

Annexure 4: Seedling Resistance Test of AVT I against pathotypes of brown rust (*Puccinia triticina*) at Shimla during 2014-2015

S.No.	VARIETY	PATHOTYPES																										Gene postulation		
		11	12	12-2	12-3	12-5	12-7	12-9	16-1	77	77-1	77-2	77-5	77-7	77-8	77-9	77-10	77-12	77A-1	104-2	104-3	104-4	104B	106	107-1	108-1	162-1		162-3	162A
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		27	28
Northern Hills Zone																														
1	HPW393	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Lr1+10+23+	
2	HPW394	R	R	R	R	R	R	R	R	R	S	S	S	S	R	S	S	R	R	S	R	S	R	R	R	R	MX	R	R	Lr1+13+10+
3	HPW413	R	R	S	R	R	S	MS	R	R	R	S	S	S	R	M	S	R	R	S	S	R	R	R	R	R	R	R	Lr10+23+	
4	HPW421	R	R	R	S	S	S	MS	R	R	-	S	M	R	R	M	S	R	R	S	R	S	MX	R	R	R	R	R	Lr23+	
5	HPW422	R	R	R	R	R	R	R	R	R	S	MS	S	R	R	S	S	R	R	S	R	S	R	R	R	R	R	R	Lr23+	
6	HS580	R	R	R	R	R	R	R	R	R	S	R	S	S	R	R	S	R	R	R	S	S	R	R	R	R	R	R	Lr1+26+	
7	HS583	R	R	S	R	R	S	S	R	R	R	S	R	S	S	R	S	S	R	-	S	S	S	S	R	R	R	R	Lr10+13+	
8	HS590	R	R	R	R	S	R	R	R	M	S	S	R	S	S	R	MX	R	S	R	R	R	R	R	R	R	R	R	Lr13+	
9	HS596	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S	R	R	R	R	R	R	R	R	R	R	R	Lr23+	
10	HS597	R	R	S	R	S	S	R	R	S	S	S	S	S	S	S	S	R	S	S	S	S	S	R	S	R	S	R	Lr13+	
11	HS598	R	S	S	R	S	S	S	R	S	S	S	S	S	R	S	S	S	S	S	S	R	S	R	R	R	S	R	Lr2a+13+	
12	HS599	R	R	R	R	R	R	S	R	R	S	S	R	S	R	R	S	R	R	R	R	S	R	R	R	R	R	R	Lr10+26+	
13	HS600	R	R	R	R	R	R	R	R	R	R	R	R	S	R	M	S	R	S	R	R	R	R	R	R	R	R	R	Lr1+13+23+	
14	HS601	R	R	S	R	S	S	MS	R	R	R	S	R	S	S	S	S	R	S	S	S	S	S	R	R	R	R	R	Lr13+	
15	UP2917	R	R	R	R	R	R	R	R	R	S	R	S	S	R	R	S	R	R	R	R	R	S	R	R	R	R	R	Lr10+26+	
16	UP2918	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	S	R	R	R	R	R	R	R	R	R	R	R	Lr1+23+26+	
17	VL1005	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	Lr1+23+26+	
18	VL1006	R	R	S	R	R	R	R	R	R	R	S	S	S	R	R	R	R	R	R	R	S	R	R	R	R	R	R	Lr10+13+23+	
19	VL1007	R	R	R	S	S	S	R	R	R	R	R	S	S	R	S	R	R	R	S	S	R	R	R	R	R	S	R	Lr26+	
20	VL3002	R	R	R	R	R	R	R	R	R	R	S	R	R	MS	R	S	R	S	S	MX	S	R	R	R	S	S	R	Lr10+13+	
21	VL3007	R	R	R	R	R	R	R	R	R	S	R	R	S	R	R	S	R	R	R	R	R	R	R	-	R	R	R	Lr1+26+	
22	VL3008	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Lr26+	
23	VL3009	S	S	S	R	S	S	S	R	R	S	R	R	R	R	S	S	S	S	S	S	R	S	R	R	R	S	R	Lr2b+13+	
24	VL4001	R	R	R	R	R	R	MS	R	R	-	R	R	S	R	S	R	S	-	R	R	R	R	R	R	R	S	R	Lr10+26+	
North Western Plain Zone																														
25	DBW147	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	-	
26	DBW148	R	R	MS	R	R	S	MS	R	R	R	S	S	S	R	S	S	R	R	S	R	R	S	R	R	R	R	R	Lr10+23+	
27	DBW150	R	R	R	R	R	R	R	R	R	R	S	R	R	R	S	S	R	R	R	R	S	R	R	R	R	R	R	Lr1+10+23+	
28	DDW31	R	R	R	R	S	S	R	R	R	R	R	S	R	R	MR	R	R	R	MS	R	R	R	R	R	R	R	R	Lr13+23+	
29	DDW32	R	R	R	R	S	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	S	S	R	R	R	R	R	Lr23+	

S. No.	VARIETY	PATHOTYPES																												Gene postulation
		11	12	12-2	12-3	12-5	12-7	12-9	16-1	77	77-1	77-2	77-5	77-7	77-8	77-9	77-10	77-12	77A-1	104-2	104-3	104-4	104B	106	107-1	108-1	162-1	162-3	162A	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
30	HD3159	R	MX	S	MS	MS	S	R	R	R	MX	S	S	S	S	S	S	S	S	S	S	S	R	R	R	R	R	S	Lr13+	
31	HD3165	R	R	S	R	R	S	R	R	R	MS	S	S	S	MX	S	S	S	R	S	S	R	S	R	R	R	R	R	S	Lr13+
32	HD3174	R	R	S	R	R	S	R	R	R	S	S	S	S	R	S	S	S	R	S	S	R	S	R	R	R	R	R	S	Lr13+
33	HI1604	R	R	R	R	R	R	R	R	R	S	S	S	S	S	S	S	R	R	R	S	R	R	R	R	R	R	R	R	Lr1+23+
34	HI1605	R	S	R	S	MS	R	S	R	M	R	R	S	R	R	S	S	R	S	S	M	S	S	R	R	R	MS	R	S	Lr13+
35	HUW688	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	-
36	K1312	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	S	Lr10+13+
37	K1313	R	R	R	R	R	R	S	R	R	S	R	M	S	R	S	S	R	R	R	R	S	R	R	R	S	R	S	Lr13+	
38	K1314	R	S	S	R	R	S	S	R	MX	S	S	M	S	MS	S	S	S	R	S	S	R	S	R	R	R	S	R	S	Lr13+
39	MACS3949	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
40	MACS4024	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
41	NW6024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
42	PBW707	R	S	S	R	S	S	S	R	S	S	S	S	S	S	S	S	S	S	S	S	S	R	S	R	R	S	R	Lr13+	
43	PBW709	R	R	R	R	R	R	S	R	R	R	S	MX	S	R	S	S	R	R	S	R	R	R	R	R	R	R	R	R	Lr10+13+23+
44	PBW716	R	R	R	R	R	R	R	R	R	R	S	R	S	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	Lr10+13+23+
45	PBW718	R	MS	S	R	R	S	S	R	R	MS	S	S	S	R	R	S	R	R	S	S	R	R	R	R	R	R	R	R	Lr13+
46	PBW719	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Lr23+26+
47	UP2883	R	R	S	R	R	S	R	-	R	S	S	S	S	R	R	S	R	S	S	R	S	R	R	R	R	R	S	S	Lr13+
48	WH1179	R	R	S	R	R	R	R	R	R	R	S	S	R	S	R	S	R	R	S	S	R	S	R	R	R	R	R	R	Lr10+13+
North Eastern Plain Zone																														
49	HD3171	R	R	R	R	R	S	S	R	R	R	S	R	S	S	S	S	R	S	S	S	R	R	R	R	S	R	S	Lr10+13+	
50	K1317	R	R	R	R	R	R	R	R	R	S	R	S	S	R	R	S	R	R	R	R	S	R	R	R	R	R	R	R	Lr1+26+
Central Zone																														
51	CG1015	R	R	R	R	R	R	R	R	R	R	S	S	S	R	R	S	M	R	R	R	S	R	R	R	R	R	-	R	Lr13+23+
52	GW463	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	R	S	R	R	R	R	R	R	R	Lr1+23+
53	HI8759 (D)	R	R	S	R	S	S	S	S	R	R	R	S	R	R	R	S	R	R	S	S	S	S	R	R	R	S	R	R	Lr23+
Peninsular Zone																														
54	GW1315 (D)	R	R	S	R	S	S	S	S	S	R	R	S	R	R	M	S	S	R	S	S	S	S	R	R	R	S	R	R	Lr13+
55	HD3164	R	R	R	R	S	R	S	R	R	R	R	R	R	R	M	S	R	R	S	S	R	MS	R	R	R	R	S	R	Lr13+

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		11	12	12-2	12-3	12-5	12-7	12-9	16-1	77	77-1	77-2	77-5	77-7	77-8	77-9	77-10	77-12	77A-1	104-2	104-3	104-4	104B	106	107-1	108-1	162-1		162-3	162A
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26		27	28
56	HI8765 (D)	R	R	R	R	R	R	R	MS	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	R	MS	S	R	Lr23+	
57	JWS712	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Lr24+	
58	K1315	R	R	R	R	R	R	R	R	R	R	S	R	R	R	MS	R	R	R	R	MS	R	R	R	R	R	R	R	Lr1+23+	
59	MACS397 0(D)	R	S	R	R	R	R	R	MS	R	R	R	R	R	R	S	-	R	R	R	R	R	R	R	R	R	S	R	Lr13+	
60	MACS397 2(D)	R	MS	S	R	S	S	R	S	R	S	R	S	R	R	R	R	R	S	S	S	S	R	R	R	S	S	S	Lr13+	
61	MACS402 0 (D)	S	R	S	R	S	S	R	S	R	R	S	R	R	R	S	S	R	S	S	S	S	R	R	R	S	MS	R	-	
62	PBW721	R	R	R	R	S	R	S	R	S	R	S	R	S	MS	R	S	R	S	R	R	S	R	R	R	R	R	R	Lr13+	
63	UAS360	R	S	S	R	R	R	R	R	S	MS	MS	R	R	R	S	S	S	S	R	S	S	R	R	R	R	R	S	Lr2a+13+	
64	UAS361	R	R	R	-	R	R	MS	R	R	S	R	R	S	R	R	S	R	R	R	S	R	R	R	R	R	R	R	Lr1+23+26+	
65	UAS453 (D)	M S	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	R	R	S	S	R	R	R	R	S	R	R	Lr13+	
66	UAS455 (D)	R	S	S	R	R	MS	R	R	R	R	R	S	R	R	M	S	MS	R	S	S	S	S	R	R	R	S	R	Lr13+	
Special Trial (Dicoccum, Salinity and Alkalinity)																														
67	DBW181	R	S	S	R	S	MS	R	R	S	MS	S	S	S	R	R	S	S	S	S	S	S	R	S	S	S	S	S	Lr13+	
68	DBW182	R	R	R	R	R	R	S	R	R	S	S	S	S	R	R	S	R	R	R	S	R	R	R	R	S	R	R	Lr10+13+	
69	DBW183	R	S	R	S	S	R	R	R	S	S	S	S	R	M	S	MS	S	S	S	S	S	R	R	R	R	R	R	Lr13+	
70	DBW184	R	S	S	R	R	S	S	R	R	S	S	S	S	R	S	MS	R	S	S	S	S	R	R	R	R	R	S	-	
71	DBW185	R	R	R	R	R	R	R	R	R	S	S	R	S	S	R	S	R	R	S	S	S	R	R	R	R	R	R	Lr10+13+	
72	DDK1048	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	S	S	R	R	R	R	S	R	R	-	
73	DDK1049	S	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	S	R	MS	S	S	R	R	S	R	R	-	
74	KRL350	R	R	R	R	R	R	R	R	R	R	MS	S	R	R	S	R	R	R	R	R	R	R	R	R	R	R	R	Lr1+23+	
75	KRL351	R	R	S	R	R	MS	MS	R	R	S	S	S	R	R	S	R	S	S	S	S	S	R	R	R	R	R	R	Lr10+13+	
76	MACS504 1	S	R	R	R	R	R	MS	R	R	R	R	R	R	R	S	R	R	S	R	S	R	S	R	R	S	R	R	Lr20+	
77	MACS504 3	S	R	S	R	S	R	MS	R	R	R	R	R	R	R	S	R	R	S	S	S	R	S	R	R	S	R	S	-	
78	WH1309	R	R	S	R	R	S	MS	R	R	R	S	S	S	R	R	S	R	S	S	S	MS	R	R	R	R	R	S	Lr10+13+	
Special Trial (Triticale)																														

