

...FROM THE DESK OF  
SCOTT SCHAFFERT P.A.G.  
CCA 4R

# Between the Rows

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## INSIDE THIS ISSUE:

Preharvest 1  
Myth-busting

Post-Harvest 2  
Myth-busting

Soil Testing 2  
Myth-busting

## Preharvest Myth-busting

As with most things, there are many myths out there concerning preharvest applications. One popular myth is that glyphosate is a dry-down product. To be a true dry-down product, the active ingredient must act as a crop desiccant, glyphosate does not. Glyphosate only helps kill the actively growing plants, they only dry down by nature, after they are killed. Now that's not to say that glyphosate shouldn't be used preharvest, glyphosate does an excellent job killing plants, be they late crop flushes or weeds, but especially perennial weeds. But it does not actually dry the plant alone.

Saflufenacil (Heat) is slightly different, it actually has some dry-down capabilities to go along with weed control, however it does not act as fast as diquat (Reglone).

Reglone is a true desiccant, that actually disrupts plant cell cells causing them to dry rapidly. Diquat however is does not kill perennial weeds, it only burns the top growth.

Another popular myth is the use of Glufosinate-ammonium (Liberty) as a preharvest product. The truth is it was first marketed and developed as a "Harvest" for desiccation, however it was soon apparent that it wasn't nearly as good as diquat and was soon discontinued, only to be brought back when Liberty-Link crops

were developed. It may seem that Liberty would work well, we've all seen how fast it kills weeds in the spring. But large mature weeds and crops are a different nut to crack, and it just doesn't work well. Studies as recent as 2020 by Ag Canada measured the percentage dry-down by glyphosate, glufosinate, saflufenacil, and diquat. They found that when applied to both RR and Liberty-Link canola, diquat had the highest percentage by far, followed by saflufenacil, glyphosate and way down was glufosinate.

Interesting fact a product called "Roundup FastForward" was developed and sold for a short while as a competitor to Reglone. You could see the logic, glyphosates perennial weed control and glufosinate's speed, Good combo right? Wrong. Glyphosate works by getting into the plant, translocating down to the roots and killing the plant. Glufosinate is a contact herbicide that quickly burn young leaf material. As a result the glyphosate was unable to get into the plant because the leaves were damaged. They pulled the product a few years after disappointing results.

So its important to ask yourself what you want your pre-harvest application to do, how long are you willing to wait and what's the weed situation.

## Post-Harvest Myth-busting

When is the best time to kill perennial weeds? The answer is the fall. Perennial weeds are preparing for winter just like we are. But instead of pulling out winter jackets and hockey skates, perennial weeds are pumping resources down into their root to preserve them for next year. Any resources left above ground will be lost as that plant material is frozen, then rots away.

Plants actually sense that winter is coming, not from cooler nights, but rather shorter daylength. Daylength is what triggers trees into pulling the chlorophyll back from the leaves, leaving them yellow or red. Perennial weeds such as Canada Thistle act the same way, once the days get short enough they will put the resources out of the stems and leaves and store it in a safe place, below ground.

So using this knowledge we can time our herbicide application accordingly. Pre-harvest application of glyphosate can do a good job killing thistle, however you have to realize that the spray will have to penetrate the crop and enough chemical has to land on and be absorbed by the thistle. So control can be a bit less than desired. However on those crops that we get off early we do have a unique time-frame to do any even better job of control.

A couple of weeks after harvest, many perennial weeds recover

enough and are actively growing to take advantage of more sunlight, water and nutrients after the crop competition is gone. This is our opportunity to control them. With the crop removed we can ensure that adequate levels of chemical will hit the target and thereby achieve better control.

We don't always get this chance and once we get a "killing frost" times up, game over. But if conditions are right, don't put away the sprayer just yet.



## Soil Testing Myth-busting

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There are also a lot of myths surrounding soil testing out there. It's too expensive, takes too long, I did one 3 years ago, soil doesn't change that much; I've heard them all, and I'm here to tell you that these are all wrong. The soil in our fields is the sole source of nutrients that enable plant growth to produce yields and eventually pay us for all the time we spend out in the field.

I like to think of the soil in 2 ways, it's your crop's refrigerator and it's farm's bank account. All the nutrients a crop requires to produce the yield you are planning for have to come from the soil. Everything you want to eat tonight is coming from your fridge. Or if you move into financial analogies, the soil is a series of balances on bank accounts. It costs so much from each account to produce the crop you want and when one of the accounts is empty, that's it, you won't generate any more yield. So don't you want to know what's in your fridge before you go to the grocery store? Don't you want to know the balance in your bank account before you do a withdrawal?

Your largest expense on the farm is fertilizer. To maximize the efficiency of these dollars you need to know what and how much you need. Otherwise you're just shooting in the dark and either over-spending or under-spending your fertilizer dollar. The cost of a soil sample is just over \$1/acre, 1/10th or less than what you're spending on fertilizer. Let that sink in. As well fall is often the cheapest time to buy fertilizer, and definitely the best way to ensure you have the product in your bin come the spring seeding rush.

In terms of time, we can have the soil sample results and a recommendation by myself the next day by using our NutriScan. Even samples sent to the lab should take less than a week to get you the results and recommendations in your hands.

Soils do change over time. Nutrients such as nitrogen, potassium and sulphur can be mobile in the soil, levels do change. Using the same fertilizer blend year after year will not may not give you the same results. pH levels and structural issues take longer to change, but don't you want to know if your current practices and fertilizer blends are improving your soil?

I'm booking acres for soil sampling now. I expect the soil to be cool enough to accurately sample in a couple of weeks. Don't be left hungry, book your acres today.