

Evaluation of Fungicide on Canola for White Mold Control, Langdon 2010
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Treatment*	Rate	Yield lbs/a	Disease		Disease Severity Index ²
			Incidence %	Severity ¹	
1	Untreated	3030	24	3.8	57
2	Proline SC + Induce	5 oz/a + 0.125% v/v	13	2.9	30
3	Endura	6.0 oz/a	8	2.7	14
4	Proline SC + Induce**	5 oz/a + 0.125% v/v	5	2.8	12
5	Quash	2 oz/a + 0.25% v/v	13	3.4	27
HIGH MEAN		3273	24	3.9	57
LOW MEAN		3030	5	2.1	12
EXP MEAN		3148	11	3.1	24
C.V. %		8.7	52	39.8	56
LSD 5%		NS	8	NS	20
LSD 1%		NS	11	NS	27
# OF REPS		4	4	4	4
F-TRT		0.4	4.4	0.9	4.9

* All treatments sprayed at 35-40% bloom. **Sprayed a second time at same rate, 7d later.

¹ Field Severity Scale: 1=superficial lesions or small branch infected, 2=large branch dead, 3=main stem at least 50% girdled, 4=main stem girdled but plant produced good seed, 5=main stem girdled, much reduced yield. Only plants with an infections are included in this rating.

² Disease Severity Index is a weighted scale of incidence and severity ratings.

The research trial was located at the Langdon Research Extension Center. The trial was planted May 28 with the cultivar 'DKL 30-42'. The previous crop was wheat. The trial location followed state recommendations for land preparation, fertitization, seeding rate and weed control. Plot size was 3.5 ft x 16 ft long with a canola border between every plot. A CO2 pressurized backpack style sprayer with 8002 flat fan nozzles spaced at 20 inches was used to apply an 18 GPA solution at 40 psi. All treatments were sprayed on July 2 at 35-40% bloom. Treatment 4 was sprayed again on July 9 at 50-60% bloom. This was done to indicate whether any late infections came that would have affected the earlier spraying. On July 9 ascospores, at a concentration of approximately 5000 spores/ml, were sprayed on all treatments at a rate of 18 gpa. The trial was irrigated with an overhead sprinkler system to help promote disease levels. Disease levels were low. Twenty-five stems were counted in two locations within each plot with incidence and severity level recorded for each plant on prior to swathing on August 17. Harvest was August 27. The experimental design was a randomized complete block design with four replications.

June had above normal rainfall with rainfall occurring 21 out of 30 days. Although there was no significant difference in yield, disease differences were noted for % incidence and the disease severity index.