

## Minimizing Canola Harvest Losses

*This article was provided by Brian Hall, OMAFRA Canola Specialist*

### Harvest Losses

To minimize pod shattering losses, do not delay harvest. Field losses from heavy rain, wind or hail can be high, particularly if the crop is not heavy and will knit together. Seed moisture can drop rapidly, often by 2-3% throughout the day.

Losses can be minimized by

- Harvesting in early morning or evening when the crop is slightly damp. Canola can be harvested at higher moisture (10-15%) and then dried. Check canola sample for green seed.
- Set the combine reel speed to match ground speed. The reel should be set high and as far back over the grain table as possible.
- Slowing harvest speed.
- Cut plants off just below the bottom pods to reduce amount of material passing through the combine.
- Fields typically will have mix of mature and immature areas. When direct harvesting waiting for immature areas to ripen, increases the risk of shattering losses. A pre-harvest herbicide can be used to even out dry down of the crop. Be prepared to harvest when the crop is ready, otherwise the crop is exposed to shattering losses.

A loss of 1 lb/ac is equal to about 2 seeds/sq ft. Average harvest losses reported in Western Canada are 50-100 lb/ac

Video on tips for reducing canola combining harvest losses: <http://canola.ab.ca/acpctv.aspx>

### Swathing Tips

In fields with adequate plant population but uneven maturity the typical time of swathing is 60% seed colour change on the main stem. At this stage the seed will contain about 30-35% moisture. Parts of the field will be less than 60% colour change and some more. Seed colour changes about 10% every 2-3 days. Seed colour change is a better indicator than pod or plant colour of when to swath. If you have large acreage to harvest, swathing can begin as early as 40% seed colour change. Swathing before this stage can lower yield and increase the amount of green seed. Green seed content cannot be lowered once canola is stored in the bin. Moisture (heavy dew or rainfall) post-swathing helps speed up the curing process.

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: [https://canola-council.merchantsecure.com/canola\\_resources/product12.aspx](https://canola-council.merchantsecure.com/canola_resources/product12.aspx)

If the crop is thin, then more yield will come from branches, so time of swathing should be based on whole plant seed colour change rather than just main stem.

[http://canola.ab.ca/timing\\_of\\_swathing\\_resources\\_bulletin.aspx](http://canola.ab.ca/timing_of_swathing_resources_bulletin.aspx)

**More Information:** An excellent source of further information or to watch a video on time of swathing go to [http://canola.ab.ca/timing\\_of\\_swathing\\_resources\\_bulletin.aspx](http://canola.ab.ca/timing_of_swathing_resources_bulletin.aspx)

### **Storage of Canola**

If storing canola, although the seed may test dry, the presence of green material (e.g. insects, weed seeds, chaff) can cause heating in canola with its high oil content.

- Canola harvested above 8% moisture will require some conditioning. Conditioning cools the canola and/or lowers its moisture content. Canola can maintain a high respiration rate for up to 6 weeks following harvest before becoming dormant.
- Canola is more prone to deterioration in storage than cereals because of its high oil content. At 70% relative humidity the safe storage moisture is 8.3% for canola and 13.9% for wheat at 25<sup>0</sup> C.
- Do not store canola in bins previously treated with Malathion, as the oil in canola has a strong attraction for the insecticide and can result in residues in seed. Malathion is not registered for controlling insects in stored canola and bins treated with malathion cannot be used to store canola for at least six months to one year. Malathion residues detected in canola exported out of Canada could cost the industry, including farmers, millions of dollars in lost business.
- **More Information:** The Canola Council of Canada has extensive information on storage of canola at <http://www.canolacouncil.org/contents12.aspx>