



Canola Bits

Bringing Canola Rotation to Winter Wheat Producers

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In cooperation with the Great Plains Canola Association

Knowledge for a More Profitable Harvest

Despite the freezing weather in early April, the canola crop appears to be developing well in most areas. Southern OK counties with severe drought may be the exception, however, the canola has looked more drought tolerant than the wheat in those areas. Thus, it is time to start getting ready to harvest canola. Canola can be either swathed and then harvested or direct combined. Whether to swath or direct combine is a management decision because both can be done successfully. Swathing is generally recommended for winter canola if harvest cannot be completed in a timely manner. Direct combining requires no additional equipment for wheat growers. Harvesting canola is a slower process than harvesting wheat. Ripe canola should be harvested as soon as moisture drops to 10 % to minimize the risk of preharvest shattering. Equipment should be ready to combine canola just as soon as the crop is ready and it should be harvested before wheat. Losses from pod shattering due to excessive wind, rain, and hail can be devastating, resulting in yield losses greater than 50 percent when the crop is ripe. Holes in the combine or trucks should be plugged with tape or caulk to ensure that the seed is not lost.

Direct Combining

Direct combining is one harvest method recommended for the southern Great Plains because dry-down is accelerated by sufficiently high air temperatures at harvest. Ideally, canola should be harvested when the average seed moisture is 8 to 10 percent and with only a few green pods visible. Ripe standing winter canola is very easy to thrash. Therefore, after first setting the combine, try opening the concaves more, as this reduces grinding of stalks. This will allow more material through, and by not grinding the green stalks, the moisture content of the canola seed will be lower. Keep an eye on what is coming out the back. Do not be concerned if you see a few unthreshed green pods. Look around the combine for places where the seed may be falling out and fill those cracks with duct tape, caulking, or grease.

Advantages to direct combining

- Best opportunity to deliver No. 1 quality because of reduced green seed potential.
- Able to combine during hot (greater than 85 degrees Fahrenheit) dry weather conditions and maintain quality.
- Generally results in the best yield, protein, and oil content.
- One-pass harvest with either the grower's combine or by custom cutters.
- No swathing equipment or pickup attachments for combines required.
- Best method for stands of canola that are tall, heavy, "laced" together, or lodged.
- Avoids risk of improperly laying (twisting or bunching) the crop on the ground by swathing.

- Thicker, more productive canola will mature evenly and is easier to direct combine.

Swathing

Swathing reduces the risk of seed loss from wind and hail. If swathing is the preferred method of harvest, it is important that the plant be at the proper stage of maturity. The best time to swath for optimum canola seed yield and quality is when average seed color change on the main stem is 40 to 60 percent and the seed contains 30 to 40 percent moisture. But canola can be swathed at 30 to 40 percent seed color change without sacrificing significant yield or quality. This widens the “swathing window” for growers. Swathing involves cutting and placing the crop directly on the cut stubble for approximately 7 to 10 days or until the seed moisture is 8 to 10 percent. At this time, the canola can be harvested with a pickup header. Try to swath during the cool evening hours, at night, or early morning to allow the seed to dry at a slower rate. The draper, belt-style of swather should be used to swath canola. Regardless of the swather used, the windrow must flow smoothly through the swather without bunching or twisting. Canola should be swathed just below the pods to reduce the amount of crop passing through the throat. This leaves a maximum amount of stubble on which to lay the windrow and ensure adequate air circulation through the swath. Swathing too early will result in green seed, lower oil content, and higher seed moisture. Swathing too late will result in excessive shattering. Growers who swath regularly often use swath rollers to push the swathed canola down into the stubble a few inches to reduce the potential for the swath to blow in strong winds..

Field staging for optimum time of swathing

Start inspecting fields approximately 7 to 10 days after flowering ends. Walk out and sample five to 10 plants, examining pods on the main stem only. Seeds in pods on the bottom third of the main stem mature first. Using the seed color change chart available at www.canola.okstate.edu, evaluate the percentage seed color change on the main stem. Only seeds with small patches of color (spotting) should be counted as color change. Most of the seeds in the top third should be firm and roll, as opposed to breaking or crushing, when pressed between the forefinger and thumb. After assessing the main stem, look at the seed from the pods on the side branches to ensure that they are firm with no translucency. Once you have sampled the seeds, estimate the average percent seed color change for that field. Continue to evaluate every 2 to 3 days to monitor color change. Seed color change is more important than the overall field, stalk, or pod color when gauging the optimum time to swath.

Advantages of swathing canola:

- Can pick up and combine swathed canola 8 to 10 days earlier.
- With earlier harvest comes an increased potential for double cropping.
- More management flexibility with large acreages since the timing of harvest is not as critical.
- Swathing can be done around the clock to assist with harvesting large acreages.
- Cutting weeds early allows a cleaner and drier sample and reduces the number of weed seeds that reach maturity.
- A properly swathed, tight windrow will withstand heavy rain storms and high wind.
- Uneven field maturity makes swathing a desirable option because of time management concerns with direct harvesting the canola.
- Swathing is advantageous if weather conditions cause shattering (hail, hard rain, high winds).

Combining swathed canola

Canola is ready to pick up from the swath with a combine when seed moisture has dropped under 10 percent. Under normal conditions, this is about 5 to 10 days after swathing. Most seeds will be mature with little or no green color. A moisture meter is essential to ensure correct harvest timing. If green seed is present due to rapid dry down and it is early in the harvest window, the swaths may be left longer to clear more green seed. Only a small percentage of green seeds will reduce the grade. Windrows are best picked up using a rubberized draper

belt. These belt types have rubber or synthetic fingers and are preferred when harvesting canola as the gentle action helps to reduce shattering losses. Direct cut headers require crop lifter attachments that are the width of the windrow that lift it into the header. The rest of the cutter bar may be covered to prevent or reduce the amount of second cut stubble entering the combine.

Please be thinking about your harvesting options and which method will work best for you. Harvest will be here before you know it, so try to have your equipment or custom operators ready to go and have a plan of attack to get your winter canola from the field to the bin. We are planning to coordinate a few swathing field days with local growers. If you are interested in learning how and when to swath canola, call 580-237-7677 and leave your E-mail address or telephone number. You will then be notified 1 or 2 days in advance of each field day regarding exactly when and where it will occur.

UPDATE: Roundup Ready Winter Canola - FFA Yield Contest

Monsanto and Land O' Lakes have been long time supporters of the FFA and they continue to create opportunities to benefit both the FFA and growers. A formal program announcement and enrollment information will be forthcoming to FFA chapters in the next couple of months. See Monsanto's booth at this summer's FFA convention. Or contact your local seed dealer, COOP, or county extension agent. Or see program details at www.canola.okstate.edu

Key Dates to remember:

- **FFA Chapter Enrollment forms** must be **postmarked by June 15, 2009**. Space limited to 75 chapters.
- **Grower Enrollment Forms** must be **postmarked by July 24, 2009**. Chapters may enroll a maximum of 2 growers.

TAILGATE TALK - Oklahoma State University Extension:

The first round of freezing temperatures with sleet and snow pelted the canola relatively hard. Winter canola that missed the sleet from the late March storm took the cold very well. Canola stems did twist and bend and flowers were lost. Just as the winter canola was beginning to recover it was slammed again with freezing temperatures that dipped down into the teens. More flowers were lost and additional stems bent over and twisted. Since winter canola is an indeterminate plant, it has the ability to branch out new buds for flowers and still make a crop. The freezing temperatures in late March and early April have delayed the maturity for the winter canola crop this spring. When looking back to the spring 2007 freeze the canola handled it very well. That year we saw a skip in the pods on the main stem, where the freeze had froze the flowers, but with moisture and warmer temperatures the canola responded put on more flowers above the skip, and still made a good crop. We will generally see this same effect on winter canola this year and expect maturity to be delayed.

Canola Equipment Digest:

OSU is providing a free contact point for people that have equipment useful to canola growers that is for sale or lease. This includes seeding equipment, draper type swathers, pushers, combine pickup heads, and direct harvesting equipment. We will also list growers and companies offering custom planting, swathing, and harvesting, consulting or new farm equipment. The information will be listed on the Oklahoma State University web site www.canola.okstate.edu. If you have something to list or that you are looking for, something you want to sell or a custom service you can provide in your area send an e-mail to mark.boyles@okstate.edu. Please include description, general location, phone and e-mail address. We will not be listing prices. The objective of this project is to assist growers in locating the custom services they would like to have or the equipment they are looking for.

For more information on winter Canola visit these web sites:

<http://greatplainscanola.com/> Subscribe to online GPCA newsletter.

<http://www.canola.okstate.edu>

<http://uscanola.com/>

Or Contact your local OSU, KSU or Texas County Extension Office.