

**Annexure 2. Seedling Resistance Test of AVT-II against pathotypes of black rust (*Puccinia graminis tritici*) at Shimla during 2015-16**

S. NO.	Variety/Line	PATHOTYPES																			Postulated genes		
		11	11A	15-1	21	21-1	21A-2	24A	34-1	40A	40-2	40-3	42B	117A-1	117-1	117-3	117-4	117-5	117-6	122		295	
<b>I - Northern Hill Zone</b>																							
1	HPW251(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+2
2	HS375(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+5+2+
3	HS490(C)	S	S	S	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	Sr9b+2+
4	HS507(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+
5	HS542(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
6	VL829(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+5+
7	VL892(C)	R	R	R	R	R	R	R	R	MS	R	S	R	R	R	R	R	R	R	R	R	R	Sr2+
<b>II. North Western Plain Zone</b>																							
8	DBW88(C)	S	R	R	R	R	R	R	R	MS	R	S	R	R	R	R	R	R	R	R	R	R	Sr11+2+
9	DBW90(C)	S	S	S	R	R	R	MR	R	S	S	MS	MS	R	R	MS	R	MS	R	R	MS	R	Sr2+
10	HD3043(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
11	HD2967(C)	S	R	S	R	R	R	R	R	R	S	S	R	R	R	R	R	R	R	R	MS	-	
12	HD3059(C)	S	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	Sr11+2+
13	HD3086(C)	S	S	S	R	R	R	MR	S	S	S	MS	R	R	R	MS	R	S	MR	S	S	Sr7b+2+	
14	PBW644(C)	R	R	R	R	R	R	R	R	S	R	S	R	R	R	R	R	S	R	R	R	R	Sr11+2+
15	WH1021(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+2+
16	WH1080(C)	R	R	S	R	R	R	R	R	MR	R	S	R	R	R	R	R	R	R	R	R	R	Sr9e+2+
17	WH1105(C)	MS	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	Sr11+2+
18	WH1124(C)	S	S	S	R	R	R	MS	R	S	S	MS	R	R	R	MS	R	R	R	R	R	S	Sr7b+2+
19	WH1142(I)(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+2+
<b>III. North Eastern Plain Zone</b>																							
20	HD3171	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	MR	Sr11+7b+2+
21	K1317	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
22	C306(C)	S	S	S	S	MS	MS	S	MS	S	S	S	MS	S	R	S	S	S	S	S	S	S	-
23	DBW39(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+
24	HD2733(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+2+
25	HD2888(C)	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	-
26	K8027(C)	S	R	R	R	R	R	S	R	R	R	S	S	S	S	S	MS	R	R	S	R	R	Sr11+2+
27	K0307(C)	MR	R	R	R	R	R	R	R	R	R	MR	MR	S	R	R	R	S	R	R	R	R	Sr2+
28	K1006(C)	R	R	R	R	R	R	R	R	MR	R	R	R	R	R	R	R	R	R	R	R	R	Sr8a+9b+11+
<b>IV. Central Zone</b>																							
29	HI8759(D)	MS	R	R	R	R	R	S	R	R	R	R	R	R	S	R	MR	R	R	S	R	MS	Sr11+2+

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30	HD4728(D)(I)(C)	MR	R	MR	R	R	R	S	R	R	R	MR	R	S	S	S	MS	S	S	R	R	Sr11+2+
31	HI8498(D)(C)	MS	R	R	R	R	R	S	R	R	R	S	S	S	S	MS	S	S	S	R	R	Sr11+2+
32	HI8737(D)(C)	MS	R	MS	R	R	R	S	R	R	R	S	S	S	R	S	R	R	S	S	MR	-
33	MPO1215(D)(C)	R	R	R	R	R	S	S	R	NG	R	R	MS	S	S	S	R	NG	S	R	R	Sr11+
<b>V. Peninsular Zone</b>																						
34	MACS3949(D)	R	R	MS	R	R	R	MR	R	MS	R	S	R	S	S	S	S	S	MS	R	R	Sr7b+2+
35	HI1605	S	R	R	R	R	R	R	R	S	MR	R	R	R	R	MS	R	R	R	R	R	Sr5+11+
36	AKDW2997-16 (D)(C)	S	S	MR	MS	S	MS	R	R	S	R	MR	MS	S	S	S	MR	MS	S	S	MR	Sr7b+2+
37	DBW93(C)	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	Sr31+2+
38	HD2932(C)	R	R	R	R	R	R	R	R	R	S	R	S	R	R	R	R	R	R	R	R	Sr25+2+
39	MACS6222(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+2+
40	MACS6478(C)	S	S	S	R	R	R	R	S	R	S	S	R	R	R	R	R	R	R	R	R	-
41	NI5439(C)	S	R	R	R	R	R	S	R	S	R	S	R	R	R	R	R	R	S	R	R	Sr11+
42	NIAW1415(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+2+
43	NIAW34(C)	R	R	S	R	R	R	R	S	S	R	R	R	R	R	R	R	R	R	R	R	-
44	NIDW295(D)(C)	R	R	S	R	R	R	S	R	S	R	S	R	S	S	S	R	R	S	R	R	Sr2+
45	RAJ4083(C)	R	R	R	R	R	R	R	R	R	S	S	R	R	R	R	R	R	R	MR	R	Sr11+2+
46	UAS428(D)(C)	R	MR	S	R	R	R	S	R	MR	R	S	MR	S	S	S	S	MR	S	R	R	-
47	UAS446(D)(C)	R	R	R	R	R	R	MS	R	R	R	R	R	S	S	S	MS	MS	S	R	R	Sr11+2+
<b>VI. Southern Hills Zone</b>																						
48	HW2044(C)	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	-
49	HW5216(C)	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	-
50	CoW(W)-1(C)	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG	-
<b>VII. Special Trial (MABB-IR-LS- CZ/PZ/WB)</b>																						
51	HD3209	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-
52	PBW723	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+2+
53	WB2	MR	R	S	R	R	R	R	R	R	R	S	MR	R	R	R	R	R	R	R	R	Sr7b+2+
54	DBW14(C)	MR	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	R	R	R	R	Sr2+
55	DBW71(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Sr31+5+
56	DDK1029(C)	MS	R	R	R	R	R	MS	S	R	R	S	S	S	R	R	R	R	R	S	MS	-
57	DPW621-50(C)	S	R	R	R	R	R	S	R	R	S	S	R	R	R	R	R	R	R	R	R	Sr2+
58	GW322(C)	S	R	R	R	R	R	R	R	R	R	S	R	MR	MR	R	R	MR	R	R	MR	Sr11+2+
59	HD2864(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
60	HW1098(C)	S	R	R	R	R	R	MR	R	R	R	S	MS	R	MS	MR	R	R	R	MR	MS	Sr11+2+
61	Kharchia 65(C)	S	S	S	S	R	R	R	S	S	R	S	R	S	R	S	S	S	S	S	S	-

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62	KRL19(C)	MR	R	S	R	R	R	R	R	MS	R	R	R	R	R	R	R	R	R	R	R	R	<i>Sr2+</i>
63	KRL210(C)	S	S	S	R	R	S	MR	R	S	S	R	R	R	R	MS	R	MR	R	R	R	S	<i>Sr7b+2+</i>
64	MP3336(C)	S	R	R	R	R	R	R	S	MR	R	S	R	R	MR	R	S	MS	R	R	R	S	<i>Sr2+</i>
65	PBW343(C)	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	<i>Sr31+2+</i>
66	TL2942(C)	R	R	R	R	R	R	R	MS	R	R	R	R	R	R	R	R	R	R	R	R	R	<i>Sr2+R</i>
67	TL2969(C)	R	R	R	R	R	R	R	R	R	R	MS	R	R	R	R	R	R	R	R	R	R	<i>Sr2+R</i>
68	WR544(C)	R	R	R	R	R	R	R	R	S	R	S	R	R	R	R	R	R	R	R	R	R	<i>Sr28+8a+2+</i>