99	114	112	108	109	99	102	101	101	68	89
16	30614	PHI-22108	105	108	103	103	91	102	98	88	96	96	93	96	90	98	89	92	66	89
17	30615	CRHR-174	106	113	111	102	102	113	104	99	103	106	103	104	101	108	99	103	65	98
18	30616	IIRRH-166	101	102	98	102	87	100	96	88	116	89	98	97	82	90	83	85	69	81
19	30617	CRHR-175	99	111	111	112	88	114	103	98	103	112	105	104	87	103	101	97	68	86
20	30618	IIRRH-167	107	112	105	112	88	108	101	97	95	102	98	100	92	103	92	96	67	94
21	30619	IIRRH-168	105	107	102	103	93	102	99	92	93	99	94	97	87	90	84	87	68	95
22	30620	PHI-22109	104	106	103	103	89	104	98	92	93	93	93	95	87	95	89	90	69	93
23	HRI-174 (NCH)		106	109	104	107	94	102	101	93	100	98	97	99	88	96	99	94	69	92
24	NDR-359 (NCV)		105	108	104	101	90	102	97	93	93	93	93	95	87	91	91	90	67	94
25	PR-121/CR Dhan-300/ IR-64 Akshayadhan/Jaya (ZCV)		93	96	97	109	95	103	102	92	98	97	96	99	87	96	91	91	66	98
26	Local Check Variety (LCV)		98	104	102	104	81	102	95	98	106	101	102	98	103	117	104	108	70	90
Experimental Mean			106	109	105	106	92	104	100	95	99	99	98	99	90	99	93	94	68	93

Appendix-8 (contd.) : Days to 50% Flowering (DFF) of hybrids in IHRT-Medium, Kharif 2022

S. No	IET No	Name	KA-Z7 (2)	KRK	PY-Z7 (1)	HYD	TIE	WGL	TE-Z7 (3)	CBT	TN-Z7 (1)	Z7 (10)	Overall Mean (34)
1	**29616**	MALI-484	91	96	96	107	108	106	107	101	101	100	105
2	30600	RRX-3484	91	92	92	99	101	91	97	95	95	93	97
3	30601	ADVRH-190518	95	91	91	101	101	96	99	98	98	95	98
4	30602	ADVRH-191788	99	98	98	105	103	100	103	99	99	98	100
5	30603	RNE-0456	101	98	98	107	107	99	104	103	103	100	102
6	30604	Indam 200-055	94	91	91	107	109	105	107	99	99	101	105
7	30605	RNE-0463	101	98	98	105	107	100	104	102	102	100	102
8	30606	MPTH-1070	99	98	98	106	105	101	104	101	101	100	103
9	30607	KAVERI-7428	96	95	95	103	103	96	101	99	99	97	100
10	30608	MEPH-170	99	91	91	99	104	93	99	99	99	97	97
11	30609	US-362	99	91	91	106	105	99	103	100	100	98	101
12	30610	PHI-22107	94	96	96	100	105	92	99	97	97	95	97
13	30611	MEPH-171	95	91	91	100	101	91	97	97	97	94	97
14	30612	VNR-232	98	91	91	101	105	96	100	99	99	96	100
15	30613	CRHR-169	93	91	91	111	110	107	110	104	104	102	108
16	30614	PHI-22108	92	92	92	99	102	97	99	96	96	95	99
17	30615	CRHR-174	98	91	91	110	107	105	108	106	106	102	105
18	30616	IIRRH-166	88	91	91	93	104	94	97	90	90	91	96
19	30617	CRHR-175	92	98	98	104	110	106	106	99	99	100	104
20	30618	IIRRH-167	96	94	94	103	104	103	103	99	99	98	101
21	30619	IIRRH-168	97	91	91	104	103	101	103	100	100	95	98
22	30620	PHI-22109	96	91	91	101	108	96	102	99	99	96	98
23	HRI-174 (NCH)		96	93	93	101	103	99	101	99	99	97	101
24	NDR-359 (NCV)		96	91	91	101	102	95	99	99	99	95	99
25	PR-121/CR Dhan-300/ IR-64 Akshayadhan/Jaya (ZCV)		99	91	91	105	105	92	101	100	100	96	100
26	Local Check Variety (LCV)		95	91	91	103	101	103	102	97	97	101	101
Experimental Mean			96	93	93	103	105	99	102	99	99	97	101

Appendix-9: Quality characteristics of IHRT-Medium, Kharif 2022

S. No.	IET No.	Name	Hull	Mill	HRR	KL	KB	L/B	Grain Type	Grain Chalk	ASV	AC	GC
1	**29616**	MALI-484	81.0	71.5	63.1	6.22	2.30	2.70	LB	VOC	4.0	24.49	42
2	30600	RRX-3484	81.1	71.3	57.6	6.25	2.21	2.82	LB	VOC	5.3	23.02	82
3	30601	ADVRH-190518	82.4	71.6	58.7	6.81	2.31	2.94	LB	VOC	4.7	26.69	36
4	30602	ADVRH-191788	83.5	67.6	55.4	6.84	2.24	3.05	LS	VOC	4.0	22.18	53
5	30603	RNE-0456	81.8	70.9	60.4	6.81	2.16	3.15	LS	OC	6.0	22.00	26
6	30604	Indam 200-055	81.7	74.1	69.8	6.66	2.33	2.85	LB	VOC	5.3	24.99	22
7	30605	RNE-0463	83.5	71.2	56.1	6.46	2.09	3.09	LS	OC	5.5	21.94	25
8	30606	MPTH-1070	81.8	71.7	37.7	6.22	2.30	2.70	LB	VOC	7.0	23.43	51
9	30607	KAVERI-7428	81.7	70.2	53.0	6.29	2.22	2.83	LB	VOC	4.0	23.70	49
10	30608	MEPH-170	82.0	70.3	56.4	6.94	2.17	3.19	LS	VOC	4.0	23.61	57
11	30609	US-362	81.1	67.1	36.2	6.77	2.29	2.95	LB	VOC	4.0	27.72	43
12	30610	PHI-22107	79.9	67.8	43.1	6.65	2.31	2.87	LB	VOC	4.0	22.88	50
13	30611	MEPH-171	81.1	70.3	54.1	6.39	2.30	2.77	LB	VOC	4.0	25.72	22
14	30612	VNR-232	81.1	68.7	47.4	6.25	2.23	2.80	LB	VOC	5.4	21.76	55
15	30613	CRHR-169	82.7	71.5	58.7	6.68	2.28	2.92	LB	VOC	5.5	25.49	46
16	30614	PHI-22108	81.6	71.9	60.0	6.33	2.26	2.80	LB	VOC	4.0	25.46	42
17	30615	CRHR-174	81.4	72.6	61.1	5.45	1.96	2.79	MS	VOC	5.0	24.55	22
18	30616	IIRRH-166	82.0	70.2	44.4	6.36	2.34	2.71	LB	VOC	5.3	28.13	24
19	30617	CRHR-175	81.8	72.5	63.3	6.31	2.17	2.90	LB	VOC	4.9	26.37	46
20	30618	IIRRH-167	82.3	72.1	58.4	5.28	2.06	2.60	MS	VOC	4.0	26.66	46
21	30619	IIRRH-168	81.9	70.2	48.3	6.01	2.28	2.63	LB	VOC	4.0	26.69	24
22	30620	PHI-22109	80.7	67.6	55.3	6.31	2.32	2.72	LB	VOC	4.0	23.70	51
23	HRI-174 (NCH)		81.8	66.0	55.6	6.19	2.29	2.70	LB	VOC	5.8	25.81	53
24	NDR-359 (NCV)		81.0	69.5	55.1	6.64	2.48	2.67	LB	OC	4.0	24.34	22
25	Jaya (ZCV)		81.5	72.1	56.1	5.63	2.56	2.19	SB	OC	7.0	24.78	22
26	DRR Dhan-38 (LCV)		82.0	73.8	67.8	5.48	2.37	2.31	SB	VOC	4.0	25.54	47

Hull: Hulling %; Mill: Milling %; HRR: Head rice recovery; KL: Kernel length; KB: Kernel breadth; L/B: L/B ratio; ASV: Alkali spreading value; AC: Amylose content; GC: Gel consistency

Appendix-10 : Grain Yield (kg/ha) of hybrids in IHRT-Medium Slender, Kharif 2022

S No.	IET No.	Name	Zone-III											Zone-IV				
			DNG	BR-Z3 (1)	LIG	RCI	JH-Z3 (2)	CTK	OR-Z3 (1)	@MSD	CHN	WB-Z3 (1)	Z3 (5)	TTB	AS-Z4 (1)	ARD	TR-Z4 (1)	Z4 (2)
1	30621	CRHR-173	7268	7268	8918	4995	6956	6391	6391	5515	5614	5614	6637	4037	4037	4395	4395	4216
2	30622	HRI-215	7419	7419	9626	3780	6703	6664	6664	5964	6004	6004	6699	6380	6380	5333	5333	5857
3	30623	RALLIS-20609	8087	8087	10362	6480	8421	7177	7177	7434	6394	6394	7700	5230	5230	4741	4741	4986
4	30624	NPH-X60	8658	8658	10124	6075	8100	6807	6807	6209	6043	6043	7542	6440	6440	5333	5333	5886
5	30625	KAVERI-7605	8084	8084	9907	5805	7856	6514	6514	6455	6745	6745	7411	4673	4673	3556	3556	4114
6	30626	MEPH-172	7348	7348	9118	4050	6584	6754	6754	6495	5224	5224	6499	4630	4630	4691	4691	4661
7	30627	RNRH-203	5269	5269	8668	6525	7597	5628	5628	5270	6784	6784	6575	5797	5797	3605	3605	4701
8	30628	CRHR-167	7348	7348	9491	6345	7918	7097	7097	6168	7537	7537	7564	5353	5353	4790	4790	5072
9	30629	CRHR-168	9414	9414	9494	6120	7807	7850	7850	6005	7407	7407	8057	4533	4533	4741	4741	4637
10	30630	IRH-120	6400	6400	9562	7470	8516	7380	7380	7332	6160	6160	7395	4463	4463	4173	4173	4318
11	30631	IIRRH-169	7041	7041	9837	8019	8928	6931	6931	7148	6706	6706	7707	4707	4707	4494	4494	4600
12	29758	KRH-11 (Repeat)	7810	7810	8978	8809	8894	6358	6358	6904	5458	5458	7483	4390	4390	4667	4667	4528
13	27P63 (NCH)		7540	7540	10045	5715	7880	6774	6774	7067	6862	6862	7387	4713	4713	5160	5160	4937
14	WGL-14 (NCV-1)		9351	9351	8530	5535	7032	7467	7467	6944	5536	5536	7284	4497	4497	4766	4766	4631
15	BPT-5204 (NCV-2)		7306	7306	7974	4815	6395	4470	4470	6291	7641	7641	6441	4630	4630	3728	3728	4179
16	Improved Samba Mahsuri/ Ketekejoha/Karjat-6/ADT-49 (ZCV)		6868	6868	8213	6165	7189	4893	4893	6250	7096	7096	6647	4877	4877	3951	3951	4414
Exp. Mean			7576	7576	9303	6044	7673	6572	6572	6466	6451	6451	7189	4959	4959	4508	4508	4734
CD(0.05)			700	700	709	917	593	1641	1641	442	1387	1387	538	416	416	441	441	287
CV(%)			5.54	5.54	4.57	9.1	4.64	14.98	14.98	4.1	12.89	12.89	4.49	5.03	5.03	5.87	5.87	3.63
F val			**	**	**	**	**	*	*	**	*	*	**	**	**	**	**	**
NHC+CD (0.05)													7925					5224
BVC+CD (0.05)													7822					4918
D/S			25.6.22		22.6.22	21.6.22		20.6.22		15.6.22	14.6.22			18.6.22		8.7.22		
D/P			24.7.22		15.7.22	3.8.22		30.7.22		17.7.22	13.7.22			18.7.22		3.8.22		
Gross Plot Size (Sq.m)			10.08			10.08		8.1		10	10.39			10		13.5		
Net Plot Size (Sq.m)			9.36		10	10		5.76		8.16	8.55			10		13.5		

Note: @ Data of Masoda (MSD) not included in the analysis due to Low CV. **-Highly Significant; *-significant; ns-not significant

Appendix-10 (contd.): Grain Yield (kg/ha) of hybrids in IHRT-Medium Slender, Kharif 2022

S No.	IET No.	Name	Zone-V											Zone-VI								
			RPR	@ VNR	CG-Z5 (1)	@ ANK	SKL	SND	MH-Z5 (2)	JBP	WRS	MP-Z5 (2)	Z5 (5)	DHB	NVS	NWG	GJ-Z6 (3)	KJT	PDG	SHR	MH-Z6 (3)	Z6 (6)
1	30621	CRHR-173	5074	7019	5074	6186	4276	5205	4741	6173	4468	5321	5039	6503	6367	8312	6785	4395	2734	4944	4024	5332
2	30622	HRI-215	5282	7063	5282	5535	5549	5248	5398	5817	4451	5134	5269	6667	6169	8334	6843	6194	3828	5309	5110	5937
3	30623	RALLIS-20609	5433	7869	5433	5596	5745	6568	6156	6310	5662	5986	5944	6013	5271	8398	6276	7202	5873	5926	6333	6318
4	30624	NPH-X60	5790	7317	5790	6089	4652	5775	5214	5520	4958	5239	5339	4836	6971	6902	6046	5374	5625	5802	5600	5825
5	30625	KAVERI-7605	6049	7635	6049	6117	6383	5789	6086	5760	4456	5108	5687	6677	5887	9004	6875	5497	5268	4822	5195	5992
6	30626	MEPH-172	4707	6783	4707	5625	4881	4372	4626	5563	3709	4636	4646	6029	4823	6589	5668	4199	4396	4351	4315	4961
7	30627	RNRH-203	5409	7100	5409	5865	6258	5521	5890	6660	4245	5452	5619	5751	4270	7458	5548	5500	4433	6318	5417	5501
8	30628	CRHR-167	4273	7881	4273	6019	4381	6007	5194	5820	5317	5568	5160	6726	5813	6586	6400	4837	3050	4060	3983	5094
9	30629	CRHR-168	4460	7720	4460	5914	5131	5254	5193	5877	5793	5835	5303	6745	6462	8270	6930	4354	3379	2860	3531	5141
10	30630	IRH-120	5639	6271	5639	5629	4714	5891	5303	6697	4278	5488	5444	4513	5216	6674	5207	4588	4028	6968	5195	5237
11	30631	IIRRH-169	5295	6318	5295	5690	6320	5668	5994	6210	5080	5645	5715	6879	4659	7265	6181	5416	4919	4056	4797	5432
12	29758	KRH-11 (Repeat)	4619	6082	4619	5661	4005	5321	4663	6350	3996	5173	4858	6569	6490	5976	6437	6304	3622	5591	5172	5760
13	27P63 (NCH)		5923	6966	5923	5893	3942	6194	5068	5610	5363	5486	5407	6291	6605	8523	6931	5821	5229	5110	5387	6115
14	WGL-14 (NCV-1)		5127	7041	5127	5702	5699	5468	5583	4730	4223	4477	5049	6928	7010	8334	7242	5707	3308	5293	4769	5966
15	BPT-5204 (NCV-2)		5437	5747	5437	5613	5882	5335	5608	4623	3801	4212	5016	5947	3981	7322	5516	4339	4950	2380	3889	4653
16	Improved Samba Mahsuri/Ketekejoha/ Karjat-6/ADT-49 (ZCV)		4340	7358	4340	5437	5674	4907	5290	4240	3975	4107	4627	4703	3271	5632	4346	5011	2734	2355	3367	3840
Exp. Mean			5179	7011	5179	5786	5218	5533	5375	5748	4611	5179	5258	6111	5579	7474	6202	5296	4211	4759	4755	5444
CD (0.05)			962	1442	962	583	938	824	640	1122	539	592	437	1182	1120	1795	766	1133	793	1174	602	485
CV (%)			11.14	12.34	11.14	6.04	10.78	8.93	7.14	11.71	7.01	6.85	4.98	11.6	12.04	11.27	7.41	12.83	11.3	14.8	7.6	5.35
F val			**	ns	**	ns	**	**	**	**	**	**	**	**	**	*	**	**	**	**	**	**
NHC+CD (0.05)													5844									6600
BVC+CD (0.05)													5486									6451
D/S			28.6.22	11.6.22		25.6.22	30.6.22	25.6.22		20.6.22	17.6.22			18.6.22	11.6.22	18.6.22		11.6.22	9.6.22	14.6.22		
D/P			25.7.22	2.7.22		30.7.22	1.8.22	20.7.22		16.7.22	19.7.22			16.7.22	29.6.22	18.7.22		4.7.22	2.7.22	7.7.22		
Gross Plot Size (Sq.m)			12	625		10.08	10	10		10	10			12.96	10.08	9.24		6.48	10.24	11.12		
Net Plot Size (Sq.m)			10.8	11.54		8.19	7.99	7.48		7.99	7.9			10.2	8.1	7.02		4.41	7.67	8.42		

Note: @ Data of Ankur Seeds (ANK) and VNR Seeds (VNR) are not included in the analysis due to non-significant of F-Value. **-Highly Significant; *-significant; ns-not significant

Appendix-10 (contd.): Grain Yield (kg/ha) of hybrids in IHRT-Medium Slender, Kharif 2022

S No.	IET No.	Name	Zone-VII															Overall Mean (27)
			BAY	BPT	@MTU	RGL	AP-Z7 (3)	BRM	MND	KA-Z7 (2)	KRK	PY-Z7 (1)	HYD	WGL	TE-Z7 (2)	CBT	TN-Z7 (1)	Z7 (9)	
1	30621	CRHR-173	9033	6059	5515	4940	6678	4879	3103	3695	8704	8704	5772	6725	6248	6776	6776	6276	5758
2	30622	HRI-215	10300	5405	5964	5186	6964	4970	8241	6967	8889	8889	3259	7009	5134	7930	7930	6865	6258
3	30623	RALLIS-20609	9653	6193	7434	8079	7975	3061	7069	5572	7593	7593	5286	7228	6257	9706	9706	7250	6714
4	30624	NPH-X60	7927	6740	6209	7313	7327	5048	6972	6163	7531	7531	4559	6362	5461	8409	8409	6824	6397
5	30625	KAVERI-7605	9633	6534	6455	6393	7520	5764	5356	5361	6543	6543	4813	7451	6132	7873	7873	6737	6311
6	30626	MEPH-172	7623	4890	6495	7443	6652	4909	5534	5317	6790	6790	5143	5031	5087	8120	8120	6217	5587
7	30627	RNRH-203	6457	6082	5270	5183	5907	4940	3006	3741	7469	7469	6006	6522	6264	8039	8039	6013	5835
8	30628	CRHR-167	9350	5681	6168	4868	6633	3242	3948	3713	6667	6667	6240	5822	6031	6610	6610	5932	5848
9	30629	CRHR-168	9100	5905	6005	4766	6590	5121	5069	5086	7161	7161	4625	6102	5363	5893	5893	6015	5976
10	30630	IRH-120	8313	6723	7332	5145	6727	3879	4351	4192	5494	5494	4791	5282	5037	7365	7365	5782	5797
11	30631	IIRRH-169	8210	5428	7148	6602	6747	5054	2471	3337	5185	5185	4768	6597	5682	6614	6614	5678	5938
12	29758	KRH-11 (Repeat)	9787	4938	6904	8075	7600	5000	8546	7247	6111	6111	6281	5987	6134	7901	7901	7032	6243
13	27P63 (NCH)		8963	6162	7067	7347	7491	4212	7276	6312	7778	7778	4997	6963	5980	6410	6410	6790	6357
14	WGL-14 (NCV-1)		8253	5197	6944	7323	6925	4030	2684	3030	8210	8210	4819	6398	5608	6078	6078	5960	5937
15	BPT-5204 (NCV-2)		7440	4663	6291	5381	5828	5242	2552	3408	6728	6728	5536	6029	5782	5503	5503	5457	5294
16	Improved Samba Mahsuri/ Ketekejoha/Karjat-6/ADT-49 (ZCV)		7393	3755	6250	4752	5300	4848	4661	4700	5185	5185	4270	4972	4621	3480	3480	4807	4888
Exp. Mean			8590	5647	6466	6175	6804	4638	5052	4865	7002	7002	5073	6280	5676	7044	7044	6227	5946
CD (0.05)			879	875	442	1043	565	862	939	1026	584	584	1056	951	765	955	955	317	204
CV (%)			6.14	9.29	4.1	10.13	4.98	8.72	11.15	12.64	5	5	12.48	9.08	8.08	8.13	8.13	3.05	2.05
F val			**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**	**
NHC+CD (0.05)																		7107	6561
BVC+CD (0.05)																		6277	6141
D/S			18.6.22	2.8.22	25.6.22	2.7.22		15.6.22	16.7.22		16.9.22		1.7.22	24.6.22		9.6.22			
D/P			7.9.22	3.9.22	26.7.22	28.7.22		13.7.22	3.8.22		20.10.22		30.7.22	23.7.22		6.7.22			
Gross Plot Size (Sq.m)			10	9	10.89	12.15		10			12		6.44	7.92		8.82			
Net Plot Size (Sq.m)			10	6.9	8.38	9.75		8.25	5.8		5.4		4.95	7.92		7.02			

Note: @ Data of Maruteru (MTU) not included in the analysis due to Low CV. **-Highly Significant; *-significant; ns-not significant

Appendix-11 : Days to 50% Flowering (DFF) of hybrids in IHRT-Medium Slender, Kharif 2022

S No.	IET No.	Name	Zone-III												Zone-IV		
			DNG	BR-Z3 (1)	LIG	RCI	JH-Z3 (2)	CTK	OR-Z3 (1)	@MSD	UP-Z3 (1)	CHN	WB-Z3 (1)	Z3 (6)	TTB	AS-Z4 (1)	Z4 (1)
1	30621	CRHR-173	101	101	96	112	104	104	104	107	107	110	110	105	122	122	111
2	30622	HRI-215	100	100	95	115	105	97	97	109	109	104	104	102	109	109	107
3	30623	RALLIS-20609	94	94	97	116	107	101	101	103	103	96	96	101	101	101	103
4	30624	NPH-X60	89	89	86	116	101	111	111	94	94	90	90	98	87	87	96
5	30625	KAVERI-7605	95	95	96	119	108	109	109	107	107	97	97	103	104	104	107
6	30626	MEPH-172	92	92	97	114	106	99	99	114	114	96	96	100	102	102	103
7	30627	RNRH-203	94	94	97	115	106	95	95	101	101	106	106	102	109	109	107
8	30628	CRHR-167	104	104	97	113	105	109	109	103	103	111	111	107	119	119	108
9	30629	CRHR-168	102	102	96	111	104	110	110	115	115	111	111	106	120	120	114
10	30630	IRH-120	90	90	86	115	100	109	109	97	97	89	89	98	88	88	92
11	30631	IIRRH-169	94	94	97	118	107	93	93	98	98	97	97	100	104	104	107
12	29758	KRH-11 (Repeat)	93	93	97	114	106	97	97	104	104	98	98	100	103	103	104
13	27P63 (NCH)		99	99	95	113	104	111	111	101	101	104	104	104	104	104	102
14	WGL-14 (NCV-1)		97	97	96	111	104	108	108	118	118	112	112	105	113	113	111
15	BPT-5204 (NCV-2)		102	102	98	114	106	109	109	111	111	105	105	106	105	105	108
16	Improved Samba Mahsuri/ Ketekejoha/Karjat-6/ADT-49 (ZCV)		106	106	97	112	104	113	113	111	111	114	114	108	121	121	114
Exp. Mean			97	97	95	114	105	105	105	106	106	103	102	103	107	107	106

Appendix-11 (contd.): Days to 50% Flowering (DFF) of hybrids in IHRT-Medium Slender, Kharif 2022

S No.	IET No.	Name	Zone-V											Zone-VI							
			RPR	@VNR	CG-Z5 (1)	@ANK	SKL	SND	MH-Z5 (2)	JBP	WRS	MP-Z5 (2)	Z5 (7)	DHB	NVS	NWG	GJ-Z6 (3)	PDG	SHR	MH-Z6 (2)	Z6 (5)
1	30621	CRHR-173	112	100	112	113	106	103	104	121	111	116	110	119	96	111	108	105	105	103	105
2	30622	HRI-215	105	95	105	105	101	105	103	116	104	110	106	111	92	100	101	109	94	101	101
3	30623	RALLIS-20609	101	91	101	105	100	102	101	112	103	108	104	104	91	100	98	95	95	95	96
4	30624	NPH-X60	101	85	101	102	95	96	96	105	94	100	98	98	80	88	89	90	91	92	90
5	30625	KAVERI-7605	106	93	106	105	103	104	103	114	104	109	106	103	92	96	97	97	101	99	98
6	30626	MEPH-172	102	89	102	106	96	100	98	110	101	106	102	104	89	92	95	96	95	94	95
7	30627	RNRH-203	103	90	103	102	98	103	101	114	101	108	104	109	87	94	97	92	94	94	95
8	30628	CRHR-167	111	101	111	115	105	108	106	116	112	114	111	114	98	104	106	106	104	103	104
9	30629	CRHR-168	110	102	110	115	107	106	106	120	111	116	111	119	98	106	108	107	105	103	106
10	30630	IRH-120	98	83	98	99	92	96	94	105	93	99	97	105	81	91	93	88	84	89	91
11	30631	IIRRH-169	101	90	101	102	98	100	99	111	99	105	102	96	88	96	93	93	90	93	93
12	29758	KRH-11 (Repeat)	103	92	103	106	95	103	99	111	104	108	103	107	90	94	97	101	91	97	97
13	27P63 (NCH)		108	95	108	109	102	103	102	115	103	109	106	106	102	101	103	100	103	98	101
14	WGL-14 (NCV-1)		118	100	118	114	105	108	106	121	108	114	112	118	103	112	111	110	105	104	108
15	BPT-5204 (NCV-2)		109	93	109	109	103	105	104	116	107	112	108	106	84	102	96	96	97	97	97
16	Improved SambaMahsuri/ Ketekejoha/Karjat-6/ADT-49 (ZCV)		117	104	117	114	110	109	109	115	114	115	113	118	89	96	102	114	116	110	106
Exp. Mean			107	94	107	107	101	103	102	114	104	109	106	109	91	99	100	100	98	98	99

Appendix-11 (contd.): Days to 50% Flowering (DFF) of hybrids in IHRT-Medium Slender, Kharif 2022

S No.	IET No.	Name	Zone-VII																Overall Mean (29)
			BAY	BPT	@MTU	RGL	AP-Z7 (4)	BRM	MND	KA-Z7 (2)	KRK	PY-Z7 (1)	HYD	WGL	TE-Z7 (2)	CBT	TN-Z7 (1)	Z7 (9)	
1	30621	CRHR-173	100	100	103	103	101	65	92	92	80	80	100	103	102	107	107	98	104
2	30622	HRI-215	91	95	96	95	94	62	91	92	80	80	98	98	98	101	101	94	100
3	30623	RALLIS-20609	89	92	95	91	90	61	94	93	76	76	99	97	98	102	102	92	98
4	30624	NPH-X60	81	91	90	78	83	66	90	93	76	76	93	82	88	96	96	87	93
5	30625	KAVERI-7605	88	96	96	91	92	65	99	98	80	80	98	98	98	103	103	94	100
6	30626	MEPH-172	85	96	96	85	89	66	90	93	76	76	93	92	92	97	97	90	96
7	30627	RNRH-203	85	93	96	83	87	69	86	92	76	76	92	93	93	97	97	89	97
8	30628	CRHR-167	99	101	103	101	100	68	93	95	80	80	102	105	103	106	106	99	104
9	30629	CRHR-168	97	101	101	103	100	59	92	90	80	80	101	104	103	106	106	97	105
10	30630	IRH-120	79	94	90	80	84	59	87	87	75	75	91	82	86	95	95	86	92
11	30631	IIRRH-169	84	91	94	85	86	68	83	90	75	75	92	93	92	96	96	88	95
12	29758	KRH-11 (Repeat)	89	103	96	90	94	66	90	93	80	80	95	94	94	98	98	93	98
13	27P63 (NCH)		96	94	97	95	95	68	95	97	80	80	98	96	97	98	98	95	101
14	WGL-14 (NCV-1)		100	101	103	100	100	59	100	96	80	80	104	104	104	107	107	99	105
15	BPT-5204 (NCV-2)		94	100	101	103	99	67	101	101	76	76	101	96	98	104	104	97	102
16	Improved Samba Mahsuri/ Ketekejoha/Karjat-6/ADT-49 (ZCV)		97	100	102	101	99	61	99	96	75	75	103	99	101	106	106	97	105
Exp. Mean			91	97	97	93	93	64	93	94	78	78	97	96	97	101	101	93	100

Appendix-12: Quality characteristics of IHRT-Medium Slender, Kharif 2022

S. No.	IET No.	Name	Hull	Mill	HRR	KL	KB	L/B	Grain Type	Grain Chalk	ASV	AC	GC
1	30621	CRHR-173	82.3	74.3	71.3	5.79	1.98	2.92	MS	VOC	7.0	24.31	22
2	30622	HRI-215	82.6	66.2	57.3	5.19	1.99	2.60	MS	VOC	7.0	26.42	40
3	30623	RALLIS-20609	80.5	70.8	61.7	5.45	1.96	2.78	MS	A	4.0	21.67	40
4	30624	NPH-X60	80.6	70.3	34.9	5.80	2.37	2.44	SB	VOC	7.0	24.87	22
5	30625	KAVERI-7605	82.5	69.3	59.7	5.39	1.93	2.79	MS	VOC	4.0	23.93	37
6	30626	MEPH-172	82.2	73.1	59.6	5.58	1.94	2.87	MS	VOC	4.0	23.84	22
7	30627	RNRH-203	80.6	72.0	56.2	5.53	2.20	2.51	MS	VOC	4.0	22.35	22
8	30628	CRHR-167	81.3	73.2	68.2	5.62	1.87	2.97	MS	VOC	5.0	24.78	22
9	30629	CRHR-168	82.0	73.7	70.2	5.59	1.95	2.86	MS	VOC	4.0	24.55	22
10	30630	IRH-120	82.2	74.3	65.5	6.75	2.05	3.29	LS	VOC	7.0	24.55	22
11	30631	IIRRH-169	82.1	70.6	48.0	6.01	2.29	2.62	LB	VOC	4.0	26.34	22
12	29758	KRH-11 **(Repeat)**	80.1	71.7	53.6	5.50	2.06	2.66	MS	VOC	4.0	23.81	22
13	27P63 (NCH)		81.0	71.1	58.3	5.34	2.01	2.65	MS	VOC	4.0	24.11	22
14	WGL-14 (NCV-1)		79.8	71.6	65.9	5.35	1.91	2.80	MS	A	5.0	22.96	22
15	BPT-5204 (NCV-2)		82.0	74.3	66.6	5.47	1.92	2.84	MS	A	4.0	24.40	32
16	ADT-49 (ZCV)		77.8	66.3	60.6	4.88	1.85	2.63	MS	VOC	7.0	23.26	30

Hull: Hulling %; Mill: Milling %; HRR: Head rice recovery; KL: Kernel length; KB: Kernel breadth; L/B: L/B ratio; ASV: Alkali spreading value; AC: Amylose content; GC: Gel consistency