...FROM THE DESK OF SCOTT SCHAFFERT P.AG.

Between the Rows

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Soil Moisture Situation

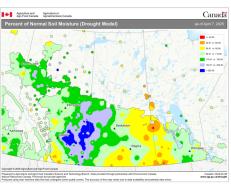
The current Soil Moisture maps from Ag Canada show that our overall level of soil moisture is better than this time last year. Last year at this time the 2024 map (bottom right) showed most of the area was sitting between 60-85% of normal soil moisture levels. The 2025 map (top right) indicates that most of the area is between 85-115% of normal. So according to these maps we are sitting pretty decent for soil moisture going into this season.

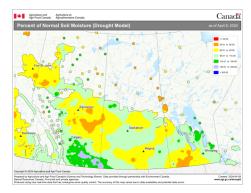
However area around High Level are the exact opposite. Whereas in 2024 the were in the 85-115% range, this season there at 60-85%.

When you look at the rest of Alberta and western Saskatchewan soil moisture levels are also significantly better. The Eastern Prairies are generally the same with soil moisture levels below normal.

The Peace as a whole is better than in 2024, except for a dry pocket near Fort St. John.

Agroclimate interactive maps - Agriculture and Agri-Food Canada





Agronomy Research Focus:

Developing Heat Stress Tolerant Canola Varieties

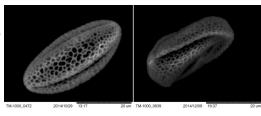
A recent article in "Crop and Soil" described current research being done in at the University of Manitoba that is looking at the affects of heat stress on canola and possible ways to develop new varieties that will overcome this stress.

As we all know from last year, a 35C heat wave at flowering can severely reduce canola yield and quality. This picture on the top right shows a mal-formed flower that will not be able to pollinate. The picture on the bottom right shows the differences between a normal canola pollen grain (left) and a pollen grain taken from a heat-stressed canola.

Since canola is a cool season crop, high heat events (>28C) cause many adverse effects to the biology of the plant itself. These effects reduce the effectiveness of pollination, pod formation and filling and even sprouting in the pods months after the heat event itself. For a further deep dive check out my discussions on heat stress affects on canola in BTR Vol 2 Issue 4 and Vol 2 Issue 8. The hope is in the future that varieties will be developed to overcome the adverse effect of heat stress.



<u>Heat Stress in Canola: Paving a Path Forward for Varieties</u>
With Improved Tolerance | Science Societies



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Seed Treatments: Primers and Biologicals

Seed primers and biological products are fairly new tools for farmers to use. These products are designed to be applied directly on the seed. In cereals and peas these products can be applied in conjunction to the traditional fungicide and insecticide seed treatments. For canola seed, these products are applied on top of the existing seed treatment your canola seed came with.

Primers are essentially a nutrient package that is placed right on the seed. This nutrient package is designed to ensure the newly germinated seed has readily available nutrients to get the newly germinated plant time for its roots to find the fertilizer band that you applied. In canola, a primer has the potential to speed up emergence and increase uniformity of the plant stand. The quicker your canola gets to the 1st true leaf stage the lower the risk of flea beetle damage.

Biologicals are divided into 2 different categories. Microbial biologicals are beneficial microbes such as bacteria, fungi or algae that promote soil health and plant growth. The other category are non-microbial: substances such as seaweed extracts, amino acids, humic substances and other organic substances that can stimulate plant metabolism and improve plant stress tolerance.

As with any new product or technology, I would suggest that if your interested in these products that you start with small areas or strips in your field so you can test if the are beneficial in your fields.

Seed

Treatments

Seed Treatments: Fungicides and Insecticides

Classic seed treatments of fungicide with or without insecticide have been around longer than I've been in this business and that's saying a lot. Us old-timers remember Vitavax powder, just sprinkle it into the 8' press drill seed box, and of course nothing worked better than Vitavax RS for flea beetle control, but unfortunately it also can cause cancer. Of course those days are long gone. Today's seed treatments control more seedling diseases, better, safer, and in more different ways (modes of action) than ever before.

All canola seed now comes pre-treated. You do have the option to increase protection, especially from flea beetles and cutworms with long-lasting insecticides. If your fields have a history of cutworms, or if you just want that added insurance they are worth the added cost.

In cereals and peas growers often forego a seed treatment due to costs or application issues. However, more often than not protecting seedlings from disease or wireworms will pay for themselves. Seedling diseases can reduce stands, increase maturation variability and ultimately reduce yield. It makes sense to treat your seed.

Another aspect of cereal and pea seed treatment I want to mention is to get your seed tested. Labs such as 20/20 in Nisku can screen your seed sample and determine what diseases that are on your seed already. Then you can either source better seed or tailor your seed treatment based on what's there, Since seedling diseases are either seed or soil borne, a good seed treatment will enhance your crop's establishment, and your overall yield.

Why pay for Agronomy?

So why should you pay for Agronomy? Prices are down, costs are up, so does having a Professional Agrologist scout your field payoff?

I understand those farmers who don't want one more thing to pay for. So let's look at the costs of Agronomy versus the value Agronomy can bring your bottom line. Our Agronomic Packages range from \$2-5/acre (less than half the price of the same services in the South Peace). Our most popular package costs \$3.50/ac or \$560 for a quarter section for an entire season. \$3.50/ac is cheaper than that second pass of Liberty, in fact that \$3.50/ac you spent on Agronomy may be the difference between 2 passes or one, over 4 times the package cost.

A recent survey by the Canola Council found that herbicide timing was the biggest reasons for preventable yield loss. A late herbicide application can reduce weed control, however too early and late flushes of weeds will also cause reduced yield. And that's just timing. As a Professional Agrologist with over 30 years of experience in the Peace, I will look at all aspects of your crop production.

High yields results from a combinations of factors you can control and those you can not. We can't control the weather, however I can help you find ways to reduce negative impacts and maximize positive impacts. Using a "Whole Field" concept that incorporates soil, water and crop together.

Bushels in the bin is the best way to compete with low prices and high tariffs. Having a Certified Professional Agrologist in your field, on your side, helping you make decisions that result in the highest returns for those fields is a proven way to get bushels in your bin.

Why pay for Agronomy?



Farming is Fun

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