Canola Disease Survey in North Dakota – 2025

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In 2025, canola was grown in 48 counties of North Dakota. Of these, 21 major canola-producing counties were surveyed following swathing or direct harvest, with 94 fields scouted. During this process, the project team monitored the incidence of five diseases: Verticillium stripe, white mold, blackleg, clubroot, and powdery mildew. In addition to the disease monitoring, purple stem, a stress response exhibited by canola plants to biotic or abiotic factors, was also assessed.

Results:

Table 1: Percentage of canola fields exhibiting disease during the annual assessment across canola-growing counties in North Dakota.

County	Verticillium Stripe	White Mold	Blackleg	Clubroot	Powdery Mildew	Purple Stem
Benson	100	80	100	0	0	0
Bottineau	100	80	40	0	20	20
Bowman	100	100	100	0	100	100
Burke	100	100	100	0	0	0
Cavalier	100	71	76	35	0	0
Grand Forks	100	100	80	0	0	0
McHenry	100	100	80	0	0	0
McLean	100	100	60	0	20	20
Mountrail	100	100	100	0	0	0
Nelson	100	100	80	0	0	0
Pembina	80	20	40	0	0	0
Pierce	100	100	100	0	0	20
Ramsey	67	0	50	0	0	0
Renville	100	100	25	0	25	25
Rolette	100	100	67	0	0	0
Steel	100	100	100	0	0	0
Towner	100	100	50	0	17	17
Walsh	100	0	80	0	0	0
Ward	100	100	20	0	0	0
Wells	100	100	50	0	0	0
Average	92	83	66	2	9	10

In summary, major canola diseases were observed in a large number of fields in North Dakota; however, the incidence levels were low. When elaborated, Verticillium stripe appeared in 92% of surveyed canola fields, with an average disease incidence rate of 12% in each field visited. White mold was found in 83% of fields (6% incidence), blackleg in 66% (5% incidence), powdery mildew in 9% (4% incidence), and purple stem in 10% (3% incidence) of fields surveyed. Clubroot was present only in Cavalier County, detected in 35% of the fields surveyed (with an average incidence of 41%) (Tables 1 & 2).

Table 2: Incidence percentages of canola diseases observed in each field visited during the annual survey conducted in North Dakota.

County	Verticillium Stripe	White Mold	Blackleg	Clubroot	Powdery Mildew	Purple Stem
Benson	13	12	5	0	0	0
Bottineau	7	6	2	0	6	6
Bowman	2	2	2	0	40	30
Burke	12	7	3	0	0	0
Cavalier	23	6	19	41	0	0
Grand Forks	12	8	5	0	0	0
McHenry	9	8	3	0	5	0
McLean	14	8	2	0	0	0
Mountrail	14	10	2	0	0	0
Nelson	17	11	3	0	0	0
Pembina	31	8	16	0	0	0
Pierce	10	6	4	0	0	3
Ramsey	10	0	13	0	0	0
Renville	15	9	1	0	7	4
Rolette	13	5	3	0	3	3
Slope	8	2	2	0	20	10
Steel	2	6	6	0	0	0
Towner	13	5	2	0	2	2
Walsh	14	0	13	0	0	0
Ward	13	6	0	0	10	0
Wells	6	5	2	0	0	0
Average	12	6	5	3	4	3