

# 2008 Sclerotinia Risk Looks High - Apply Fungicides Early

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*Sclerotinia is one of the biggest threats to your canola yield. Excellent emergence in many fields this year will result in thicker crop canopies and increased risk of sclerotinia if wet weather prevails at flowering. Sclerotinia can result in a potential yield loss of 25% .*

*Check fungicide availability as supplies are tight this year.*

*It is critical that the fungicide be applied early before sclerotinia becomes established. Application should be made at the 20 to 50% bloom stage, with 30% being optimum.*

Predicting sclerotinia and severity of infection is very difficult, but factors that increase the risk include:

- Dense crop canopy
- Wet weather leading up to early bloom– 25-50 mm (1-2 inches) of rain that saturates the soil in the two weeks prior to bloom is required for the disease.
- Showery weather and high humidity is expected at flowering. Sclerotinia needs two days of wet weather at flowering for spores to germinate. Optimum temperature for sclerotinia growth is 15 - 20<sup>0</sup> C. Temperatures over 30<sup>0</sup> C (86 F) stop disease development.

## Fungicides and Timing

The main two choices in fungicides are Lance (boscalid) and Proline (prothioconazole) and both work similarly in providing effective protection. Lance is registered at a single rate for canola, while Proline has two rates. The low rate (127 ml/ac) of Proline is the recommended rate for most canola crops, with the higher rate recommended for fields with a history of sclerotinia or very dense stands. Fungicides provide about 2 weeks of protection. Apply Proline only once per year. A second application of Lance may be made 7-14 days later if weather conditions favourable for disease persist.

***Because fungicides offer protectant activity, it is critical to spray high-risk canola fields at early flowering prior to disease appearance.***

Optimum timing is when there are a maximum number of flowers open and before any petals fall to ensure petals are protected before infection occurs.

At this stage (30% bloom) there are about 20 open flowers on the main stem, very few on secondary stems, and few pods. Infected flower petals that stick to stems and leaves are the food source for the fungus.

**Canola stands are looking excellent. Protect your yield by *timely* scouting and pre-arranging for product and custom application as needed. No one has a great interest in your crop than you.**



Canola at 30% Flower Stage ↑

Canola at 50% Flower Stage ↓



| % Flowering Stage | Number of Open Flowers on Main Stem | Time from First Flower Days (approximate) |
|-------------------|-------------------------------------|---|
| 10                | At least 10                         | 2 – 4 days                                |
| 20                | 14 – 16                             | 5 – 6 days                                |
| 30                | At least 20                         | 7 – 8 days                                |

For images of bloom stage, refer to North Dakota State's bloom stage guide at website: [www.ag.ndsu.edu/pubs/plantsci/crops/a1208w.htm](http://www.ag.ndsu.edu/pubs/plantsci/crops/a1208w.htm)