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

Between the Rows

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Potassium Strategies

For those of you that have had soil sampling results analy- -60 lbs./ac of potash) or if your going with an ultra low rate sis and fertilizer recommendations from me in the past of canola (2-3lbs/ac). have no doubt heard me harping on potassium. Some even say I might be obsessed by K. Keep your K up as I always say. Potassium is key to many aspects of crop development and based on soil tests from this area over the years K levels are either below optimum or the ratio of K/Mg is

Potash is the product of choice for potassium, after all it is 62% potassium. So for 10-20 lbs./ac of actual K you only need 16-32 lbs./ac of potash. However there are a couple of issues with potash. Since potassium does not move much in the soil, its best to place it in the seed row, however potash has a salt index of 120. That means that a high rate of potash next to a small seeded crop like canola can in fact damage root hairs. Now remember it's the dose that makes the poison and we only are applying a relatively small amount. The only time to be very concerned by the salt index of potash is either when you going high rates (50

If you are looking to add a high rate of potassium or the ultra low rate of canola seed there are a couple of strategies for you. One is that you could split your potash placement between the seed row and the sideband. Logistically this has a few problems both with requiring 2 separate blends and that the potash on the side band is farther from the young seeding roots.

Another strategy is to use a different source of potassium. PolySulphate Premium from Taurus is a new form of fertilizer that contains 13% potassium but has a salt index of only 34. So its very safe in the seed row. Since its only 13% K versus 62% K to replace all your K needs with PolySulphate versus potash doesn't make sense. However by replacing only some of K requirement with PolySulphate does make sense if you are looking at high rate of K or ultra low rates of canola seed.

Agronomy Update 2025: Come learn with me.

The 2025 Agronomy Update is being held January 14-15, 2025. I have registered for this webinar and will have it on the big screens upstairs at the CropMaxx office in Fort Vermilion. The webinar runs from 8:30-4:00pm each day. Topics covered include Crop Diseases of 2024, Weed Survey of 2024, Harvest losses, drought resiliency, salinity and sodic soils, 2024 insect updates and precision farming.

AU Agenda: Agronomy Update 2025

If you interested in learning with me, shoot me a text and I'll make sure there is enough coffee and donuts.

Agronomist
Take:
Top Canola
Yield Risk
Factors

2024 Soil
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Agronomist Take: Top Canola Yield Risk Factors

This past fall the Canola Council of Canada took a survey, asking agronomists what they see as the biggest risk factors to canola yields over the next 5 years. The top answer in Alberta (and the one gave too) was temperature stress. Drought was second and herbicide-resistant weeds (top answer in the last survey in 2022) was third.

Managing heat stress in canola is not as simple as applying a different herbicide or changing fertilizer rates. Heat tolerance in canola involves many different factors; genetics, hormonal, nutrient balance and water-use efficiency are just a few. Seeding an early maturing variety early in season may avoid the hottest summer days at flowering, but that's not guaranteed. As of yet we don't have hormonal treatments we can apply on canola in case of extreme heat events. Research into developing varieties with improved heat tolerance is underway. But since many of these factors are beyond the control of the farmer, we must focus our attention on controlling what we can. A healthy, vigorous crop has the best chance to deal with heat stress. So we must provide an environment that will enhance early season growth. The first step is to do accurate and annual soil tests, we need to know what is the true potential of that field and what it takes to achieve it. By analyzing the results, we can determine soil chemical and structural capabilities, and what may be needed to restore the balance. Tissue tests in season can be used to see if the crop is still on-track for that goal. Since we can control when it rains, we must try to control the water we do have in the soil. Avoiding field operations that will dry out the soil, controlling weeds that will use up water, and promoting vigorous early growth that will close the canopy sooner, all will go a long way to improving water-use efficiency on a field level. For more information contact me or check out the article in the January 7, 2025 Canola Digest by Jay Whetter.

2024 Soil Sampling: Key Findings

I sampled over 24,000 acres in the area last fall and here is a summary of the highlights and trends I found.

- I. In general pH levels decreased. Not exactly sure why, but it will be interesting to see if this trend continues.
- 2. Soil moisture levels this fall we're good, not excellent but good.
- 3. In a mini-study I conducted in 5 fields, early soil sampling (early September, soil >5C) versus normal timing (early October, after soil is <5C), I found that the early sample results did vary significantly from later sampled fields. What did surprise me though was that this variance of inconsistency was itself inconsistent. I will do an article on this mini-study in a future BTR. Spoiler alert: consistency is crucial for soil testing.
- 4. K/Mg ratio's below ideal levels are in approximately 66% of fields sampled.
- 5. Boron deficiency was observed in 98% of fields sampled.
- 6. Sodium levels increased in some fields, but still below concern levels for 95% of fields.
- 7. In fields with obvious yield limitations (i.e. very low pH, high Na, or other structure issues) levels of Phosphate, Potassium and Boron tend to be quite high. My assumption is poor crops don't take up much of these essential nutrients, so they build up in the soil.
- 8. Organic Matter is super important in "restoring the balance" of a soil.

2025

Agronomic

Packages

2025 Agronomic Packages

Interested in having a professional Agrologist scout your field, provide instant updates and recommendations? We have 3 different levels of Agronomic packages available for 2025.

B (Basic) Plan includes 4-5 scouting visits at key timings during the season such as: pre-seed burn off, in-crop herbicide application, fungicide/insecticide timings and pre-harvest timing. The plan can also be customized to suit your needs. Are you planning a month long fishing trip or holiday during the season? You can rest easy knowing that I am your eyes and ears back on your farm. This package also gives you 24hr access to me for any agronomic questions you have. This plan is \$2.00/ac.

Plan 50 is a guarantee of scouting visits to each field at least every 2 weeks and more often during "crunch" times like fungicides and pre-harvest timing. This level of protection allows me to really get to know your field corner to corner and to ease your mind and protect your crop input investment. This plan is available for \$3.50/ac.

Plan 65 is the Cadillac plan that guarantees a weekly scouting visit to each field, comprehensive reporting and updates. This plan is well-suited for high value crops or problem fields that just need more watching.

In 2024 we purchased access to the Ag Grow scouting app that allows me to instantly create pdf files: listing my observations, recommendation and pictures right from the field to your email or text messages. This app also allows me to put together all of the data from your fields for a comprehensive overview of the entire season. As a grower we can also set up the app to allow you to input field operations as they occur, so field record keeping is accurate, consistent and stored safely. For more information or to sign up for our Agronomy packages call Courtney at the Fort Office or myself.

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Farming is Fun

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"We ain't quite stuck yet, but I've gotta feelin' the farther we go forward the longer we will hafta walk