## BATTLE RIVER AGRONOMY UPDATE

As we roll through July and the crops start to mature, this would seem to be a good time to talk about the canola crops we are seeing out there. In many cases the stands are thin and inconsistent. Germination, emergence and establishment of canola crops this year has been challenging to say the least.

For many of the fields I scout, I would say that excess early moisture is one of the main reasons for what we are seeing. In some places we saw heavy rains either right before seeding or right after. This led to compaction issues and poor, spotty emergence of the crop. In other places, stand establishment was inhibited by having to fight with the excess trash left by last year's crop. The high amount of residue may have affected the drill performance and led to lower seed to soil contact, therefore a lot of seed never even had a chance to germinate. Also the generally cool, wet conditions we faced at seeding time cause issues all on their own. These conditions lead to delayed seed germination and emergence, leaving the seedlings at a much higher risk of mortality through diseases than we would normally see.

Once up, the challenges to the stands have not disappeared. In places where there was excess moisture, the rooting system remains shallow, unable to access nutrients from deeper in the soil and vulnerable to later season dry spells. The moisture also has led to diseases we normally would not deal with such as root rot or foot rot. Look for stunted plants that are trying to flower below the canopy and pull them up to examine the roots. You will likely find examples of root diseases. We also seem to be dealing with larger than usual infestations of root maggots. These are usually present, but do little damage. On some fields this year, I am finding them to the extent that the affected plants have had their roots girdled and are exhibiting weird micronutrient deficiency symptoms.

There are several other potential explanations for thin canola stands, but you get the idea. While there are many nice stands out there, there are also many that are below average. This becomes important when you are assessing insect risk to your crop. While lygus, diamondbacks, and Bertha Army Worms can be found in the fields of the area, the levels are still extremely low. If that situation changes and you are trying to decide whether or not an insecticide is necessary, don't forget to take into account what kind of stand you are looking at. Economic Threshold (ET) numbers that are established in the literature make several assumptions and give you a number based on commodity price and cost of application. The important thing to remember is that if you are dealing with a substandard crop stand, the established ETs will be set too high. In other words, your crop will not be able to tolerate the level of insect infestation the charts say you will. Spraying an insecticide should always be the last resort, as you will be better off in the long run if beneficial insects that target the pest can build up and do the job for you. However, you need to understand how the potential of the stand affects how you approach the decision on whether to spray or not to spray.

Wayne Spurrill is the agronomist at Battle River Implements Ltd and is in charge of Agronomy Services in the Integrated Solutions Department. For more information on the services offered by the Integrated Solutions team, you can contact Wayne at 780-781-1616, or Ward Anticura at 780-672-4463.