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Assessing genetic potential of elite inter- and intra-specific advanced lentil lines for agronomic traits and their reaction to rust (*Uromyces viciae-fabae*)

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Supplementary Table 1. List of 100 genotypes (96 derived from interspecific and intraspecific crosses)

Sr. No.	Genotypes	Source	Sr. No.	Genotypes	Source
1	HPLL-1	Precoz X ILWL-77	51	HPLL-51	PL-639 X ILWL-74
2	HPLL-2	Precoz X ILWL-77	52	HPLL-52	PL-639 X ILWL-74
3	HPLL-3	Precoz X ILWL-77	53	HPLL-53	PL-639 X ILWL-74
4	HPLL-4	Precoz X ILWL-77	54	HPLL-54	Precoz X ILWL-74
5	HPLL-5	Precoz X ILWL-77	55	HPLL-55	Precoz X ILWL-74
6	HPLL-6	Precoz X ILWL-77	56	HPLL-56	Precoz X ILWL-74
7	HPLL-7	Precoz X ILWL-77	57	HPLL-57	Precoz X ILWL-74
8	HPLL-8	Precoz X ILWL-77	58	HPLL-58	Precoz X ILWL-74
9	HPLL-9	Precoz X ILWL-77	59	HPLL-59	Precoz X ILWL-74
10	HPLL-10	Precoz X ILWL-77	60	HPLL-60	Precoz X ILWL-74
11	HPLL-11	Precoz X ILWL-77	61	HPLL-61	Precoz X ILWL-74
12	HPLL-12	Precoz X ILWL-77	62	HPLL-62	Precoz X ILWL-74
13	HPLL-13	Precoz X ILWL-77	63	HPLL-63	Precoz X ILWL-74
14	HPLL-14	Precoz X ILWL-77	64	HPLL-64	Precoz X ILWL-74
15	HPLL-15	Precoz X ILWL-77	65	HPLL-65	Precoz X ILWL-74
16	HPLL-16	Precoz X ILWL-77	66	HPLL-66	Precoz X ILWL-74
17	HPLL-17	Precoz X ILWL-77	67	HPLL-67	Precoz X ILWL-74
18	HPLL-18	PL-639 X ILWL-74	68	HPLL-68	Precoz X ILWL-74
19	HPLL-19	PL-639 X ILWL-74	69	HPLL-69	Precoz X ILWL-74
20	HPLL-20	PL-639 X ILWL-74	70	HPLL-70	Precoz X ILWL-74
21	HPLL-21	PL-639 X ILWL-74	71	HPLL-71	Precoz X ILWL-74
22	HPLL-22	PL-639 X ILWL-74	72	HPLL-72	Precoz X ILWL-74
23	HPLL-23	PL-639 X ILWL-74	73	HPLL-73	PL-406 X ILWL-77
24	HPLL-24	PL-639 X ILWL-74	74	HPLL-74	PL-406 X ILWL-77
25	HPLL-25	PL-639 X ILWL-74	75	HPLL-75	PL-406 X ILWL-77
26	HPLL-26	PL-639 X ILWL-74	76	HPLL-76	PL-406 X ILWL-77
27	HPLL-27	PL-639 X ILWL-74	77	HPCL-96-1	Vipasha X PL-639
28	HPLL-28	PL-639 X ILWL-74	78	L-26	Vipasha X PL-639
29	HPLL-29	PL-639 X ILWL-74	79	L-632	Vipasha X PL-639
30	HPLL-30	PL-639 X ILWL-74	80	L-642	Vipasha X PL-639
31	HPLL-31	PL-639 X ILWL-74	81	HPCL-404	L-406 X L-259
32	HPLL-32	PL-639 X ILWL-74	82	HPCL-407	L-406 X L-259
33	HPLL-33	PL-639 X ILWL-74	83	L-861	L-406 X L-259
34	HPLL-34	PL-639 X ILWL-74	84	HPCL-446	Precoz X ILL-2991
34	HPLL-35	PL-639 X ILWL-74	85	L-437-1	Precoz X ILL-2991
36	HPLL-36	PL-639 X ILWL-74	86	L-437-2	Precoz X ILL-2991
37	HPLL-37	PL-639 X ILWL-74	87	L-87	L-4145 X PL-639
38	HPLL-38	PL-639 X ILWL-74	88	L-649	L-4145 X PL-639
39	HPLL-39	PL-639 X ILWL-74	89	L-666	L-4145 X PL-639
40	HPLL-40	PL-639 X ILWL-74	90	L-354	L-4145 X PL-259
41	HPLL-41	PL-639 X ILWL-74	91	L-390	PL-406 X PL-639
42	HPLL-42	PL-639 X ILWL-74	92	L-403	PL-406 X PL-259
43	HPLL-43	PL-639 X ILWL-74	93	L-406	PL-406 X PL-259

44	HPLL-44	PL-639 X ILWL-74	94	L-412	PL-406 X PL-259
45	HPLL-45	PL-639 X ILWL-74	95	L-541	Precoz X L-4145
46	HPLL-46	PL-639 X ILWL-74	96	L-710	ILL-2991 X L-5588
47	HPLL-47	PL-639 X ILWL-74	97	Precoz	Argentina
48	HPLL-48	PL-639 X ILWL-74	98	Markanday	Australia
49	HPLL-49	PL-639 X ILWL-74	99	Vipasha	HPKV, Palampur
50	HPLL-50	PL-639 X ILWL-74	100	PL-406	Pantnagar

Supplementary Table 2. Rust reaction of 96 genotypes based on disease severity

Sr. no.	Line no.	Disease severity (%)	Disease reaction
1	HPLL-1	35	S
2	HPLL-2	15	MS
3	HPLL-3	>1%	R
4	HPLL-4	40	S
5	HPLL-5	50	S
6	HPLL-6	40	S
7	HPLL-7	80	HS
8	HPLL-8	60	HS
9	HPLL-9	80	HS
10	HPLL-10	80	HS
11	HPLL-11	60	HS
12	HPLL-12	60	HS
13	HPLL-13	70	HS
14	HPLL-14	20	MS
15	HPLL-15	80	HS
16	HPLL-16	40	S
17	HPLL-17	60	HS
18	HPLL-18	30	S
19	HPLL-19	40	S
20	HPLL-20	50	S
21	HPLL-21	60	HS
22	HPLL-22	60	HS

23	HPLL-23	30	MS
24	HPLL-24	50	S
25	HPLL-25	70	HS
26	HPLL-26	45	S
27	HPLL-27	>1%	R
28	HPLL-28	30	S
29	HPLL-29	40	S
30	HPLL-30	70	HS
31	HPLL-31	10	MR
32	HPLL-32	10	MR
33	HPLL-33	40	S
34	HPLL-34	80	HS
35	HPLL-35	80	HS
36	HPLL-36	25	MS
37	HPLL-37	5	MR
38	HPLL-38	>1%	R
39	HPLL-39	>1%	R
40	HPLL-40	>1%	R
41	HPLL-41	40	S
42	HPLL-42	40	S
43	HPLL-43	>1%	R
44	HPLL-44	20	MS
45	HPLL-45	5	MR
46	HPLL-46	40	S

47	HPLL-47	50	S
48	HPLL-48	30	S
49	HPLL-49	60	HS
50	HPLL-50	40	S
51	HPLL-51	60	HS
52	HPLL-52	40	S
53	HPLL-53	60	HS
54	HPLL-54	30	S
55	HPLL-55	20	MS
56	HPLL-56	30	S
57	HPLL-57	>1%	R
58	HPLL-58	80	HS
59	HPLL-59	80	HS
60	HPLL-60	40	S
61	HPLL-61	5	MR
62	HPLL-62	40	S
63	HPLL-63	80	HS
64	HPLL-64	20	MS
65	HPLL-65	70	HS
66	HPLL-66	10	MR
67	HPLL-67	10	MR
68	HPLL-68	40	S
69	HPLL-69	20	MS
70	HPLL-70	5	MR

71	HPLL-71	5	MR
72	HPLL-72	>1%	R
73	HPLL-73	50	S
74	HPLL-74	60	HS
75	HPLL-75	5	MR
76	HPLL-76	50	S
77	HPCL-96-1	70	HS
78	HPCL-404	>1%	R
79	HPCL-407	>1%	R
80	HPCL-446	40	S
81	L-26	40	S
82	L-87	70	HS
83	L-354	>1%	R
84	L-390	85	HS
85	L-403	20	MS
86	L-406	>1%	R
87	L-412	80	HS
88	L-437-1	>1%	R
89	L-437-2	20	MS
90	L-541	80	HS
91	L-632	20	MS
92	L-642	5	MR
93	L-649	>1%	R
94	L-666	30	S

95	L-710	>1%	R
96	L-861	60	HS