

Canola Frost Damage / Advice on Weed and Flea Beetle Treatment – May 28/08

Frost Damage

Growers in western and central Ontario experienced a sharp frost Tuesday night and freezing temperatures of 0 to -2 °C. Northern Ontario canola growing areas experienced similar conditions on Monday night.

The amount of canola froze to death is expected to be minimal. The cold night temperatures over the last week will have helped canola plants harden off, and made them better able to withstand freezing temperatures. However it is best to wait a couple of days before assessing the damage and continuing with any herbicide application.

- Prior to taking any reseeding action, wait four to five days to assess damage.
- Check the growing point for green colour at the centre of the leaf rosettes. Although the cotyledons or other leaves may be black, re-growth can occur in 4-10 days depending on weather conditions.
- For further information on assessing frost damaged canola, refer to Canola Council Factsheet: Tips for Assessing Spring Frost Damage to Canola at www.canola-council.org/canola_resources/product37.aspx

It's important to control weeds early in emerging canola fields

- Assess stand survival prior to applying weed control products. Normally optimum application of weed control products in emerging canola fields is the 2 leaf stage, **however with recent frost damage it is important to allow a minimum of 1 to 2 days for plants to recover.**
- If frost damage to canola plants is unclear, wait at least 4-5 days to assess survival and for new growth to resume.
- Herbicide activity on weeds will be improved when application is made to weeds that have resumed growth.
- Liberty works best when applied during the heat of the day.
- Weed pressure should be kept at a minimum up to the 4 to 6 leaf stage. Allowing significant early weed pressure to build in your canola field will result in yield losses. Once canola is established it is a strong competitor with weeds.

Check for flea beetles before spraying for weeds

- Before spraying for weeds check fields for flea beetle activity, so this can be done at the same time if necessary. Populations and damage has been low to date, but can build quickly under warm (>15 °C), sunny weather. Seed treatments provide protection for 3-4 weeks from time of planting, so in some cases control may have run out before canola is past the critical stage (3-4 leaves). Action threshold is 25% leaf feeding damage.

Winter Canola Frost Damage

Frost can be more damaging to canola in flower. Pollination may not be affected, but freezing temperatures of -3 to -4 °C for several hours can damage developing seeds which begins as early as 8 days prior to pollination. These freezing temperatures can also reduce seed fill. Fortunately most areas experienced temperatures above this, but it will take several days to assess damage to newly formed pods. Check pods for damaged seeds that have lost their green colour and turgidity. There is little experience with freezing temperature at flowering to provide clear guidelines. Please contact Brian Hall if you have damage and would like a second opinion.

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