



CropLinks May 2018

What's that in your Winter Wheat?

Most of the winter wheat across the province is at or approaching growth stage 30. This is a very significant stage, as it means the wheat is switching from a vegetative/tillering stage to a reproductive stage and starting to determine yield. You want to be wrapping up weed control and have your nitrogen strategy worked out. Since the plant is through tillering you can also determine if fields should be taken out if they are not meeting the threshold of 25 plants per foot of row.

What is troubling me is the amount of Cereal Leaf Beetle (CLB) I am seeing out this early in Kings, Annapolis and Hants counties. If you are seeing them in your field as well, first take a deep breath, you need very high levels to impact yield. What you are seeing right now are adults and the larvae have the largest effect on yield. The larvae strip the chlorophyll out of the leaves, so that photosynthesis and therefore energy production in the plant is decreased.



Adult Cereal Leaf Beetle



Larva of Cereal Leaf Beetle

Populations tend to be very spotty, so it is important to check the whole field and monitor the population to see if it is increasing or decreasing. Beneficial parasitic insects can take the Cereal Leaf Beetle populations down very quickly.

The following has been written by Tracy Baute from OMAFRA on how to properly scout and determine treatment for Cereal Leaf Beetle:

Examine 20 plants in five locations across the field. It is important to scout various areas of the field, as CLB tends to be unevenly distributed across the field. Record the number of beetles and larvae found per plant and the crop stage. Scout every 5 days, as damage can increase dramatically within days.

Control is warranted if an average of 3 larvae per tiller are found before boot stage. After boot stage but prior to heading, one CLB adult or larvae per stem warrants control. If significant feeding is taking place on the flag leaf in the early heading stages, control may be warranted but make sure that CLB is still present and actively feeding in the field before deciding to spray.

It is important to treat only if thresholds are met because you will also kill the beneficial insect populations that will control this insect long term. These beneficial populations may take several years to recover. If you are finding Cereal Leaf Beetle, take a breath, have a good look at the numbers and stage of the crops before you decide to take action.

Additional Soybean Inoculation?

I have been fielding a lot of questions about whether growers should be using a peat inoculant on top of their pre-inoculated soybean seed. This is a very good question and my answer is a cautious yes. I can remember the days before soybean seed came pre-inoculated. Soybean fields were notoriously uneven. Under perfect conditions where the soil pH is maintained, soils do not sit in drought or flooded conditions and soybeans are kept in a 2-3 year rotations, soil rhizobia populations will maintain. You would not benefit from added inoculant of the soybean seed. But if a soybean field falls into any of

these three categories added inoculant is something you really want to be thinking about;

- No previous history of soybean
- It has been more than three years since soybeans were grown on the field
- Soil environmental conditions such as soil ph, moisture, low organic matter has impacted the survival of your rhizobia bacteria population.

Soybean Seed Size

The other major concern I have on soybeans is the different seed size effecting plant populations. When you are switching from one seed lot to the next or one variety to another, pay close attention to the seed size in those bags. Most major seed companies have put 140,000 seeds in the bag (bag weights will vary between seed lots as the seed weights vary). Not all seed companies put the same number of seeds in a tote. This is important to note. Seed weights can range from 2000 seeds per kg to 3400 seeds per kg. This is a difference of 60 percent! This has a major effect on your seed cost/acre, but also on the performance on your field. Over planting in a wet year can lead to lodged soybeans and increased white mold; over planting in a dry year can lead to drought stress and smaller beans. If we can't manage soybean plant populations, we cannot manage white mold! If you take the time to note the seed size and the drill settings you can start to manage your soybean plant populations.

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