

Optimum Fungicide Application: Timing
Watch for Cabbage Seedpod Weevil
Diamond Back Moth – Early but low populations
Leaf Diseases flourish when it's wet
Check flowering canola for Sulphur deficiency

Optimum Fungicide Timing for Sclerotinia.

Fungicide application has started on early flowering canola fields. Many fields of canola have a have a thick lush canopy, and with soils that are saturated and showery weather the risk of sclerotinia infection is high.

The recommended timing for fungicide application is at 20 to 50% bloom, with 30% being optimum. At 30% bloom there are about 15-20 open flowers on the main stem, very few flowers on secondary stems, and few pods. Typically there is 5-6 days from when the first blooms are seen to 30% bloom stage (see table).

Since it will be difficult to time things perfectly, target application slightly on the early side at 20% bloom to provide some application flexibility.

In applying a fungicide, the goal is to cover as many of the flower petals as possible before they begin to fall down in the canopy and stick to stems and leaves. The decaying flower petals are the initial food source for sclerotinia.

Use 15 -20 gal/ac water to ensure good coverage. Fungicides provide about 2 weeks protection, which at 30% flower will cover most of the remaining flowering period.

Proline can only be applied once per season.

If you intend to also apply a liquid fertilizer at the same time, note that some liquid fertilizers can act to coat fungicide granules so they don't dissolve properly, so be sure to check compatibility before continuing, (especially after the first tankful when there is some spray solution left). Do not let product sit in the tank for more than a few hours before applying.

Identification of Flowering Stage of Canola

% 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	16- 20+	7 – 8 days



Canola at 30% Flowering Stage



Canola at 50% Flowering Stage

For more information on identification of canola bloom stages go to <http://www.ag.ndsu.edu/pubs/plantsci/crops/a1208.pdf>

Cabbage Seedpod Weevil (CSPW)



- CSPW can be found in many canola fields that are in the bud to flowering stage. Populations have been mostly well below threshold (<1 to 2 per sweep), which is quite normal for this time of year. The threshold for control is 2-4 per sweep, at early flowering. We cannot predict how much longer adults will remain active before dying off. In the past, weevil numbers would often crash quite abruptly at the beginning of July.
- Adult weevils feed in the flowering canola crop before beginning to lay their eggs in pods and larvae eat developing seeds, causing yield loss. Pods begin to form at 30-50% flower stage.

Only the adult weevils may be controlled. Infested fields are often noticeable by the presence of flocks of birds that forage on the adult weevils.

Matador is the only registered insecticide in Ontario for control. Some have inquired about the availability of other insecticides. Decis is registered in Western Canada for CSPW, but is registered only for flea beetle control in Eastern Canada. Spraying before thresholds are reached is not recommended as beneficial predator insects and pollinating insects will be killed.

Bee Friendly

It is important to protect bees when you spray. Honeybees, as well as other bees and insects, are important pollinators of crops. Many crops also offer bees important sources of pollen for honey production.

If you choose to use insecticides for insect control, take these steps to prevent harming bees when you spray:

- Before you apply a pesticide, advise local beekeepers so that they can move colonies out of the danger area. Contact the Provincial Apiarist at **1-888-466-2372** for a list of the beekeepers in your area.
- If you must apply insecticides, spray after 7 p.m. when the bees are not foraging. Applying when bees are not active also allows time for the insecticide to dry, so bees are less likely to pick up contaminated pollen and transport it back to the hive. If this is not a possibility, spray before 7 a.m. Bees usually do not forage at temperatures below 13°C.

Diamond Back Moth (DBM)



Low populations of DBM larvae feeding damage (holes in leaves) have been found in some canola fields.

This is earlier than normal, and populations will need to be monitored in canola during pod fill.

Leaf Diseases flourish when it's wet

Leaf disease is showing up in a number of canola fields. The greatest disease pressure is often in low areas, and areas with less air circulation. Affected leaves are in the lower canopy. Samples have been submitted to the Pest Diagnostic Clinic, University of Guelph to verify the cause and results should be known shortly. Black leg is not suspected. The most likely culprit is either downy mildew or white spot disease. It is interesting to note that Elaine Roddy, OMAFRA, reports finding downy mildew in cucumberbits. Dry weather should stop any further development. At this point, we do not think that it will have any impact on canola yields.

Check canola for Sulphur deficiency

Sulphur deficiencies often do not become evident until bolting and early flowering when sulphur demand is peaking. Deficiencies can be partly offset up to early flowering, provided there is sufficient rainfall to move the sulphur fertilizer into the root zone. Foliar feeding is insufficient to supply the needs of canola.

At flowering, it is too late to correct a deficiency, but a good time to scout fields for signs of deficiency to manage in the future.

Restricted root growth from compaction, lack of topsoil, root rot can also cause sulphur deficiency symptoms.

To verify a deficiency exists, collect a leaf tissue and soil sample from affected and 'good' areas. A soil sample from 0-6 inches, and 6-12 inches will provide more accuracy than only a 6-inch sample. For a tissue sample collect 50-70 of the youngest fully expanded mature leaf, and place these in a paper bag.

For further information on sulphur deficiency, refer to following website:

[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/agdex3526](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/agdex3526)