

# CANOLA HARVEST MANAGEMENT

## Where does straight cutting fit in your operation?



## BATTLE RIVER IMPLEMENTS

### AGRONOMY UPDATE

August 2016



Hello Again Everyone,

As harvest quickly approaches, I have started to get the annual questions on straight cutting canola vs swathing; so I thought I would take the opportunity to review the pros and cons of both. The first point I would like to make is that like with many other things in life, people tend to take a stand or pick a side on this topic. Straight cutting canola becomes the only

option in some people's mind or no option at all in the minds of others. It should be neither of those things – what it should be is an option available to you that can be taken advantage of when conditions are favorable, but not something you are tied to.

There are still times when swathing is going to be your best bet. Swathing will get the field ready for harvest faster (8 to 10 days earlier on average), it gives you more even seed maturity and helps avoid fall frost by accelerating dry down. It also gives you greater

harvest flexibility, as canola holds quality in the swath better than most crops, so it can be swathed and then left while other, more sensitive crops are harvested. On the other hand, straight cutting reduces the need for manpower, fuel use and equipment. It can also lead to increased seed size and yield, increased oil content, and may aid in decreasing green seed counts.

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So the first step in deciding on straight cutting vs swathing should be a field assessment

Swathing is likely the right decision when you are dealing with;

- An immature crop with frost in the forecast
- Uneven crop maturity
- Lots of regrowth or green plant material from late germinating weeds
- Heavily diseased or hail damaged stands that are vulnerable to excessive shattering

So what fields are best suited to being selected for straight cutting canola?

- The most important factor in straight cutting is a crop canopy that is "well knitted" and slightly lodged, so the individual plants are not easily moved.
- Best results are obtained when there is even maturity in the stand – this can be assisted by pre harvest applications of Glyphosate, Heat or Reglone if necessary.

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Once a field assessment has been done and field's harvest

management plan has been decided on, the most important job is trying to time the operations properly, regardless of whether it is swathing or straight cutting. According to Angela Brackenreed, Agronomy Specialist for The Canola Council of Canada, swathing too early is still the #1 cause of yield losses in Western Canada. According to her data, crops swathed at 30% to 40% seed colour change can have increased losses that are more than 15% higher than what will be seen in crops that are straight cut at the proper time. Angela's definition of a "properly timed" straight cut operation is when the seed is down to 10% moisture, regardless of the amount of green material still in the canopy. This recommended timing is based on a 13 site-year study conducted by IHARF that shows an average of 15% yield loss across all site years and varieties tested when the crop was harvested 3 to 4 weeks after seed had already dried down. In other words, there is

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**...there is a significant yield impact when you wait for the canopy to dry down completely before harvesting.**

a significant yield impact when you wait for the canopy to dry down completely before harvesting. While the dried down canopy and weed material is definitely easier on the combine than chewing through green canola stalks and weeds, it does come with a yield penalty. In addition to showing what the impact harvest timing had on yield, the study also showed that agronomic practices such as seeding rate and disease management, as well as the environmental conditions that occur during the harvest period seem to have a much larger impact on losses than any differences in varieties did – although shatter resistant varieties are going to change that story and likely redefine what we mean by "optimum" harvest time in the future. Interestingly, the yield losses from delayed straight cutting with varieties that were largely not shatter resistant seemed to be about equal to those that occur through early swathing of the canola, so producers may take the approach that not all canola acres can be swathed (or straight cut) at the proper time anyway, so these levels of loss are unavoidable regardless of your management practices if there are a lot of canola acres to harvest.

If the goal is to straight cut at the "optimum" timing, pre harvest treatments can be used to help dry down the canopy somewhat and even up the stand. Spraying should happen at about the same time as ideal timing for swathing – 60% seed colour change (see the seed colour change chart from the Canola Council Swathing Guide at the bottom of the article). If the crop is sprayed earlier, there is a risk of locking in green seed. The options for spraying include Reglone, Heat, and Glyphosate. These products all have different dry down times, so if Reglone is being used, you can expect the crop to be ready for harvest in 4 to 7 days, Heat in roughly 7 days, and Glyphosate in 7 to 10 days. Cool and cloudy

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conditions may adversely affect these times and the overall effectiveness of the herbicide application.

Another topic of conversation is what header to use and what losses can be expected with the different types of headers. PAMI has done work testing several different headers and measuring canola losses during straight cutting. While there were differences between the various designs, all header types tested had relatively low losses that ranged from 1% to 2% according to results presented at FarmTech 2016. This is insignificant compared to the estimated 2 to 5 bushels that go out the back of a combine through improper settings. So the main message to be taken here is that if you are considering trying straight cutting canola, there is no need to invest in a new header. There is not enough difference between the types to justify a change in your equipment, although I suspect Rotoshears might be a good investment for your header.

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I have already broached the topic of combine losses – which tend to be greatly underestimated by producers, and that leads me to the final part of the puzzle when it comes to straight cutting canola – setting the combine. As this is getting out of my area of knowledge, I will just refer you to the excellent video on the subject that was done by Bayer Crop Science in conjunction with Cervus Equipment which gives great tips specific to straight cutting canola. <https://www.youtube.com/watch?v=mifgLjIFGxE>

As always, if there are any comments about, or corrections to this article, or if you have suggestions for future articles, I would love to hear from you! And please remember as we roll into the hectic harvest season to keep safety in the forefront of your mind. No 5 minute shortcut is worth your life. Have a safe and trouble free harvest!

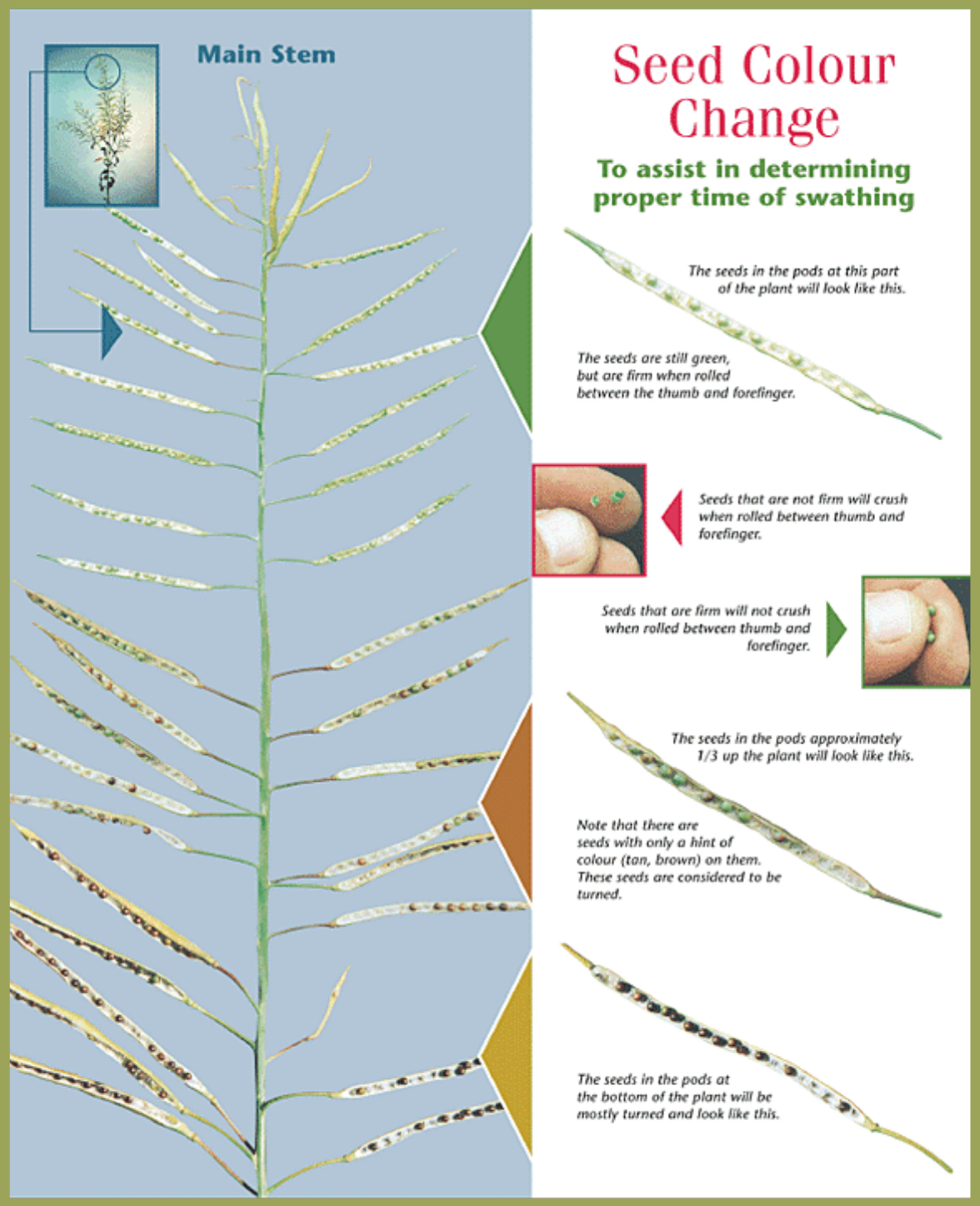
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