

BATTLE RIVER IMPLEMENTS

AGRONOMY UPDATE





This is a little late for this spring, but I think it is still useful information to have going forward, so here goes!

Have you ever noticed one thing that every crop production meeting or training session has in common? It is a phrase that is sure to come up whether you are learning about how to maximize spring wheat production, increase

canola yields, or ensure malt barley quality. Sooner or later every presenter is going to advise you to "get it in the ground early". I have walked out of meetings like this thinking to myself that apparently if I was a producer seeding 4,000 acres, every crop needs to be seeded first and all of them need to be in the ground before May 10th!

Obviously this is not going to happen. As we know, when agronomy ideals meet logistical realities, agronomy is seldom the winner. However, there is a sound reason that this advice is given at all these meetings. According to work done at the University of Minnesota, every day of delay past the optimum seeding period costs producers 1% in yield potential on hard red spring wheat. A study done on "Major Management Factors Determining Spring and Winter Canola Yield in North America (Assefa, et al.)", determined that the losses were even greater in canola – 1.7% of lost yield potential each day.



According to these studies, seeding timing is at least as important as the correct seeding rate, the availability of nutrients for the seedlings and uniform crop emergence in determining the yield potential of the crop.

So how can we use this information to help make seeding time decisions? Here are a few factors for you to consider.

ENVIRONMENT:

Frost can hit at any time – this is Alberta after all; but Alberta Ag has compiled some very good data that can let you see the probability of frost based on your closest weather station (<u>http://agriculture.alberta.ca/acis/alberta-weatherdata-viewer.jsp</u>). Check under the "normals" tab and you will see the probability of frost for everything from -5C to 0C for any Alberta weather station. Knowing you have a 50% chance of a -3C on May 1st may impact what you want to try seeding the last week of April.

CROP:

Crops such as canola and soybeans push the cotyledons (and thus the growing point) above ground as they germinate, while crops like cereals and peas maintain their growing points below ground until well into the seedling's development . This is what makes cereals and peas much more tolerant of early season frosts – the leaves can burn off without affecting the growing point. So if you are on the wrong side of a 50% risk of a killing frost, canola seeding might not be the best way to spend that day.

LOGISTICS:

What can you do in your operation that would lead to more time seeding and less time spent filling? Would a larger cart increase efficiencies? Or can you do something to increase loading speed so the actual fill time decreases? We are also seeing a move towards getting more of the fertilizer out of the cart at seeding time to enable people to get more acres per fill. In the past several years, I have seen producers trying alternatives to banding all the nutrients at seeding time. This might involve floating on AMS (or trying other sulfer solutions like BioSul), or a return to using fall banding to spread out workload and take advantage of traditionally lower N prices. I have also seen producers trying out some of the stabilized nitrogen products now available,. Farmers are trying products such as Super U in fall broadcasting , or applying a percentage of the N post emergent in crop using 28-0-0. Any and all ways that can reduce down time during seeding means more acres that can go in the ground during that optimum window to maximize the yield potential.

Hopefully, this has given you a couple of reasons to review your seeding operation and ensure that you are getting the best efficiency possible when you hit the fields in the spring. And please remember that the most efficient thing you can do as we are well into another busy season is to work safely. So heres to hoping for a trouble free 2019 planting season.

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