

Reactions of different entries of barley in National Barley Disease Screening Nursery (NBDSN), 2018-19

S. No.	NBDSN Entries	Yellow Rust		Leaf Blight		CCN	Aphid Score	
		ACI	HS	Avg.	HS	HS	Avg.	HS
1	BH 1023	1.67	10S	45	56	S	5.0	5
2	BH 1024	10.1	40S	35	46	S	5.0	5
3	BH 1025	0.07	TMR	46	69	HS	4.3	5
4	BHS 472	0.67	5MS	35	47	S	4.3	5
5	BHS 474	0.9	5S	46	78	HS	4.7	5
6	BHS 475	3.33	20S	35	36	S	5.0	5
7	BHS 476	11.67	40MS	35	47	HS	4.3	5
8	BHS 477	7.33	20S	36	56	HS	5.0	5
9	DWRB 160	3.83	10S	47	78	S	5.0	5
10	DWRB 182	0	0	35	36	S	4.0	5
11	DWRB 184	0	0	35	46	S	4.3	5
12	DWRB 188	8.6	20S	46	56	S	5.0	5
13	DWRB 196	3.67	20S	57	89	S	5.0	5
14	DWRB 197	0	0	46	68	HS	5.0	5
15	DWRB 198	1.13	5S	36	67	HS	4.7	5
16	DWRB 199	0.67	5MS	36	56	HS	5.0	5
17	DWRB 200	4.2	15S	56	57	S	4.3	5
18	DWRB 201	1.7	10S	46	47	S	5.0	5
19	DWRB 202	1.67	10S	35	56	S	4.3	5
20	DWRB 203	8.33	20S	35	57	HS	5.0	5
21	DWRB 204	6.47	20S	35	46	S	4.7	5
22	DWRB 205	6.5	20S	34	56	S	5.0	5
23	DWRB 206	5.67	10S	35	56	S	5.0	5
24	DWRB 207	3	10S	46	56	S	4.7	5
25	HBL 845	0	0	46	79	S	4.3	5
26	HBL 848	0	0	56	99	HS	4.7	5
27	HBL 851	0	0	35	47	S	4.7	5
28	HBL 858	0	0	35	56	S	4.0	5
29	HBL 863	0	0	57	99	HS	4.7	5
30	HUB 265	6.97	20MS	46	56	S	5.0	5
31	HUB 266	2.5	10S	35	46	HS	5.0	5
32	HUB 267	45	60S	25	36	HS	5.0	5
33	HUB 268	39.17	60S	24	26	HS	5.0	5
34	KB 1706	4.33	10S	35	46	S	5.0	5
35	KB 1707	12.37	40S	36	68	HS	4.7	5
36	KB 1713	8.5	20S	46	57	S	4.7	5
37	KB 1743	41.67	80S	46	56	HS	4.7	5
38	KB 1750	1.08	5S	35	47	S	5.0	5

39	KB 1754	12.33	30MS	45	57	HS	5.0	5
40	KB 1757	1.33	10MS	35	57	S	5.0	5
41	KB 1762	11.7	60S*	57	78	HS	4.7	5
42	NDB 1708	35.33	60S	36	68	HS	5.0	5
43	NDB 1709	30.33	60S	45	46	S	5.0	5
44	NDB 1712	1.5	5S	35	46	HS	4.7	5
45	NDB 1713	37	80S	67	99	S	4.3	5
46	NDB 1723	38.33	60S	47	78	S	4.7	5
47	PL 891	1.7	5S	35	45	S	4.7	5
48	PL 906	2.2	10MS	46	67	S	4.3	5
49	PL 907	3.83	10S	56	99	S	4.7	5
50	PL 908	0	0	46	68	HS	4.7	5
51	PL 909	0.83	5S	46	67	S	3.7	4
52	PL 910	3.33	15S	46	57	S	4.7	5
53	PL 911	0	0	46	57	S	4.0	5
54	RD 2969	3.33	20S	46	89	S	4.7	5
55	RD 2991	4.03	20S	68	99	HS	5.0	5
56	RD 2992	3.33	10S	68	89	S	4.3	5
57	RD 2994	0.87	5S	57	67	S	4.0	5
58	RD 2999	0.33	5MR	78	99	S	4.3	5
59	RD 3000	1.33	5MS	67	99	S	5.0	5
60	RD 3002	0.03	TR	57	99	S	4.3	5
61	RD 3003	1.53	5S	78	99	S	5.0	5
62	RD 3004	1.33	10MS	57	79	S	5.0	5
63	RD 3005	0	0	57	68	S	4.0	5
64	RD 3007	0	0	25	36	HS	4.7	5
65	RD 3008	1.33	10MS	25	35	S	5.0	5
66	RD 3009	3.17	10S	24	35	S	5.0	5
67	RD 3010	0.87	5S	35	35	S	5.0	5
68	UPB 1074	10	60S*	45	68	S	5.0	5
69	UPB 1077	9.2	40S*	46	78	HS	4.7	5
70	UPB 1078	0	0	46	57	S	5.0	5
71	UPB 1079	10	40S*	36	57	S	5.0	5
72	UPB 1080	2.63	10S	46	78	S	5.0	5
73	UPB 1082	8.33	20S	36	47	HS	5.0	5
74	VLB 155	7.5	30S	46	99	S	5.0	5
75	VLB 161	10.67	40S	35	46	S	5.0	5
76	VLB 162	7.67	40MS	45	89	HS	5.0	5
77	VLB 163	3.17	15S	35	56	HS	5.0	5
78	VLB 164	2.13	10MS	35	76	HS	5.0	5
79	AZAD (c)	70	80S	46	46	S	5.0	5
80	BH 902 (c)	9.5	15S	57	78	S	4.3	5

81	BH 946 (c)	13.6	60S*	46	78	S	4.7	5
82	BHS 352 (c)	3.83	10S	35	38	S	4.3	5
83	BHS 380 (c)	0	0	35	46	S	5.0	5
84	BHS 400 (c)	16.5	60S	56	99	S	5.0	5
85	DWRB 101 (c)	0.83	5S	46	67	HS	4.7	5
86	DWRB 123 (c)	0	0	46	57	HS	4.3	5
87	DWRB 137 (c)	1.5	5S	57	68	S	5.0	5
88	HBL 113 (c)	4.17	15S	56	99	HS	5.0	5
89	HBL 276 (c)	1.67	10S	35	58	S	4.7	5
90	HUB 113 (c)	9.67	40S*	58	79	HS	4.7	5
91	K 1055 (c)	53.33	80S	47	89	S	5.0	5
92	K 1149 (c)	48.33	80S	46	47	S	5.0	5
93	K 508 (c)	30	40S	57	89	HS	4.3	5
94	K 603 (c)	66.67	80S	35	56	S	5.0	5
95	Karan 16 (c)	46.67	60S	46	46	S	5.0	5
96	Lakhan (c)	70	80S	46	78	S	5.0	5
97	NDB 1173 (c)	19.33	60S	57	79	S	5.0	5
98	NDB 1445 (c)	50	60S	57	79	S	5.0	5
99	NDB 943 (c)	66.67	100S	36	57	S	5.0	5
100	RD 2035 (c)	61.67	80S	57	67	S	5.0	5
101	RD 2552 (c)	6	20S	67	89	HS	4.7	5
102	RD 2786 (c)	2.33	10S	57	79	MR	4.7	5
103	RD 2794 (c)	6.67	40S*	47	79	S	4.7	5
104	RD 2849 (c)	1.67	10S	46	68	HS	5.0	5
105	RD 2899 (c)	0	0	35	46	S	5.0	5
106	RD 2907 (c)	3	10S	46	69	S	4.7	5
107	VLB 118 (c)	3.3	10S	35	56	HS	5.0	5
108	Infector	83.33	100S	89	89	HS	5.0	5

* Out of 125 entries, few check varieties and entries were found place in many trials and only one check is retained in NBDSN thus resulting 107 entries under NBDSN.

HS- Highest score, ACI- Average Coefficient of Infection; CCN- Cereal Cyst Nematode, HS- Highly susceptible, S- Susceptible, MR- Moderately Resistant, R- Resistant, (c) - Released Checks, ND- Not Determined, NG – Not germinated.

Aphid scoring: Score 1-Immune (I), Score 2-Resistant (R), Score 3-Moderately resistant (MR), Score 4-Susceptible (S) and Score 5- Highly susceptible (HS)

Center wise reactions of different entries of barley in National Barley Disease Screening Nursery (NBDSN), 2018-19

S. No.	NBDSN Entries (2018-19)	Yellow Rust						Leaf Blight				CCN*			Aphid score		
		Jammu	Bajaura	Durgapura	Ludhiana	Karnal	Hisar	Pantnagar	Faizabad	Varanasi	Dharwad	Durgapura	Hisar	Ludhiana	Kanpur	Ludhiana	Karnal
1	BH 1023	0	0	0	0	0	10S	56	24	35	56	S	R	S	5	5	5
2	BH 1024	0	0	TMR	20S	TR	40S	45	24	25	46	S	S	S	5	5	5
3	BH 1025	0	0	TMR	0	0	0	13	36	69	67	S	HS	S	3	5	5
4	BHS 472	5MS	0	0	0	0	0	47	24	46	12	S	S	S	5	4	4
5	BHS 474	5S	0	0	0	TMR	0	45	36	78	24	S	HS	S	5	5	4
6	BHS 475	20S	0	0	0	0	0	35	24	36	24	S	S	S	5	5	5
7	BHS 476	20MS	10S	5MR	10S	40MS	0	46	25	47	12	S	HS	S	5	4	4
8	BHS 477	5MS	20S	10S	0	0	10S	56	35	39	12	S	HS	S	5	5	5
9	DWRB 160	5MS	10S	10MR	0	0	5S	37	78	26	56	S	S	S	5	5	5
10	DWRB 182	0	0	0	0	0	0	25	36	24	34	S	S	M R	5	4	3
11	DWRB 184	0	0	0	0	0	0	13	46	26	46	S	HS	S	5	5	3
12	DWRB 188	20MS	15S	TMR	0	TR	20S	46	36	36	56	S	S	S	5	5	5
13	DWRB 196	0	20S	5MR	0	0	0	24	46	89	67	HS	HS	S	5	5	5
14	DWRB 197	0	0	0	0	0	0	23	46	68	56	HS	HS	M R	5	5	5
15	DWRB 198	5R	0	TMS	5S	0	0	25	36	26	67	S	HS	S	5	5	4
16	DWRB 199	5MS	0	0	0	0	0	25	35	28	56	HS	HS	S	5	5	5
17	DWRB 200	10S	15S	0	0	TR	0	45	57	57	56	S	S	S	5	4	4
18	DWRB 201	0	0	0	0	TR	10S	36	46	47	46	MR	R	S	5	5	5
19	DWRB 202	0	0	0	0	0	10S	47	24	56	24	S	R	S	5	4	4
20	DWRB 203	10S	0	0	10S	20S	10S	57	24	35	24	S	HS	S	5	5	5
21	DWRB 204	10MS	0	0	10S	TMS	20S	45	24	24	46	S	MR	S	4	5	5
22	DWRB 205	10MS	20S	0	TS	10S	0	56	24	24	12	S	S	S	5	5	5
23	DWRB 206	5S	10S	0	5S	5MS	10S	56	24	35	24	S	MR	S	5	5	5
24	DWRB 207	10MS	0	0	0	0	10S	24	36	47	56	MR	R	S	4	5	5
25	HBL 845	0	0	0	0	0	0	56	35	79	12	S	HS	S	5	5	3

26	HBL 848	0	0	0	0	0	0	45	36	99	24	S	HS	S	5	5	4
27	HBL 851	0	0	0	0	0	0	47	45	46	12	S	S	S	5	5	4
28	HBL 858	0	0	0	0	0	0	56	36	35	12	S	MR	S	5	4	3
29	HBL 863	0	0	0	0	0	0	56	35	99	46	S	HS	S	5	5	4
30	HUB 265	0	10 S	TMS	10S	20MS	5S	56	36	24	46	S	R	S	5	5	5
31	HUB 266	0	0	5S	10S	0	0	46	34	24	24	S	HS	S	5	5	5
32	HUB 267	60S	30 S	40S	40S	40S	60S	24	36	26	24	S	HS	S	5	5	5
33	HUB 268	60S	15 S	20S	20S	60S	60S	12	24	26	24	HS	S	S	5	5	5
34	KB 1706	0	10 S	5MR	10S	5MS	0	35	46	24	46	S	S	S	5	5	5
35	KB 1707	5MS	20 S	0	10S	TR	40S	68	24	26	34	HS	HS	S	4	5	5
36	KB 1713	0	15 S	0	0	20MS	20S	57	35	35	56	S	S	S	4	5	5
37	KB 1743	20S	80 S	10S	60S	40S	40S	56	36	36	34	HS	S	S	4	5	5
38	KB 1750	-	0	TMR	5S	0	0	47	24	35	34	S	R	S	5	5	5
39	KB 1754	10MS	10 S	5MR	10S	30MS	20S	23	57	35	46	S	HS	S	5	5	5
40	KB 1757	10MS	0	0	0	0	0	57	24	24	46	S	MR	S	5	5	5
41	KB 1762	60S	0	0	0	TR	10S	46	78	36	78	S	HS	S	4	5	5
42	NDB 1708	40S	20 S	40S	20S	40MS	60S	24	68	26	24	S	HS	M R	5	5	5
43	NDB 1709	10S	0	20S	60S	40MS	60S	45	35	35	46	R	NG	S	5	5	5
44	NDB 1712	0	0	0	5S	5MS	0	46	46	35	24	S	HS	S	5	5	4
45	NDB 1713	0	80 S	40S	40S	40MS	30S	79	35	99	34	S	R	S	5	4	4
46	NDB 1723	20S	40 S	40S	60S	40S	30S	45	36	27	78	S	MR	S	4	5	5
47	PL 891	0	0	0	5S	TR	5S	45	24	36	24	MR	S	S	5	5	4
48	PL 906	10MS	0	0	0	TR	5S	45	24	36	67	S	S	S	5	4	4
49	PL 907	0	0	10S	5S	10MS	0	34	36	99	46	S	S	S	4	5	5
50	PL 908	0	0	0	0	0	0	45	68	26	34	S	HS	S	4	5	5
51	PL 909	0	0	0	0	0	5S	46	36	26	67	S	S	S	3	4	4
52	PL 910	5S	15 S	0	0	0	0	47	35	57	56	S	R	S	4	5	5
53	PL 911	0	0	0	0	0	0	56	36	57	46	S	NG	S	5	4	3
54	RD 2969	20S	0	0	0	0	0	23	46	25	89	S	S	S	4	5	5

55	RD 2991	5MS	0	0	20S	TR	0	57	36	69	99	S	HS	S	5	5	5
56	RD 2992	10S	0	0	0	0	10S	67	46	69	89	S	S	S	3	5	5
57	RD 2994	0	0	5S	0	TR	0	58	46	35	67	S	MR	S	3	5	4
58	RD 2999	0	0	0	0	5MR	0	45	58	99	89	MR	R	S	5	4	4
59	RD 3000	5MS	0	0	0	5MS	0	68	46	99	56	R	R	S	5	5	5
60	RD 3002	0	0	0	0	TR	0	35	36	99	67	R	R	S	5	4	4
61	RD 3003	5MS	0	0	0	TR	5S	68	68	99	78	S	S	S	5	5	5
62	RD 3004	10MS	0	0	0	0	0	79	57	35	67	S	R	S	5	5	5
63	RD 3005	0	0	0	0	0	0	58	24	68	67	S	S	S	4	5	3
64	RD 3007	0	0	0	0	0	0	24	36	25	24	S	HS	S	5	5	4
65	RD 3008	10MS	0	0	0	0	0	25	35	26	24	S	S	S	5	5	5
66	RD 3009	0	0	5S	10S	10MR	0	23	35	24	24	S	S	S	5	5	5
67	RD 3010	0	0	0	5S	TR	0	35	35	35	34	S	S	S	5	5	5
68	UPB 1074	60S	0	0	0	0	0	68	24	35	34	S	S	S	5	5	5
69	UPB 1077	0	0	5S	40S	TR	10S	78	24	35	46	S	HS	S	4	5	5
70	UPB 1078	0	0	0	0	0	0	57	45	48	12	S	S	S	5	5	5
71	UPB 1079	-	0	40S	0	0	10S	57	24	27	24	S	NG	S	5	5	5
72	UPB 1080	0	0	TMS	5S	0	10S	46	24	36	78	S	S	S	5	5	5
73	UPB 1082	20S	20 S	5MR	0	10MS	0	47	24	38	34	S	HS	S	5	5	5
74	VLB 155	10MS	30 S	5MR	5S	0	0	46	35	99	12	S	S	S	5	5	5
75	VLB 161	5MS	0	0	0	20S	40S	46	24	36	34	S	S	S	5	5	5
76	VLB 162	10S	0	5MS	0	40MS	0	46	24	89	12	S	HS	S	5	5	5
77	VLB 163	0	15 S	5MS	0	0	0	56	24	37	12	S	HS	S	5	5	5
78	VLB 164	10MS	0	TMS	0	5MS	0	76	24	37	12	HS	S	S	5	5	5
79	AZAD (c)	60S	80 S	80S	60S	80S	60S	45	36	36	46	S	MR	S	5	5	5
80	BH 902 (c)	10MS	15 S	10S	10S	5MS	10S	36	68	24	78	S	S	S	3	5	5
81	BH 946 (c)	20MS	5 S	TMR	0	TR	60S	45	36	36	78	S	S	S	4	5	5
82	BHS 352 (c)	0	0	5S	10S	10MS	0	35	36	38	12	MR	MR	S	5	4	4
83	BHS 380 (c)	0	0	0	0	0	0	46	45	35	24	S	R	S	5	5	5

84	BHS 400 (c)	60S	15 S	5MS	10S	10S	0	57	24	99	24	S	S	S	5	5	5
85	DWRB 101 (c)	0	0	0	5S	0	0	35	35	35	67	S	HS	S	4	5	5
86	DWRB 123 (c)	0	0	0	0	0	0	57	35	24	46	S	HS	S	3	5	5
87	DWRB 137 (c)	5MS	0	0	5S	0	0	46	35	68	67	S	MR	S	5	5	5
88	HBL 113 (c)	10S	15 S	0	0	0	0	45	36	99	24	S	HS	S	5	5	5
89	HBL 276 (c)	0	0	0	0	10S	0	58	36	35	12	S	S	S	5	4	5
90	HUB 113 (c)	10MS	0	0	0	40S	10S	68	36	27	79	S	HS	S	4	5	5
91	K 1055 (c)	40S	40 S	80S	60S	60S	40S	25	46	26	89	S	S	S	5	5	5
92	K 1149 (c)	10S	80 S	20S	80S	40S	60S	46	47	26	46	S	S	S	5	5	5
93	K 508 (c)	40S	0	20S	40S	40S	40S	57	36	26	89	S	HS	S	3	5	5
94	K 603 (c)	60S	80 S	60S	60S	80S	60S	56	24	35	34	S	S	S	5	5	5
95	Karan 16 (c)	20S	60 S	60S	60S	40S	40S	46	46	35	46	S	S	S	5	5	5
96	Lakhan (c)	60S	80 S	80S	60S	80S	60S	78	24	24	46	S	S	S	5	5	5
97	NDB 1173 (c)	60S	20 S	0	20S	20MS	0	25	36	79	67	S	S	S	5	5	5
98	NDB 1445 (c)	60S	40 S	40S	40S	60S	60S	45	46	79	56	S	S	S	5	5	5
99	NDB 943 (c)	40S	100 S	40S	60S	80S	80S	57	36	26	34	S	NG	S	5	5	5
100	RD 2035 (c)	60S	80 S	80S	60S	60S	30S	56	46	48	67	S	R	S	5	5	5
101	RD 2552 (c)	10MS	0	0	0	10MS	20S	34	46	89	78	HS	S	S	4	5	5
102	RD 2786 (c)	5MS	0	0	10S	0	0	79	46	35	56	MR	MR	M R	5	4	5
103	RD 2794 (c)	0	0	0	0	0	40S	36	36	79	NS	S	S	S	4	5	5
104	RD 2849 (c)	0	0	0	0	10S	0	24	36	68	46	S	HS	S	5	5	5
105	RD 2899 (c)	0	0	0	0	0	0	46	24	35	46	S	NG	S	5	5	5
106	RD 2907 (c)	10MS	0	0	0	0	10S	35	35	69	NS	S	S	S	4	5	5
107	VLB 118 (c)	5S	10 S	TMS	0	5MS	0	56	35	46	12	S	HS	S	5	5	5
108	Infector	60S	100 S	100S	60S	80S	100S	89	78	89	78	-	-	-	5	5	5

* Out of 125 entries, few check varieties were found place in many trials and only one check is retained in NBDSN thus resulting 107 entries under NBDSN.

HS- Highest score, ACI- Average Coefficient of Infection; CCN- Cereal Cyst Nematode, HS- Highly susceptible, S- Susceptible, MR- Moderately Resistant, R- Resistant, (c) - Released Checks, ND- Not Determined, NG – Not germinated.

Aphid scoring: Score 1-Immune (I), Score 2-Resistant (R), Score 3-Moderately resistant (MR), Score 4- Susceptible (S) and Score 5- Highly susceptible (HS)

