

2006 Canola Disease and Flea Beetle Survey – Progress Report

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A canola disease and flea beetle field survey was conducted in North Dakota and Minnesota in 2006. Fields were surveyed a few days after swathing, if possible. A total of 204 and 7 fields were surveyed in North Dakota and Minnesota, respectively. A total of 50 plants (10 plants in 5 different sites per field) were evaluated for diseases in each field and a total of 20 sweeps with a net (4 sweeps in 5 different sites per field) were used to measure the number of flea beetles present in a field. Insects were not surveyed in Minnesota.

Results of the survey are summarized in Table 1. This was the third year in which blackleg was recorded as penetrating or superficial lesions. Penetrating lesions would be those that would likely cause economic yield reductions, whereas superficial lesions would cause no to minimal economic yield reductions. Penetrating blackleg lesions were found on 2% of the plants evaluated in North Dakota; blackleg was not found in Minnesota. These figures are similar to the 2005 survey, in which 4 and 0% of the plants evaluated had penetrating blackleg lesions in North Dakota and Minnesota, respectively. Sclerotinia stem rot was low, and found on 0.7 and 0% of the plants evaluated in North Dakota and Minnesota, respectively. Flea beetle populations were slightly higher than the 2006 survey with an average of 15 beetles per 4 sweeps (10 beetles per 4 sweeps in 2005).

Table 1. Results of the 2006 canola disease/flea beetle survey in North Dakota and Minnesota.

		Flea Beetles	Blackleg Penetrating	Blackleg Superficial	Sclerotinia/ White Mold	Aster Yellows	Black Spot
County	# Fields	Ave. 5 sweep	% plants	% plants	% plants	% plants	% pod area
North Dakota							
Cavalier	41	14.51	4.39	6.98	0.88	0.00	0.173
Nelson	4	X	0.00	0.00	2.50	4.50	0.645
Ramsey	10	4.94	12.90	7.70	1.90	0.30	1.826
Towner	29	22.29	5.35	7.24	0.39	0.15	0.041
Walsh	3	28.40	0.00	0.00	0.00	0.00	0.000
NE Ave.		16.39	5.34	6.59	0.88	0.29	0.384
NE Sub Total	87						
Benson	8	X	0.25	6.25	0.75	0.50	0.000
Bottineau	14	17.09	0.00	1.00	0.00	0.00	0.023
McHenry	7	8.23	0.00	0.00	0.00	0.00	0.003
Pierce	8	10.33	0.00	0.25	1.75	0.00	0.000
Rolette	9	3.78	0.22	0.22	3.33	0.67	0.027
NC Ave.		10.88	0.09	1.48	1.09	0.22	0.013
NC Sub Total	46						
Burke	6	12.60	0.67	0.00	0.00	0.00	0.027
Divide	2	11.20	0.00	2.00	0.00	0.00	0.000
Mountrail	9	4.40	0.00	4.22	0.00	0.00	0.007
Renville	13	16.66	0.15	2.77	0.00	0.00	0.008
Ward	15	12.21	0.00	7.33	0.00	0.00	0.015
NW Ave.		11.94	0.18	4.18	0.00	0.00	0.012
NW Sub Total	45						
Sheridan	4	21.25	0.00	0.00	0.50	1.50	0.590
Wells	4	74.15	0.00	0.00	2.00	0.50	0.250
C Ave.		50.64	0.00	0.00	1.25	1.00	0.420
C Sub Total	8						
McLean	15	12.76	0.13	2.93	0.00	0.13	0.007
WC Ave.		12.76	0.13	2.93	0.00	0.13	0.007
WC Sub Total	15						
Hettinger	3	4.40	0.00	0.00	0.00	0.00	0.000
SW Ave.		4.40	0.00	0.00	0.00	0.00	0.000
SW Sub Total	3						
ND Ave.		14.76	2.34	4.28	0.67	0.22	0.172
ND Total	204						
Minnesota							
Kittson	2	X	0.00	0.00	0.00	0.00	0.020
Roseau	5	X	0.00	0.00	0.00	0.00	0.000
MN Ave.		X	0.00	0.00	0.00	0.00	0.003
MN Total	7						
Grand Total	211						