

Table: Seedling response of AVT I and II against the pathotypes of *Puccinia striiformis tritici* (wheat yellow rust) during 2020-21 at ICAR-IIWBR, RS, Shimla

S. No.	Variety/line	TPATHOTYPES																Resistance/ Yr genes
		46S119	110S119	238S119	110S247	78S84	110S84	T	P	111S68	79S68	79S4	14S64	6S0	7S0	K	L	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
1	VL2041	R	S	MS	R	R	R	MS	R	R	R	R	R	R	R	R	R	Yr2+
2	HS562 (C)	S	S	MS	S	R	R	S	S	R	R	R	R	R	R	S	R	YrA+
3	HPW349 (C)	S	S	S	S	R	R	S	S	R	R	R	R	R	R	S	S	Yr2+
4	HS507 (C)	R	R	MS	R	R	R	R	R	R	R	R	R	R	R	R	R	Yr9+
5	VL907 (C)	R	S	S	R	R	R	R	R	R	R	R	R	NG	R	R	R	Yr9+
6	WH1105 (C)	R	MS	S	R	R	R	R	R	R	R	R	R	R	R	R	R	Yr2+
7	DBW187 (C)	R	S	S	S	R	MS	S	S	S	R	R	R	R	R	S	MS	Yr2+
8	HD3349	R	S	S	R	R	R	MR	R	R	R	R	R	R	R	R	R	YrA+
9	PBW876 ^B	R	S	S	S	R	MS	MS	S	R	R	R	R	R	R	S	S	Yr2+
10	HD3406 ^M	R	S	S	S	R	MS	S	MR	R	R	R	R	R	R	MS	R	Yr2+
11	DBW222 (C)	R	S	S	R	R	S	R	R	MS	R	R	R	R	R	R	R	Seed
12	DBW313 [#]	R	S	MS	R	R	R	R	R	R	R	R	R	R	R	R	R	Yr2+
13	HD2967 (C)	R	S	S	S	R	MS	S	MS	MS	S	R	R	R	R	S	S	Yr2+
14	PBW826	R	S	S	S	R	MS	R	S	R	R	NG	R	NG	R	MS	R	Yr2+
15	RAJ4548 [#]	MS	S	S	S	MS	S	S	S	MS	S	S	R	R	R	S	S	-
16	HD3354	S	S	S	S	MS	S	S	R	R	MS	S	R	R	R	S	R	Yr2+
17	WH1283	S	S	S	S	R	R	S	S	R	R	R	R	R	R	S	S	Yr2+
18	HD3086 (C)	MS	MS	MS	S	MR	R	S	MS	R	R	MX	R	R	R	S	S	Yr2+
19	JKW261	R	S	S	MR	MS	MS	R	R	R	R	R	S	S	S	S	S	-
20	WH1124 (C)	R	S	R	R	S	MR	R	R	S	R	R	R	R	R	R	R	Yr2+
21	PBW771 (C)	R	S	MR	R	MS	R	R	R	R	R	R	R	R	R	R	R	Yr9+
22	HD3059 (C)	R	S	S	R	R	R	R	R	MS	R	R	R	R	R	MS	R	Yr2+
23	PBW834	S	MS	S	R	R	R	MS	R	R	R	R	R	R	R	S	R	YrA+
24	DBW173 (C)	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	Yr9+
25	HUW838 ^{#*}	NG	S	NG	R	R	R	MS	R	R	NG	R	R	R	NG	MS	R	Yr2+
26	NW7096	R	S	S	S	R	R	R	R	R	R	R	R	R	R	R	R	Yr2+
27	DBW321	MS	S	S	MS	R	R	MS	MR	R	R	R	R	R	R	S	R	YrA+
28	K1910	MS	MS	S	S	R	R	MS	R	S	R	R	R	R	R	R	R	Yr2+
29	HII654	MR	S	S	S	R	MS	S	MS	MS	R	R	R	R	R	S	S	Yr2+
30	NIAW3170 (C)	S	S	S	S	S	S	S	MS	S	MS	S	S	S	MS	S	S	-
31	PBW838	S	S	S	S	R	R	S	MR	R	S	R	R	R	R	S	S	Yr2+
32	DBW296*	S	S	S	S	MR	R	S	MS	R	R	R	R	S	MS	S	S	-
33	HII628 (C)	S	S	S	S	S	MS	S	S	R	S	R	S	R	R	S	S	Yr2+
34	HD3369	MS	S	S	S	MR	MS	S	S	MS	MS	R	S	S	R	S	S	-
35	WH1142 (C)	S	S	MS	S	MR	R	R	R	R	R	R	R	R	R	R	R	Yr9+
36	UP3062	S	S	S	R	NG	MS	R	R	R	R	R	R	R	R	R	R	Yr9+
37	HD3368	S	S	S	S	R	S	S	S	S	S	R	R	R	R	S	S	Yr2+
38	HD3043 (C)	R	S	S	R	R	R	R	R	R	R	R	R	R	R	R	R	Yr9+A+
39	PBW644 (C)	R	MS	R	R	R	MS	R	R	MR	MS	MX	R	R	R	R	S	Yr2+
40	HII653	S	S	S	S	MS	MS	S	MS	MS	R	R	R	R	R	S	S	Yr2+

41	PBW848	R	S	S	S	R	S	S	MS	MS	R	R	R	R	R	S	R	Yr2+
42	HD2733 (C)	S	S	S	R	S	S	R	R	S	R	R	R	R	R	R	R	Yr9+18+
43	HD3249 (C)	MR	S	S	S	MR	MS	S	S	R	MS	R	R	R	R	S	S	Yr2+
44	DBW187 (C)	R	S	S	S	R	MS	MS	S	MS	R	R	R	R	R	MS	MS	Yr2+
45	HD3406 ^M	R	S	S	S	R	MS	S	MR	R	R	R	R	R	R	MS	R	Yr2+
46	HD3411 ^M	S	S	S	S	S	S	S	MS	MR	R	R	R	R	R	MS	R	Yr2+
47	DBW39 (C)	R	S	S	R	R	S	R	R	R	R	R	R	R	R	R	R	Yr9+
48	HD2967 (C)	S	S	S	S	R	S	S	S	MS	S	R	R	R	R	S	S	Yr2+
49	PBW826 [#]	R	S	S	S	R	MS	R	MS	R	R	R	R	R	R	MS	R	Yr2+
50	HD3086 (C)	MS	S	S	S	MR	R	S	MS	R	R	R	R	R	R	S	S	Yr2+
51	DBW317	R	MS	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
52	DBW318	S	S	S	MS	MR	S	S	MS	MS	MS	R	R	R	R	R	S	Yr2+
53	PBW835	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Resistant
54	HI1563 (C)	R	S	S	R	MR	MS	R	R	MS	R	R	S	R	R	MR	MR	Yr2+
55	DBW107 (C)	S	S	S	R	R	MS	R	R	R	R	R	R	R	R	R	R	Yr9+
56	PBW834	S	S	S	R	R	R	MS	R	R	R	R	R	R	R	S	R	YrA+
57	UP3060	R	S	S	S	R	S	S	S	S	R	R	R	R	MX	R	S	MX
58	HD3118 (C)	S	S	S	S	S	MS	S	S	R	R	S	R	R	R	S	R	Yr2+
59	HI1621 (C)	S	S	S	S	S	S	S	S	MS	MR	R	S	R	R	S	R	Yr2+
60	DBW316	R	MS	S	R	R	R	R	R	R	R	R	R	R	R	R	R	Yr9+A+
61	PBW833	MR	S	S	R	R	MS	MR	R	MS	R	R	R	R	R	MR	R	Yr2+
62	HD3360	S	S	S	S	R	R	MS	S	MS	R	R	R	R	R	S	R	Yr2+
63	HI1653	S	S	S	S	MS	MS	MS	S	MS	R	R	R	R	R	S	S	Yr2+
64	DBW322	S	S	S	S	R	R	MS	S	R	R	R	R	R	R	S	S	YrA+
65	HI1612 (C)	S	S	S	S	MR	MS	S	MS	R	MS	R	R	R	R	S	R	Yr2+
66	DBW252 (C)	R	S	S	R	R	R	R	MS	R	R	R	R	R	R	S	R	Yr2+
67	DBW321	S	S	MS	S	R	R	S	MR	R	R	R	R	R	R	S	R	YrA+
68	HD3368 [#]	S	S	S	S	R	S	S	S	S	S	R	R	R	R	S	MS	Yr2+
69	HI1654	MS	S	S	S	R	S	MS	S	S	R	R	R	R	R	S	S	Yr2+
70	HD3293(I) (C)	R	S	MS	R	R	MS	R	R	R	R	R	R	R	R	R	S	Yr2+
71	WH1281	MS	S	S	S	R	MS	S	S	S	S	R	R	R	R	S	R	Yr2+
72	PBW848 [#]	R	S	S	S	R	MS	S	MR	S	R	R	R	R	R	S	R	Yr2+
73	HD3171 (C)	R	MS	R	R	R	R	R	R	R	R	R	R	R	R	MR	R	Yr2+
74	HD3369 [#]	S	S	S	S	MR	S	S	S	S	MS	R	S	S	R	S	S	-
75	K1317 (C)	R	S	MS	MS	R	R	MR	R	R	R	R	R	R	R		R	seed
76	UP3062	S	S	MS	R	MS	MS	R	R	R	R	R	R	R	R	R	R	Yr9+
77	HI8833(d) ^M	S	S	R	R	R	MS	R	R	R	MS	MX	R	S	R	R	R	-
78	GW322 (C)	MS	S	S	S	S	S	S	S	MS	MS	S	MS	S	MS	S	S	-
79	MP3535	R	S	S	R	R	S	MR	R	S	R	R	R	R	R	S	R	Yr2+
80	GW523	MS	S	S	S	S	S	S	S	MS	MS	S	MS	S	MS	S	S	-
81	GW513*	MR	S	S	R	MS	S	R	R	MS	MS	S	S	R	MR	R	S	-
82	HI1636*	S	S	S	S	MS	S	S	MS	MS	MS	S	S	R	MS	S	S	-
83	HI8832(d) ^M	S	S	MR	S	R	MS	R	MS	R	R	R	R	S	S	S	MR	-
84	MACS6768	S	S	S	S	S	S	R	R	R	R	R	R	R	R	R	R	Yr9+
85	HI1544 (C)	MS	S	S	S	MR	S	S	S	MS	S	S	S	S	MS	MS	MR	-
86	HI1667 ^B	MS	S	S	S	S	S	S	MS	S	S	S	MS	R	S	MS	MS	-
87	HI8498(d) (C)	S	S	R	MR	MS	MS	R	R	R	R	S	R	S	R	MS	MR	-
88	HI8713(d) (C)	S	S	MS	S	S	S	R	MS	S	R	S	S	S	NG	MS	R	-
89	HI1650	MS	S	S	R	S	S	R	R	MS	R	R	R	R	R	R	R	-
90	MP4010 (C)	S	S	S	S	S	S	S	S	S	MS	S	S	R	R	S	S	Yr2+

91	HD2864 (C)	S	S	S	S	S	S	S	MR	S	S	R	S	R	R	S	S	Yr2+
92	MP3336 (C)	MR	S	S	MS	R	S	S	R	MR	MS	R	S	MR	R	R	MS	-
93	HD2932 (C)	S	S	S	S	S	S	S	MS	S	MS	S	R	R	R	S	S	Yr2+
94	HI1634(I) (C)	S	S	S	R	S	S	R	R	R	R	R	R	R	R	R	R	Yr9+
95	HD3407 ^M	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Resistant
96	CG1029(I) (C)	S	S	S	S	MS	S	S	S	R	R	R	S	R	R	S	R	Yr2+
97	HI8823(d)*	S	S	MS	MS	R	MS	MS	S	R	R	R	S	S	R	MR	R	-
98	GW528	MR	S	S	R	R	S	R	R	R	MS	R	R	R	R	R	R	Yr2+
99	DDW47(d) (C)	S	S	S	R	R	S	R	MS	R	R	R	S	R	S	R	R	-
100	DBW326	R	R	R	S	R	R	MS	R	R	R	R	R	R	R	R	R	Yr2+
101	UAS475(d)	R	MS	MR	R	R	R	R	R	R	R	R	S	R	R	R	R	Yr2+
102	HI8627(d) (C)	S	MS	R	R	S	MS	R	R	R	R	R	S	S	R	MR	R	-
103	NIAW3851	R	R	S	R	MR	R	S	S	R	R	R	S	R	R	S	R	Yr2+
104	HI8830(d)	R	S	S	MS	S	S	R	S	S	R	R	MS	S	S	R	S	-
105	CG1036	R	S	MS	R	S	S	R	S	MS	R	R	S	R	R	MS	MS	-
106	HI1655	R	S	S	S	S	S	MS	S	S	R	R	S	R	R	S	R	Yr2+
107	DBW110 (C)	R	S	S	S	R	S	S	S	MS	MS	NG	S	R	R	S	S	Yr2+
108	MP3288 (C)	MS	S	S	MS	S	S	S	MS	S	MS	R	S	R	S	S	R	-
109	DDW55(d)	S	S	S	S	S	S	S	MS	S	S	S	S	S	R	S	S	-
110	WHD965(d)	S	S	S	R	S	MS	MS	S	R	R	R	S	MR	R	R	R	-
111	UAS428(d) (C)	S	S	S	S	S	S	S	MS	S	MS	S	S	R	R	S	S	Yr2+
112	HI8826(d)	S	S	MS	S	S	S	R	MS	R	R	R	S	S	S	R	S	-
113	MACS4100(d)	S	MS	S	S	S	S	S	S	S	MS	S	S	S	R	S	S	-
114	MACS3949(d) (C)	S	S	MR	R	S	MR	MS	R	R	R	R	S	S	R	R	R	-
115	DDW53(d)	MS	S	MS	MS	S	S	R	R	S	S	MR	S	R	R	R	S	Yr2+
116	NIDW1345(d)	MS	S	S	MS	S	MS	R	R	MS	R	MS	S	R	R	MS	S	-
117	MACS6222 (C)	S	S	S	R	S	S	R	R	R	MS	R	R	R	R	R	R	Yr2+
118	MACS4106(d)	MS	S	S	MS	MR	MS	R	R	R	R	R	S	R	R	R	S	Yr2+
119	NIDW1348(d)	MS	S	S	S	S	S	S	S	MS	R	R	S	S	R	MS	S	-
120	HI8828(d)	MS	S	R	R	MS	S	MS	R	R	R	R	S	R	R	R	R	Yr2+
121	GW322 (C)	S	S	S	S	S	S	S	S	MS	MS	S	S	S	MS	S	S	-
122	HI8827(d)	S	S	MS	S	S	S	R	S	R	R	R	S	S	S	MR	S	-
123	DDW48(d)(I) (C)	MS	S	S	R	R	S	R	R	R	R	R	S	R	R	MS	MS	Yr2+
124	HD3090 (C)	S	S	S	R	S	S	R	R	R	R	R	R	R	R	R	R	Yr9+
125	HI1633(I) (C)	MS	S	S	R	S	S	R	R	R	R	R	R	R	R	R	R	Yr9+
126	HD2932 (C)	MS	S	S	MS	S	S	S	MS	S	MS	S	R	R	R	MS	S	Yr2+
127	RAJ4083 (C)	MS	S	S	MS	S	S	S	R	MS	R	R	R	R	R	S	MS	Yr2+
128	DBW320	MR	S	S	S	R	R	S	R	MS	R	R	R	R	S	S	MS	-
129	MACS6774	MS	S	S	MS	MS	MS	S	R	S	R	R	R	S	MS	S	S	-
130	NWS2180 [#]	R	S	S	MS	R	MS	S	R	S	R	R	R	R	R	S	R	-
131	HI1651	MR	S	S	R	R	MS	MS	R	MS	S	S	S	S	R	S	MS	-
132	MP1358*	R	S	S	S	R	S	S	R	MS	MX	S	R	S	R	S	R	-
133	MACS6755	MS	S	S	S	S	S	S	S	S	MS	S	S	S	S	S	S	-
134	HI1605 (C)	R	S	S	R	R	S	R	R	MS	R	R	R	R	R	MS	R	Yr2+
135	MACS6753	S	S	S	S	S	S	S	S	S	S	S	S	S	R	S	S	-
136	AKDW2997-16(d) (C)	S	S	S	S	S	S	S	S	S	MS	R	S	S	R	S	S	-
137	NIDW1149(d)(I) (C)	R	S	S	S	S	S	R	R	R	MS	R	S	S	R	R	NG	-
138	NIAW3170 (C)	S	S	S	S	S	S	S	S	MS	S	S	S	S	MS	S	S	-
139	UAS446(d) (C)	MS	S	S	S	R	R	MS	MS	R	R	R	S	S	R	R	MS	-
140	DBW325	S	S	S	S	MS	S	S	R	MS	S	S	R	R	R	S	S	Yr2+

141	UAS3014	S	S	S	S	S	S	S	S	S	S	S	S	R	S	S	S	R	-
142	MACS5058	MR	MS	S	MS	MS	S	MS	MR	S	R	R	S	R	R	MR	MR	Yr2+	
143	MACS6222(a) (C)	S	S	S	R	S	S	R	R	R	MS	R	R	R	R	R	R	Yr2+	
144	DDK1029 (C)	S	MS	S	S	MS	S	MS	MS	MS	MS	R	S	R	R	MS	R	-	
145	DDK1061	S	S	S	S	MS	S	S	S	S	S	S	S	S	S	MS	S	-	
146	HW1098 (C)	MR	MS	S	R	MS	MS	R	R	R	R	R	MR	R	R	R	R	Yr2+	
147	MACS5057	MS	MS	S	MS	MS	S	MS	R	MS	R	R	S	R	R	MS	MS	Yr2+	
148	DDK1060	S	MS	S	S	MS	S	MS	MS	MS	MS	R	S	S	S	MS	MS	-	
149	DBW328*	S	S	S	S	R	R	S	MS	R	R	R	R	R	R	S	S	Yr2+	
150	DBW372	MS	S	S	MS	S	MR	S	R	MS	MS	R	R	MR	R	S	S	-	
151	DBW370	S	S	S	MS	R	R	S	R	R	R	R	R	R	R	MS	R	Yr2+	
152	DBW327*	S	S	S	R	R	R	S	R	R	R	R	R	R	R	S	R	Yr2+	
153	WH1252*	MS	S	S	S	R	MR	S	S	R	R	R	R	R	R	S	S	Yr2+	
154	PBW874	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Resistant	
155	HD3410	R	S	S	R	MR	MS	S	S	S	R	R	R	R	R	S	MS	Yr2+	
156	DBW332*	R	S	S	MS	R	R	S	R	R	R	R	R	R	R	S	R	YrA+	
157	PBW873	R	MS	S	NG	R	R	R	R	R	R	R	R	R	R	MR	R	-	
158	DBW371	R	S	S	S	R	S	S	S	MS	R	R	R	NG	R	S	MS	Yr2+	
159	HD3086 (C)	S	S	S	S	MR	R	S	S	R	R	R	R	R	R	S	S	Yr2+	
160	DBW333*	R	S	S	S	R	R	S	MS	R	R	R	R	R	R	S	S	Yr2+	
161	PBW872	MS	S	S	R	R	R	S	MS	R	R	NG	R	R	R	S	R	Yr2+	
162	DBW187(I) (C)	R	S	S	MS	R	MS	S	S	MS	R	R	R	NG	NG	S	S	Yr2+	
163	WH1270(I) (C)	R	S	S	S	R	MS	S	S	S	MS	R	R	R	R	S	R	Yr2+	
164	DBW303(I) (C)	R	S	S	MS	R	MS	MS	R	R	R	R	R	R	R	MS	R	Yr2+	
165	HD3412	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Resistant	
166	DBW375	S	S	S	S	R	S	S	S	MS	MS	R	R	R	R	S	S	Yr2+	
167	DBW374	R	S	S	S	R	MS	S	R	R	R	R	R	R	R	S	R	Yr2+	
168	HD3403	MS	MS	S	R	R	S	R	R	R	R	R	R	R	R	R	R	Yr2+	
169	WH1406	R	S	S	R	R	MS	MS	R	R	R	R	R	R	R	MS	R	Yr2+	
170	HD3413	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Resistant	
171	PBW867	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Resistant	
172	UP3096	R	MS	S	R	R	R	S	R	R	R	NG	R	R	R	R	R	YrA+	
173	WH1404	R	S	S	R	MS	S	R	R	MS	R	R	R	R	R	R	R	Yr2+	
174	PBW868	R	S	S	R	R	S	S	MS	R	R	NG	R	R	R	S	R	Yr2+	
175	DBW318	S	S	S	MS	MR	S	S	MS	MS	MS	R	R	R	R	R	S	Yr2+	
176	DBW378	R	S	S	S	R	R	S	S	R	R	R	R	R	R	S	R	Yr2+	
177	WH1405	S	S	S	S	S	S	S	S	R	R	S	S	R	R	S	S	Yr2+	
178	HD3405	R	S	S	R	R	R	MS	R	R	R	R	R	R	R	MS	R	YrA+	
179	DBW377	MR	S	S	S	R	S	S	R	R	R	R	R	R	R	MS	MS	Yr2+	
180	PBW869	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Resistant	
181	PBW871	R	S	S	R	MR	MS	R	R	R	R	R	R	R	R	S	S	Yr2+	
182	HD3086 (C)	S	S	S	S	MR	R	S	S	R	MS	R	R	R	R	S	S	Yr2+	
183	DBW376	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Resistant	
184	DBW373	R	R	MS	R	R	MS	R	R	R	R	R	R	R	R	R	R	Yr2+	
185	HD3404	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	-	
186	DBW187(I) (C)	R	S	S	S	R	MS	S	S	MS	R	R	R	R	R	MS	MS	Yr2+	
187	WH1407	S	S	S	S	R	S	S	R	R	R	S	MS	S	NG	S	S	-	
188	PBW870	R	S	MS	R	R	R	R	R	R	R	R	S	R	R	R	R	Yr2+	
189	UP3095	MR	S	R	S	MS	MR	R	S	MS	MS	S	S	MX	R	S	S	-	
190	DBW368	MR	S	S	R	MR	R	MS	R	S	R	R	R	NG	R	S	R	Yr2+	

191	DBW363	R	S	S	R	R	MS	MS	MS	MS	R	R	R	R	R	R	S	Yr2+
192	DBW369	S	S	S	S	S	S	S	S	S	S	S	S	S	R	S	S	-
193	DBW367	S	S	S	S	S	MS	R	R	R	R	R	R	R	R	MS	MS	Yr2+
194	DBW364	R	S	S	MR	R	MS	S	S	S	R	R	R	R	R	S	R	Yr2+
195	Kharchia 65 (C)	S	S	S	S	S	S	S	S	S	S	S	S	R	R	S	S	-
196	DBW366	S	S	S	S	R	R	S	S	R	R	R	R	R	R	S	S	YrA+
197	KRL210 (C)	S	S	S	S	R	MR	S	MS	R	MS	R	R	R	R	S	S	Yr2+
198	DBW365	S	S	S	S	R	MS	S	S	R	MS	R	R	R	R	S	S	Yr2+
199	K1805	S	S	S	S	S	MS	S	R	S	R	R	S	R	R	MS	MX	Yr2+
200	KRL19 (C)	S	S	S	S	R	S	S	S	S	R	S	MS	S	S	MS	MS	-