

IPPSN 2021-22

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
RARI, Durgapura											
1	WR 2115	2	10MS	2.4	5MS	6.3	20S	11	40S	46	79
2	WR 2116	13.1	40S	10.4	20S	17.5	40S	32.6	60S	56	89
3	WR 2117	5.5	20MS	21.6	60S	20.0	40S	39.3	80S	46	89
4	WR 2118	12.6	50S	37.6	80S	11.3	40S	38.3	80S	46	68
5	WR 2119	1.9	10MS	3.3	10MS	10.0	20S	39	80S	46	68
6	WR 2120	6	40MR	9.2	20S	27.6	60S	0.8	5S	46	68
7	WR 2121	10.9	30S	17.6	40S	8.0	20S	3.1	10MS	46	78
8	WR 2122	10	50S	15.2	60S	11.3	40S	30.7	60S	57	89
9	WR 2123	32	70S	27.2	80S	12.5	40S	21.1	40S	57	79
10	WR 2124	1.3	5S	0.8	10MR	2.6	10S	24.1	60S	57	89
11	WR 2125	17.1	40S	0.9	10MR	6.3	20S	9.9	20S	46	89
12	WR 2126	16	40S	14.4	40MS	17.5	40S	9.9	40MS	56	89
13	WR 2127	20.3	50S	24	60S	31.3	60S	13	40MS	57	79
14	WR 2128	30	70S	48	80S	22.5	40S	33	60S	46	57
15	WR 2129	14	40S	4.6	10S	15.1	20S	31.1	60S	46	58
16	WR 2130	7.4	20MS	2.9	10MS	13.0	20S	12.9	40S	45	68
17	WR 2131	2.9	20MS	0	R	7.0	20S	4.3	20MS	46	79
18	WR 2132	14.4	50S	12	60S	1.1	5MS	16.5	40S	35	57
19	WR 2133	2.4	20MS	0.4	5MR	2.6	10S	25.3	60S	56	79
20	WR 2134	19	40S	12	60S	0.0	0	15.7	40S	56	77
20A	Infector	80	100S	80	100S	70.0	80S	71.4	80S	68	89
21	WR 2135	3.5	10MS	3.3	20MS	3.0	10MS	3.3	10MS	67	89
22	WR 2136	0.8	10MR	2.4	10MS	1.3	5S	18.9	60S	68	89
23	WR 2137	0.9	10MR	4.3	10MS	7.6	10S	11.7	40S	57	89
24	WR 2138	1.8	10MS	14.4	20S	26.3	60S	21	60S	57	99
25	WR 2139	2.9	20MS	18.8	20S	26.3	60S	16.9	60S	56	89
26	WR 2140	5.5	20S	7	30S	0.5	5MR	11.1	40S	45	79
27	WR 2141	2.5	20MS	0.6	5MR	20.0	40S	10.1	40S	56	68
28	WR 2142	0.7	5MR	0.2	5R	0.0	0	37.1	80S	57	79
29	WR 2143	3.5	10MS	0.5	5MR	2.5	10S	17.9	40S	57	89
30	WR 2144	11	40S	4	20MS	20.0	40S	29.1	60S	57	89
31	WR 2145	22.9	40S	10.8	20S	10.3	40S	16.1	40S	56	79
32	WR 2146	22.6	40S	13.6	40S	20.2	60S	10.3	20S	46	79
33	WR 2147	3.5	20MS	2.4	10MS	11.0	40S	24.7	60S	35	57
34	WR 2148	1.9	20MR	0	R	0.0	0	12.4	40S	46	68
35	WR 2149	0.3	TS	0	R	0.3	TS	32	60S	56	89
36	WR 2150	0.2	5R	0	R	5.0	20S	27	60S	46	89
37	WR 2151	6.4	20S	0.4	5MR	6.0	20S	10	20S	57	89
38	WR 2152	13	20S	0.4	5MR	7.3	20S	8.1	20S	56	89
39	WR 2153	10.3	20S	0.8	10MR	0.0	0	21.6	40S	56	79
40	WR 2154	24.6	70S	16.9	80S*	3.8	10S	14.6	40S	47	89
40A	Infector	81.4	100S	76	100S	70.0	100S	77.1	80S	78	89
MPUAT, Udaipur											
41	PWU 8	9.9	60S*	0.9	10MR	0.5	5MR	7	20S	46	89
42	PWU 9	1.2	10MS	1.7	20MR	1.0	10MR	7.2	20MS	56	79
43	PWU 11	4	20MS	3.3	20MS	1.0	10MR	39.7	80S	45	68
44	PWU 12	2.3	10S	0.9	5MS	10.5	5MR	10.2	40S	35	68
45	PWU 13	5.8	20MS	4.1	10MS	13.8	40S	34	60S	56	89
46	PWU 21	0.3	10R	0.8	5MR	0.0	0	43.3	60S	57	79
47	PWU 24	2.3	10MS	0.5	5MR	0.1	TR	6.3	20MS	47	69
48	PWU 37	2.9	10MS	0.9	10MR	5.0	20S	16.6	40S	46	58
49	PWU 39	1.2	10MS	6	20S	10.5	40S	7.6	20S	35	57
50	PWU 40	3.5	20MS	7.2	15MS	21.0	40S	10.3	20S	46	78

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		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
51	PWU 41	3.2	10S	10.9	20S	3.0	10S	10.7	20S	46	89
52	PWU 44	13.3	40MS	6	10S	5.5	10S	14.3	40S	47	68
NDUAT, Ayodhya											
53	NW-8053	1.9	5S	0.8	10MR	10.0	40S	19	40S	46	58
54	NW-8054	0.4	10R	1.3	5MS	5.1	20S	20.4	40S	46	57
55	NW-8055	20.1	40S	1.6	5MS	1.3	5S	12.3	40S	46	57
56	NW-8056	5	20S	2.4	10MS	0.0	0	21.4	40S	45	68
57	NW-8057	4.9	10S	3.6	10MS	7.3	20S	27.1	60S	45	68
58	NW-8058	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG
59	NW-8059	5.6	20MS	2	10MS	2.5	10S	30.9	60S	35	57
60	NW-8060	6.3	20MS	1.6	10MS	0.1	TR	30.1	60S	45	78
60A	Infector	75.7	100S	76	100S	70.0	80S	71.4	80S	78	89
61	NW-8061	1.2	10MS	0	R	0.0	0	25.4	60S	35	56
62	NW-8062	2.1	10S	0	R	0.0	0	34	60S	35	68
63	NW-8063	5.7	20MS	1.6	5MS	0.0	0	29.7	40S	45	68
64	NW-8064	3.5	10MS	0	0	3.8	10S	35.9	60S	46	68
65	NW-8065	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG
66	NW-8066	9	20S	0	R	2.5	10S	32.1	60S	34	57
67	NW-8067	7	20S	1.9	5S	0.0	0	27.9	40S	25	36
68	NW-8068	5.7	20MS	0.8	10MR	0.0	0	37.1	80S	46	89
69	NW-8069	6.9	20S	0.8	10MR	0.0	0	30	60S	46	58
70	NW-8070	4	20MS	0.8	10MR	1.0	5MS	22.3	40S	46	89
71	NW-8071	6.5	20S	0.4	5MR	2.6	10S	10.1	20S	46	79
72	NW-8072	20	40S	2.4	10MS	5.0	20S	11.3	20S	46	79
73	NW-8073	10.3	40MS	2.4	10MS	11.3	20S	9.9	40S	34	35
74	NW-8074	11.4	20MS	0	R	0.0	0	22.9	40S	35	56
75	NW-8075	5	20S	1.6	5MS	15.0	40S	13.4	40S	46	57
76	NW-8076	7.6	40MS	20	60S	25.0	60S	47.4	60S	56	67
77	NW-8077	13.7	40S	10.8	20S	20.0	60S	23.4	40S	57	78
JNKV, Sagar											
78	JWS- 920 (d)	4	40MR	2.8	10MS	2.8	10S	7.9	40S	67	78
79	JWS- 948	5.3	30S	15.2	40S	11.3	40S	31.4	60S	68	79
80	JWS-1013	8.9	50S*	14	60S*	22.5	40S	35.4	60S	57	68
80A	Infector	75.7	100S	80	100S	70.0	80S	77.1	80S	78	89
81	JWS-1027	3.5	20MS	16.4	40MS	27.5	60S	45.7	80S	57	89
82	JWS-1122	6.9	30MS	20	40S	45.0	60S	54.3	80S	57	79
83	JWS-1216	2.9	10MS	14.6	20S	15.0	20S	39.4	60S	57	78
84	JWS-1220	14.6	40S	12.2	20S	22.5	60S	50.9	80S	45	77
85	JWS-1226	10.6	40S	12.2	30MS	32.5	60S	53.7	80S	46	57
86	JWS-1318	6.6	30S	17	40S	32.5	60S	42.3	60S	35	37
87	JWS-1333	2.1	20MR	2.8	10S	10.0	20S	37.1	60S	34	56
88	JWS-1339	2.9	20MS	9.8	20S	15.0	20S	45.1	60S	25	46
BARC (SB), Mumbai											
89	TAW221	12.7	40S	3.2	10MS	5.3	20S	12.6	20S	56	78
90	TAW222	6.9	20S	4	20MS	15.0	40S	18.4	40S	57	68
91	TAW223	5.9	20S	2.4	10MS	4.0	20MS	16.3	40S	57	89
92	TAW224	10	30S	6.4	20MS	5.0	20S	14	20S	56	89
93	TAW225	6.6	20MS	0.9	10MR	0.1	TR	26.9	40S	57	89
94	TAW226	5.5	10MS	3.6	20MS	1.0	5MS	15	40S	57	79
95	TAW227	3.2	10MS	0.1	TMR	0.0	0	20.4	40S	46	78
96	TAW228	12	30S	0.6	5MR	0.0	0	29.4	60S	46	79
97	TAW229	17.1	40S	0.8	10MR	15.0	60S*	22.9	60S	35	46
98	TAW230	8	30S	4.8	20MS	30.5	40S	23.7	60S	35	68
BARC (BKB), Mumbai											
99	TW-177-14	4.6	20MS	4.2	20MS	5.0	20S	35	80S	57	78
100	TW-177-18	6.9	20MS	3.7	20MS	0.0	0	49.7	80S	68	79

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		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
100A	Infector	81.4	100S	80	100S	75.0	100S	65.7	80S	78	89
101	TAW159	19.7	40S	5	10MS	5.5	20S	16.9	60S	57	89
102	TW181	2.9	10MS	0.1	R	2.5	10S	45.7	60S	56	89
103	TW197	10	20S	18.4	60S	20.5	40S	31.9	60S	46	68
ARI, Pune											
104	MACS 6825	6	20S	6.1	30S	0.0	0	3.2	10MS	57	79
105	MACS 6826	0.2	5R	1.6	20MR	1.3	5S	5.9	20S	57	79
106	MACS 6827	1.7	10MS	1.7	20MR	0.0	0	23.1	60S	57	89
107	MACS 6828	24.3	40S	3.6	20MS	7.6	20S	48.6	60S	35	67
108	MACS 6829	0.7	10MR	0.4	5MR	0.0	0	50	80S	46	78
109	MACS 6830	0.9	10MR	0	R	0.0	0	54.3	80S	46	67
110	MACS 6831	1.8	10S	12.6	40S	20.0	40S	15.4	60S	57	79
111	MACS 6832	12.3	40S	9.6	20S	12.5	40S	45.1	80S	56	78
112	MACS 6833	3.5	10S	4.1	20S	3.8	10S	54.3	80S	57	89
113	MACS 6834	2	10MS	0.4	5MR	0.5	5MR	57.1	80S	57	89
114	MACS 6835	24.3	40S	3.6	10MS	1.0	5MS	49.7	80S	47	57
115	MACS 6836	3.8	10MS	2.5	15MS	0.0	0	15.7	60S	56	89
116	MACS 6837	6.6	20MS	0.4	5MR	1.3	5S	18.4	40S	56	89
117	MACS 6838	24.3	60S	1.6	20MR	2.5	10S	15	60S	67	79
118	MACS 6839	23.6	40S	0.8	5MS	7.5	20S	28.6	60S	46	68
119	MACS 6840	17.7	40S	8.3	20MS	6.6	20MS	40.6	60S	57	89
120	MACS 6841	8.6	20S	1.2	15MR	0.0	0	36	60S	45	58
120A	Infector	75.7	100S	80	100S	75.0	80S	80	100S	78	78
121	MACS 6842	8.6	20MS	1.8	5S	1.0	5MS	27.1	80S	46	78
122	MACS 6843	23.4	60MS	2.5	15MS	1.3	5S	15.6	60S	57	79
123	MACS 6844	13.1	40MS	1.6	10MS	2.5	10S	46.6	80S	57	89
124	MACS 4125	2.2	10MR	0.5	5MR	0.0	0	1.7	5S	56	89
125	MACS 4126	5.4	40MS	0.1	TMR	0.0	0	1.8	5S	67	89
126	MACS 4127	6.9	40MS	1.9	10MS	0.5	5MR	13	40S	57	89
127	MACS 4128	20	40S	1.3	10MR	0.5	5MR	8.4	20S	57	79
128	MACS 4129	7.4	40MS	0.5	5MR	0.0	0	0.6	5MR	57	79
129	MACS 4130	6.6	40MS	4.1	20S	0.1	TR	1.3	5S	67	79
130	MACS 4131	6.9	40MS	0.5	5MR	0.0	0	0.1	TS	67	89
131	MACS 4132	4	20S	1.7	5MS	1.0	5MS	3.5	10S	67	89
132	MACS 4133	6.9	40S	4.1	20MS	2.0	10MS	16.1	60S	56	89
133	MACS 4134	12.9	60S	0.5	5MR	0.0	0	3.9	10S	57	79
134	MACS 4135	8.9	60MS	4.1	20S	0.1	TR	3.3	10MS	57	79
135	MACS 4136	16.3	40S	4.1	20S	0.0	0	3.9	20S	57	89
136	MACS 4137	9.5	40MS	4.9	20S	0.6	5MR	3.6	10MS	57	79
137	MACS 5062	1.4	20MR	0.1	R	0.0	0	17.7	40S	56	89
138	MACS 5063	1.2	20MR	0.1	R	0.0	0	8.1	20S	56	89
SKUAST, Jammu											
139	JAUW 705	16.4	40S	0	R	4.3	20MS	8.9	20S	56	89
140	JAUW 706	25.1	40S	0.2	TMR	0.0	0	17	40S	56	89
140A	Infector	75.7	100S	76	100S	75.0	80S	74.3	80S	78	89
141	JAUW 707	15.7	60MS	1.6	10MS	5.0	20S	5	20S	46	79
142	JAUW 708	1	5MS	6.1	15MS	12.6	40S	23.1	40S	67	89
143	JAUW 709	10	40MS	0.4	5MR	2.5	10S	15.6	40S	57	79
144	JAUW 710	23.4	60S	0.9	10MR	5.0	10S	4.4	10S	57	89
145	JAUW 711	10.2	20S	1.7	5MS	3.8	10S	9.1	20MS	46	68
146	JAUW 712	16	60MS	0.8	10MR	2.5	10S	10.3	40S	46	68
147	JAUW 713	12.3	40MS	7.6	20MS	10.0	20S	14.3	40S	57	78
148	JAUW 714	17	40MS	1.6	10MS	5.0	20S	7.2	40S	57	79
PDKV, Akola											
149	AKAW-4764	2.7	20MR	1.7	10MS	5.0	20S	55.7	80S	57	89
150	AKAW-5347	2.4	10MS	3.5	10MS	0.0	0	37.1	60S	67	89

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		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
151	AKDW-5348	3.9	10MS	1.9	5S	0.5	5MR	9.9	40S	57	89
152	AKAW-5440	4.9	20S	16.8	20S	2.0	10MS	40	80S	67	89
153	AKDW-5442	13.5	40S	9	20S	3.5	10S	16.9	60S	57	89
154	AKAW-5446	35.7	60S	42	80S	22.5	40S	47.9	80S	57	89
155	AKAW-5447	14.6	50S	40	80S	22.5	40S	34.1	60S	68	89
156	AKAW-5448	2.8	10S	8.1	20S	10.5	20S	40.6	60S	57	79
157	AKAW-5449	14.4	40MS	24	60S	11.3	40S	39.6	60S	67	89
158	AKAW-5512	2.6	20MR	0.9	10MR	0.1	TR	40.9	80S	45	77
159	AKAW-5514	19.7	80MS	3.6	20MS	12.0	40S	48	80S	45	57
160	AKDW-5516	7.1	20MS	2.1	20MR	7.0	20S	6.9	20MS	56	89
160A	Infector	75.7	100S	76	100S	70.0	80S	77.1	80S	78	79
161	AKAW-5517	20.3	40S	48	80S	30.0	60S	54.3	80S	67	78
162	WSM-131-2-1	2.6	20MR	0.9	10MR	0.0	0	54.3	80S	46	69
163	WSM-138	0.3	10R	0.8	10MR	0.0	0	33.4	60S	46	68
BAU, Ranchi											
164	JKW 300	14.7	40S	2.1	5MS	10.0	40S	49.7	80S	46	68
165	JKW 301	21.1	60MS	4	20S	2.5	10S	32.7	60S	45	77
166	JKW 302	12.3	20S	0.8	10MR	0.0	0	40.6	60S	45	77
167	JKW 303	7.7	20S	4.4	10S	5.0	20S	2.9	10S	57	79
168	JKW 304	18.9	40S	1.1	5MS	0.0	0	1.2	5MS	46	79
169	JKW 305	8.9	40MS	10.1	40S	7.5	20S	15.7	40MS	57	68
170	JKW 306	7.7	20S	0.8	10MR	0.1	TMR	11.1	20S	57	79
171	JKW 307	7.7	20S	0.8	10MR	0.0	0	3.9	10MS	67	89
172	JKW 308	9	40MS	3.6	10S	1.3	5S	22.1	40S	57	89
173	JKW 309	5.5	20MS	1.2	5MS	10.0	40S	32.3	60S	68	89
SKAUST, Kashmir											
174	SKW-367	1.6	5S	1.6	10MS	0.0	0	5.6	20MS	57	89
175	SKW-368	4.1	20MS	0.4	5MR	2.5	10S	3.3	10S	67	89
176	SKW-369	2.9	10MS	2.1	10S	2.5	10S	4.3	10S	56	79
177	SKW-370	0.3	5MR	0.9	10MR	0.0	0	0	TR	67	79
178	SKW-371	3.3	10MS	3.4	10MS	0.0	0	4.2	10S	57	89
179	SKW-372	2.9	10MS	1.6	10MS	0.0	0	3.6	10S	56	89
180	SKW-373	8.9	20S	4.1	20S	0.0	0	7.1	10S	46	67
180A	Infector	75.7	100S	80	100S	75.0	100S	77.1	80S	78	89
181	SKW-374	7.7	20MS	6.8	20S	3.8	10S	10.2	40S	46	89
182	SKW-375	2.2	10MR	2.1	10S	11.0	40S	5.5	20S	56	78
183	SKW-376	5.4	10MS	3.2	10MS	0.0	0	6.3	20MS	57	78
184	SKUA-WW-101	8	20MS	9.2	20S	0.0	0	4.7	10S	57	68
185	SKUA-WW-102	11.3	40MS	14	40S	0.0	0	9.1	20S	57	68
186	SKUA-WW-103	0.2	5R	0.4	5MR	0.0	0	1.5	5S	57	89
187	SKUA-WW-104	0.7	5MS	0.1	R	2.5	10S	2.1	10MS	57	89
188	SKUA-WW-105	1.6	10MR	4.4	20MS	1.0	5MS	7.1	40S	46	57
SHUATS, Prayagraj											
189	SHUATS-W58	16.2	80MS	15.2	20S	25.0	60S	47.1	60S	56	68
190	SHUATS-W63	23.4	60S	6.5	20MS	9.0	20S	42.6	80S	56	89
191	SHUATS-W86	26.3	60S	24.8	80S	27.0	60S	37.1	60S	57	89
192	SHUATS-W69	6	20MS	3.8	20MS	2.0	10MS	16.1	40S	57	78
193	SHUATS-W74	30.3	60S	35.6	80S	35.0	60S	23.6	40S	67	77
Lok Bharti, Sanosara											
194	Lok-2021-1	11.5	40S	12.4	20S	10.0	20S	28	60S	67	89
195	Lok-2021-2	2.3	10MS	1.8	10MS	0.5	5MR	32	80S	68	89
196	Lok-2021-3	9.5	40S	17.6	20S	12.5	40S	49.7	80S	78	89
197	Lok-2021-4	8.8	40S	15.6	40S	12.5	40S	44.3	80S	68	89
198	Lok-2021-5	6.3	20S	17.6	40S	7.5	20S	50.9	80S	57	89
VNMKV, Prabhani											
199	DSS-15-1737	18	40S	0	R	10.0	40S	35.1	60S	45	56

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
200	DSS-16-1762-1	9.7	40S	0.4	5MR	0.0	0	46.9	60S	45	58
200A	Infector	78.6	100S	76	100S	75.0	100S	74.3	80S	67	78
201	DSS-16-1766-1	6.3	20S	0	R	0.0	0	45.1	60S	35	58
202	DSS-16-1792-1	4	20S	2	10S	0.0	0	37.4	60S	46	68
203	DSS-16-1826-1	8	20S	13.6	20S	25.0	40S	39.1	60S	35	68
RPCAU, Pusa											
204	RAUW 107	2.3	10S	0.1	R	0.0	0	5	10MS	45	89
205	RAUW 108	18.3	60S	0.5	5MR	10.0	40S	23	40S	46	79
206	RAUW 109	12.9	40S	4.1	10MS	12.5	40S	25.1	40S	57	78
207	RAUW 110	2.3	10MS	0.8	5MR	5.0	20S	42.3	60S	46	68
208	RAUW 111	1.8	10S	0.4	5MR	0.0	0	20.6	40S	36	47
209	RAUW 112	25.7	40S	2	10S	5.0	20S	34.7	60S	46	68
VPKAS, Almora											
210	VW 2102	9.3	60S*	0.5	5MR	0.0	0	18	40S	35	57
211	VW 2106	3	20S	0.9	10MR	0.0	0	14.3	40S	46	57
212	VW 2107	1.7	5MS	0.8	10MR	12.5	40S	2.6	10MS	46	68
213	VW 2109	25.7	40S	0.5	5MR	10.0	20S	28	60S	35	56
214	VW 2111	15.9	20S	0.8	5MS	0.0	0	6.5	20S	46	78
215	VW 2113	13.9	60S*	0.8	5MS	2.5	10S	12.1	40S	24	37
216	VW 2115	6.3	40MS	1.8	5S	3.8	10S	3.3	10MS	46	78
217	VW 2117	8.2	40MS	1.8	10MR	2.5	10S	20.3	40S	68	89
218	VW 2118	3.5	40MR	7.6	20S	0.0	0	22	40S	68	89
219	VW 2120	16.6	80MS	2.6	10MS	1.3	5S	28.4	60S	57	89
220	VW 2121	12.6	20S	0.5	5MR	0.0	0	9.6	40S	67	79
220A	Infector	78.6	100S	80	100S	70.0	80S	74.3	80S	78	89
221	VW 2123	12.4	40MS	14.4	40S	10.0	40S	8.4	20MS	67	89
222	VW 2127	1.7	5S	0.1	TMR	2.5	10S	5.2	20MS	45	57
223	VW 2128	24.3	60S	25.6	40S	3.8	10S	6.1	20S	57	78
224	VW 2131	22.9	60S	4.5	20S	1.3	5S	8	30S	46	57
225	VW 2132	6	10S	0	R	1.3	5S	0.6	5MS	35	57
226	VW 2134	2.3	10MS	1.6	10MS	0.0	0	17.9	60S	46	68
227	VW 2138	2.4	20MR	4.6	20S	10.0	20S	2.7	10S	68	79
228	VW 2141	10.6	20S	4	10S	11.3	40S	26.3	40S	57	77
229	VW 2143	2.9	10MS	15.2	30S	12.5	20S	13	40S	67	89
230	VW 2144	13	40S	2.4	10MS	2.6	10S	17.9	40S	46	78
231	VW 2145	2.1	10S	0	R	0.0	0	7.4	20S	56	67
232	VW 2146	1.7	10MR	0.8	5MS	1.3	5S	14.9	40S	57	69
233	VW 2147	0.9	10MR	8	20S	15.0	40S	10.1	40S	57	89
234	VW 2149	14.7	40S	0.5	5MR	1.3	5S	8.4	20S	35	68
HAU, Hisar											
235	P 13820	3.5	20MS	4	10MS	12.5	40S	2.9	10S	56	89
236	P13841	6.2	20MS	6.6	20S	15.0	40S	13.6	40S	45	89
237	P13851	0.5	5MR	0.8	10MR	2.5	10S	13.6	40S	46	79
238	P13854	20	60MS	1	10MR	5.0	20S	17.7	40S	67	89
239	P13855	12.1	80MS*	1.7	10MS	1.3	5S	18.9	40S	57	77
240	P14161	21.6	60S	3.7	10MS	12.5	40S	9.9	40S	67	89
240A	Infector	81.4	100S	76	100S	70.0	80S	74.3	80S	78	89
241	P13819	4.9	20MS	4	10S	1.3	5S	9	30S	56	89
242	P13653	9.6	60S*	2	10S	0.0	0	8.9	40MS	57	79
243	P13935	4.9	20MS	6.5	20S	2.5	10S	22.9	40S	67	89
244	P13978	7.8	40MS	0.8	10MR	0.0	0	16.9	40S	57	78
245	P13983	1.7	5S	2	10S	5.0	20S	7.1	20S	47	58
246	P13987	6	20S	5	20MS	0.0	0	16	40S	46	68
247	P13989	12.9	60S	0	R	0.0	0	19.1	40S	56	78
248	P13861	6.5	20S	0.8	5MS	10.0	40S	18	40S	46	68
249	P14029	11.4	40MS	12	20S	0.0	0	30.2	60S	57	77

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
250	P13741	24.6	60S	8.1	40S	10.0	40S	11.2	20S	57	79
251	P13679	16.1	60S	1.1	10MR	5.0	20S	17	40S	57	79
252	P14283	8.2	40S	1	5MS	0.0	0	13.4	40S	57	79
253	P14284	13.4	40S	0.8	5MR	15.0	60S*	3.9	10MS	57	79
254	P14285	3.5	20MS	1.6	10MS	0.0	0	9.6	40S	46	57
255	P14286	14.9	60S	1.6	10MS	0.0	0	13.5	40S	57	79
256	P14287	16.1	40S	0.9	10MR	7.5	20S	10.6	40S	46	58
257	P14288	21.4	40S	0.6	5MR	10.0	40S	7.8	20S	56	89
258	P14291	29.7	80S	7.7	20S	15.0	40S	21.7	40S	57	78
259	P14292	10.3	40S	9.6	20S	0.0	0	22.6	60S	68	89
260	P14123	7.5	40MS	0.9	10MR	25.0	60S	14.4	40MS	46	58
260A	Infector	75.7	100S	80	100S	75.0	100S	78.6	90S	68	78
261	P14124	7.8	20MS	3.3	10MS	0.0	0	15.7	40S	45	56
262	P14126	1.2	5MS	0.9	10MR	3.8	10S	19.9	40S	46	58
263	P14154	19.6	40S	3.4	15S	0.8	5MR	6.1	20MS	57	69
264	P 13634	1.6	10MS	0.1	TMR	1.3	5S	28	60S	56	89
265	P 13833	7.1	20MS	3.4	20MR	2.3	5S	26.6	60S	56	57
266	P 13909	5	20MS	1.7	10MS	0.0	0	10.7	20S	56	68
267	P 14091	7.2	40MS	0.9	5MS	1.0	5MS	10.3	40S	56	68
268	P 14092	18.7	40S	1.1	5S	0.0	0	3.7	20MR	46	58
269	P 14100	16.3	40S	0.4	5MR	0.0	0	17.8	40S	56	89
270	P 14230	21.7	60S	11.4	40S	20.0	40S	17	60S	46	58
271	P 14232	4	20MS	10	20S	25.0	60S	16.6	60S	46	68
272	P 14234	13.1	60MS	1	5S	10.0	20S	8.7	40MS	46	68
273	P 14235	16.7	60S	4.9	10S	13.0	40MS	3.7	10MS	57	79
274	P 14239	16	60S	3.5	10MS	15.0	40S	14.5	60S	57	89
275	P 14240	22	60S	10	30S	15.5	40S	11.6	40S	57	89
276	P 12368	21.4	40S	9.9	20S	20.1	40S	9.7	40MS	67	89
277	P 13787	8.6	20S	0.4	5MR	5.0	20S	17.2	40S	35	57
278	P 13793	13.4	40S	1.7	10MS	0.0	0	7.6	20S	45	89
279	P 13839	18.7	40S	1.1	5MS	6.3	20S	10.5	20S	57	89
280	P 13974	11.9	40MS	4.3	20MS	5.0	20S	5.9	10S	56	89
280A	Infector	78.6	100S	72	100S	75.0	100S	77.1	80S	78	89
281	P 14271	9.3	40MS	0.9	5MS	0.0	0	4.5	10MS	46	89
282	P 14272	12.6	40S	0.8	10MR	1.3	5S	6.6	20S	45	78
283	P9004	22.4	80S	2.5	5MS	0.5	5MR	2.9	10S	45	89
284	P9010	17.2	100S	3.7	20MS	2.0	10MS	3.6	10MS	57	69
SDAU, Vijapur											
285	VA 2020-16	0.9	10MR	0.4	5MR	0.0	0	33.1	60S	57	89
286	VA 2018-01	0.6	5MR	0.4	5MR	0.0	0	10.2	20S	57	89
287	VA 2020-02	1.7	30MR	1.6	10MS	10.0	40S	17.9	60S	56	89
288	VA 2020-19	1.6	20MR	10.8	20S	12.6	40S	36.3	60S	57	89
289	VA 2020-06	1	5MS	3.8	15MS	0.5	5MR	29.9	60S	56	89
290	VA 2020-17	0.2	5R	1.6	10MS	0.3	TS	45.7	80S	67	89
291	VA 2020-18	1.3	5S	0.8	5MS	0.3	TS	47.1	80S	67	89
292	VA 2020-13	0.9	10MR	0.4	5MR	1.0	5MS	51.4	80S	56	89
293	VA 2020-14	0.3	5MR	0.5	5MR	0.3	TS	44.3	80S	56	89
294	VA 2020-11	0.6	10MR	0.8	5MR	1.0	5MS	23.4	40S	56	79
295	VA 2020-08	1.8	20MR	0.9	10MR	10.0	40S	15	60S	57	79
296	VA 2020-10	2.5	10S	12.8	20S	7.3	20S	53.6	80S	68	89
297	VA 2020-15	0.6	10MR	0.9	10MR	15.0	60S*	31.9	60S	57	89
298	VA 2020-34	9.7	40MS	10.2	20S	22.5	60S	43.7	80S	46	89
299	VA 2020-35	7.7	20MS	11.8	20S	30.0	60S	46.6	80S	57	79
300	VA 2020-04	3.5	10S	7.7	20S	22.5	40S	40.6	60S	57	89
300A	Infector	78.6	100S	76	100S	70.0	80S	74.3	80S	78	89
301	VA 2020-28	0.6	10MR	0.5	5MR	1.1	5MS	32.9	60S	57	79

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
302	VA 2020-26	1.5	10MR	0.5	5MR	0.0	0	41.6	80S	56	89
303	VA 2020-24	0.9	10MR	0.8	10MR	5.1	20S	33.1	60S	56	99
304	VA 2020-32	0.9	10MR	0.9	10MR	0.0	0	44.4	80S	67	89
305	VA 2020-25	3.5	20MS	3.3	10MS	3.5	10S	40.4	80S	67	89
306	VA 2020-30	0.6	5MR	0.4	5MR	0.3	TS	21.1	60S	67	89
307	VA 2020-31	0.2	5R	1.7	10MS	0.3	5R	36.9	60S	67	89
308	VA 2020-33	0.3	5MR	0.8	10MR	0.0	0	25.3	60S	67	99
309	VA 2020-21	2	10MR	1.1	5MS	3.3	10MS	42.6	80S	57	89
310	VD 2020-3	1.7	10S	0.4	5MR	0.0	0	18.6	60S	56	89
311	VD 2020-4	3.2	20S	3.7	20MS	2.3	10MS	1.3	10MS	57	78
312	VD 2020-5	0.8	10MR	3.2	20MS	4.0	20MS	1.7	5MS	56	89
313	VD 2020-6	3.8	20S	0.8	10MR	0.1	TR	13.9	40S	57	89
314	VD 2020-7	0.6	10MR	3.6	20MS	2.0	10MS	13.6	40S	58	89
315	VD 2020-12	2.4	10MS	3.7	20MS	2.0	10MS	20.7	60S	57	89
316	VD 2020-14	1.7	10MS	0.5	5MR	0.1	TR	23	60S	67	99
317	VD 2020-1	5.3	20MS	3.6	10MS	2.5	10S	8.7	20S	57	99
318	VD 2020-11	4	20S	4.8	30MS	7.0	20S	6.7	20S	57	89
319	VD 2020-9	1	5S	4.4	20S	5.0	20S	9.2	40MS	56	78
320	VD 2020-2	1.5	10MS	2.9	10S	1.3	5S	7.2	20S	56	77
320A	Infector	81.4	100S	76	100S	75.0	100S	77.1	80S	68	78
321	VD 2020-8	2.6	5S	9.3	20S	17.0	40S	10.2	40S	45	79
322	DR-19-47	1.8	10MS	0.9	5MS	0.1	TR	28.4	80S	57	99
323	DR-19-53	5.3	20S	10.5	40S	10.1	40S	27	60S	57	99
324	DR-20-08	16.8	80S	9.6	40S	5.1	20S	28.3	60S	57	99
UBKV, Coochbehar											
325	UBKV-2021-1	1.9	10MS	4	10S	7.5	20S	15.7	60S	57	77
326	UBKV-2021-2	8.4	20S	0.8	10MR	15.0	40S	17.6	40S	46	68
327	UBKV-2021-3	11.1	20S	5	15S	5.0	10S	19.7	60S	46	57
328	UBKV-2021-4	13.5	40S	2.7	10MS	0.8	5MR	30	60S	46	68
329	UBKV-2021-5	10.4	20S	0.3	5R	1.3	5S	25.7	60S	45	74
BCKV, Kalyani											
330	BCW 26	1	5MS	2.4	10MS	11.8	40S	18	60S	46	78
331	BCW 27	3.9	10S	2.4	15MS	2.6	10S	8.9	40MS	46	78
332	BCW 28	11.3	20S	2.6	10MS	3.0	10S	3.7	20MS	36	58
333	BCW 29	1.2	10MR	0.8	10MR	10.0	40S	2.9	10S	35	47
334	BCW 30	8.6	20S	1.7	10MS	6.3	20S	8	20S	35	57
HPKV, Malan											
335	PW 2101	14.1	40S	6	15S	5.0	10S	29	40S	46	77
336	PW 2102	6	40MS	9.6	20S	10.0	20S	22.1	60S	56	68
337	PW 2103	4.7	20S	0.8	10MR	0.0	0	10.5	60S*	46	68
338	PW 2104	14.6	40S	6.2	20S	22.5	60S	19.4	60S	45	55
339	PW 2105	0.7	5S	11	20S	2.5	10S	25	60S	34	56
340	PW 2106	11.1	60S*	4.6	10S	0.0	0	20.1	60S	46	89
340A	Infector	78.6	100S	84	100S	75.0	100S	74.3	80S	78	89
341	PW 2107	3.9	20S	1.7	10MS	0.0	0	0.2	TS	46	89
342	PW 2108	6.9	20S	15.2	40S	7.5	20S	23.6	60S	56	89
343	PW 2109	1.2	10MR	1.6	5MS	15.0	40S	9.4	20S	46	57
344	PW 2110	0.5	5MR	2.1	10MS	0.0	0	8.9	40MS	46	89
345	PW 2111	4.4	20S	3.8	15S	7.5	10S	5.3	20MS	45	68
346	PW 2112	7.8	40S	1.7	10MS	0.0	0	10.6	40MS	46	79
347	PW 2113	5.5	20MS	0.1	R	0.0	0	11.1	40S	57	79
348	PW 2114	2.3	10MS	1.6	10MS	1.3	5S	18.9	60S	45	89
349	PW 2115	7.5	20MS	5	20S	1.0	5MS	20.3	60S	56	89
350	PW 2116	5.6	20S	2	10S	1.3	5S	11.5	60S	56	89
351	DW 281	14.6	40S	4.6	10S	15.5	40S	22	40S	45	56
352	DW 284	4.9	20S	0.4	5MR	1.0	5MS	35.7	60S	46	68

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
353	DW 288	7.3	30S	4.1	20S	1.3	5S	10.1	40MS	57	78
354	DW 289	1.6	5S	8.6	20S	13.5	40S	2	5S	56	57
355	DW 290	4.6	30S	8	40S	0.0	0	40	80S	45	57
HPKV, Bilaspur											
356	CG2101	7.1	20S	14.4	40S	12.5	40S	41.4	80S	56	78
357	CG2102	15.7	40S	2	10S	0.0	0	10.6	40S	46	68
358	CG2103	5.5	20MS	4.1	20S	2.5	10S	47.4	80S	56	79
359	CG2104	2.7	10S	8.4	20S	21.0	40S	44	80S	57	68
360	CG2105	7.2	20MS	17.6	40S	16.0	40S	48.9	80S	56	77
360A	Infector	78.6	100S	80	100S	70.0	80S	74.3	80S	68	78
361	CG2106	1.2	10MR	1.6	10MS	0.0	0	42.3	60S	46	89
362	CG2107	1.3	5S	2	10S	0.0	0	40	80S	56	89
363	CG2108	12.9	30S	15.2	40S	15.0	40S	27.9	60S	46	89
364	CG2109	10.6	40MS	13.2	20S	10.0	40S	34.3	60S	56	89
365	CG2110	10.9	40S	3.2	10MS	2.5	10S	5.6	20MS	57	89
366	CG2111	15.3	50S	18.2	60S	16.3	40S	20.6	60S	56	79
367	CG2112	4.3	20MS	10.2	20S	15.0	40S	41.1	80S	67	89
368	CG2113	8.3	40S	2.8	10S	1.8	5S	17.7	40MS	56	79
369	CG2114	9.4	30S	16.4	40S	8.5	20S	23.7	60S	56	79
370	CG2115	32.9	60S	11.6	20S	16.0	40S	42.3	60S	56	79
BARC, Indore											
371	THI-3	0.1	TMR	0.8	10MR	0.0	0	35.7	80S	46	58
372	THI-4	0.1	TMR	0.4	5MR	0.0	0	36.6	80S	46	57
373	THI-5	0.1	TR	1.6	10MS	0.0	0	33.1	80S	45	57
374	THI-6	0.1	TR	0.4	5MR	0.0	0	32	80S	46	68
375	THI-7	0.1	TR	0.4	5MR	2.5	10S	33.1	80S	46	68
BAU, Sabour											
376	BRW 3928	6.3	20S	8.4	20S	10.0	20S	25.7	60S	45	77
377	BWR 3929	13.4	60S	0.5	5MR	13.0	40S	33.7	60S	35	57
378	BRW 3930	8	20S	2.5	10MS	13.5	40S	33.7	60S	45	57
379	BRW 3931	9	40MS	3.8	10MS	12.0	40S	34.3	60S	46	89
380	BRW 3932	12.3	40S	10.8	20S	12.5	40S	30	40S	46	57
380A	Infector	78.6	100S	76	100S	75.0	100S	77.1	80S	67	78
381	BRW 3933	3.8	20MS	0	R	0.0	0	41.6	80S	45	57
382	BRW 3934	22.1	40S	0	R	2.5	10S	38	60S	46	57
383	BRW 3935	5.1	20MS	0.4	5MR	0.0	0	19.3	40S	56	68
384	BRW 3936	5.1	20MS	0.4	5MR	0.0	0	20.9	40S	46	77
385	BRW 3937	2.3	10MS	0	R	1.3	5S	30.6	40S	56	68
386	BRW 3938	6.7	40S	0.1	TMR	0.1	TR	19.7	40S	46	68
387	BRW 3939	5	20S	0.8	5MS	0.0	0	26.9	40S	56	78
388	BRW 3940	4.5	20MS	7	20S	0.1	TR	10.6	40S	46	58
389	BRW 3941	2.9	20MS	0.5	5MR	0.0	0	14.6	40S	46	57
390	BRW 3942	4.5	20S	4.8	10S	2.5	10S	12.9	40S	56	68
391	BRW 3943	12.2	40S	7.2	20MS	10.0	20S	12	30S	57	68
392	BRW 3944	7.8	20S	0.1	TMR	5.0	10S	13.7	40S	46	77
393	BRW 3945	7.3	20S	1.2	5S	7.5	20S	21.7	40S	56	89
394	BRW 3946	15.7	60S	8.2	20MS	1.8	5S	19.7	40S	46	89
395	BRW 3947	10.7	40S	4.6	10S	8.5	20S	24	40S	46	68
BHU, Varanasi											
396	HUWL2101	15.4	40S	6	20MS	26.0	60S	35.9	60S	46	68
397	HUWL2102	15.4	40S	16.4	40S	15.5	40S	36.3	80S	56	68
398	HUWL2103	13.1	40S	11.6	20S	22.5	60S	33.7	60S	56	68
399	HUWL2104	17.3	40S	21.2	40S	27.5	40S	31.3	80S	46	67
400	HUWL2105	18	40S	14.6	40S	25.5	40S	36.3	80S	35	57
400A	Infector	78.6	100S	80	100S	80.0	100S	77.1	80S	78	89
401	HUWL2106	0.6	5MS	2.8	10MS	5.0	20S	31.9	60S	57	79

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
402	HUWL2107	6.8	40S	3.8	10S	0.0	0	27.9	60S	56	79
403	HUWL2108	5.5	20MS	18.4	20S	20.0	40S	36.3	80S	57	79
404	HUWL2109	4.3	20MS	4.8	20S	12.5	40S	28.7	60S	67	89
405	HUWL2110	4	10S	22.4	40S	25.0	60S	28.6	60S	67	89
406	HUWL2111	8.5	30S	26.2	60S	25.0	40S	34.3	60S	57	89
407	HUWL2112	24.4	60S	23.4	40S	30.0	40S	35.7	60S	56	68
408	HUWL2113	2.7	20MS	1.6	10MS	1.3	5S	24.3	40S	46	68
409	HUWL2114	27.1	40S	4	10S	2.5	10S	19.3	40S	35	57
410	HUWL2115	21	40S	1.6	5MS	0.6	5MR	27.1	40S	56	67
411	HUWL2116	3.8	20MS	4	20MS	1.0	5MS	25.9	40S	57	89
412	HUWL2117	3.2	10MS	1.9	10MS	0.0	0	20	40S	56	78
413	HUWL2118	32.9	60S	2.2	10MS	2.5	10S	38.6	80S	56	79
414	HUWL2119	17.1	40S	7.2	20S	2.6	10S	20.1	40S	35	57
415	HUWL2120	16.6	40S	5.2	20MS	2.5	10S	26.4	60S	56	89
JNKVV, Jabalpur											
416	MP 3568	1.9	10MS	5.9	20MS	5.0	20S	29.9	60S	56	89
417	MP 3569	3.2	20MS	10.2	30S	17.5	40S	46.3	80S	56	89
418	MP 3570	3.7	20MS	1.7	10MS	10.0	40S	16.6	40S	57	89
419	MP 3571	3.5	40MR	3.7	20MS	5.0	10S	42.3	60S	57	89
420	MP 3572	3.2	10S	4	20S	0.0	0	37.3	60S	57	79
420A	Infector	78.6	100S	72	100S	60.0	80S	77.1	80S	78	89
421	MP 3573	3.3	10MS	3.2	10S	2.5	10S	8.8	20MS	56	89
422	MP 3574	6.9	20S	0.9	5MS	10.0	40S	10	40MS	67	89
423	MP 3575	1.7	10MS	6.8	20S	17.5	40S	28.3	60S	57	89
424	MP 3576	1.7	10S	8.5	20S	10.0	20S	8.9	20S	46	89
425	MP 3577	7.3	20S	4.2	20S	3.8	10S	12.7	20S	47	79
426	MP 3578	8.5	20MS	6.8	20MS	20.0	40S	33.3	60S	56	99
427	MP 3579	3.8	10S	4.2	10MS	5.0	20S	32	60S	45	79
428	MP 3580	2.6	20MS	2.2	5S	1.3	5S	36.9	60S	46	57
429	MP 3581	4.4	20S	4	10MS	1.3	5S	6.2	20MS	46	89
430	MP 3582	1.6	10S	4	20S	2.5	10S	38	60S	56	99
UAS, Dharwad											
431	UASD-2101	16.6	40S	5.9	20MS	3.8	10S	20.9	40S	46	57
432	UASD-2102	14.3	40S	0.4	5MR	0.0	0	12	20S	56	68
433	UASD-2103	3.5	20S	0.4	5MR	0.0	0	19.9	60S	56	78
434	UASD-2104	1.1	10MR	1	5S	0.0	0	25	40S	56	89
435	UASD-2105	3.2	10S	0.8	5MS	0.5	5MR	13.9	40S	46	78
436	UASD-2106	16.6	40S	0.4	5MR	5.0	20S	4.4	10S	56	89
437	UASD-2107	12.1	80S*	1.8	5S	0.0	0	1	5S	56	89
438	UASD-2108	6	20S	0.9	10MR	0.0	0	38.6	80S	46	89
439	UASD-2109	8.9	40MS	0.5	5MR	5.0	20S	32.6	80S	46	89
440	UASD-2110	6.7	40S	0.5	5MR	0.0	0	35.4	60S	46	68
440A	Infector	78.6	100S	76	100S	75.0	100S	77.1	80S	78	79
441	UASD-2111	14.3	80S	0.5	5MR	0.5	5MR	5.6	20MS	55	99
442	UASD-2112	12.6	80S*	1.7	10MS	1.0	10MR	8.3	20S	56	99
443	UASD-2113	12.9	80S	0.5	5MR	0.5	5MR	6.2	20MS	56	99
444	UASD-2114	19.1	100S	2.1	10MS	2.0	10MS	5.3	20S	46	89
445	UASD-2115	8.9	60MS*	1.6	5MS	0.5	5MR	4	20MS	46	79
446	UASD-2116	12.7	80S*	2.5	10MS	1.0	5MS	1.9	10MS	45	89
447	UASD-2117	21.4	80S	8.4	40S	0.5	5MR	3	20MS	57	79
448	UASD-2118	24.6	80S	0.8	10MR	0.1	TR	7.7	20S	56	57
449	UASD-2119	5.2	20S	0.9	10MR	1.3	5S	33	60S	46	69
450	UASD-2120	30.3	80S	0.5	5MR	0.0	0	27.7	60S	46	68
451	UASD-2121	11.6	40MS	0.8	10MR	0.0	0	37.1	60S	46	89
452	UASD-2122	14.5	60S	1.6	5MS	0.0	0	10.7	20S	56	79
453	UASD-2123	21	40S	8.1	40S	5.0	20S	7	20S	57	79

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
454	UASD-2124	12.6	40S	1.6	10MS	3.5	10S	3	10S	56	77
455	UASD-2125	15.3	50S	12.4	60S*	2.5	10S	30	60S	36	57
456	UASD-2126	30.3	80S	9.1	40S	2.5	10S	10.7	30S	46	57
457	UASD-2127	14.1	80S	0.9	10MR	0.0	0	2.5	10MS	46	68
458	UASD-2128	12.9	80S*	0.8	5MS	0.1	TR	2.4	10MS	56	89
459	UASD-2129	4.3	20S	3.3	20MS	1.0	10MR	1.9	5S	57	57
460	UASD-2130	21.8	60S	0.5	5MR	0.0	0	2.3	10S	45	57
460A	Infector	75.7	100S	76	100S	75.0	80S	74.3	80S	78	79
461	UASD-2131	9.3	60S*	1.7	10MS	1.0	5MS	5.9	20MS	57	99
462	UASD-2132	3.5	40MR	0.1	R	0.0	0	22	40S	46	79
463	UASD-2133	3.8	20MS	0.1	R	0.0	0	22	40S	56	79
464	UASD-2134	2.4	20MR	0.1	R	0.1	TR	23.3	40S	46	79
465	UASD-2135	1.7	20MR	0.1	R	0.0	0	28	60S	56	89
Nuziveedu seeds											
466	NWS2442	1.3	10MS	1.6	10MS	2.5	10S	6.2	20MS	56	89
467	NWS2216	13.4	40S	0.1	R	0.0	0	16.7	40MS	56	89
468	NWS2170	9.5	40S	0.1	TMR	0.0	0	22.6	40S	46	79
CSAUAT, Kanpur											
469	KA 2101	9.8	60S*	0.2	TMS	0.5	5MR	28.3	40S	46	68
470	KA 2102	1.8	10MS	2	10S	2.5	10S	36.9	60S	46	68
471	KA 2103	6.3	20S	0	R	0.0	0	36.6	60S	46	57
472	KA 2104	16.3	80S	7.8	20S	15.0	20S	45.7	60S	56	89
473	KA 2105	6	20S	0.5	5MR	1.3	5S	39.3	60S	56	89
474	KA 2106	17.1	60S	0.4	TMS	3.5	10S	13.4	40MS	46	57
475	KA 2107	20.9	40S	0.4	5MR	0.5	5MR	6	20MS	46	68
476	KA 2108	12	40S	1.2	10MR	0.5	5MR	16.3	40S	46	78
477	KA 2109	7.3	40MS	0.4	5MR	0.0	0	7	20MS	46	69
478	KA 2110	6.6	20MS	0	R	5.0	20S	20.3	40S	57	79
479	KA 2111	1.8	10MS	0.4	5MR	0.1	TR	11.4	20S	67	79
480	KA 2112	6.9	20S	0.8	10MR	0.0	0	13.4	40S	46	57
480A	Infector	81.4	100S	68	100S	70.0	80S	84.3	100S	68	78
481	KA 2113	13.1	20S	0.4	5MR	1.3	5S	32.6	40S	46	79
482	KA 2114	2	10MS	0.8	10MR	0.0	0	21.1	40S	47	79
483	KA 2115	1.2	10MS	4	20S	0.0	0	22.3	40S	46	79
484	KA 2116	9	40S	1.1	5S	5.0	20S	42.1	60S	46	68
485	KA 2117	11.7	40S	5.7	20S	5.0	20S	38.3	60S	67	89
486	KA 2118	13.2	40S	16.8	40S	16.3	40S	31.4	60S	57	79
487	KA 2119	16.4	60S	8.6	20MS	12.8	20S	48.6	80S	47	79
488	KA 2120	8.6	20S	10.6	20S	5.3	20S	48.6	80S	57	89
489	KA 2121	3.7	10MS	2.9	10S	3.8	10S	50	60S	46	69
490	KA 2122	3.2	10S	0.8	10MR	1.3	5S	47.1	80S	46	69
491	KA 2123	12.1	40S	0.1	R	0.0	0	5.5	40MS	46	79
492	KA 2124	11.4	40S	0	R	0.0	0	26.9	60S	35	58
493	KA 2125	3.1	10S	2.1	10S	3.5	10S	32.9	40S	35	57
494	KA 2126	7.4	20S	0.1	R	0.0	0	8.9	20S	35	57
495	KA 2127	3.2	20S	0	R	0.0	0	37.1	60S	46	57
496	KA 2128	6.7	40S	1.8	10MS	2.6	10S	29.4	60S	36	58
497	KA 2129	8.3	40S	1	10MR	3.8	10S	38.3	60S	47	69
498	KA 2130	4.4	20S	1	10MR	0.0	0	34.7	60S	56	89
499	KA 2131	3.9	20MS	0	R	1.3	5S	28.3	40S	46	79
500	KA 2132	6.4	20MS	5.1	20S	5.0	10S	15	30S	45	68
500A	Infector	75.7	100S	80	100S	75.0	80S	74.3	80S	78	79
501	KA 2133	2.5	10MS	1.2	5MS	2.5	10S	37.1	60S	46	79
502	KA 2134	17	80S	3.6	10MS	1.0	10MR	44.3	60S	46	68
503	KA 2135	8.7	40S	0.8	10MR	1.0	10MR	7.9	20MS	56	89
GBPUAT, Pantnagar											

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
504	UPW-1	20.6	60S	1	5MS	2.5	10S	15.1	30S	46	89
505	UPW-2	24.4	80S	0.4	5MR	0.0	0	10.4	20MS	35	47
506	UPW-3	21	60S	2.9	10S	2.5	10S	19.4	40S	35	68
507	UPW-4	28.1	80S	1.9	10MS	5.0	10S	10.3	30S	35	57
508	UPW-5	28.7	80S	1.8	10MS	2.5	10S	12	20S	35	68
509	UPW-6	13.5	40S	0	R	1.3	5S	3.3	10S	35	68
510	UPW-7	0.9	10MR	0.8	10MR	0.0	0	15.6	40S	45	57
511	UPW-8	10.3	60S*	2.4	10MS	1.3	5S	18	40S	45	57
512	UPW-9	3.5	20MS	0	R	0.0	0	14.5	60S	46	67
513	UPW-10	7.7	20S	0.8	10MR	0.0	0	3.6	10MS	35	47
514	UPW-11	6.3	20MS	2.2	10MS	1.3	5S	21.4	60S	46	57
515	UPW-12	5.2	20MS	0.8	10MR	1.3	5S	22.7	60S	57	67
516	UPW-13	21.1	60S	0.4	5MR	0.0	0	20.9	60S	46	68
517	UPW-14	15.9	40S	0.4	5MR	0.0	0	19.1	60S	46	58
518	UPW-15	17.3	40S	4	20S	0.0	0	3	10MS	56	68
519	UPW-16	17.1	60S	3.7	10MS	7.5	20S	20.6	40S	35	58
520	UPW-17	6.6	20S	4	20S	0.0	0	24.3	60S	45	68
520A	Infector	81.4	100S	76	100S	80.0	100S	77.1	80S	78	78
521	UPW-18	4.3	10S	0.9	10MR	0.0	0	33.3	60S	57	68
522	UPW-19	11.1	40S	1.2	5MS	1.5	5S	21.1	60S	46	57
523	UPW-20	10.3	20S	3.3	10MS	5.0	20S	12	40S	45	68
524	UPW-21	12.7	60S	1.7	10MS	0.0	0	6.1	20MS	45	57
525	UPW-22	16.6	60S	4.8	20MS	0.0	0	11.7	40MS	46	57
526	UPW-23	17.6	40S	0.5	5MR	1.3	5S	26.6	60S	56	89
527	UPW-24	6.3	20S	1.9	5S	0.0	0	20.7	40S	46	57
528	UPW-25	8.3	40S	4.2	10MS	2.5	10S	24.6	60S	46	69
529	UPW-26	13.3	40S	2	10MS	0.1	TR	25.7	60S	46	57
530	UPW-27	8.2	60MS*	6.4	20MS	2.5	10S	31.4	60S	46	69
531	UPW-28	19.7	80S	11	20S	3.3	10MS	8.7	20S	46	57
532	UPW-29	7.3	20S	1.6	5MS	1.3	5S	20.4	40S	46	56
533	UPW-30	15.9	40S	8.9	40S	0.0	0	10.6	40MS	46	56
534	UPW-31	6	20MS	1.4	10MR	0.0	0	25.8	60S	45	58
535	UPW-32	31.4	60S	1.4	5S	0.0	0	12.3	40MS	56	57
536	UPW-33	9.6	20S	0.5	5MR	1.3	5S	36.9	60S	46	69
537	UPW-34	6.6	20S	2.7	10MS	0.0	0	16.4	40S	46	68
538	UPW-35	4.3	20S	1.7	10MS	0.0	0	11.2	40S	46	69
539	UPW-36	0.3	5MR	0.4	5MR	2.5	10S	16.3	40S	36	68
540	UPW-37	1.3	5MS	1.6	10MS	0.0	0	6.4	20MS	46	89
540A	Infector	81.4	100S	76	100S	80.0	100S	74.3	80S	78	79
541	UPW-38	28	80S	6.5	20S	11.3	40S	17.4	60S	56	67
542	UPW-39	0.6	5MR	5.6	20S	3.8	10S	18.3	60S	46	79
543	UPW-40	10	20S	5.8	20S	2.6	10S	27.7	60S	35	46
544	UPW-41	3.7	10S	5.6	20S	0.0	0	10.9	20S	46	57
545	UPW-42	13.1	40S	0.8	5MR	0.1	TR	16.1	40S	35	47
546	UPW-43	9.7	40MS	5	20S	0.0	0	8.2	20S	46	58
547	UPW-44	16	40S	4.2	20S	5.0	20S	31	60S	46	58
548	UPW-45	7.5	20S	0.8	10MR	2.5	10S	12.3	20S	57	69
549	UPW-46	5.8	20S	4.2	20S	1.3	5S	8	20S	56	69
550	UPW-47	13.6	40S	1.2	10MR	6.3	20S	11.7	40MS	56	68
551	UPW-48	7.3	20MS	2.1	10S	0.0	0	5.5	20MS	46	68
552	UPW-49	7.8	20S	0.4	5MR	0.0	0	5.6	20S	56	89
553	UPW-50	19.4	40S	0.5	5MR	0.0	0	4.4	20S	45	89
JNKVV, Powarkheda											
554	MPO-22-01	10.9	40S	3.3	20MS	2.5	10S	6.9	30S	56	89
555	MPO-22-02	0.9	10MR	8.1	20S	1.3	5S	49.4	80S	56	89
556	MP-22-03	21.5	40S	4.3	20S	5.0	10S	42.1	80S	56	89

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
557	MP-22-04	9.8	40MS	1.2	10MR	10.0	40S	41.4	80S	68	79
558	MP-22-05	8.7	40MS	10.6	20S	10.0	20S	48.3	80S	57	89
559	MP-22-06	13.3	40S	4.9	20MS	10.0	40S	8.7	20S	57	89
560	MP-22-07	2.1	5S	2	10S	0.0	0	10.9	40MS	57	89
560A	Infector	78.6	100S	76	100S	70.0	80S	77.1	80S	78	79
561	MP-22-08	3.8	10S	6.6	10S	5.1	10S	20	40S	57	89
562	MP-22-09	2.4	10MS	0.9	10MR	0.0	0	37.4	60S	57	89
563	MP-22-10	0.3	5MR	0.9	10MR	0.0	0	25.9	60S	56	89
564	MP-22-11	13.7	20S	1.2	15MR	0.0	0	45.1	60S	56	99
565	MP-22-12	2.6	10MS	3.2	20MS	0.0	0	49.4	80S	67	99
566	MP-22-13	7.1	20S	1.5	5S	10.0	40S	27.1	40S	47	79
567	MP-22-14	1.5	10MS	1.6	10MS	0.0	0	43.4	60S	57	79
568	MPO-22-15	1.8	10S	9.2	20S	0.0	0	40.6	60S	67	99
569	MP-22-16	9.9	20S	2.8	10S	0.0	0	35.6	60S	56	99
570	MPO-22-17	4.6	20S	0.6	5MR	0.0	0	5.4	20S	35	57
571	MPO-22-18	1.4	5S	0.1	R	0.0	0	1.8	5MS	57	89
572	MP-22-19	3.5	20MS	4.8	10MS	7.3	20S	6.7	20S	67	99
573	MPO-22-20	1.4	10MS	0.8	10MR	0.0	0	3.4	10MS	46	68
574	MP-22-21	1.9	10S	4.5	10S	3.8	10S	17.6	40S	57	89
575	MP-22-22	5.6	10S	1.7	10MS	1.3	5S	31.6	80S	56	89
576	MPO-22-23	19.5	100S	3.8	20MS	1.3	5S	6.7	40S	67	99
577	MP-22-24	2.8	10S	1.6	10MS	0.0	0	36.6	60S	46	79
578	MP-22-25	11.1	20S	1.6	10MS	0.0	0	42.3	60S	46	79
579	MPO-22-26	2.9	20MS	1.7	10MR	0.1	TR	4.2	10MS	67	89
580	MP-22-27	5.4	40MS	2.8	5MS	5.5	10S	27.1	60S	56	89
580A	Infector	81.4	100S	68	100S	70.0	80S	77.1	80S	78	89
581	MP-22-28	4.1	10S	2.8	10MS	5.0	20S	29.9	60S	57	79
582	MPO-22-29	21.1	80S	4	20S	2.5	10S	4.2	20S	45	78
583	MP-22-30	15.9	40S	0.8	10MR	2.5	10S	25	60S	56	69
Niphad											
584	NIAW 4267	2.9	20MR	0.6	5MR	1.0	5MS	44.3	60S	56	89
585	NIAW 4273	6.1	20MS	3.3	10MS	0.0	0	36.6	60S	56	77
586	NIAW 4280	9.8	40MS	9.9	20S	3.5	10S	38	60S	57	79
587	NIAW 4284	3.7	10S	8.2	20S	1.3	5S	39.4	80S	56	89
588	NIAW 4297	1.3	10MR	0.4	5MR	0.0	0	17.3	40S	56	79
589	NIAW 4300	1.2	10MR	0.6	5MR	0.1	TR	27	60S	56	68
590	NIAW 4311	1.3	10MR	0.8	10MR	1.3	5S	43.7	80S	45	68
591	NIAW 4312	2.9	20MR	0.4	5MR	0.0	0	40.9	80S	56	78
592	NIAW 4323	1.5	20MR	2	10MS	1.0	5MS	44.3	80S	67	89
593	NIAW 4324	0.9	10MR	5.8	20MS	0.0	0	50	80S	56	79
594	NIAW 4330	2.3	20MR	1.7	10MS	0.0	0	32	60S	46	57
595	NIAW 4332	1.4	5S	11.2	20S	5.0	20S	29.9	60S	56	69
596	NIAW 4338	1	5S	2	10S	0.0	0	16.3	40S	46	69
597	NIAW 4349	1.2	10MS	0.4	5MR	0.0	0	39.4	80S	56	99
598	NIAW 4357	9.4	40S	7.2	20S	6.0	20S	43.7	80S	46	79
599	NIAW 4359	2.9	10S	13	20S	13.3	40S	38.9	80S	56	99
600	NIAW 4364	12.6	40S	1.2	10MR	5.0	20S	42.3	60S	35	57
600A	Infector	78.6	100S	72	100S	75.0	80S	77.1	80S	78	89
601	NIAW 4387	9.5	40MS	7	20S	2.3	5S	46.8	80S	46	68
602	NIAW 4403	20	80S	7.6	30S	5.0	20S	43.3	80S	46	68
603	NIAW 4412	5.2	20S	1.9	10MS	7.5	20S	20.9	40S	46	69
604	NIAW 4424	4.6	20S	0	R	2.5	10S	33.6	60S	45	77
605	NIAW 4432	0.7	10MR	0.8	10MR	0.0	0	32.9	60S	57	79
606	NIAW 4437	6.9	20S	0.5	5MR	2.5	10S	21.3	60S	46	89
607	NIAW 4440	4.3	10MS	5.3	20MS	0.0	0	24.9	60S	45	58
608	NIAW 4454	22.1	80S	1.6	5MS	1.3	5S	29.6	60S	46	69

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
609	NIDW 1499	10.3	40S	3.3	20MS	2.5	10S	2	5S	45	57
610	NIDW 1507	10.3	40S	3.2	20MS	2.0	10MS	5	20MS	35	47
611	NIDW 1520	9.2	60S*	0	R	0.0	0	2	5MS	35	69
612	NIDW 1521	10.3	60S*	3.7	20MS	2.5	10S	1.7	5MS	35	89
613	NIDW 1534	8.1	40S	0.9	5MS	1.0	5MS	1.8	5MS	45	89
Bioseed research											
614	BW18R1009	6.6	20MS	0	R	0.0	0	24.4	60S	35	58
615	BW18R6060	11	20S	0.9	5MS	2.5	10S	54.3	80S	56	78
616	BW18R6016	3.5	20MS	3.2	10MS	5.2	20S	38.6	60S	57	79
CSSRI, Karnal											
617	KRL2101	0.5	5MR	12.4	60S	0.0	0	16.6	40S	46	78
618	KRL2102	4	20S	9.6	20S	17.5	40S	41.4	80S	46	79
619	KRL2103	5.8	40S	0.4	5MR	0.0	0	35.4	80S	46	78
620	KRL2104	2.5	20MR	2.9	10S	2.5	5S	55.7	80S	46	57
620A	Infector	78.6	100S	76	100S	75.0	80S	77.1	80S	78	89
621	KRL2105	0.3	5MR	0.5	5MR	0.0	0	13.7	40S	57	68
622	KRL2106	6.7	20S	2	10S	0.0	0	16.9	40S	34	78
623	KRL2107	10.7	40S	7.3	20S	2.5	10S	51.4	80S	56	77
624	KRL2108	1.9	10MS	2	10S	0.0	0	50	80S	57	79
625	KRL2109	1.3	5S	2	10S	0.0	0	27.6	40S	57	89
626	KRL2110	1.9	5S	2	10S	0.0	0	34.9	80S	56	89
627	KRL2111	14	60S	9.4	20S	11.3	40S	27.7	60S	56	89
628	KRL2112	9.8	40S	2	5S	0.1	TR	13.6	40S	46	89
629	KRL2113	7.9	20S	0.5	5MR	0.0	0	49.4	80S	46	57
630	KRL2114	13.7	60S	0.4	5MR	0.0	0	19.6	60S	46	77
631	KRL2115	1.7	20MR	0.5	5MR	0.0	0	35.7	80S	56	89
632	KRL2116	0.6	10MR	0.4	5MR	5.0	20S	27.4	60S	46	89
633	KRL2117	2	20MR	20	60S	5.0	20S	29.7	60S	46	57
634	KRL2118	2.9	10S	4	20S	0.0	0	50.3	80S	46	58
635	KRL2029	0.6	5MR	0.8	10MR	2.5	10S	45.3	80S	57	89
636	KRL2025	12.1	40S	0.5	5MR	0.0	0	21.7	60S	46	79
IIFSR, Modipuram											
637	SVPWL21-01	5.7	20S	0.1	R	2.5	10S	1	5S	35	78
638	SVPWL21-02	11	20S	0.1	R	0.0	0	5.4	20S	46	57
639	SVPWL21-03	5.9	20S	2.4	10MS	5.0	20S	4.6	20MS	57	77
640	SVPWL21-04	3.5	20S	0.9	10MR	0.0	0	14.9	40S	56	77
640A	Infector	78.6	100S	80	100S	70.0	80S	77.1	80S	78	79
641	SVPWL21-05	2	10S	0.4	5MR	0.0	0	7.6	20S	46	68
642	SVPWL21-06	8	20S	1	10MR	0.0	0	7.9	20S	56	77
643	SVPWL21-07	9.9	20S	0.1	TMR	0.0	0	4.3	20MS	46	79
644	SVPWL21-08	16	80S	2.6	10MS	1.3	5S	4.2	20MS	35	57
645	SVPWL21-09	2.5	20MR	2	10S	2.5	10S	12.2	40S	46	57
646	SVPWL21-10	11.4	40S	2.4	10S	1.3	5S	6.5	20S	46	57
647	SVPWL21-11	3.6	10S	1.2	5MS	1.3	5S	1.5	5S	46	57
648	SVPWL21-12	11.1	40MS	3.4	10MS	2.5	10S	6.4	20MS	45	79
649	SVPWL21-13	2.5	10S	1	5S	0.0	0	16.3	40S	46	57
650	SVPWL21-14	15.9	40S	3.3	10S	1.3	5S	9.9	40MS	56	89
651	SVPWL21-15	13.8	60S	13.5	40S	10.3	40S	3.7	20MS	57	89
PAU, Ludhiana											
652	BWL5410	6.1	20MS	2	10MS	0.2	TMS	5	30S	46	68
653	BWL 8878	15.7	70S	31.2	80S	15.8	40S	39.4	80S	46	68
654	BWL 9107	13	40S	3.8	10S	6.0	10S	5.1	20S	56	89
655	BWL 9244	6.9	20MS	16.2	40S	7.0	20S	42.3	80S	56	79
656	BWL 9264	17.9	40S	2.6	10MS	0.0	0	0.2	TS	57	79
657	BWL 9330	6	20S	1.2	5MS	0.0	0	5.1	30S	56	79
658	BWL 9344	4.2	20MS	0.8	10MR	0.0	0	0.4	5MR	46	68

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
659	BWL 9440	8.7	40S	2.6	5S	1.3	5S	0	0	56	79
660	BWL 9758	11.3	50S	15.4	60S*	11.8	40S	50	80S	45	79
660A	Infector	78.6	100S	76	100S	80.0	80S	77.1	80S	78	79
661	BWL 9851	8.1	20MS	3.7	20MS	2.0	10MS	2.2	5S	46	89
662	BWL 9869	4.9	20MS	4	20S	0.0	0	17.3	40S	57	89
663	BWL 9923	1.5	20MR	0.8	5MS	1.0	5MS	7.3	20MS	67	89
664	BWL 9928	10.9	40MS	0.4	5MR	0.0	0	6.3	20MS	46	57
665	BWL 9937	0.6	10MR	0.8	5MR	1.0	5MS	2.9	20MS	56	68
666	BWL 9945	4	20MS	14	40S	17.5	40S	45.7	80S	46	68
667	BWL 9951	4.7	20MS	2	10S	1.3	5S	17.3	40S	57	79
668	BWL 9995	6.9	20S	12.5	30S	16.8	40S	38.3	80S	35	57
669	BWL9984	1.8	10S	2	10MS	2.0	10MS	4.9	20MS	45	68
670	BWL9985	2.6	20MR	1.2	5MS	0.5	5MR	8.5	20S	56	78
671	BWL9986	1.7	10MS	0.8	5MR	10.5	40S	12.7	40S	56	68
672	WBL0002	4.6	20MS	5.7	10S	2.6	10S	0.3	5MR	46	57
673	WBL0003	15	40S	0.9	5MS	0.5	5MR	0.1	TMS	47	69
674	WBL0006	4.9	20S	10.1	40S	10.0	40S	36.6	60S	56	79
675	WBL0009	2.3	10MS	2.5	10MS	1.0	5MS	4.7	10S	46	89
676	WBL0014	2.9	10MS	0.5	5MR	0.0	0	2.4	10MS	46	56
677	WBL0016	1.5	10MS	0.1	R	5.0	20S	11.3	40S	46	58
678	WBL0018	1.7	10MS	2.4	10MS	2.5	10S	9.7	20S	56	68
679	WBL0023	7.9	20S	2.4	10MS	0.0	0	1.3	5S	56	99
680	WBL0026	2	10S	0.7	5MR	0.0	0	10.4	40S	46	89
680A	Infector	84.3	100S	80	100S	70.0	80S	77.1	80S	78	89
681	WBL0028	0.2	5R	0	R	0.0	0	0.7	5S	46	79
682	WBL0030	1.1	5S	1	5MS	0.0	0	1.4	10S	46	79
683	WBL0031	4.9	20S	6.1	30S	1.3	5S	2.1	10S	46	68
684	WBL0032	2.9	10MS	2.8	10MS	16.3	60S*	1.3	5S	46	68
685	WBL0042	11.6	40S	4.5	10S	5.0	10S	0.6	5MS	46	57
686	WBL0043	12.1	40S	24.7	80S	20.0	40S	39.4	60S	46	79
687	WBL0047	1.8	5MS	0.1	R	0.0	0	5.4	10S	56	77
688	WBL0051	1.5	10S	0.5	5MR	0.0	0	5.1	10S	46	67
689	WBL0053	8.4	20S	0	R	2.5	10S	1.5	10MS	56	78
690	WBL0060	3.8	20MS	0	R	0.0	0	1.3	10MS	45	57
691	WBL0061	5.7	20S	0.1	TMR	1.3	5S	2.6	10MS	57	67
692	WBL0062	9.7	40S	0.1	R	0.0	0	0	0	57	68
693	WBL0064	13.4	40MS	0.8	10MR	0.0	0	0	0	46	68
694	WBL0067	3.8	10S	4.1	20S	2.5	5S	0	0	45	68
695	WBL0068	3	10S	1.6	10MS	0.5	5MR	2.5	20MR	46	79
696	WBL0080	8	20S	2	10S	17.5	60S	19.1	40S	46	78
697	WBL0081	12.8	40S	13.8	60S*	25.0	60S	39.4	60S	46	68
698	WBL0090	22.9	100S	27.3	80S	20.3	40S	2.9	20MS	46	68
699	WBL0091	5.7	20S	0.4	5MR	0.1	TR	3.9	20MS	45	57
700	WBL0092	4.3	20S	0.8	10MR	5.0	20S	6.7	20MS	46	68
700A	Infector	81.4	100S	80	100S	70.0	80S	77.1	80S	78	79
701	WBL0093	7.4	20S	1.6	5MS	0.0	0	0.6	5MS	46	79
702	WBL0094	3.5	20MS	0	R	0.0	0	3.3	10MS	46	56
703	WBL0095	23.3	80S	0.8	10MR	0.0	0	4.9	20MS	46	58
704	WBL0096	2.7	10MS	1.7	10MS	0.0	0	18.3	40S	67	99
705	WBL0097	11	30S	12.1	40S	20.0	40S	52.9	60S	46	57
706	WBL0174	7.5	20S	2.8	10S	12.5	40S	0.7	5S	57	79
707	WBL0227	9.4	40MS	2.8	10S	3.8	10S	0.6	5MS	46	68
708	WBL0231	23	60S	11	20S	12.5	40S	0.6	5MS	45	89
709	WBL0239	30	80S	0	R	0.0	0	0.4	5MR	57	99
710	WBL0281	34.4	80S	3.6	10S	2.5	10S	0.1	TS	45	68
711	WBL0311	18.7	60S	6.4	20S	15.0	40S	4.1	10S	45	57

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
712	WBL0332	9.9	30S	11.4	40S	12.5	40S	45.1	60S	46	68
713	WBL0338	5.5	30S	8.8	40S	6.3	20S	13.7	40S	56	78
714	WBL0413	3.5	10S	2	10S	10.0	40S	26.3	60S	46	68
715	WBL0415	6.4	20MS	0.1	R	5.0	20S	27	60S	56	68
716	WBL0425	2.6	10MS	2.9	10S	6.0	20S	26.3	40S	46	68
717	WBL0428	10	40S	6.6	20S	11.0	40S	43.7	60S	56	68
718	WBL0431	4	10MS	4.8	20MS	0.0	0	8.1	20MS	46	57
719	WBL0435	3.5	20MS	2.3	10S	0.0	0	13.6	20S	56	79
720	WBL0438	7.7	20S	9.8	20MS	7.8	20S	38	60S	46	77
720A	Infector	78.6	100S	68	80S	70.0	80S	80	80S	78	89
721	WBL0517	4.3	20MS	5.4	10S	10.0	40S	7.4	20MS	56	89
722	WBL0530	4.6	20S	1.7	10MS	0.0	0	0.1	TR	46	79
723	WBL0588	6.7	20S	2.6	10MS	16.5	60S*	41.6	60S	46	68
724	WBL1601	3.2	10MS	3.6	10S	5.0	20S	9.7	20S	35	58
725	WBL1602	3.8	20MS	4.1	20S	0.0	0	28.6	40S	56	58
726	WBL1603	5.2	20S	6.4	20S	3.5	10S	37.1	60S	45	57
727	WBL1604	15.1	40S	4	20S	0.0	0	25.7	40S	46	68
728	WBL1605	6.9	20S	8.2	20S	21.0	60S	35	60S	46	68
729	WBL1606	6	20MS	0.1	TMR	0.0	0	24.4	40MS	35	68
730	WBL1607	21.3	60S	2.1	10MS	0.5	5MR	6.4	20S	46	68
731	WBL1608	12.6	40S	8.6	15S	22.0	40S	40.9	60S	45	78
732	WBL1609	18.3	40S	1.6	10MS	1.3	5S	0.1	TS	35	56
733	WBL1610	17.9	40S	3.2	10S	1.3	5S	0	0	46	57
734	WBL1611	8	20S	10.6	40S	2.5	10S	40	60S	45	57
735	WBL1612	1.6	10MS	0.2	TMS	0.0	0	0	0	46	78
736	WBL1613	4.1	20S	0	R	0.0	0	0.6	5MS	46	79
737	WBL1614	8.9	40MS	0.4	5MR	0.0	0	5.5	10S	35	57
738	WBL1615	30	60S	0	R	7.5	20S	27.9	40S	46	79
739	WBL1616	0.9	10MR	0	R	0.0	0	4.1	10MS	57	79
740	WBL1617	12	40S	18.6	40S	1.3	5S	42.9	60S	46	79
740A	Infector	81.4	100S	76	100S	70.0	80S	77.1	80S	78	78
741	WBL1618	4.4	20MS	2.1	10S	5.0	10S	10.9	20S	56	77
742	WBL1619	6.5	20MS	2.4	10MS	1.3	5S	0.7	5MS	56	79
743	WBL1620	2.9	20MS	3.2	10MS	0.0	0	0.1	TMR	55	78
744	WG 2395	3.5	20S	7.2	20S	6.0	20S	37.1	60S	46	68
745	WG 2396	4.1	10MS	2	10S	2.5	10S	4.6	20S	46	57
746	WG 2399	13.1	40S	3.6	20MS	2.0	10MS	2.6	10MS	45	56
747	WG 2429	4.8	20MS	4.5	10S	2.6	10S	7.9	20S	46	68
748	WG 2432	16.8	40S	4.1	10S	1.3	5S	0.9	5MS	45	57
749	WG 2434	11	40S	3.6	20MS	2.5	10S	1.1	5S	46	47
750	WG 2435	2.4	20MS	0.8	10MR	0.0	0	5.6	20S	35	68
751	WG 2437	13.7	40S	5.8	20S	0.0	0	1.7	5S	35	47
752	WG 2457	9.1	20S	1.6	10MS	2.6	10S	5.1	10S	24	46
753	WG 2467	13.9	40S	2	10S	0.0	0	16.6	40S	34	68
754	WG 2469	11.5	40S	4	20S	2.5	10S	20	40S	35	68
755	WG 2474	7.4	20S	0.2	TMR	1.3	5S	26.3	40S	35	57
756	WG 2496	0.6	5MR	0	R	0.0	0	4.7	20S	46	68
757	WG 2499	6.3	20S	0	R	0.5	5MR	9.1	40S	35	68
758	WG 2526	8	40S	1.8	5S	1.0	5MS	17.7	40S	45	56
759	WG 2540	0.6	10MR	0	R	0.0	0	17.3	40S	35	57
760	WG 2541	1.5	20MR	0.4	5MR	0.5	5MR	1.1	10MS	46	58
760A	Infector	81.4	100S	80	100S	70.0	80S	77.1	80S	78	79
761	WG 2542	7.7	20S	16.6	40S	26.3	60S	1.1	10MS	56	68
762	WG 2543	19.9	80S	1	5S	0.0	0	3	5S	46	57
763	DW582	21.7	80S	4.1	20S	2.5	10S	4.7	20MS	56	89
764	DW583	21.7	60S	1.7	10MS	2.0	10MS	2.9	10MS	45	89

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
765	DW584	17.8	100S	2	10S	2.5	10S	4.9	20S	35	57
766	DW585	29.1	100S	4	20S	2.5	10S	4.4	10MS	45	79
767	DW586	16.6	100S*	2	10S	2.5	10S	3.1	10MS	35	58
768	DW587	25.2	100S	5	20S	2.5	10S	4.9	20MS	56	89
769	DW588	20.7	100S	2.1	5S	5.0	20S	2.7	10S	45	89
770	DW589	14.5	60S	1.1	5S	0.0	0	6	40MS	46	89
771	DWG 2601	19.4	40S	2.4	10S	2.5	10S	0.7	5S	35	56
772	WBL1621	13.8	60MS	3.2	20MS	1.0	10MR	0.7	5S	46	57
773	WBL1622	17.7	80S	0.8	10MR	0.0	0	0.6	5MS	45	68
774	WBL1623	6.1	60MR	0.4	5MR	0.0	0	1.1	10MS	46	79
775	WBL1624	9.3	30S	11.2	20S	12.5	40S	36.6	60S	56	68
776	WBL1625	3.6	40MR	0.4	5MR	0.0	0	5.1	20MS	67	89
777	WBL0441	3.3	10S	2.4	10MS	0.0	0	25.9	40S	56	79
778	WBL0493	2.9	20MS	0.5	5MR	0.1	TR	12	40S	57	69
779	WBL0536	1.6	10MS	1.2	10MR	0.0	0	2.1	10MS	45	68
780	WBL0567	3.4	10MS	0.5	5MR	17.5	40S	1.9	10MS	45	57
780A	Infector	78.6	100S	76	100S	75.0	100S	77.1	80S	78	79
781	WBL0577	8.6	20MS	0.8	10MR	0.0	0	0.7	5S	46	79
IARI, New Delhi											
782	IARI-21-1	6.7	20S	9	20S	25.0	60S	16	40S	56	77
783	IARI-21-2	5.3	20S	3	10MS	2.5	10S	39.4	60S	46	77
784	IARI-21-3	12.7	40MS	2.4	10S	2.5	10S	4.5	20MS	46	77
785	IARI-21-4	15.1	40S	4.7	10S	7.5	20S	5.6	20MS	46	77
786	IARI-21-5	11.5	40S	4.6	10MS	16.3	40S	20.7	40S	46	58
787	IARI-21-6	6.3	20S	1.3	5MS	15.0	40S	4.4	10S	57	77
788	IARI-21-7	3.1	10MS	6.2	10S	21.3	40S	10.7	40S	46	77
789	IARI-21-8	10.5	40S	0.8	5MS	0.0	0	24.1	40S	57	79
790	IARI-21-9	5.3	20MS	13.8	40S	20.0	40S	7.7	20S	57	79
791	IARI-21-10	16.4	40S	1	5S	1.0	5MS	7.3	20S	35	57
792	IARI-21-11	16.6	80S	8.4	20MS	1.0	5MS	35	60S	56	67
793	IARI-21-12	23.7	60S	5.2	20MS	1.3	5S	16.6	40MS	57	77
794	IARI-21-13	16	40S	5.2	10S	12.5	40S	20.6	40S	46	89
795	IARI-21-14	13.4	40S	0.5	5MR	7.5	20S	25.1	60S	46	89
796	IARI-21-15	6.6	20S	2	10S	5.0	20S	2.8	10S	46	79
797	IARI-21-16	18.6	40S	1	5S	0.0	0	34.3	60S	46	68
798	IARI-21-17	12.4	60S*	1.3	15MR	0.0	0	4.3	20MS	35	58
799	IARI-21-18	8.1	40S	7.6	20S	17.5	60S	33.7	60S	56	68
800	IARI-21-19	1.2	10MS	0	R	0.0	0	4.7	20MS	46	79
800A	Infector	81.4	100S	84	100S	70.0	80S	68.6	80S	78	89
801	IARI-21-20	10.6	20S	3.6	10S	5.0	20S	9	40MS	56	89
802	IARI-21-21	3.6	20MS	0.9	10MR	0.0	0	44.3	60S	57	79
803	IARI-21-22	0.4	5MR	0.6	5MR	1.3	5S	37.1	60S	56	77
804	IARI-21-23	24.3	60S	27	40S	20.0	60S	0.1	TS	56	67
805	IARI-21-24	14.6	60S*	10.8	20S	6.0	20S	29.3	60S	57	78
806	IARI-21-25	12.8	60S*	11.2	40S	11.0	40S	35.7	60S	57	68
807	IARI-21-26	0.6	5MS	0	R	0.0	0	7.9	20S	35	68
808	IARI-21-27	23.4	60S	1	5S	0.0	0	1.9	5S	56	68
809	IARI-21-28	9.4	20S	0.9	10MR	0.0	0	7.6	20S	45	68
810	IARI-21-29	7.4	20MS	2.1	20MR	0.0	0	17.4	60S	46	77
811	IARI-21-30	3.8	20S	0.5	5MR	0.0	0	36.3	60S	56	78
812	IARI-21-31	12.9	30S	26	40S	30.1	40S	30.1	60S	47	79
813	IARI-21-32	3	20MR	4.1	10MS	2.5	5S	31.4	60S	56	78
814	IARI-21-33	5.3	20S	0.5	5MR	0.0	0	9.7	40MS	46	79
815	IARI-21-34	4.4	20S	6.1	20MS	2.5	10S	32.9	60S	46	79
816	IARI-21-35	0.5	5MR	0.5	5MR	0.0	0	56.6	80S	46	89
817	IARI-21-36	0.5	5MR	0	R	0.0	0	65.1	80S	57	79

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
818	IARI-21-37	0.6	5MR	1.2	10MR	0.0	0	60	80S	56	79
819	IARI-21-38	0.3	5MR	0.5	5MR	0.0	0	40.7	80S	46	58
820	IARI-21-39	4.7	30S	8.1	40S	0.0	0	46.4	80S	46	77
820A	Infector	78.6	100S	76	100S	80.0	100S	77.1	80S	68	78
821	IARI-21-40	0.1	TR	1	10MR	0.0	0	42.3	60S	56	99
822	IARI-21-41	0.6	5MR	8	20S	3.5	10S	39.4	60S	67	79
823	IARI-21-42	9.8	20S	11.2	40S	20.5	40S	5.9	20MS	56	99
824	IARI-21-43	11	40S	9.3	20S	2.5	5S	34.9	60S	56	79
825	IARI-21-44	13.9	30S	8	40S	0.0	0	4.7	10S	57	79
826	IARI-21-45	8.2	20S	0	R	0.0	0	3.5	5S	57	89
827	IARI-21-46	5.5	20S	1.6	10MS	0.0	0	5.1	20MS	45	68
828	IARI-21-47	0.4	5MR	3.6	10MS	1.3	5S	26.9	60S	56	84
829	IARI-21-48	18.9	60S	3.4	20MS	0.1	TR	5.6	20S	46	68
830	IARI-21-49	7.1	20S	0	R	0.0	0	6.2	20S	46	89
831	IARI-21-50	7.2	40S	5.8	20MS	2.5	10S	0	0	46	79
832	IARI-21-51	8.1	40S	8.8	20S	0.5	5MR	40.6	60S	56	58
833	IARI-21-52	16.1	60MS	21.2	40S	20.5	40S	0.6	5MS	46	58
834	IARI-21-53	44.3	80S	8.8	20S	20.0	60S	4.5	20MS	45	56
835	IARI-21-54	8.9	20MS	4.2	20S	7.5	20S	27.6	40S	57	89
836	IARI-21-55	3.5	10MS	4.9	20S	0.0	0	36.4	60S	45	78
837	IARI-21-56	4.7	20S	6.6	20S	1.3	5S	41.6	60S	36	68
838	IARI-21-57	32.1	80S	10.8	40S	25.0	60S	23.4	60S	46	68
839	IARI-21-58	24	80S	24	40S	37.5	80S	31.4	60S	56	78
840	IARI-21-59	17.6	40S	3.2	10MS	30.0	60S	33.7	60S	67	79
840A	Infector	81.4	100S	76	100S	80.0	100S	77.1	80S	68	79
841	IARI-21-60	11.3	40MS	3.3	10MS	20.0	60S	11.5	40S	46	79
842	IARI-21-61	12.7	40S	4	15MS	2.5	10S	3.3	10S	46	79
843	IARI-21-62	4	10S	1.6	10MS	2.5	10S	26.7	60S	56	89
844	IARI-21-63	4.2	20S	2.6	10MS	0.0	0	23.6	40S	46	69
845	IARI-21-64	20	50S	28.2	60S	20.3	80S*	32.7	60S	57	78
846	IARI-21-65	5.1	10S	6.5	20S	0.5	5MR	44.3	80S	46	69
847	IARI-21-66	0.5	5MR	1.2	15MR	0.0	0	38.6	80S	57	79
848	IARI-21-67	1.3	5S	2	10S	5.0	20S	53.7	80S	56	89
849	IARI-21-68	1.2	5S	3	15S	0.0	0	46.9	80S	56	89
850	IARI-21-69	0.6	5MR	0.8	10MR	0.0	0	44.3	60S	56	89
851	IARI-21-70	0.1	TR	1.6	10MS	0.0	0	57.1	80S	46	89
852	IARI-21-71	0.3	5MR	1.2	15MR	0.0	0	50	80S	45	89
853	IARI-21-72	0.7	5MR	15.6	60S*	17.5	40S	33.7	60S	46	89
854	IARI-21-73	6.6	20S	12	20S	2.5	5S	43.7	60S	56	79
855	IARI-21-74	19.4	40S	6.1	20S	3.8	10S	13.1	40S	56	68
856	IARI-21-75	12.3	40S	1.2	10MR	0.0	0	12.9	40S	45	79
857	IARI-21-76	7.7	20S	9.4	20S	0.0	0	12.1	40S	57	99
858	IARI-21-77	13.6	20S	8.8	30S	15.0	40S	14.6	60S	67	99
859	IARI-21-78	2.8	20MS	2	10MS	0.0	0	9	40S	45	89
860	IARI-21-79	6.5	40S	1.2	10MR	0.0	0	7.4	40S	46	99
860A	Infector	81.4	100S	80	100S	75.0	80S	74.3	80S	78	89
861	IARI-21-80	5.9	40S	2	5MS	0.0	0	1.6	5MS	46	79
862	IARI-21-81	5.9	40S	0.5	5MR	0.0	0	1.6	5MS	46	69
863	IARI-21-82	3.2	20S	4	20MS	2.5	10S	8	40MS	46	69
864	IARI-21-83	2.9	10S	0.9	10MR	0.0	0	3.6	10S	45	69
865	IARI-21-84	7.8	20S	1.6	5MS	1.0	5MS	3.6	10MS	46	68
866	IARI-21-85	4.7	20S	1	10MR	0.0	0	4.3	10MS	45	68
867	IARI-21-86	3.6	20S	1.6	5MS	0.0	0	4.9	40MR	46	68
868	IARI-21-87	2	10S	1.2	5MS	0.0	0	2.1	5S	46	68
869	IARI-21-88	2	10S	2	10S	3.8	10S	2.8	5S	35	57
870	IARI-21-89	17.5	50S	36	60S	27.5	60S	3.4	20MS	56	79

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
871	IARI-21-90	0.6	10MR	0.5	5MR	0.0	0	22.3	60S	56	68
872	IARI-21-91	0.7	10MR	1.2	10MR	0.0	0	23.6	60S	56	78
873	IARI-21-92	0.1	TR	1.6	10MS	0.0	0	37.1	60S	46	57
874	IARI-21-93	10.3	40MS	19	20S	17.5	40S	0.1	TS	46	56
875	IARI-21-94	12.6	40S	3.2	10S	2.5	10S	3	20S	46	68
876	IARI-21-95	16.1	40S	28.4	80S	21.3	40S	27.1	60S	35	68
877	IARI-21-96	5	20MS	3.6	10MS	1.3	5S	15.6	40S	45	57
878	IARI-21-97	4.1	10S	9.4	20S	10.0	40S	37.1	60S	46	68
879	IARI-21-98	6.7	20MS	6.5	20S	15.0	40S	6.6	20S	57	89
880	IARI-21-99	22	60S	3.8	10MS	2.5	10S	18.3	80S	56	89
880A	Infector	81.4	100S	76	100S	75.0	80S	74.3	80S	78	79
881	IARI-21-100	20	80S	5.4	20MS	12.5	40S	7.6	20MS	56	89
882	IARI-21-101	16.3	80S*	2.8	15MS	0.0	0	11.5	40MS	45	57
883	IARI-21-102	3.4	10MS	1.6	10MS	0.0	0	2.7	20MR	57	89
884	IARI-21-103	7.3	20S	1.3	10MR	0.0	0	7	20S	56	89
885	IARI-21-104	1.6	10MS	1.6	10MS	0.0	0	38.3	80S	45	68
886	IARI-21-105	1.5	10MS	1.7	10MS	0.0	0	42.9	80S	46	78
887	IARI-21-106	0.7	5MS	1.6	10MS	0.0	0	28.6	60S	46	69
888	IARI-21-107	3.5	20S	15.2	30S	25.0	60S	39.4	60S	56	78
889	IARI-21-108	0.9	10MR	1.3	10MR	0.5	5MR	3.7	10MS	46	67
890	IARI-21-109	1	10MR	0.5	5MR	0.0	0	3.6	20MS	46	67
891	IARI-21-110	0.3	TS	0.4	5MR	0.0	0	17.7	40S	57	69
892	IARI-21-111	0.1	TMR	1.7	5MS	0.5	5MR	3.6	20S	46	79
893	IARI-21-112	5.1	20S	9.6	20S	10.0	20S	12.4	60S	45	57
894	IARI-21-113	22.3	60S	17.6	40S	20.0	40S	24.9	60S	56	79
895	IARI-21-114	14.3	40S	16.2	40S	25.5	60S	3.2	20MR	56	78
896	IARI-21-115	2.1	10MS	13.2	40S	12.5	40S	13.5	60S	57	69
897	IARI-21-116	5.1	20MS	12	20S	7.5	10S	37.3	80S	46	56
898	IARI-21-117	11.5	60S	6.8	20MS	17.5	40S	23.6	80S	46	78
899	IARI-21-118	7	40S	0.9	10MR	0.0	0	10.6	40S	46	79
900	IARI-21-119	0.8	5S	0	R	2.5	10S	13.3	60S	45	79
900A	Infector	81.4	100S	80	100S	80.0	100S	74.3	80S	78	89
901	IARI-21-120	14.1	60S	5.8	20MS	0.1	TR	3.5	20S	45	58
902	IARI-21-121	2.3	5S	2	10S	10.0	40S	7.5	40S	46	89
903	IARI-21-122	10.3	40S	0.8	10MR	6.3	20S	24	60S	46	89
904	IARI-21-123	26.9	60S	24.2	40S	21.3	40S	33.7	60S	46	89
905	IARI-21-124	4.9	20S	13.2	20S	17.5	40S	39.4	60S	45	89
906	IARI-21-125	9.2	40S	9	20S	23.0	40S	45.1	60S	46	77
907	IARI-21-126	21.3	60S	7.6	20S	3.8	10S	17.3	40S	45	58
908	IARI-21-127	0.1	TR	0.8	10MR	0.0	0	41.7	80S	46	56
909	IARI-21-128	0.3	5MR	1.6	10MS	0.0	0	55.1	80S	46	89
910	IARI-21-129	1	5S	1.6	10MS	0.0	0	30.3	80S	56	89
911	IARI-21-130	1	5S	0.9	10MR	0.0	0	46.3	80S	46	89
912	IARI-21-131	0.9	10MR	0	R	0.0	0	5.7	20MS	45	58
913	IARI-21-132	2.9	10S	0.4	5MR	0.0	0	7.4	30MS	46	69
914	IARI-21-133	13	60S	3.4	15S	0.0	0	16.6	60S	46	68
915	IARI-21-134	17.4	40S	3	20MR	2.5	5S	11.6	60S	46	79
916	IARI-21-135	20.6	80S	5.2	20MS	12.5	40S	13.6	60S	45	79
917	IARI-21-136	10.7	40S	8.4	20S	3.8	10S	43.6	80S	57	68
918	IARI-21-137	19	80S	12	40S	1.8	5S	48.3	80S	46	69
919	IARI-21-138	26.4	60S	2.8	10MS	3.0	10S	3.7	20S	46	89
920	IARI-21-139	0.5	5MR	1.2	15MR	5.0	20S	35.1	80S	56	89
920A	Infector	75.7	100S	72	100S	70.0	80S	77.1	80S	78	89
921	IARI-21-140	8.6	40S	2.7	10MS	10.0	40S	1.4	10S	46	89
922	IARI-21-141	14.2	80S	5.8	10S	22.5	40S	16.6	40S	35	57
923	IARI-21-142	5.1	10MS	5	20MS	16.3	40S	24.1	60S	46	78

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
924	IARI-21-143	8.9	40S	8	20MS	10.0	20S	41.4	60S	46	78
925	IARI-21-144	17.8	40S	12.8	40S	20.0	40S	17.1	40S	57	79
926	IARI-21-145	27.6	60S	5.6	20MS	6.3	20S	2.4	10S	46	79
927	IARI-21-146	11.5	40S	0.9	5MR	0.0	0	4.7	20S	45	58
928	IARI-21-147	1.5	20MR	0.4	5MR	0.0	0	3.8	20S	46	56
929	IARI-21-148	0.3	5MR	2.4	20MR	2.0	10MS	21.3	40S	46	58
930	IARI-21-149	0.3	5MR	0.5	5MR	0.0	0	39.1	60S	35	57
931	IARI-21-150	7.2	20MS	13.6	30MS	2.5	10S	43.7	60S	46	68
932	IARI-21-151	5.9	40S	1.2	5S	0.0	0	3.3	20MR	57	69
933	IARI-21-152	4	20S	1.2	5S	0.0	0	5.6	20MS	46	68
934	IARI-21-153	4.6	20S	0.2	TMS	2.5	10S	14.4	40S	46	68
935	IARI-21-154	0.9	5MS	3.6	20MS	10.0	40S	48	60S	46	68
936	IARI-21-155	0.3	5MR	4.1	20MS	2.5	10S	44.3	60S	35	69
937	IARI-21-156	4.9	20S	5.5	20S	16.7	40S	42.3	60S	46	77
938	IARI-21-157	3.9	20MS	1.8	10MS	1.3	5S	22.9	40S	46	68
939	IARI-21-158	4	20MS	4.8	20MS	0.0	0	10.6	20S	56	77
940	IARI-21-159	1.5	10MS	0.4	5MR	0.0	0	2.7	10S	35	47
940A	Infector	81.4	100S	84	100S	80.0	100S	77.1	80S	78	78
941	IARI-21-160	14.3	60MS	12.6	40S	20.0	40S	20.8	40S	57	79
942	IARI-21-161	9.2	60MS*	6.8	10S	12.5	40S	26.6	60S	57	69
943	IARI-21-162	0.3	5MR	0.1	TMR	2.5	10S	17.7	40S	45	57
944	IARI-21-163	6	20S	12	40S	17.5	40S	36.6	60S	45	57
945	IARI-21-164	14.1	40MS	18.8	40S	12.5	40S	9.6	40S	46	57
946	IARI-21-165	16.1	40S	14	40S	27.5	40S	23	60S	57	67
947	IARI-21-166	0.9	10MR	0.8	10MR	0.5	5MR	8.4	20S	46	58
948	IARI-21-167	12.9	60S	0.4	5MR	2.5	10S	18.9	60S	46	67
IWBR (Hanif Khan)											
949	RWP1170	9.5	30S	20.4	40S	26.3	60S	33.7	60S	57	89
950	RWP1365	15.2	50S	25.2	60S	17.5	40S	36.6	60S	56	89
951	RWP1375	12	50S	20.8	60S	25.0	40S	39.4	60S	46	79
952	RWP1397	14	50S	35.2	60S	17.5	40S	43.7	60S	46	79
953	RWP1403	15.2	50S	22.4	60S	7.5	10S	46.6	60S	46	79
954	RWP1407	15.5	60S	9.6	20MS	13.8	40S	43.7	60S	45	68
RVSKVV, Gwalior											
955	RVW 4360	31.7	60S	37.2	80S	20.0	60S	45.1	60S	46	79
956	RVW 4361	11.4	20S	20.8	30MS	27.5	60S	43.7	80S	56	77
957	RVW 4362	8.6	30S	8.4	20MS	17.5	40S	38.3	60S	46	68
958	RVW 4363	3.7	10MS	6.4	20MS	5.0	10S	26.3	40S	46	79
959	RVW 4364	22.9	80S	18.4	40S	26.3	60S	28.6	60S	46	69
960	RVW 4365	3.5	40MR	10.2	40S	12.5	40S	42.3	80S	57	69
960A	Infector	78.6	100S	80	100S	80.0	100S	77.1	80S	68	78
961	RVW 4366	1.2	5MS	8.8	20S	15.0	40S	40.1	80S	56	79
962	RVW 4367	11.9	40MS	0.5	5MR	0.0	0	50.9	60S	46	79
963	RVW 4368	1.1	5S	5.6	20MS	1.3	5S	48.9	60S	35	57
964	RVW 4369	2.6	10MS	4.8	20MS	13.5	40S	46	60S	46	77
965	RVW 4370	6.6	20MS	2.8	5S	3.8	10S	25.7	40S	45	77
966	RVW 4371	1.9	5S	4.2	20MS	3.8	10S	20.6	40S	56	68
967	RVW 4372	2.3	10MS	5.2	20MS	0.0	0	45.1	60S	46	69
968	RVW 4373	2.9	10S	0.8	5MS	0.0	0	23.7	40S	46	77
969	RVW 4374	8.1	20S	0	R	0.0	0	28	40S	46	68
970	RVW 4375	1.3	5MR	0.1	TMR	0.0	0	22.9	40S	45	57
971	RVW 4376	0.7	5MR	0.5	5MR	0.0	0	26.3	60S	57	68
972	RVW 4377	2.7	20MS	1.6	10MS	0.0	0	15.1	40S	57	89
JAU, Junagarh											
973	J 20-01	0.5	5MR	1.8	10MS	0.0	0	58.6	80S	56	79
974	J 20-03	0.5	5MR	1.2	15MR	2.5	10S	48	80S	47	89

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
975	J 20-05	2.1	10S	6.8	20S	0.0	0	56.6	80S	57	89
976	J 20-06	1.2	15MR	1.6	10MS	1.3	5S	60	80S	56	89
977	J 20-07	0.3	5R	0.8	10MR	0.0	0	57.1	80S	46	69
978	J 20-12	2.6	10S	9.2	20S	0.0	0	49.7	80S	46	79
979	J 20-13	0.7	10MR	0.4	5MR	0.0	0	54	80S	56	89
980	J 20-14	1.5	10MR	1.2	15MR	1.3	5S	46.9	80S	56	89
980A	Infector	78.6	100S	68	100S	70.0	80S	68.6	80S	78	89
981	J 20-16	1.2	10MR	11.2	40S	2.5	10S	53.7	80S	45	99
982	J 20-17	2	10S	14	40S	5.0	20S	50.9	80S	45	99
983	J 20-18	1.3	10MS	0.1	R	10.0	40S	43.7	80S	56	99
984	J 20-19	1.7	10MR	4.2	20MS	0.0	0	38.6	80S	57	99
985	J 20-25	3.2	10S	1.6	10MS	0.0	0	50.9	80S	56	99
986	J 20-26	0.3	5MR	0.4	5MR	0.0	0	51.4	80S	57	99
987	J 20-30	0.3	5MR	0.8	10MR	2.5	10S	61.4	80S	67	99
988	J 20-31	1.1	5MR	0.8	10MR	1.3	5S	62.9	80S	67	99
989	J 20-32	0.6	5MR	0.5	5MR	0.0	0	48.6	60S	67	99
990	JD 20-10	2.1	10S	1	10MR	0.0	0	10.5	40S	46	77
991	JD 20-12	1.7	5S	0.5	5MR	0.0	0	4	20S	46	57
992	JD 20-13	3.3	20S	0.5	5MR	0.0	0	3.8	20MS	47	68
IWBR (Vishnu Kumar)											
993	IC640204	4.4	20S	2	20MR	0.0	0	3.9	10S	46	78
NABI, Mohali											
994	NABI 21-1	8.3	20S	1.6	5S	15.0	60S*	33.6	80S	35	57
995	NABI 21-2	9.7	20S	0.6	5MR	15.0	60S*	28.6	60S	46	77
IWBR											
996	RWP1055	7.5	20S	0	R	0.0	0	11.4	40S	56	79
997	RWP1056	7.9	40MS	3.2	20MS	5.0	20S	6.1	20MS	46	79
998	RWP1157	14	40S	4.6	20MS	1.3	5S	2.8	10S	56	79
999	RWP1058	14.4	60S	4	20MS	0.0	0	7	20S	56	79
1000	RWP1060	3.3	10MS	0.9	10MR	0.0	0	17.7	40S	35	56
1000A	Infector	81.4	100S	76	80S	80.0	100S	77.1	80S	78	79
1001	RWP1091	15.4	40S	4.8	10S	6.3	20S	13.9	40S	45	68
1002	RWP1099	2.2	10S	2.4	20MR	1.3	5S	9.5	40S	45	68
1003	LBP2020-8	3.5	20MS	4	15MS	1.3	5S	1.4	5S	35	57
1004	LBP2020-10	5.9	20MS	6.4	20MS	2.6	10S	3.9	10S	46	68
1005	LBP2020-22	17	40S	1.4	15MR	1.3	5S	11.4	40S	45	77
1006	LBP2020-25	22.9	80S	0.8	5MS	0.0	0	13.9	40S	45	77
1007	DWAP2020-26	13.7	40S	1.6	10MS	0.0	0	5.6	20S	46	79
1008	DWAP2020-28	29.3	60S	8	40S	0.0	0	3.8	20MS	35	57
1009	DWAP2020-29	14.6	40S	2.8	10MS	0.5	5MR	9.6	40S	46	69
1010	DWAP2020-30	2.3	10MS	0	R	0.0	0	19.4	40S	45	56
1011	PBS-PYT-IR-2020-21	26.6	60S	2.6	10MS	0.0	0	40.7	60S	45	68
1012	PBS-PYT-IR-2020-30	2.6	10MS	4	20MS	1.0	10MR	1.6	5S	45	68
1013	QYT-2030	4.3	40MS	0.8	10MR	0.3	TS	5	20MS	56	69
1014	QYT-2031	3.3	20MR	3.6	20MS	1.3	5S	4.1	20MS	46	68
1015	QYT-2032	2.7	10MS	0.8	10MR	1.3	5S	4.4	20S	45	69
1016	QYT-2047	5.4	20MS	0.8	5MR	0.0	0	7.9	40S	46	69
1017	QYT-2049	2.3	5MS	5	10S	5.0	20S	24.3	60S	35	69
1018	QYT-2050	6.6	20MS	0	R	0.0	0	6.2	20MS	35	78
1019	RWP1057	11.3	40MS	2	10S	1.3	5S	7.7	30MS	46	78
1020	RWP1097	20.9	60S	8.1	40S	0.0	0	10.9	20S	45	89
1020A	Infector	78.6	100S	76	100S	80.0	100S	74.3	80S	78	89
1021	RWP1104	7.6	20S	2.4	10MS	11.3	40S	10.8	40S	46	79
1022	RWP1148	1.7	10MR	0.8	10MR	2.5	10S	8.3	20S	56	78
1023	RWP1155	0.7	10MR	0.9	10MR	2.5	10S	11.6	20S	56	79
1024	LBP2020-11	7.1	20S	2.6	15MS	2.5	10S	5.7	20S	45	77

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
1025	LBP2020-20	0.4	5MR	1.7	10MS	3.8	10S	17.1	40S	45	68
1026	LBP2020-21	4.6	20S	6.2	30S	2.5	10S	11.4	40S	46	68
1027	DWAP2020-10	7.4	20MS	8.6	20S	1.3	5S	13.6	40S	45	69
1028	DWAP2020-15	13.9	40S	1.3	15MR	0.0	0	21.7	60S	35	46
1029	DWAP2020-22	5.4	20MS	2.8	20MR	0.0	0	6.5	20S	46	69
1030	DWAP2020-27	6	20S	0.8	10MR	6.3	20S	4.5	20MS	45	77
1031	PBS-PYT-IR-2020-01	0.3	5MR	5.4	10S	5.0	20S	12.5	30MS	46	69
1032	PBS-PYT-IR-2020-12	7.5	30S	9.7	40S	1.3	5S	32.3	60S	45	69
1033	PBS-PYT-IR-2020-13	6.6	20MS	3.7	10S	5.0	20S	7.3	20S	45	68
1034	PBS-PYT-IR-2020-32	20.9	80S	13.2	40S	10.0	20S	7.9	20S	46	68
1035	PBS-PYT-IR-2020-35	14.6	40S	7.2	20S	0.0	0	7.7	20S	46	69
1036	QYT-2034	13.1	20S	7.2	20S	1.3	5S	6.9	20S	46	57
1037	QYT-2036	4.7	20MS	0.4	5MR	0.0	0	2.6	10MS	34	47
1038	QYT-2038	7.9	20S	4	20MS	12.5	40S	7.1	20MS	34	78
1039	QYT-2041	6.9	20MS	2.4	10S	2.5	10S	18.3	40S	34	57
1040	QYT-2048	8	20MS	4.4	20S	2.5	10S	12.4	60S	34	57
1040A	Infector	78.6	100S	76	100S	80.0	100S	74.3	80S	78	79
1041	QYT-2073	3.4	10MS	2.4	10MS	5.0	20S	29.4	60S	35	57
1042	RWP1008	5.1	10MS	4.8	20MS	10.0	40S	6.9	20S	46	69
1043	RWP1103	17.1	40S	3.7	15MS	2.5	10S	10.1	40MS	46	69
1044	RWP1109	8.1	20MS	2.6	10MS	0.0	0	14.6	40S	46	79
1045	RWP1123	6.3	20S	1.2	10MR	0.0	0	8.3	20S	46	67
1046	LBP2020-28	4.6	20MS	2	5MS	2.5	10S	4.1	10S	34	57
1047	LBP2020-37	34.3	80S	0.2	TMS	0.0	0	16.7	40MS	36	69
1048	LBP2020-40	18.9	40S	1.2	5MS	1.3	5S	1.3	5S	35	58
1049	LBP2020-50	5.7	20MS	0	R	0.0	0	7.7	20MS	56	78
1050	LBP2020-51	12	40MS	1.6	5MS	1.3	5S	6.2	20S	45	79
1051	LBP2020-52	23.3	60S	4	20MS	0.1	TR	14.3	40MS	46	79
1052	DWAP2020-40	18.3	40S	1.4	15MR	6.3	20S	25	60S	45	79
1053	DWAP2020-42	30	60S	0.8	10MR	0.0	0	14.7	40S	45	78
1054	DWAP2020-49	10	40S	1.7	10MS	1.0	5MS	4.5	20MS	46	78
1055	DWAP2020-50	19.3	40S	1.8	5MS	0.0	0	8.9	20S	35	69
1056	DWAP2020-51	7.5	20S	2.8	15MR	0.0	0	4	10S	35	58
1057	DWAP2020-52	3.7	10S	2.4	10MS	0.0	0	3.8	20MS	45	57
1058	PBS-PYT-LS-2020-01	12.1	20S	2.6	15MS	0.0	0	16.1	40S	47	69
1059	PBS-PYT-LS-2020-03	4.9	10MS	3.2	20MS	0.0	0	6.7	20MS	56	89
1060	PBS-PYT-LS-2020-06	4	20MR	0.4	5MR	0.0	0	24.6	60S	46	79
1060A	Infector	81.4	100S	68	100S	75.0	80S	75.7	80S	78	79
1061	PBS-PYT-LS-2020-10	8	40S	11.2	20S	16.0	60S*	30	60S	45	78
1062	PBS-PYT-LS-2020-12	1	10MR	2.4	10MS	1.0	5MS	0.6	5MS	46	79
1063	QYT-2051	5.8	20MS	13.6	20S	14.0	40S	21.1	40S	45	79
1064	QYT-2061	4.9	20MS	9.4	20S	28.0	40S	8.7	20S	45	89
1065	RWP1063	12.9	40S	1.7	10MS	5.0	20S	21.4	40S	46	79
1066	RWP1067	5.9	20S	1.7	5MS	0.0	0	6.8	20MS	56	89
1067	RWP1071	8.7	40S	0.9	10MR	1.3	5S	13	40S	46	79
1068	RWP1076	9.7	40S	4.4	15MS	0.0	0	10.7	20S	45	79
1069	RWP1078	11.6	20S	3.3	20MS	1.3	5S	6.7	30S	56	68
1070	RWP1090	7.9	20S	3.3	15MS	0.0	0	18.3	40S	57	79
1071	RWP1107	12	40S	2.4	15MS	1.3	5S	2.6	5S	45	68
1072	RWP1131	7.3	20S	3.4	10MS	7.5	20S	3.4	10S	46	68
1073	LBP2020-55	6.5	40MS	4.4	10S	10.0	20S	9.1	20S	35	47
1074	LBP2020-56	10	40MS	0.8	5MS	0.0	0	3.9	10S	46	58
1075	LBP2020-57	14.4	40S	8.4	20MS	20.0	40S	1.9	10MS	46	58
1076	LBP2020-61	6.4	20S	1.2	15MR	16.3	60S*	1.3	5S	46	56
1077	LBP2020-63	5.9	20S	0.8	10MR	0.0	0	0.6	5MS	46	68
1078	DWAP2020-60	3	20S	8.4	30S	5.0	20S	10.6	20S	56	69

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
1079	DWAP2020-63	2.9	10MS	3.4	15MS	0.0	0	19.4	40S	46	68
1080	DWAP2020-73	9	20S	1.6	10MS	1.3	5S	7	20MS	56	79
1080A	Infector	81.4	100S	76	100S	75.0	100S	77.1	80S	78	79
1081	PBS-PYT-RI-2020-02	1.4	10MR	2.1	5MS	0.0	0	41.4	60S	45	78
1082	PBS-PYT-RI-2020-09	11.4	20S	6.9	30S	5.0	20S	16.4	40S	46	78
1083	PBS-PYT-RI-2020-18	6.1	40MS	0.8	5MR	0.0	0	7.6	40S	45	78
1084	QYT-2004	8.9	20S	10.9	30S	5.0	20S	29.3	60S	46	99
1085	QYT2008	1	5S	0.4	5MR	0.0	0	4.5	10S	45	57
1086	QYT-2009	2.3	5S	1.3	15MR	5.0	20S	32.9	60S	45	57
1087	QYT-2011	15.4	60S	0.4	5MR	0.0	0	7.8	20S	46	79
IWBR (C N Mishra)											
1088	CRP 2	3.3	10MS	2.4	10MS	0.0	0	20.6	40S	46	68
1089	CRP 3	3	10MS	2.4	15MS	0.0	0	23.1	40S	45	68
1090	CRP 7	6	20S	1.6	10MS	2.5	10S	17.6	40S	35	68
1091	CRP 8	6.9	20MS	4.8	20S	2.5	10S	9.4	20S	35	69
1092	CRP 9	3.8	20MS	2.5	15MS	2.5	10S	16	40S	45	69
1093	CRP 11	12	20S	2	10MS	2.5	10S	12.3	40S	46	69
1094	CRP 14	22	80S	13.2	40S	25.0	40S	10.1	20S	46	79
1095	CRP 16	22.9	80S	10.8	20S	12.5	40S	26.9	60S	46	57
1096	CRP 18	11	40MS	20	40S	1.3	5S	40	60S	45	68
1097	CRP 19	5.4	20MS	2.8	10S	0.0	0	32.6	60S	46	78
1098	CRP 28	4.5	20MS	7.2	20MS	2.5	10S	10.9	20S	56	78
1099	CRP 30	11.4	20S	30.8	80S	12.5	40S	15.9	40S	56	89
1100	CRP 33	4.7	20MS	6.4	20S	5.0	10S	26.9	40S	35	57
1100A	Infector	75.7	100S	72	100S	80.0	100S	68.6	80S	68	78
1101	CRP 37	12.7	20S	12.4	20S	10.0	40S	20	40S	56	68
1102	CRP 41	11.7	20S	14.8	20S	25.0	60S	29.7	60S	46	68
1103	CRP 45	7.5	20MS	3.4	15MS	10.0	40S	36.6	60S	56	68
1104	CRP 47	12	60MS	4	10MS	10.0	40S	32.6	60S	46	68
IWBR (Satish Kumar)											
1105	BRNS 1	4.3	10S	0.8	5MS	0.0	0	13.7	40S	46	79
1106	BRNS 2	7.7	40S	5.8	10MS	10.0	40S	24.9	60S	45	57
1107	BRNS 3	19.7	40S	3.2	20MS	1.3	5S	30.6	60S	35	57
1108	BRNS 4	14.3	40MS	9.2	20S	12.3	40S	17.1	40S	46	79
1109	BRNS 5	8.9	40S	0.8	5MR	1.3	5S	7.4	20MS	46	79
1110	BRNS 6	4.6	20MS	0.4	5MR	5.0	20S	7.5	20MS	46	77
1111	BRNS 7	14.6	40S	9.2	20MS	10.0	40S	16.3	40S	56	79
1112	BRNS 8	9.3	40MS	3.2	15MS	5.0	20S	16.4	40S	56	68
1113	BRNS 9	13.3	40S	1.6	20MR	5.3	20S	10.3	40MS	56	77
1114	BRNS 10	9.2	40S	0.4	5MR	0.0	0	11.3	20S	56	68
1115	BRNS 11	15.4	60S	0.4	5MR	1.3	5S	12.4	20S	45	68
1116	BRNS 12	10.3	20S	4.1	20MS	7.5	20S	10.9	20S	56	68
1117	BRNS 13	11.1	20S	7.1	30S	5.0	10S	42.9	80S	34	57
1118	BRNS 14	13.4	40S	6	15MS	12.5	40S	17.2	40S	46	79
1119	BRNS 15	11.3	40MS	2.5	10MS	3.8	10S	26.6	60S	56	79
1120	BRNS 16	14	40S	2.6	10MS	11.3	40S	18.9	60S	56	89
1120A	Infector	78.6	100S	72	100S	75.0	80S	74.3	80S	78	79
1121	BRNS 17	18.3	60S	2	5S	10.3	40S	20.7	40S	56	68
1122	BRNS 18	14.3	20S	6.4	30MS	10.0	40S	19.3	40S	45	79
1123	BRNS 19	13.7	20S	6.6	20MS	10.0	40S	25.1	40S	56	79
1124	BRNS 20	8.6	40S	3.4	10MS	1.0	5MS	36.1	60S	34	56
1125	BRNS 21	12.6	40S	2.3	15MR	11.3	40S	20.1	40S	46	57
1126	BRNS 22	12.6	20S	6.4	20MS	2.5	10S	18.7	60S	45	68
1127	BRNS 23	15.7	40S	9.4	20S	6.3	20S	17.7	60S	46	79
1128	BRNS 24	16.9	60S	6.1	20S	9.0	20S	18.6	60S	45	78
1129	BRNS 25	16.6	40MS	4.8	15MS	2.3	5S	20.6	40S	45	78

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
1130	BRNS 26	7.3	20S	3.6	10S	1.3	5S	12	20S	46	78
1131	BRNS 27	10.3	30S	2.7	20MR	0.0	0	26	40S	56	78
1132	BRNS 28	0.9	10MR	0.8	5MS	0.0	0	43.7	60S	34	68
1133	BRNS 29	21.4	60S	0.1	R	0.0	0	24.7	60S	35	47
1134	BRNS 30	5	20MS	4.8	20MS	0.0	0	11.7	40MS	46	78
1135	BRNS 31	7.1	20S	4.4	20MS	0.0	0	18.6	60S	46	79
1136	BRNS 32	10.1	20MS	2.2	5S	2.5	10S	24.3	60S	46	79
1137	BRNS 33	9.1	20S	6.2	20MS	1.3	5S	23.6	60S	57	79
1138	BRNS 34	11.8	20S	5.1	20MS	0.0	0	25	60S	56	89
1139	BRNS 35	7.8	20S	1.8	5S	0.0	0	21.9	60S	56	89
1140	BRNS 36	12.7	40MS	4.5	20MS	0.0	0	13.1	40MS	56	89
1140A	Infector	75.7	100S	76	100S	80.0	100S	77.1	80S	68	78
1141	BRNS 37	15.5	40MS	4	20S	2.5	10S	24.3	60S	45	89
1142	BRNS 38	11.4	30MS	4.9	20MS	1.3	5S	22.9	40S	56	89
Supreme breeders											
1143	Supreme 1122	16.3	40S	8.9	40S	0.0	0	7	20MS	46	58
QCWBN											
1144	PBS 01	6.6	20S	1.2	10MR	0.0	0	5.1	20MS	46	69
1145	PBS 02	1.5	15MR	1.7	10MS	0.0	0	2.1	10MS	46	79
1146	PBS 03	23	80S	0.9	10MR	0.0	0	16.6	60S	46	69
1147	PBS 04	2.7	10MS	10.6	20MS	15.5	60S*	6.3	20S	36	69
1148	BNSR 8	9.5	40S	2	15MR	2.5	10S	35.4	60S	46	68
1149	BNSR 9	6.3	20S	4.2	20S	5.0	20S	29	60S	46	89
1150	NEQ 2021-1	2.4	10MS	0.9	5MR	1.8	5S	22.3	40S	46	57
1151	NEQ 2021-2	6.9	40S	0.5	5MR	0.0	0	26.6	40S	46	57
1152	RWP 1216	3.3	20MS	0.1	TMR	5.0	20S	0.7	5MS	45	57
1153	RWP 1174	6	40S	0	R	0.1	TR	2.6	5S	46	58
1154	QLD 124	12	20S	0.2	TMR	5.0	20S	11.7	30S	46	68
1155	QLD 125	6.2	20S	2.4	15MS	0.0	0	27.1	40S	57	77
1156	RAJ 4238	1.1	5S	2.4	10S	0.0	0	57.1	80S	56	77
1157	RAJ 4083	2.3	10S	8.4	20S	7.5	20S	41.1	80S	57	78
1158	MACS 6847	11.3	40S	3.7	10S	1.3	5S	53.7	80S	57	78
1159	MACS 6846	0.7	5MR	0.9	10MR	0.0	0	16.9	40S	56	78
1160	MACS 6849	11.4	40MS	2.4	15MS	0.0	0	6.3	20MS	45	57
1160A	Infector	81.4	100S	76	100S	75.0	80S	74.3	80S	78	78
1161	MACS 6848	11.7	60S*	4.8	20MS	0.0	0	11.4	40S	46	68
1162	MACS 6845	18.1	60S	4.5	20MS	0.0	0	47.6	80S	45	68
1163	AKDW 4773	6.9	40S	0.6	5MR	0.0	0	0.9	5MS	46	89
1164	AKDW 4781	14.6	40S	31.2	60S	25.0	40S	37.7	80S	46	57
1165	UASQ 332	0.6	5MS	8.8	20MS	6.5	20MS	47.3	80S	46	99
1166	MP 3564	3.6	20MS	3.6	10MS	12.5	40S	40.9	80S	57	79
1167	MP 3562	9.8	30S	21.6	40S	20.5	40S	54.3	80S	46	58
1168	MP 3340	0.9	5S	8.4	20MS	8.0	20S	37.6	80S	67	89
1169	GW 2021-1017	0.8	5S	0.5	5MR	2.5	5S	41.7	80S	45	57
1170	GW 2021-1026	1	5S	2.4	20MR	0.0	0	16.9	60S	57	89
1171	GW 2021-1020	0.1	TMR	21.6	60S	7.5	20S	40.9	80S	57	89
1172	GW 2021-1018	0.6	10MR	0.1	TMR	1.3	5S	48.6	80S	56	89
1173	GW 2021-1022	0.1	TMR	0.1	TMR	0.0	0	48.6	80S	57	79
1174	CG 2116	1.3	5S	0.9	5MS	2.5	10S	45.1	80S	57	78
1175	CG 2118	14.9	30S	33	100S	5.0	20S	30.9	80S	46	79
1176	CG 2117	4.6	20S	13.6	30S	10.0	20S	31.1	60S	46	79
1177	UP 3083	3.5	10MS	2.5	15MS	0.0	0	9.3	20S	45	57
1178	UP 3086	10	20S	1.6	5MS	1.3	5S	20	60S	45	57
1179	UP 3088	7.4	20S	0.1	TMR	0.0	0	23.7	60S	45	57
1180	WBL 1626	10.9	60S*	2.4	20MR	5.0	20S	33	60S	46	79
1180A	Infector	81.4	100S	72	80S	62.5	80S	74.3	80S	68	78

IPPSN No.	Entry	Stem rust		Leaf rust (S)		Leaf rust (N)		Yellow rust		Foliar blight	
		ACI	HS	ACI	HS	ACI	HS	ACI	HS	Avg.	HS
1181	WBL 1628	6.3	20MS	1.7	10MS	1.3	5S	28.7	60S	56	78
1182	WBL 1627	6.5	20MS	0.6	5MR	2.5	10S	26.4	60S	56	89
1183	WBL 1630	5.9	10S	4.9	20S	5.0	10S	15	40S	35	89
1184	WBL 1629	9.6	30S	1.6	10MS	0.0	0	13.7	40S	56	79
1185	QBI 21-1	4.4	20MS	1.6	5MS	1.3	5S	21.4	60S	35	58
1186	QBI 21-5	13.2	40S	4.9	20S	6.3	20S	28.6	60S	35	57
1187	QBI 21-2	4.6	10S	3.2	20MR	1.3	5S	37.1	60S	35	58
1188	QBI 21-3	13.3	40S	0.6	5MR	3.8	10S	40.7	60S	46	58
1189	QBI 21-4	13.6	40S	16	20S	12.5	40S	29.1	60S	46	77
1190	INDB 2121	0.6	10MR	0.5	5MR	0.0	0	46.1	80S	57	79
1191	IDW 2116 (d)	2	10MS	0.9	5MR	1.0	5MS	11.6	40S	46	79
1192	INDB 2120	0.3	5MR	0.8	10MR	0.0	0	51.4	80S	57	89
1193	INDB 2119	0.6	10MR	1.6	10MS	0.0	0	31.1	80S	67	89
IWBR											
1194	RWP-1004	3.3	20MS	4.4	20MS	0.0	0	9.9	30S	57	79
1195	RWP-1005	7.3	40MS	10.4	20S	12.5	40S	15.7	40S	56	89
1196	RWP-1175	7.6	40S	4.8	10S	2.5	10S	5.6	20MS	56	79
1197	RWP-1181	12.6	40S	0.1	R	0.1	TR	15.7	40S	46	68
1198	NEST-21-1	14.7	40S	0.1	TMR	0.0	0	12.3	30S	46	68
1199	NEST-21-2	13.8	40S	1.6	10MS	0.0	0	9.1	20S	35	57
1200	NEST-21-3	0.7	10MR	2.6	20MR	12.5	40S	15.7	60S	45	68
1200A	Infector	75.7	100S	72	80S	75.0	80S	74.3	80S	68	78
1201	NEST-21-4	4.1	10S	0.4	5MR	0.0	0	28	60S	46	79
1202	QYT 2101	6.6	20MS	0.8	5MS	12.6	40S	10.7	40MS	46	77
1203	QYT 2102	13	40S	2.4	5MS	5.0	20S	9.9	20S	57	79
1204	QYT 2103	6	20MS	2.4	10MS	0.0	0	7	20MS	56	79
1205	DWAP-2162	12	40MS	1.3	10MR	2.5	5S	23.4	60S	35	79
1206	DWAP-2163	2.7	20MS	0.5	5MR	15.0	60S*	10.1	40S	45	57
1207	DWAP-2164	2.7	20MR	16	40S	17.5	40S	34.3	60S	56	67
1208	DWAP-2165	14.1	40S	2.4	15MS	1.3	5S	28.6	60S	35	58
1209	PBS-ST-5-21-1	4.9	10S	3.3	20MS	1.3	5S	13.6	60S	46	69
1210	PBS-ST-5-21-2	3.8	20MS	2.8	10MS	6.3	20S	20.9	60S	46	68
1211	PBS-ST-5-21-3	12.1	30S	27.2	40S	12.5	40S	28	60S	46	79
1212	PBS-ST-5-21-4	4.7	10S	2.2	15MR	5.0	10S	9.1	40S	46	57
1213	BSP 2001	7	20MS	0.8	5MS	0.0	0	27.1	60S	46	56
1214	BSP2002	6.4	20MS	0.9	5MS	0.0	0	23.7	40S	36	69
1215	BSP2003	16.1	40S	3.5	15MS	0.3	TS	7.9	20MS	46	69
1215A	Infector	80	100S	80	100S	75.0	80S	77.1	80S	78	79

Abbreviations: ACI = Average Coefficient of Infection, HS = Highest Score, Avg. = Mean, NS = No seed, NG = No germination, *Indicates high rust score (more than 40S) at one location only.

Stem rust: Data of Dharwad have not been considered due to low disease pressure in infector.

Leaf rust (S): Data of Vijapur, Powarkheda and Dharwad have not been considered due to low disease pressure in infector and no sufficient disease spread in lines

Leaf rust (N): Data of Durgapura, Ayodhya and Sabour have not been considered due to low disease pressure in infector and no sufficient disease spread in lines. Coochbehar data also found erratic as point out by cooperators hence deleted after through discussion.

Yellow rust: Data of Malan have not been considered due to low disease pressure in infector and no sufficient disease spread in lines.