

**Supplementary Table S1 (Part-I): Means of Paddy Yield (kg/ha) of Rice Hybrids Evaluated in NUYT during Kharif, 2020**

Sr. No.	Hybrids Name	Decoded Name	RRI, KSK	RRI, Dokri	PARC, KSK	GUARD, Golarchi	Four Brothers, Multan	Emkay, Shiekhupura	CKD, DG Khan	Avg Yield
1	R 20001	ANMOL	8739	8680	7631	9750	9595	7513	8010	<b>8560</b>
2	R 20003	SC-415	9283	9317	8380	11313	7720	7604	6854	<b>8639</b>
3	R 20005	NAUBAHAR-110	8079	9270	8129	10125	11329	7633	7676	<b>8892</b>
4	R 20009	FB-39	10002	9178	6952	12250	11825	8024	8432	<b>9523</b>
5	R 20010	Rachna-415	7707	9247	6446	8688	11297	8111	9365	<b>8695</b>
6	R 20011	CNRRI-17-17	8712	9571	6020	11125	7157	7507	8832	<b>8418</b>
7	R 20013	LH-118	7450	9247	6810	7813	6332	7147	7343	<b>7449</b>
8	R 20015	SC-128	9103	9930	6082	10188	8806	7541	8476	<b>8590</b>
9	R 20033	TARA-1732	9205	9815	8020	11375	8951	7868	8387	<b>9089</b>
10	R 20035	LPSA-03	8234	9004	7495	-	8620	7733	8254	<b>8224</b>
11	R 20037	Generation	7544	9386	6375	10500	12502	7361	9054	<b>8960</b>
12	R 20040	D-121 (check)	9038	9699	7586	12500	9488	7632	8254	<b>9171</b>
13	R 20041	Sitara-404	9739	10032	7591	11750	8575	7441	9276	<b>9201</b>
14	R 20044	LPSA-08	9473	9872	6707	11438	10263	7890	7032	<b>8954</b>
15	R 20046	HP-3	9276	9467	7101	11188	11058	7311	9965	<b>9338</b>
16	R 20100	AA-2396	9074	9675	6120	13938	9717	7364	8321	<b>9173</b>
17	R 20101	EG-1908	8905	9607	7320	10000	11819	7927	8143	<b>9103</b>
18	R 20103	VGro-315	7798	9652	7263	10875	9722	7732	8698	<b>8820</b>
19	R 20105	Ennova-77	8968	9502	6826	11688	13045	7564	9521	<b>9588</b>
20	R 20107	HSP-21	9061	9618	6899	-	11857	7824	10032	<b>9215</b>
21	R 20109	HP-2	8461	9791	6554	10750	9818	7555	8898	<b>8833</b>
22	R 20111	US-125	8361	9409	6675	11438	8189	7717	8810	<b>8657</b>
23	R 20113	Nawaz-21	9476	9316	7867	11063	13299	7883	9365	<b>9753</b>

24	R 20115	CD-34	7594	9839	5473	10938	9546	7447	10298	<b>8734</b>
25	R 20117	HSP-19	7806	9675	6882	7875	13501	7441	8187	<b>8767</b>
26	R 20119	LUS-250	6716	9838	7945	9188	9076	7643	9121	<b>8504</b>
27	R 20120	ASW-505	9354	9467	6250	13375	8559	7585	9832	<b>9203</b>
28	R 20121	TEG-111	8541	9641	7333	9750	9421	7393	8076	<b>8594</b>
29	R 20123	2050	8925	9756	6572	7125	8398	7386	8498	<b>8094</b>
30	R 20125	Topson Risor	8339	8680	7586	10000	11755	7479	8503	<b>8906</b>
31	R 20127	VGRO-177	8790	9710	7026	8625	9425	7237	7413	<b>8318</b>
32	R 20129	Winner-66	8238	9328	7294	9688	11295	7235	5125	<b>8315</b>
33	R 20131	HSP-20	9734	9675	7499	12313	9265	8112	7658	<b>9180</b>
34	R 20133	One-01-Plus	7581	8358	7009	11563	8755	7368	5555	<b>8027</b>
35	R 20135	OS-167	9365	9918	5816	11625	12372	7652	5605	<b>8908</b>
36	R 20138	Tara-1728	9594	9351	5547	16000	9488	8074	6725	<b>9254</b>
37	R 20140	LPSA-04	8602	9491	6857	12375	10141	8756	5769	<b>8856</b>
38	R 20141	OS-166	8704	8566	6513	11250	10848	7348	6436	<b>8524</b>
39	R 20143	Chandani	9086	9386	7093	11438	11628	7494	6836	<b>8994</b>
40	R 20145	Tara-2001	9932	9708	7891	13438	9432	7905	6102	<b>9201</b>
41	R 20147	LPSA-07	9639	9062	6061	11125	8690	8028	5969	<b>8368</b>
42	R 20149	Uqaab-101	8664	8969	6894	13063	9866	7868	5947	<b>8753</b>
43	R 20150	AA2376	9964	9247	7563	12500	10719	7972	6436	<b>9200</b>
44	R 20151	Madina-F1	8690	9571	7300	13250	9522	7894	5725	<b>8850</b>
45	R 20153	Shaheen-18	8999	9632	6272	11250	10303	7483	6725	<b>8666</b>
46	R 20155	KF-801	9484	9432	7088	13125	6501	8042	6310	<b>8569</b>
47	R 20157	2051	9968	9386	6234	10000	7948	7496	7436	<b>8352</b>
48	R 20159	HSP-18	9238	9455	5962	11875	7274	7419	4113	<b>7905</b>
49	R 20161	SS-2020	9347	9421	6563	11375	9196	7395	6125	<b>8489</b>

50	R 20165	KF-1398	8109	9722	6727	12438	8828	7509	6347	<b>8526</b>
51	R 2017	Topson-111	9243	9259	6916	11250	11851	8200	6569	<b>9041</b>
52	R 20170	Arroze	8202	9614	6532	12188	8065	7413	6102	<b>8302</b>
53	R 20173	FMC-3	9487	9108	7083	12125	7465	7453	6680	<b>8486</b>
54	R 20175	Guard-53 (check)	8981	9513	7275	12000	6898	6771	7325	<b>8395</b>
55	R 20179	Tara-2002	9604	9375	6583	12063	8279	7273	5769	<b>8421</b>
56	R 20180	Tara-1730	8475	9328	7003	13375	10271	7470	6680	<b>8943</b>
57	R 20181	Safa-F1	8564	9502	6783	12000	9490	7299	9702	<b>9049</b>
58	R 20183	LPSA-06	8599	9421	6490	13250	9626	7472	7413	<b>8896</b>
59	R 20185	16001	6810	9398	6385	9500	5303	6476	7080	<b>7279</b>
60	R 2019	Yg-20	6456	9872	6989	13125	7747	7740	8007	<b>8562</b>
61	R 20190	PAPA-HR-02	8154	9294	7234	13375	8852	7521	7495	<b>8847</b>
62	R 20191	LPSA-09	8236	9198	7256	11563	9281	7627	9251	<b>8916</b>
63	R 20193	Murk-101	8633	9502	6373	13313	7561	7705	6562	<b>8521</b>
64	R 20195	Prince-433	8030	9918	6621	12375	7843	8099	6895	<b>8540</b>
65	R 20197	Arisco-91	9118	9386	7623	13000	8788	7834	8629	<b>9197</b>
66	R 20199	ASW-503	7324	8963	7086	14250	9798	7354	7229	<b>8858</b>
67	R 2020	CD-32	8587	9552	7106	12625	8076	7356	7429	<b>8676</b>
68	R 2022	HSP-22	7925	9201	6501	12375	11061	7028	8051	<b>8877</b>
69	R 2024	HP-1	8141	9780	7535	12000	8924	7041	7540	<b>8709</b>
70	R 2026	LS-115	6885	9617	5400	11563	8504	7054	5750	<b>7825</b>
71	R 2027	TEG-786	8100	8830	5807	12000	7848	7664	7940	<b>8313</b>
72	R 2029	KF-911	8443	9467	6332	11000	8405	8069	7718	<b>8490</b>
73	R 2030	PAPA-HR-01	9176	9339	5624	11750	9493	7487	8673	<b>8792</b>
74	R 2048	13076	6236	9085	6122	10625	6498	6293	7118	<b>7425</b>
75	R 2050	FMC-4	9181	9409	7104	10438	9639	7588	8051	<b>8773</b>

76	R 2053	FB-3086	7563	9514	7053	10125	9283	7318	4673	<b>7933</b>
77	R 2055	Kisan-07	9612	9837	6074	10875	8299	7578	8784	<b>8723</b>
78	R 2057	CNRRI-17-19	7554	9467	7182	8563	8400	7282	8295	<b>8106</b>
79	R 2059	Sunrise Super	9203	10104	7226	9625	7849	8064	7473	<b>8506</b>
80	R 2061	Naubahar Super Gold	5169	9537	6322	6625	9033	6574	9473	<b>7533</b>
81	R 2063	EG-1907	9986	9189	6415	10375	9089	7579	6695	<b>8476</b>
82	R 2065	FB-1802	9012	9930	7071	9750	9156	8167	7673	<b>8680</b>
83	R 2067	Naubahar IQS-749	9501	9536	7303	9938	10093	7814	8051	<b>8891</b>
84	R 2069	EG-1904	9236	9930	6535	10875	10420	7494	7562	<b>8864</b>
85	R 2070	CNRRI-17-08	8439	9178	5190	11688	9238	7534	8762	<b>8575</b>
86	R 2071	FB-53	9580	9085	6859	11500	10921	8121	9162	<b>9318</b>
87	R 2073	Rachna-414	9160	9687	7057	10375	12280	7628	7473	<b>9094</b>
88	R 2075	SC-156	9180	9467	5927	10875	12048	7150	4607	<b>8465</b>
89	R 2077	Naubahar-786	8545	9722	5245	10688	9732	7563	6695	<b>8313</b>
90	R 2079	EG-1906	9365	9120	5932	12500	9573	8202	8261	<b>8993</b>
91	R 2081	SC-130	8593	9285	6859	11250	9740	7791	6639	<b>8594</b>
92	R 2083	FB-1902	8600	9537	6770	10125	9418	7439	5772	<b>8237</b>
93	R 2085	CNRRI-17-11	8492	9710	7316	9750	8501	7679	7639	<b>8441</b>
94	R 2088	BKT-275	9791	9455	6747	7375	9331	7603	5305	<b>7944</b>
95	R 2090	EG-1901	7512	9409	6505	11063	9721	7588	3550	<b>7907</b>
96	R 2091	SC-170	9212	9536	6996	10500	9649	8324	5572	<b>8541</b>
97	R 2093	CR-509	9015	9120	6502	11125	9544	8069	5928	<b>8472</b>
98	R 2095	CNRRI-17-18	7869	9502	6562	10000	8925	7958	4594	<b>7916</b>
99	R 2097	Sunrise Wonder	8271	9537	6607	8500	9485	8244	5217	<b>7980</b>
100	R 2099	Millet Rice	8114	9375	7079	10375	9987	7579	4705	<b>8173</b>
101	R 20261	CKD-3185	8441	9583	7526	7313	10480	6798	4505	<b>7807</b>

102	R 20263	CKD-3188	7286	9189	6882	-	8076	6639	4817	<b>7148</b>
103	R 20265	CKD-3274	8718	9201	6699	-	11840	7681	6039	<b>8363</b>
104	R 20267	CKD-3275	8926	9201	6580	-	9736	8247	6328	<b>8170</b>
		<b>Average</b>	<b>8627</b>	<b>9447</b>	<b>6797</b>	<b>11123</b>	<b>9501</b>	<b>7592</b>	<b>7306</b>	<b>8608</b>
		<b>LSD (0.050)</b>	617	937	890	590	970	735	923	
		<b>CV (%)</b>	4.3	7.6	5.6	3.5	12	2.4	9.5	

**Supplementary Table S1 (Part-II). Quality data of NUYT 2020  
Hybrids Rice**

<b>Sr #</b>	<b>Variety</b>	<b>Decode Name</b>	<b>Length (mm)</b>	<b>Width (mm)</b>	<b>L/W Ratio</b>	<b>Thickness (mm)</b>	<b>Stickiness</b>	<b>Curling (%)</b>	<b>Bursting (%)</b>	<b>C.G. L (mm)</b>	<b>Brown Rice (%)</b>	<b>Milled Rice (%)</b>	<b>Head Rice (%)</b>
1	R-20001	ANMOL	6.8	2	3.4	1.76	sticky	7	9	10.2	83.2	76.3	64.4
2	R-20003	SC-415	6.7	2.04	3.28	1.76	sticky	2	8	9.8	82.3	76.2	65.2
3	R-20005	NAUBAHAR-110	7.14	2.11	3.38	1.8	sticky	4	14	8.9	82.6	77.7	58.3
4	R-20009	FB-39	6.65	2.06	3.22	1.73	sticky	5	10	9.8	84	76.2	65.5
5	R-20010	Rachna-415	6.64	2.12	3.13	1.84	sticky	5	24	10	82.6	76	53.4
6	R-20011	CNRRI-17-17	6.2	1.91	3.25	1.62	sticky	5	14	9.8	82	73	64.6
7	R-20013	LH-118	7.28	1.84	3.96	1.7	sticky	5	13	12.2	84	75.6	62.6
8	R-20015	SC-128	6.78	2	3.39	1.76	sticky	3	4	11.2	80	73.8	63.2
9	R-20033	TARA-1732	6.46	1.9	3.4	1.63	sticky	5	20	9.8	82.8	76	65.8
10	R 20035	LPSA-03	-	-	-	-	-	-	-	-	-	-	-
11	R-20037	Generation	6.77	1.94	3.39	1.75	sticky	5	15	11	82	78.5	57
12	R-20040	D-121 (check)	6.72	1.98	3.4	1.75	sticky	4	7	10.8	80	73.3	56.4

13	R-20041	Sitara-404	6.65	2.04	3.26	1.7	sticky	8	9	10.6	81.4	78.9	57
14	R-20044	LPSA-08	6.46	1.94	3.33	1.7	sticky	5	10	10.2	83.4	75.6	66
15	R-20046	HP-3	6.8	2.11	3.22	1.76	sticky	2	4	10.3	84.4	79.4	61.2
16	R-20100	AA-2396	6.86	2.04	3.36	1.77	sticky	3	8	10.6	83	76.2	56.3
17	R-20101	EG-1908	6.63	2.02	3.28	1.76	sticky	3	14	10.5	82.3	75.3	60.3
18	R-20103	VGro-315	6.53	2.04	3.2	1.76	sticky	11	14	10.3	84.2	79.7	66
19	R-20105	Ennova-77	6.97	2	3.48	1.7	sticky	7	6	10.4	81.2	74.2	54.1
20	R 20107	HSP-21	-	-	-	-	-	-	-	-	-	-	-
21	R-20109	HP-2	6.73	2.06	3.27	1.74	sticky	5	16	9.8	80.2	75	53.3
22	R-20111	US-125	7.14	1.9	3.75	1.68	sticky	9	10	9.4	82.6	78.3	58
23	R-20113	Nawaz-21	6.3	2.02	3.12	1.75	sticky	5	18	9.6	82.5	74.9	51.2
24	R-20115	CD-34	6.91	1.99	3.47	1.76	sticky	2	6	10.4	78.3	70.8	53.4
25	R-20117	HSP-19	6.8	2.01	3.38	1.79	sticky	4	15	11	77.8	66.7	52
26	R-20119	LUS-250	6.71	2.05	3.27	1.75	sticky	6	10	10.5	83	76.4	57.5
27	R-20120	ASW-505	6.45	1.98	3.25	1.71	sticky	6	8	9.9	84	79.2	63.4
28	R-20121	TEG-111	6.67	2.02	3.3	1.78	sticky	6	13	10.4	82.8	77.6	60.3
29	R-20123	2050	6.43	1.84	3.49	1.61	sticky	8	20	9.2	84.4	75.2	55.3
30	R-20125	Topson Risor	6.84	2.03	3.37	1.74	sticky	4	9	11	84	74.3	50.4
31	R-20127	VGRO-177	6.74	2.02	3.33	1.76	sticky	2	11	9.8	81.8	73.8	56.2
32	R-20129	Winner-66	6.71	2.06	3.26	1.76	sticky	5	14	10.2	80.7	75.7	55.7
33	R-20131	HSP-20	6.69	2.23	3	1.9	sticky	4	6	9.8	79.6	76.2	56.2

34	R-20133	One-01-Plus	6.96	2.11	3.3	1.82	sticky	8	9	11	79.4	71.5	62.1
35	R-20135	OS-167	6.85	2.01	3.41	1.82	sticky	3	16	10.2	79.6	70.4	54.3
36	R-20138	Tara-1728	6.42	2.03	3.16	1.71	sticky	3	11	9.2	83	76.2	66.4
37	R-20140	LPSA-04	6.88	2	3.44	1.69	sticky	4	4	9	82.6	75.7	62.6
38	R-20141	OS-166	7.18	2.16	3.32	1.84	sticky	6	11	12	78.2	74.4	54.3
39	R-20143	Chandani	6.8	2.06	3.3	1.77	sticky	3	10	12	81.3	77.8	56.7
40	R-20145	Tara-2001	6.58	2.02	3.26	1.7	sticky	6	8	9.8	80.6	73	54.6
41	R-20147	LPSA-07	6.41	1.92	3.33	1.66	sticky	6	9	8.8	80.8	73.8	58
42	R-20149	Uqaab-101	6.69	2.05	3.26	1.79	sticky	2	5	10.7	74.6	70.2	51.4
43	R-20150	AA2376	6.87	2	3.43	1.77	sticky	8	7	9.7	82.8	75	60
44	R-20151	Madina-F1	6.83	2.02	3.38	1.76	sticky	7	16	11	81.4	68	50.7
45	R-20153	Shaheen-18	6.88	2.07	3.32	1.74	sticky	7	12	10	81	73	52.2
46	R-20155	KF-801	7.04	1.87	3.76	1.62	sticky	10	14	9.1	81.5	70.9	51.4
47	R-20157	2051	6.8	2.03	3.35	1.76	sticky	2	2	11.4	83.3	76	52
48	R-20159	HSP-18	6.57	1.95	3.36	1.66	sticky	4	5	10	81.3	78	62.3
49	R-20161	SS-2020	6.96	180	3.87	1.57	sticky	4	5	10.3	78.4	67.4	50.8
50	R-20165	KF-1398	6.32	1.84	3.43	1.56	sticky	8	9	9.6	80.6	76.8	64.9
51	R-2017	Topson-111	6.85	2.05	3.34	1.76	sticky	3	4	10.6	79.2	71.5	50.4
52	R-20170	Arroze	6.58	2.04	3.22	1.73	sticky	6	8	9.9	79.5	74	57.4
53	R-20173	FMC-3	6.56	1.9	3.45	1.66	sticky	4	5	9.8	78.4	68.7	57
54	R-20175	Guard-53	6.9	2.08	3.32	1.77	sticky	3	8	10.3	81.6	74.5	62.3



		(check)											
55	R-20179	Tara-2002	7.19	2.08	3.46	1.74	sticky	2	5	11.6	82.3	77.3	52.3
56	R-20180	Tara-1730	6.7	2.2	3.04	1.84	sticky	4	6	10.2	79.4	74.6	56.8
57	R-20181	Safa-F1	6.32	2.04	3.09	1.8	sticky	4	7	10.6	84	75.3	74
58	R-20183	LPSA-06	6.86	1.79	3.83	1.63	sticky	12	7	9.8	80	74.6	54.7
59	R-20185	16001	6.06	2.03	2.98	1.64	sticky	5	11	8.3	82.5	76.5	69.4
60	R-2019	Yg-20	6.55	1.92	3.41	1.72	sticky	6	14	9.9	83.8	75.4	51.4
61	R-20190	PAPA-HR-02	6.72	1.86	3.61	1.74	sticky	3	7	10.4	84.6	74.4	56.7
62	R-20191	LPSA-09	6.48	1.96	3.31	1.7	sticky	12	16	10	81.5	72.6	52
63	R-20193	Murk-101	6.54	1.98	3.3	1.65	sticky	4	5	9.2	76.14	73.6	54.4
64	R-20195	Prince-433	6.87	2.06	3.33	1.78	sticky	2	8	10.5	80.6	76.3	57.4
65	R-20197	Arisco-91	6.82	1.96	3.48	1.84	sticky	3	5	10.4	82	78.6	60.5
66	R-20199	ASW-503	6.79	2.03	3.34	1.8	sticky	6	7	9.9	83	79	64
67	R-2020	CD-32	6.62	2	3.31	1.7	sticky	3	6	9.9	77.2	71	56.8
68	R-2022	HSP-22	7.21	1.93	3.73	1.7	sticky	10	9	11.8	76	71	55.2
69	R-2024	HP-1	7.01	2.04	3.44	1.82	sticky	2	6	10.2	81	77.3	53.8
70	R-2026	LS-115	6.92	2.06	3.36	1.82	sticky	4	15	9.8	81.2	76.3	61.8
71	R-2027	TEG-786	7.08	2.03	3.49	1.78	sticky	3	2	11	80.7	77.6	61
72	R-2029	KF-911	6.29	1.92	3.28	1.57	sticky	4	16	10	80.6	74.3	50.6
73	R-2030	PAPA-HR-01	6.81	2.04	3.34	1.81	sticky	4	13	11.2	80.5	75.4	56.7
74	R-2048	13076	7.11	1.76	4.04	1.65	sticky	3	6	10.6	78	68.2	51.4

75	R-2050	FMC-4	6.86	2.09	3.28	1.79	sticky	7	13	11.3	81.6	74.4	53.7
76	R-2053	FB-3086	6.54	1.9	3.44	1.64	sticky	20	19	8.9	81.2	74.5	52.2
77	R-2055	Kisan-07	6.59	1.96	3.36	1.76	sticky	3	6	11.3	77	68	51
78	R-2057	CNRRI-17-19	6.47	1.85	3.49	1.64	sticky	17	11	9.6	80.3	73.7	53.3
79	R-2059	Sunrise Super	6.97	1.94	3.59	1.64	sticky	8	12	9.6	81.2	73.3	53.8
80	R-2061	Naubahar Super Gold	6.77	2	3.38	1.67	sticky	4	9	9.9	82	74.6	56.8
81	R-2063	EG-1907	7.13	2.09	3.41	1.71	sticky	6	7	10	81.2	76.4	54.4
82	R-2065	FB-1802	6.4	1.9	3.37	1.66	sticky	5	9	9.6	78	73.9	53.4
83	R-2067	Naubahar IQS-749	7.06	2.05	3.44	1.74	sticky	4	12	11.3	80.5	72.6	60.2
84	R-2069	EG-1904	6.86	2.09	3.28	1.72	sticky	4	12	9.8	78.8	71.8	52.6
85	R-2070	CNRRI-17-08	6.39	2.02	3.16	1.63	sticky	4	16	10.2	77	69.5	53.5
86	R-2071	FB-53	6.58	2.01	2.27	1.75	sticky	5	17	9.4	80.1	71.6	52
87	R-2073	Rachna-414	6.95	2.15	3.23	1.79	sticky	4	16	10	79.9	75.4	52.6
88	R-2075	SC-156	7.11	1.96	3.62	1.74	sticky	3	15	10	78.7	70	50.4
89	R-2077	Naubahar-786	6.94	2.02	3.43	1.76	sticky	6	14	11	76.4	70.2	51
90	R-2079	EG-1906	6.68	1.97	3.39	1.67	sticky	5	7	10.3	78.6	75.4	60.3
91	R-2081	SC-130	6.99	2.03	3.44	1.78	sticky	3	6	11	79.6	74.3	54.7
92	R-2083	FB-1902	6.53	2.11	3.09	1.5	sticky	6	14	10.1	78.2	72	67
93	R-2085	CNRRI-17-11	6.62	1.98	3.34	1.71	sticky	3	6	9.8	78	73.3	55
94	R-2088	BKT-275	6.44	1.94	3.32	1.65	sticky	7	15	9.4	79.8	71	52.4

95	R-2090	EG-1901	6.6	2.13	3.1	1.77	sticky	2	7	10	79.3	72	58.8
96	R-2091	SC-170	6.48	1.98	3.31	1.69	sticky	4	11	9.2	79.7	73	58.8
97	R-2093	CR-509	6.74	2.04	3.3	1.76	sticky	4	9	10.2	81.4	74.8	50.8
98	R-2095	CNRRI-17-18	6.4	1.88	3.4	1.64	sticky	10	10	9.5	80.6	76.9	61.4
99	R-2097	Sunrise Wonder	6.57	1.98	3.32	1.68	sticky	2	3	9.2	82.5	75.2	63.4
100	R-2099	Millet Rice	6.92	2.08	3.33	1.81	sticky	5	16	10.4	81	71.8	59
101	R-20691	CKD-3185	6.54	2.04	3.2	1.65	sticky	3	4	9.8	78.6	74.8	55.6
102	R 20263	CKD-3188	-	-	-	-	-	-	-	-	-	-	-
103	R 20265	CKD-3274	-	-	-	-	-	-	-	-	-	-	-
104	R 20267	CKD-3275	-	-	-	-	-	-	-	-	-	-	-

- No data was received

TMR = Total milled rice, HR = Head rice, CGL = Cooked Grain Length; B= Bursting upon cooking, E/R= elongation ratio;

**Supplementary Table S2 (Part-i): Mean of Paddy Yield (kg/ha) of Rice Hybrids Evaluated in NUYT during Kharif, 2021**

S.#	Entry Name	Decode Name	GUARD, Gullarchi	Suns Crop, DG Khan	FMTC, Shikarpur	EMKAY, Farooq abad	ARI, DI Khan	Dokri, Larkana	RRI, KSK	SRRI, Thatha	Tara Crops,	PARC, KSK	Average yield (kg/ha)
1	R-21001	E-2103	11188	6040	10498	7877	6000	8188	5311	9800	7659	4888	7745
2	R-21003	Premium-1	10542	9100	7365	8197	7333	7820	5333	8900	9329	4859	7878
3	R-21005	Ultra-1	11963	6860	6781	8487	8667	7486	5104	9000	9318	4755	7842
4	R-21007	SG-2101	10207	6983	7990	8293	5333	8432	5283	9200	8599	5354	7567
5	R-21009	Dhanak(FM-HRS-2101)	10956	7941	10007	7927	7333	8561	4545	9150	8432	4138	7899
6	R-21010	Dagha-5503	9979	10257	8929	8187	7333	7723	5688	9650	8324	4365	8043
7	R-21011	HSP-22	5637	8833	7089	7703	8000	7763	5612	8100	9742	4828	7331
8	R-21013	KF-801	11932	7685	6753	8107	5333	7710	5626	7950	10060	5871	7703
9	R-21015	Winner-99	8607	8360	9251	9290	4000	7536	5688	8800	8639	5351	7552
10	R-21017	HS-110	10309	9187	11555	8057	4667	8638	5441	9400	9260	4670	8118
11	R-21019	HSP-19	9297	7680	8941	8857	6000	8025	4802	7950	9968	4364	7588
12	R-21020	S-47	7305	9980	8667	8213	2000	8438	4872	9150	8704	3881	7121
13	R-21022	Plus-1	10154	9233	11471	9133	12000	8028	4769	9500	10388	4072	8875
14	R-21024	HS-100	8092	10139	11754	9143	5333	9847	6109	8700	10487	4702	8431
15	R-21026	MG-101	10532	8929	8114	8117	6667	8638	4119	9350	10388	4820	7967
16	R-21027	HSP-20	8884	9012	6201	8150	3333	8467	5455	9200	11369	4931	7500
17	R-21029	PAPA HR01	10452	9987	9882	7277	4667	7574	6377	8950	12016	5050	8223
18	R-21030	FL-2051	9586	8787	6771	8267	6667	7282	6049	9250	9902	4282	7684
19	R-21033	E-2102	7025	8933	9051	8393	4000	8738	5096	8900	9802	4306	7424
20	R-21035	SG-2103	10400	10040	9312	8827	5333	8286	5284	8700	10122	4110	8041
21	R-21037	White Gold-1	10188	11773	7494	8630	5333	8635	5190	8200	9256	3400	7810
22	R-21039	TXP-RC-786	9683	8403	8825	9393	5333	8536	5585	10001	10156	4088	8000
23	R-21040	S-98	9554	9080	8366	7583	4667	7632	6645	7900	11039	4161	7663

24	R-21041	KF-1398	7748	8027	11009	8260	6000	8982	4896	9200	9099	3789	7701
25	R-21043	Dagha-5504	10497	7747	7741	7937	6667	8687	6210	8750	9517	4377	7813
26	R-21044	HSP-21	8558	9967	10287	7940	8000	8466	5504	9600	10771	4525	8362
27	R-21046	E-2101	9234	9728	9424	7950	6000	7843	7725	9150	11000	4876	8293
28	R-21048	SG-2102	9524	12947	8365	8373	6000	7938	6845	10250	10507	4227	8498
29	R-21050	KF-911	8191	9507	10518	7690	2667	8874	5878	9000	10962	4626	7791
30	R-21053	Winner-86	10312	8800	10212	8447	4000	7130	7252	8100	8618	4626	7750
31	R-21055	HSP-18	8874	11480	10068	6293	6667	8638	5632	8950	11268	4188	8206
32	R-21057	FL-2050	10954	8720	8305	7493	8000	8255	5967	7900	10201	5077	8087
33	R-21059	Papa-HR02	8105	6800	6639	8377	4000	7738	6586	9000	11127	5153	7352
34	R-21061	VT-22	10551	8267	7530	8260	6000	8837	6301	9250	9329	4946	7927
35	R-21063	S-78	10313	7840	8805	8463	7333	8468	6438	8900	8560	4548	7967
36	R-21065	Kissan-222	11014	8487	5427	8137	7333	7521	5646	10100	9739	5038	7844
37	R-21067	Raaj-313	10114	7440	6470	7947	2667	7956	6973	8750	7091	4175	6958
38	R-21069	HDR-16	10022	8613	7112	8630	8000	7645	5582	9600	10448	4801	8045
39	R-21070	IS-476	9937	10773	8909	9023	5333	7600	6469	9350	9696	4445	8153
40	R-21071	Muhafiz-555	9983	9293	9901	8147	5333	7854	6473	8980	9362	3664	7899
41	R-21073	EG-1906	9930	8819	8796	8927	6000	8536	5103	1080	8658	4995	7084
42	R-21075	LPSA-09	9947	9500	6296	8700	8667	8134	6368	9550	8756	4477	8040
43	R-21077	Tara-2002	10278	9307	6238	8937	3333	9564	5429	8600	9728	3832	7525
44	R-21079	XLCS-1813	8706	4853	6992	8193	4667	7138	5083	9450	7792	4371	6724
45	R-21081	GNY-53 (Check)	9814	7227	7902	8067	5333	7423	5250	8750	8491	5150	7341
46	R-21083	EG-1908	10720	8133	7192	8423	6000	8415	5677	9600	7589	4458	7621
47	R-21085	Tara-2111	10445	6773	6851	8630	5333	8887	4945	8950	8412	4589	7382
48	R-21088	TEG-111	9100	8053	9817	8113	6000	8356	4677	9300	7527	5274	7622
49	R-21090	LPSA-01	9828	5723	10175	8927	6667	7395	5609	8900	8021	4778	7602
50	R-21091	Noor-444	10295	6707	7455	9070	4000	8536	4668	9050	8726	4003	7251
51	R-21093	Raaj-555	10323	6173	6522	9413	5333	8647	5413	9300	8422	3980	7353

52	R-21095	GS-1199	10733	7693	7170	8077	4667	8786	5274	9100	7677	6229	7541
53	R-21097	Rawayat-245	10226	7267	6573	7617	4000	8175	5238	9650	8511	4778	7203
54	R-21099	IS-696	9350	7087	7685	8903	5333	8321	4374	9350	9448	3543	7339
55	R-21100	EG-1907	10968	6685	10184	8307	5333	8028	4813	7980	8746	5454	7650
56	R-21101	MAITA-125	10399	6764	8205	8060	6000	8132	5550	10150	8494	5674	7743
57	R-21103	Tara-2112	10802	7907	15904	8237	5333	8651	5239	9300	8628	4979	8498
58	R-21105	KS-2153	9737	6155	8526	8677	6667	8647	4737	10300	10354	4188	7799
59	R-21107	EG-1901	9503	6965	5086	8803	5333	8231	5939	9350	9502	5235	7395
60	R-21109	Kissan-363	10847	8343	8266	7607	5333	8675	4572	8800	10424	4137	7701
61	R-21111	LPSA-08	10987	5763	10105	7237	2000	8739	5735	9800	10189	4251	7481
62	R-21113	CD-910	10220	9299	5785	8253	10000	8536	4296	8100	9081	4569	7814
63	R-21115	Noor-111	8770	8676	6799	7690	6667	8612	5767	9800	10796	4794	7837
64	R-21117	GS-1122	9123	8013	7776	7213	7333	7825	6587	10200	9801	4404	7828
65	R-21119	Grace-2	10987	7480	6602	7310	4000	8028	6084	10100	7174	5600	7337
66	R-21120	EG-1904	10797	7747	7080	7727	8000	8124	6643	8550	7638	4271	7658
67	R-21121	Tara-2001	9873	5867	7765	7610	6000	6933	5405	9400	9271	3447	7157
68	R-21122	KS-2151	11078	6213	6536	7723	5333	8134	5651	8600	8833	4654	7276
69	R-21123	XLCS-3463	9075	7040	7604	8047	4667	7986	5828	8100	8596	3836	7078
70	R-21125	GIR-1803	10145	6013	8847	8177	5333	8023	5775	9500	8481	4474	7477
71	R-21127	LPSA-06	10374	5667	8696	8400	6000	8357	5301	8950	7545	4057	7335
72	R-21129	Ababeel-785	9263	10107	7880	8737	8000	8377	5459	8600	8403	5237	8006
73	R-21131	LPSA-02	11190	8848	21002	8007	4667	8637	4519	10200	8491	5829	9139
74	R-21133	Bakhtawar-275	8605	10027	7004	8077	6000	8113	4868	8700	7580	4745	7372
75	R-21135	Shabnam-786	10608	7120	7202	8543	5333	8056	5057	9600	8658	4619	7480
76	R-21138	Sina-500	6597	9467	8982	7767	9333	8911	6270	8550	7712	3460	7705
77	R-21140	Nawbahar Gold-2	10894	5820	8398	8520	6667	8355	6991	8950	8520	4011	7713
78	R-21141	LUS-250	11580	9968	8618	7090	4000	8746	4629	10300	8805	4704	7844
79	R-21143	Kissan-07	9596	8417	8550	7233	4667	8341	5768	9150	8941	4658	7532

80	R-21145	TEG-786	11520	9075	6302	7817	4667	7675	5014	9400	9329	4819	7562
81	R-21147	SC-138	10002	7123	9625	8090	5333	8193	5085	8750	8756	5147	7610
82	R-21149	Riscer	9702	7485	6824	7957	4000	8152	5926	9200	9782	4734	7376
83	R-21150	Diamond-121 (Check)	9904	7661	8441	8347	4667	8054	5282	9700	8903	4220	7518
84	R-21151	HP-1	8627	7715	9593	8080	6000	8097	5888	10600	9653	4382	7863
85	R-21153	DM-999	10317	9993	8517	6577	6667	8023	4988	9300	9825	5370	7958
86	R-21155	Nawbahar gold-1	6677	7965	5770	8487	4000	8430	4770	8900	6793	5381	6717
87	R-21157	Nawbahar-2102	10070	10565	7431	7433	6667	8421	5486	10400	8795	4848	8012
88	R-21159	Bakhtawar-281	10522	7819	9429	8360	4000	8656	4327	9600	8814	4818	7635
89	R-21161	Badbaan-06	7944	8480	8098	8153	6667	8873	4582	8900	7907	5072	7467
90	R-21165	ASW-503	10886	7820	10587	7347	1333	8130	4652	9400	8599	4726	7348
91	R-21170	JJR-51	9131	10800	7268	7617	5333	8127	4349	9800	8334	3629	7439
92	R-21173	SC-170	10388	10673	7557	8043	5333	7932	5555	10400	8609	5190	7968
93	R-21175	Sina-250	10938	8075	9580	6650	4000	8327	5089	9550	10307	4704	7722
94	R-21179	FMC-4	9639	10741	7914	7697	4667	8352	4996	8650	8716	3238	7461
95	R-21180	Nawbahar-2101	10238	9320	8429	7970	6667	8857	5255	10300	9491	4219	8075
96	R-21181	AS-525	10178	7400	7957	7880	6000	8347	4917	9700	9469	4364	7621
97	R-21183	LS-115	10067	5824	9063	7987	10667	7554	5433	10550	8756	4905	8080
98	R-21185	Sundar-786	11141	6891	8854	8277	3333	8054	4904	9700	8687	5018	7486
99	R-21187	SG-415	9643	8600	7494	8257	5333	8630	5115	8900	10911	4455	7734
100	R-21189	Badbaan-07	9923	8320	7477	7717	1333	8313	4064	8950	8589	5014	6970
101	R-21190	SG-436	11021	10707	8106	8413	6667	8255	4578	8400	10130	4056	8033
102	R-21191	JJR-88	9518	7453	10729	7780	6000	7923	5429	10200	8550	2746	7633
103	R-21193	ASW-505	10831	7101	8873	9077	5333	8047	5411	9750	9883	4765	7907
104	R-21194	DM-111	10056	6932	7834	8340	6000	8055	5298	8800	10260	4275	7585
105	R-21195	FMC-3	9572	10860	5754	9093	5333	8751	5680	7900	11038	4224	7821
106	R-21197	US-125	11668	7107	7142	8667	6000	7857	5910	9300	10201	4107	7796
107	R-21199	SC-156	9988	7923	7658	7863	4000	8656	5822	8900	11102	3929	7584

108	R-21200	Prime-433	10711	7273	9773	8260	2000	8145	5398	7900	10643	5193	7530
109	R-21201	IS-81	8682	7500	9233	7780	3333	8332	5548	9600	9730	3644	7338
110	R-21203	Sitra-404	10622	7368	9703	7803	7333	8733	5868	8900	8167	4665	7916
111	R-21205	FB-103	9967	7000	9256	7740	4667	8011	5780	9100	9613	4877	7601
112	R-21207	HP-2	10645	8017	6777	8327	2667	7545	5563	10200	8177	4962	7288
113	R-21209	Rachana-515	10664	10160	7244	7987	5333	8457	5620	7900	10414	4222	7800
114	R-21211	MS-333	8754	6783	9341	7517	4000	7522	5470	8800	10146	4848	7318
115	R-21212	Mumtaaz-1473	9792	5920	6478	7970	4000	7690	6127	7108	8725	4941	6875
116	R-21213	Anza	9021	6525	7473	7443	6667	8363	5660	9900	9013	4275	7434
117	R-21215	FB-1402	9873	6901	8392	8867	1333	7899	5417	9600	7177	4864	7032
118	R-21217	Uqab-101	10918	7644	7823	8710	6667	7630	5936	10500	8607	3767	7820
119	R-21219	Bankuit-128	10097	6127	8338	8440	4000	8655	5604	7800	8380	4821	7226
120	R-21220	PT-918	8233	7445	8545	8543	4667	8301	5598	8900	8218	4135	7259
121	R-21222	CMS-404	9728	7573	8708	8170	4667	6042	4259	9125	8736	4007	7101
122	R-21225	ME-444	9540	8627	8205	8030	8000	8055	5433	9745	7932	3991	7756
123	R-21227	PT-930	10023	6792	8244	8123	6000	8323	5034	7186	6071	4296	7009
124	R-21229	FB-1802	9889	5907	6252	8680	5333	8754	4626	9216	10146	4072	7288
125	R-21230	FB-101	8302	5781	6282	8547	6000	8433	5872	8629	9613	3931	7139
126	R-21232	Super Sultan	9983	7209	8838	8433	5333	7956	4545	7162	8109	4212	7178
127	R-21233	HP-3	9461	6912	7195	8090	4000	8565	5084	10789	9224	4546	7387
128	R-21235	Rachana-414	8748	6993	8883	8313	7333	8655	5604	8245	10197	5178	7815
129	R-21237	Bankuit-125	9011	4632	7008	8270	6000	8398	5094	9126	7550	5059	7015
130	R-21239	MWK	10382	8587	8143	7790	5333	8040	4517	9132	8520	3919	7436
131	R-21240	Tass	8591	7115	4130	7627	3333	8873	5067	9122	6393	5176	6543
132	R-21241	1122	8554	7120	8599	8210	3333	8713	4443	9809	8617	4292	7169
133	R-21242	YG-21	9256	6061	9357	8263	6667	8746	3947	9128	7971	4163	7356
134	R-21244	Manira-786	6141	7900	6312	7953	3333	8737	5343	9628	7952	4510	6781
135	R-21245	Arisco-88	9153	9315	8431	7730	3333	8147	4949	9172	8768	4698	7370



<b>136</b>	<b>R-21247</b>	Bankhuit-130	9103	9463	7855	8770	1333	8127	4843	8156	6346	5021	<b>6902</b>
<b>137</b>	<b>R-21249</b>	Tezro-121A	9332	10973	11114	8260	1333	8452	4820	9126	6838	5525	<b>7577</b>
<b>Grand Mean</b>			<b>9794.61</b>	<b>8076.63</b>	<b>8308.65</b>	<b>8153.53</b>	<b>5446.04</b>	<b>8224.35</b>	<b>5419.18</b>	<b>9085.80</b>	<b>9103.06</b>	<b>4549.36</b>	<b>7616</b>
<b>CV %</b>			<b>0.97</b>	<b>1.62</b>	<b>1.95</b>	<b>0.57</b>	<b>2.88</b>	<b>0.52</b>	<b>1.07</b>	<b>0.94</b>	<b>1.07</b>	<b>2.13</b>	
<b>LSD (0.05)</b>			<b>234.21</b>	<b>1356.32</b>	<b>1465.11</b>	<b>1054.16</b>	<b>287.44</b>	<b>1132.43</b>	<b>1674.65</b>	<b>255.14</b>	<b>243.34</b>	<b>1154.22</b>	

**Supplementary Table S2 (Part-Ii) Quality Characteristics of Rice Hybrids Evaluated in NUYT 2021**

			Milling Recovery								Grain Appearance			Cooking Character			
Sr. No.	Entry no.	Decode Name	Paddy (gm)	Moisture (%)	Husk (gm)	Brown Rice (gm)	Bran (gm)	White Rice (gm)	Head Rice (gm)	Head Rice Recovery (%)	W.R length (mm)	W.R width (mm)	Length/width (mm)	Cooking Elongation (mm)	Stickiness	Curling (%)	Bursting (%)
1	R-21001	E-2103	300	13.3	56.2	243.8	16.6	227.2	179.3	59.77	7.29	2.04	3.57	12.4	sticki	2	7
2	R-21003	Premium-1	300	13.1	56.9	243.1	12.9	230.2	188.6	62.87	7.02	2.03	3.46	11	sticki	2	11
3	R-21005	Ultra-1	300	13.9	78.2	221.8	18.3	203.5	179.4	59.80	6.41	1.91	3.36	10.5	Sticki	3	7
4	R-21007	SG-2101	300	13.9	59	241	12.5	228.5	211	70.33	6.47	2	3.24	10.3	sticki	2	2
5	R-21009	Dhanak(F M-HRS-2101)	300	13.6	51.7	248.3	19.4	228.9	196	65.33	7.42	2.12	3.50	11.5	sticki	5	5
6	R-21010	Dagha-5503	300	13.4	60.5	239.5	11	228.5	196	65.33	6.79	1.91	3.55	9.6	Sticki	5	6
7	R-21011	HSP-22	300	13.2	59.1	240.9	21.5	219.4	158.1	52.70	6.97	1.94	3.59	10.9	Sticki	11	13
8	R-21013	KF-801	300	13.6	51	249	24.1	224.9	163.7	54.57	6.45	1.97	3.27	9.9	sticki	6	3
9	R-21015	Winner-99	300	12.5	49.8	250.2	22.2	228.0	175.6	58.53	7.05	2.05	3.44	11.2	sticki	2	2
10	R-21017	HS-110	300	12.8	70.4	229.6	15.3	214.3	153	51.00	7.01	1.99	3.52	10.5	Sticki	1	5
11	R-21019	HSP-19	300	13.1	57.6	242.4	21	221.4	175	58.33	7.03	2.04	3.45	10.6	sticki	8	12
12	R-21020	S-47	300	12.8	61.5	238.5	17.1	221.4	195.3	65.10	6.45	1.85	3.49	9.7	Sticki	8	10
13	R-21022	Plus-1	300	13.6	56.2	243.8	12.3	231.5	152	50.67	6.9	2.32	2.97	9.4	sticki	2	3
14	R-21024	HS-100	300	12.8	57.5	242.5	19.3	223.2	161.6	53.87	6.6	1.99	3.32	10.2	sticki	2	2
15	R-21026	MG-101	300	12.6	56.4	243.6	13.3	230.3	170	56.67	6.51	1.99	3.27	10.4	sticki	8	3
16	R-21027	HSP-20	300	13.5	50.8	249.2	17.3	231.9	214	71.33	7.4	2.07	3.57	12.9	sticki	6	6
17	R-21029	PAPA HR01	300	13.1	51.9	248.1	14.5	233.6	159.6	53.20	7.17	2.06	3.48	10.8	sticki	3	6
18	R-21030	FL-2051	300	12.8	54	246	17.2	228.8	162	54.00	6.91	1.97	3.51	11.6	sticki	3	7

19	R-21033	E-2102	300	12.9	53.8	246.2	13.2	233	160.9	53.63	6.56	2	3.28	10	sticki	8	7
20	R-21035	SG-2103	300	12.9	54.6	245.4	12.5	232.9	186.8	62.27	7.19	2.08	3.46	12.2	sticki	2	2
21	R-21037	White Gold-1	300	12	63.3	236.7	12.9	223.80	213.8	71.27	6.56	1.93	3.40	10.7	sticki	7	3
22	R-21039	TXP-RC-786	300	12.9	58.9	241.1	18.8	222.3	159	53.00	6.98	2.22	3.14	10.2	sticki	4	2
23	R-21040	S-98	300	13	58.4	241.6	17.6	224	209.6	69.87	6.68	1.92	3.48	10.5	sticki	11	9
24	R-21041	KF-1398	300	13.8	53.1	246.9	14.3	232.6	163	54.33	7.13	2.1	3.40	11.9	sticki	1	2
25	R-21043	Dagha-5504	300	12.9	60.1	239.9	15	224.9	212	70.67	6.51	1.93	3.37	9.9	Sticki	3	7
26	R-21044	HSP-21	300	13.2	54.3	245.7	16.2	229.5	174	58.00	7.28	1.87	3.89	13.2	sticki	24	12
27	R-21046	E-2101	300	14	50.4	249.6	20.3	229.3	175.1	58.37	7.1	1.89	3.76	11.2	Sticki	2	2
28	R-21048	SG-2102	300	13.3	55.2	244.8	19.3	225.5	166	55.33	7.11	2.13	3.34	11.8	sticki	5	6
29	R-21050	KF-911	300	12.6	55.5	244.5	12.3	232.2	182.1	60.70	7.16	2.08	3.44	9.3	sticki	1	2
30	R-21053	Winner-86	300	12.6	63.2	236.8	22	214.8	150.8	50.27	6.7	2.04	3.28	10.4	sticki	8	3
31	R-21055	HSP-18	300	13.2	61.4	238.6	15.1	223.5	149.8	49.93	6.52	2.03	3.21	10.8	Sticki	4	5
32	R-21057	FL-2050	300	12.8	53.7	246.3	11.9	234.4	191.8	63.93	6.6	1.85	3.57	9.5	Sticki	4	7
33	R-21059	Papa-HR02	300	13.5	54	246	28.4	217.60	161.9	53.97	6.93	2.02	3.43	12	sticki	9	4
34	R-21061	VT-22	300	13.8	55	245	12.5	232.5	215.9	71.97	7.11	2.12	3.35	11	sticki	3	4
35	R-21063	S-78	300	13.5	51.1	248.9	17.1	231.8	204.6	68.20	7	2.03	3.45	10.9	sticki	4	5
36	R-21065	Kissan-222	300	13.6	53.5	246.5	18.3	228.2	206.2	68.73	6.92	2.05	3.38	9.6	sticki	4	4
37	R-21067	Raaj-313	300	13.2	52.4	247.6	15	232.6	160	53.33	6.49	1.93	3.36	10.6	sticki	10	4
38	R-21069	HDR-16	300	13.5	55.9	244.1	15.2	228.9	166.4	55.47	6.97	2.01	3.47	10.9	sticki	4	3
39	R-21070	IS-476	300	13.4	53.1	246.9	14.9	232	150.6	50.20	7.1	2.08	3.41	11.2	sticki	2	1
40	R-21071	Muhafiz-555	300	12.4	61.7	238.3	13.8	224.5	163.5	54.50	7	2.01	3.48	11.2	sticki	3	4
41	R-21073	EG-1906	300	13	54.1	245.9	12.5	233.4	155	51.67	6.89	1.93	3.57	10.7	sticki	4	6

42	R-21075	LPSA-09	300	12.7	51.5	248.5	12.5	236	160	53.33	6.8	1.92	3.54	10.5	sticki	12	3
43	R-21077	Tara-2002	300	12.9	59.7	240.3	19.2	221.1	155.5	51.83	7.01	2.1	3.34	10.2	Sticki	3	2
44	R-21079	XLCS-1813	300	12.6	52.8	247.2	17.5	229.7	158	52.67	6.65	2.02	3.29	10.8	sticki	7	6
45	R-21081	GNV-53 (Check)	300	13.6	51.4	248.6	19.2	229.4	195.9	65.30	6.66	2.02	3.30	9.7	sticki	8	4
46	R-21083	EG-1908	300	12.8	50.6	249.4	18.6	230.8	180	60.00	7.21	2.02	3.57	12	sticki	9	5
47	R-21085	Tara-2111	300	12.9	56.6	243.4	18.3	225.1	192.7	64.23	6.87	2.04	3.37	11	Sticki	3	3
48	R-21088	TEG-111	300	13.5	55	245	12.3	232.7	178.6	59.53	6.57	2.02	3.25	10.2	sticki	3	5
49	R-21090	LPSA-01	300	13.4	52.1	247.9	26.7	221.20	158.8	52.93	6.72	1.99	3.38	10.7	sticki	8	3
50	R-21091	Noor-444	300	12.7	54	246	15.8	230.20	156	52.00	6.84	2.2	3.11	10.4	sticki	4	3
51	R-21093	Raaj-555	300	12.5	62	238	21.6	216.4	151	50.33	6.67	1.98	3.37	10.2	sticki	2	2
52	R-21095	GS-1199	300	13.3	47.4	252.6	17.2	235.4	191.2	63.73	6.56	1.94	3.38	10.4	sticki	3	3
53	R-21097	Rawayat-245	300	13.1	52.8	247.2	16.4	230.8	151.2	50.40	6.86	2	3.43	11.5	sticki	3	2
54	R-21099	IS-696	300	12.4	53.8	246.2	13.1	233.1	169.6	56.53	6.88	1.98	3.47	11.4	sticki	3	3
55	R-21100	EG-1907	300	13.1	65.3	234.7	14.3	220.4	187.6	62.53	6.41	1.94	3.30	9.7	sticki	6	4
56	R-21101	MAITA-125	300	12.4	58	242	23.2	218.8	152.4	50.80	6.9	2.04	3.38	10.6	sticki	5	6
57	R-21103	Tara-2112	300	12.3	54	246	15	231	184.8	61.60	6.96	2.19	3.18	10.4	sticki	5	3
58	R-21105	KS-2153	300	12.4	52.4	247.6	16.3	231.3	200.9	66.97	6.85	2.04	3.36	11	sticki	10	6
59	R-21107	EG-1901	300	13.5	52.2	247.8	15	232.8	204	68.00	6.82	2.12	3.22	10.2	sticki	3	4
60	R-21109	Kissan-363	300	13.3	55.6	244.4	13.1	231.3	197.5	65.83	6.87	2.2	3.12	11.9	sticki	3	5
61	R-21111	LPSA-08	300	12.5	53.3	246.7	13.4	233.3	171.8	57.27	6.67	2.04	3.27	11.3	sticki	5	4
62	R-21113	CD-910	300	13.3	56.6	243.4	10.8	232.6	201	67.00	6.4	1.84	3.48	9.9	sticki	5	6
63	R-21115	Noor-111	300	13.7	60	240	18.4	221.6	168.8	56.27	7.26	2.04	3.56	12	sticki	4	3
64	R-21117	GS-1122	300	13.2	54.3	245.7	16.4	229.3	216	72.00	6.75	2.08	3.25	9.9	sticki	20	12

65	R-21119	Grace-2	300	12.1	57.6	242.4	19.2	223.2	185.6	61.87	6.79	1.87	3.63	11	sticki	5	11
66	R-21120	EG-1904	300	14.3	61.2	238.8	10.8	228	215	71.67	6.79	2.03	3.34	10.2	sticki	9	6
67	R-21121	Tara-2001	300	12.9	61.1	238.9	12.9	226.00	204	68.00	6.68	2.03	3.29	10.5	sticki	4	3
68	R-21122	KS-2151	300	13.7	57.8	242.2	18.7	223.5	150.7	50.23	6.73	2.03	3.32	9.9	sticki	7	6
69	R-21123	XLCS-3463	300	12.5	55.7	244.3	17.7	226.6	176	58.67	6.82	2.02	3.38	11	sticki	8	5
70	R-21125	GIR-1803	300	12.1	58.4	241.6	12.7	228.9	150.2	50.07	6.57	1.95	3.37	10.3	sticki	10	19
71	R-21127	LPSA-06	300	13.4	55.9	244.1	11.8	232.3	223.5	74.50	6.96	1.77	3.93	10.6	sticki	7	7
72	R-21129	Ababeel-785	300	12.8	57.8	242.2	19.4	222.8	157	52.33	7.03	2.11	3.33	11.1	Sticki	2	2
73	R-21131	LPSA-02	300	12.7	51.9	248.1	17.9	230.2	204.7	68.23	6.7	1.96	3.42	10.3	Sticki	2	6
74	R-21133	Bakhtawar-275	300	13.5	54.7	245.3	13.7	231.6	192.2	64.07	6.7	1.97	3.40	10.5	sticki	14	8
75	R-21135	Shabnam-786	300	13.1	59.3	240.7	20.5	220.2	151.4	50.47	6.76	1.91	3.54	11.3	Sticki	7	3
76	R-21138	Sina-500	300	13.1	59.8	240.2	13.8	226.4	162.2	54.07	6.98	2.22	3.14	10.5	Sticki	2	4
77	R-21140	Nawbahar Gold-2	300	12.4	61.2	238.8	18.6	220.2	150.2	50.07	7.11	1.74	4.09	11.2	sticki	3	4
78	R-21141	LUS-250	300	12.5	57.5	242.5	11.9	230.6	153.8	51.27	6.75	1.92	3.52	10.9	sticki	15	11
79	R-21143	Kissan-07	300	12.5	54	246	18.8	227.2	151	50.33	6.79	1.96	3.46	11.4	sticki	2	7
80	R-21145	TEG-786	300	13.2	52.7	247.3	18.9	228.4	198.4	66.13	6.45	1.93	3.34	11.1	Sticki	3	7
81	R-21147	SC-138	300	12.6	51.3	248.7	19.8	228.9	164.2	54.73	6.92	2.2	3.15	10.6	Sticki	5	4
82	R-21149	Riscer	300	12.1	62.3	237.7	17.4	220.3	164	54.67	6.85	1.96	3.49	11	sticki	3	4
83	R-21150	Diamond-121 (Check)	300	12.4	55.1	244.9	20.3	224.6	153	51.00	6.96	2.01	3.46	11.5	sticki	4	12
84	R-21151	HP-1	300	13	53.9	246.1	16.3	229.8	155	51.67	7.3	2.13	3.43	12.9	sticki	4	12
85	R-21153	DM-999	300	13	72.2	227.8	14.3	213.5	160.2	53.40	6.92	2.28	3.04	10.3	sticki	4	8
86	R-21155	Nawbahar gold-1	300	12.2	60.2	239.8	23	216.8	151.8	50.60	6.61	1.64	4.03	10.2	Sticki	3	6

87	R-21157	Nawbahar-2102	300	13.2	51.5	248.5	25.6	222.9	175.4	58.47	6.73	2.01	3.35	10.8	sticki	4	9
88	R-21159	Bakhtawar-281	300	12.9	52.7	247.3	21.6	225.7	167	55.67	6.48	1.99	3.26	11	Sticki	3	7
89	R-21161	Badbaan-06	300	13	50.2	249.8	18.6	231.2	157	52.33	6.88	1.97	3.49	10.4	sticki	12	18
90	R-21165	ASW-503	300	11.7	51.3	248.7	22.3	226.4	159.3	53.10	6.82	2.2	3.10	11	sticki	3	5
91	R-21170	JJR-51	300	13.4	54	246	12.1	233.9	185	61.67	6.49	1.94	3.35	9.9	sticki	3	3
92	R-21173	SC-170	300	12.3	57.4	242.6	11.6	231	209	69.67	6.64	1.96	3.39	10.6	sticki	17	4
93	R-21175	Sina-250	300	12.9	56.1	243.9	14.3	229.6	176.7	58.90	7.16	2.02	3.54	11.5	sticki	3	3
94	R-21179	FMC-4	300	12.6	53.7	246.3	14.3	232	201.4	67.13	6.94	2.01	3.45	11.2	sticki	11	7
95	R-21180	Nawbahar-2101	300	11.5	54.2	245.8	11.3	234.5	169.8	56.60	6.88	2.12	3.25	10.6	sticki	3	8
96	R-21181	AS-525	300	12.7	52.9	247.1	11.6	235.50	162.6	54.20	6.98	2.2	3.17	10.6	sticki	4	3
97	R-21183	LS-115	300	12.6	53.2	246.8	17.7	229.1	212	70.67	6.79	2.08	3.26	10.5	sticki	4	2
98	R-21185	Sundar-786	300	12.4	53.1	246.9	22.1	224.8	166.3	55.43	6.98	2.1	3.32	11	Sticki	2	12
99	R-21187	SG-415	300	13.6	53.1	246.9	13.7	233.2	185.6	61.87	6.82	2.16	3.16	10.4	sticki	7	5
100	R-21189	Badbaan-07	300	12	57.3	242.7	14.9	227.8	174	58.00	6.48	1.84	3.52	10.2	sticki	16	6
101	R-21190	SG-436	300	13.1	49.8	250.2	20.7	229.5	176.7	58.90	6.72	2.16	3.11	11	Sticki	2	7
102	R-21191	JJR-88	300	12.4	52.1	247.9	18.3	229.6	180	60.00	6.38	1.91	3.34	10	sticki	4	9
103	R-21193	ASW-505	300	13.2	53	247	20.2	226.8	153.6	51.20	6.84	2.02	3.39	10.7	sticki	6	14
104	R-21194	DM-111	300	13.4	65.1	234.9	13.4	221.50	218	72.67	6.5	1.76	3.69	10.5	sticki	3	3
105	R-21195	FMC-3	300	12.8	57.1	242.9	12.6	230.3	186.3	62.10	6.81	2.01	3.39	11	sticki	7	4
106	R-21197	US-125	300	14	55.6	244.4	15.2	229.2	213	71.00	6.68	1.98	3.37	10.2	sticki	10	5
107	R-21199	SC-156	300	13.3	53.5	246.5	12.6	233.9	153	51.00	6.85	2.19	3.13	10.5	sticki	9	8
108	R-21200	Prime-433	300	13	51.6	248.4	13.4	235	200	66.67	7.14	2.09	3.42	11.2	sticki	2	3
109	R-21201	IS-81	300	13.3	63.4	236.6	18.1	218.5	165	55.00	6.84	2.05	3.34	10.4	sticki	6	4
110	R-21203	Sitra-404	300	12.9	52.6	247.4	13	234.4	198	66.00	6.36	1.8	3.53	10	sticki	10	4

111	R-21205	FB-103	300	12.5	54.3	245.7	15.2	230.5	206	68.67	6.84	2.05	3.34	10.2	sticki	10	5
112	R-21207	HP-2	300	12.8	57	243	19.3	223.7	180	60.00	6.94	2.09	3.32	11.1	sticki	5	4
113	R-21209	Rachana-515	300	12.7	53	247	13.6	233.4	159.4	53.13	6.85	2.22	3.09	11	sticki	3	6
114	R-21211	MS-333	300	11.4	55.9	244.1	13.3	230.8	187	62.33	6.75	2.06	3.28	11.1	sticki	3	2
115	R-21212	Mumtaaz-1473	300	11.7	57	243	13.9	229.1	171.7	57.23	6.82	1.82	3.75	10.9	sticki	5	2
116	R-21213	Anza	300	12.7	58.5	241.5	14	227.5	173	57.67	6.68	1.96	3.41	10.8	sticki	6	7
117	R-21215	FB-1402	300	12.6	55.6	244.4	16.8	227.6	225	75.00	6.73	1.96	3.43	11	sticki	6	5
118	R-21217	Uqab-101	300	10.2	73.6	226.4	22	204.4	156.2	52.07	6.68	2.02	3.31	10.4	sticki	3	5
119	R-21219	Bankuit-128	300	12.5	56.5	243.5	12	231.5	171.8	57.27	6.97	1.96	3.56	10	sticki	6	12
120	R-21220	PT-918	300	12.3	51.3	248.7	10.2	238.5	222.3	74.10	6.66	1.98	3.36	9.9	sticki	8	5
121	R-21222	CMS-404	300	13.3	60	240	15.8	224.2	179.8	59.93	6.56	1.99	3.30	10.2	sticki	4	3
122	R-21225	ME-444	300	12.2	62.8	237.2	23.6	213.6	153	51.00	6.96	2.05	3.40	10.7	sticki	3	3
123	R-21227	PT-930	300	12.9	53.6	246.4	30.2	216.2	178.2	59.40	6.9	1.98	3.48	11.5	sticki	3	6
124	R-21229	FB-1802	300	12.1	56.9	243.1	17.3	225.8	154.2	51.40	6.81	2.02	3.37	10	Sticki	2	10
125	R-21230	FB-101	300	12.6	49.8	250.2	25.6	224.60	158	52.67	6.87	2.03	3.38	10.2	sticki	3	4
126	R-21232	Super Sultan	300	12.9	50.8	249.2	13.3	235.9	181	60.33	6.9	2.26	3.05	11.6	sticki	6	8
127	R-21233	HP-3	300	13	59.6	240.4	16.4	224	194	64.67	6.6	1.75	3.77	10.2	sticki	25	11
128	R-21235	Rachana-414	300	11.2	69.4	230.6	20	210.6	151.4	50.47	6.89	1.88	3.66	11	sticki	4	9
129	R-21237	Bankuit-125	300	11.5	55	245	11.6	233.4	152	50.67	6.98	2.12	3.29	10.5	sticki	5	4
130	R-21239	MWK	300	12.1	62.2	237.8	14.3	223.5	166	55.33	6.88	2.02	3.41	11.4	sticki	8	4
131	R-21240	Tass	300	12.3	57.5	242.5	18.2	224.3	186.8	62.27	6.55	1.96	3.34	10.1	sticki	4	3
132	R-21241	1122	300	12.2	54.4	245.6	19.6	226	180	60.00	6.81	2.04	3.34	10.4	sticki	7	9
133	R-21242	YG-21	300	12.5	53.3	246.7	18.9	227.8	157	52.33	6.63	1.94	3.42	9.8	sticki	12	11
134	R-21244	Manira-786	300	12.4	51.8	248.2	13.9	234.3	205	68.33	7.01	2	3.51	10.6	sticki	6	7

<b>135</b>	R-21245	Arisco-88	300	11.6	57.4	242.6	14.2	228.4	194. 6	64.87	6.87	2	3.44	9.2	sticki	26	13
<b>136</b>	R-21247	Bankhuit- 130	300	12.7	57.2	242.8	11.9	230.9	155	51.67	6.89	2.02	3.41	10.9	sticki	14	4
<b>137</b>	R-21249	Tezro- 121A	300	12.6	54.1	245.9	21.2	224.7	173. 6	57.87	6.85	2.21	3.10	11.1	sticki	6	4

**Abbreviations**

BR= Brown Rice

TMR= Total Milled Rice

HR= Head Rice

CGL= Cooked Grain Length

B= Bursting Upon Cooking

E/ R= Elongation Ratio



Supplementary Table S3: SSR markers used for rice hybrids for their Genetic diversity study

S. No.	Primer Name	Chromosomal location	Annealing temp °C	Primer Sequence (5'-3')	Fluorescence	Product size	S. No.	Primer Name	Chromosomal location	Annealing temp °C	Primer Sequence (5'-3')	Fluorescence	Product size
1	RM583	1	55	F: agatccatccctgtggagag R: gcgaactcgcgtgttaatc	VIC	180-195	25	RM493	1	55	F: tagctccaacaggatcgacc R: gtacgtaaaccggaaggtg	VIC	210-264
2	RM71	2	55	F: ctagaggcgaaaacgagatg R: ggggtggcgaggtataatg	FAM	122-148	26	RM561	2	55	F: gagctgttttgactacggc R: gagtagctttctccacccc	FAM	185-195
3	RM85	3	55	F: ccaaagatgaacctggattg R: gcacaaggtgagcagtc	FAM	80-104	27	RM8277	3	55	F: agcacaagtaggtgcattc R: atttgcctgtgatgaatagc	NED	165-212
4	RM471	4	55	F: acgcacaagcagatgatgag R: ggggagaagacgaatgtttgc	VIC	102-114	28	RM551	4	55	F: agcccagactagctgattg R: gaaggcgaggaagatcacag	FAM	184-190
5	RM274	5	55	F: cctcgcttatgagagcttcg R: cttctccatcactcccatgg	VIC	149-162	29	RM598	5	55	F: gaatcgcacacgtgatgaac R: atgcgactgatcggtactcc	FAM	153-162
6	RM190	6	55	F: cttgtctatctcaagacac R: ttgcagatgttcttctgatg	VIC	109-122	30	RM176	6	67	F: cggctcccgtacgactctcc R: agcgatgcgctggaagaggtgc	FAM	133-136
7	RM236	7	55	F: cttacagagaaacggcatcg R: gctggtttgttcagggtcg	VIC	151-166	31	RM432	7	55	F: ttctgtctcacgtggattg R: agctgcgtacgtgatgaatg	PET	168-188
8	RM72	8	55	F: ccggcgataaaacaatgag R: gcatcggtcctaactaaggg	PET	163-190	32	RM331	8	55	F: gaaccagaggacaaaaatgc R: catcatacatttgcagccag	NED	151-171
9	RM219	9	55	F: cgtcggatgatgtaaagcct R: catatcggcattcgctg	FAM	194-215	33	OSR28	9	55	F: agcagctatagcttagctgg R: actgcacatgagcagagaca	NED	132-169
10	RM311	10	55	F: tggtagtataggtactaaacat R: tccratcacatacaaacatac	VIC	160-182	34	RM590	10	55	F: catctccgctctccatgc R: ggagttgggtcttcttcg	PET	139-146
11	RM209	11	55	F: atatgagttgctgtcgtcg R: caacttgatcctccccctcc	VIC	125-160	35	RM21	11	55	F: acagtattccgtaggcacgg R: gctccatgagggtggtagag	FAM	128-260
12	RM19	12	55	F: caaaaacagagcagatgac R: ctcaagatggagccaaga	PET	216-253	36	RM3331	12	50	F: cctcctcatgagctaagtc R: aggaggagcggatttctctc	VIC	110-150
13	RM1195	1	55	F: atggaccacaacgaccttc R: cgactccctgtttctctgg	FAM	142-152	37	RM443	1	55	F: gatggttucatcggtacg R: agtcccagaatgtctgttcg	VIC	119-123
14	RM208	2	55	F: tctgcaagcctgtctgatg R: taagtcgacattgtgtggacc	PET	167-182	38	RM490	1	55	F: atctgcacactgcaaacacc R: agcaagcagtgctttcagag	FAM	92-99
15	RM232	3	55	F: ccggtatccttcgatattgc R: ccgacttttctcctgacg	PET	141-161	39	RM424	2	55	F: tttgtgctcaccagttgag R: tggcgcatcatgtcatc	NED	240-280

16	RM119	4	67	F: catcccccctgctgctgctg R: cgccggatgtgtgggactagcg	PET	166-169	40	RM423	2	55	F: agcacccatgccttatgttg R: cctttttcagtagccctccc	FAM	268-289
17	RM267	5	55	F: tgcagacatagagaaggaagtg R: agcaacagcacaacttgatg	NED	138-156	41	RM571	3	55	F: ggagggtgaaagcgaatcatg R: cctgctgctctttcatcagc	FAM	179-185
18	RM253	6	55	F: tccttcaagagtgc aaaacc R: gcattgtcatgtcgaagcc	PET	133-142	42	RM231	3	55	F: ccagattatttcctgaggtc R: cacttgcatagttctgcattg	PET	186-194
19	RM481	7	55	F: tagctagccgattgaatggc R: ctccacctcctatgttgttg	FAM	146-165	43	RM567	4	55	F: atcagggaaatcctgaaggg R: ggaaggagcaatcaccactg	PET	248-260
20	RM339	8	55	F: gtaatcgatgctgtgggaag R: gagtcatgtgatagccgatatg	VIC	140-158	44	RM289	5	55	F: ttccatggcacacaagcc R: ctgtgcacgaactccaag	PET	87-106
21	RM278	9	55	F: gtagtgagcctaacaataatc R: tcaactcagcatctctgtcc	NED	128-142	45	RM542	7	55	F: tgaatcaagccctcactac R: ctgcaacgagtaaggcagag	VIC	87-111
22	RM258	10	55	F: tgctgtatgtagctgcacc R: tggcctttaagctgtcgc	FAM	128-146	46	RM316	9	55	F: ctagtgggcatac gatggc R: acgcttatatgttacgtcaac	VIC	196-202
23	RM224	11	55	F: atcgatcgatcttcacgagg R: tgctataaaaggcattcggg	NED	120-155	47	RM332	11	55	F: gcgaaggcgaaggtgaag R: catgagtatctcactcacc	VIC	162-167
24	RM17	12	55	F: tgccctgttttttctctc R: ggtgatccttcccattca	NED	159-185	48	RM7102	12	55	F: taggagtgtttagagtcca R: tcggtttgcttatacatcag	PET	170-190