



# Harvest Considerations for the 2008 Canola Crop

Friday, August 15, 2008

## Lodged Canola: Swathing or Direct Cut?

Harvest will likely begin within the next week, and swathing has started in some areas. Some growers are questioning what is best way to harvest a heavy canola crop in which there is significant lodging - swath or direct cut. Lodging in some stands is causing kinking of stems. Consider swathing where there is concern with the ability to set the combine header low enough. However, this is unlikely to be an issue with newer combines. If harvesting direct, harvesting in the direction of the lean will significantly reduce shatter losses. Swathing may be considered if the crop is uneven in maturity, or the crop is heavily infected with sclerotinia or alternaria (black pod spot). These diseases can significantly increase the amount of pod shatter. If the crop maturity is uneven and heavily lodged, use of desiccant or pre-harvest product may not be effective because of the difficulty of achieving good plant coverage. Swathing an uneven crop will accelerate dry down and evens out ripening of the crop.

## Pre-harvest herbicides to assist Canola harvest

One of the advantages of direct cut where the crop matures evenly, is the quality of seed harvested is often better than swathed canola because of fewer fines and lower green seed. If the crop is uneven, a desiccant like Reglone or harvest aid like glyphosate will speed up dry-down but not maturity of green plant material. Application will help to 'even out' the crop and dry down weeds which will reduce the amount of green dockage. Reglone is a true desiccant that works by disrupting plant cells leading to rapid dry down of plants and weeds. Reglone has 'contact' activity and thus requires good plant coverage to desiccate adequately all plant parts including the plant stems. Glyphosate is advantageous where perennial weeds are an issue. It is slower acting, killing plants by translocation to root system. Glyphosate applied to Roundup Ready canola will assist with dry down of weeds and for perennial weed control, but will not dry down the crop. **Harvest as soon as the crop is ready, as more rapid dry down increases risk of shattering loss.**

	Glyphosate	Reglone
Typical Harvest Timing	<ul style="list-style-type: none"> <li>7-14 days following application.</li> <li>Cool, cloudy weather may slow activity, thereby delay dry down, and harvest.</li> </ul>	<ul style="list-style-type: none"> <li>5-7 days</li> </ul>
Mode of Action / Benefits	<ul style="list-style-type: none"> <li>Works systemically upon absorption</li> <li>Control of annual and perennial weeds – Canada thistle, Perennial sow –thistle at bud – flower stage, twitchgrass – 4-5 green leaves</li> </ul>	<ul style="list-style-type: none"> <li>Contact – activated by sunlight</li> <li>Fast acting- “Designer frost”.</li> <li><b>Do not delay harvest.</b> Plants are more susceptible to pod shatter and breakdown if harvest is delayed</li> </ul>
Application Timing	<ul style="list-style-type: none"> <li>Apply when crop has 30% moisture or less seed moisture. At this stage, <b>which is past typical swathing timing</b>, pods are light green to yellow and most seeds have started to turn yellow to brown.</li> <li><b>If application is made too early, crop yield and quality be reduced and seed residues may occur</b></li> </ul>	<ul style="list-style-type: none"> <li>Target application within 7-10 days of harvest.</li> <li>Apply when an <b>average 60-75% of seed on the whole plant has turned brown</b>. This will be well past the 75% seed colour change on main stem</li> <li>Apply in evening or on cloudy days to allow time for product to spread over surface of leaf before sunlight activates the product</li> <li>Consider using higher rate with dense crop canopy, high weed pressure.</li> <li>Water volume and rate are key to coverage and efficacy</li> </ul>
Rainfast	Varies depending on products	15 minutes

***The most important thing to keep in mind is the crop must be physiologically mature before a harvest-aid product is applied. Products will not directly speed up the maturity of plants, or lower seed moisture content.***

### **Swathing of Canola**

The optimum stage to swath canola for yield and quality is when 30 - 60% of seeds have changed colour on the main stem. Seed colour change is a better indicator than pod or plant colour in when to swath. Swathing before this stage can lower yield and increase the amount of green seed. Do not let premature ripening caused by sclerotinia or alternaria influence optimum stage to swath. Most of the crop yield will come from healthy plants. Pick a point at which the majority of the field is at correct stage, ensuring that in less mature areas that seeds are green, firm and no longer translucent. Swathing when there is dew or early morning or evening will help minimize losses in ripe areas. To learn more about proper field assessment, refer to the revised Canola Council publication "Canola Time of Swathing Guide" or visit the Canola Council website: [http://www.canola-council.org/pub\\_swathing.html](http://www.canola-council.org/pub_swathing.html)

### **Storage of Canola**

The Canola Council of Canada advises growers not to treat bins with Malathion in which canola is to be stored because canola can absorb Malathion from bin surfaces. Refer to the following link for further information: [http://www.canola-council.org/pesticide\\_link2.html](http://www.canola-council.org/pesticide_link2.html)

For further information on storage of canola, refer to Storage of Canola info sheet –on the Ontario Canola Growers website at [http://www.ontariocanologrowers.ca/grower\\_info.html](http://www.ontariocanologrowers.ca/grower_info.html)

### **Planting winter wheat following canola?**

If the field is intended for winter wheat and perennial weed pressure is high (e.g. milkweed) a pre-harvest burn-down may be the only option for weed control. Once canola is harvested, not enough top growth will remain to kill the weeds. Perennial broadleaf weeds such as thistles and milkweed can be controlled if application is made when weeds are actively growing and in the bud-to-flowering stage. Glyphosate will not be effective on some perennial weeds or annual weeds (e.g. ragweed, foxtail) that have already set seed, nor will the seed bank from these weeds be reduced.

Remember, uniform distribution of residue is critical to no-till. A no-till seedbed is created at harvest of the preceding crop. Uniform spreading of residue will allow better performance of seed openers, and consistent soil conditions at seeding. The goal is to spread the crop residue the width of the header.