

BATTLE RIVER AGRONOMY UPDATE

Greetings! I hope everybody is getting some well-deserved down time now that seeding and spraying seem to be behind us. Given the dry conditions, it seems unlikely that there will be many fields requiring fungicide treatment. Based on what I am seeing in the fields, the diseases are there – but the levels are low and the economics don't work out given the yield potential. I am using a modelling system compliments of Western Ag Professional Agronomy to help me calculate the yield potential for fields that I soil tested this spring. According to what I am seeing, if we get our normal rains for the remainder of July (2 to 3 inches on average), there is still a chance for reasonable yields on most crops – still below average, but by no means a disaster. The crops are hanging in amazingly well and are a testament to how much our seeding practices have improved even since 2002 which was a year that saw very similar precipitation patterns through May and June.

That being said, there are still reasons to remain vigilant to preserve as much of the yield as we possibly can. The main focus of this month's information is to give an update on insect activity in east-central Alberta. Specifically, I would like to talk about wheat midge.

WHEAT MIDGE

According to the wheat midge forecast map (found on "Ropin' the Web"), midge populations are expected to be low in most of the area but we can expect to see them throughout the region. The largest population is expected to occur in a band of land through the east part of Flagstaff County. You can expect to see more activity to the east of Killam. Midge can only affect a wheat crop if they are laying eggs in the time between the emergence of the head and the flowering (the visible appearance of the anthers on the kernels). Which fields are at the most risk can be estimated by correlating seeding date and growing degree days. We know that female midge don't emerge and become active until we have hit roughly 725 GDDs and at 800 GDDs about 50% of the population has emerged. Research tells us that wheat planted prior to hitting 110 GDDs will usually flower prior to the emergence of the female midge and wheat planted after 330 GDDs usually are in the susceptible stage after the main flight of midge has occurred, so those crops are at a reduced risk. For this year, that means the late seeded wheat (after May 18th in most areas) is the most at risk. Now this is by no means a foolproof method of determining risks because there are significant varietal differences in time of heading and length of the flowering period. The bottom line is that if the heads have emerged, but flowering has not started and GDDs are over 700, this is a field you should keep an eye on. But if you have several thousand acres of wheat to look at, and a very narrow scouting window, this does help narrow down your focus.

SCOUTING FOR WHEAT MIDGE

Scouting should start as the head emerges from the boot and continue until flowering has commenced on most of the field. Scouting is best down at sunset and under light wind conditions. Pick 4 or 5 locations on the field margins to look for the midge. The largest problems are going to occur on the headlands – pay special attention to headlands that border on fields that were in wheat last year. If you average 1 midge for every 4 or 5 wheat heads and the crop is at a vulnerable stage, you may want to consider an insecticide application. Remember, if the wheat already has visible anthers, the crop is no longer at risk. Spraying an insecticide at that point is not only a waste of money – it also will impact the population of beneficial parasitic wasps that will help control the population in the long term.

While I don't expect wheat midge to be an overriding issue this summer, the pest is present and it would be in your best interest to make yourself familiar with the life cycle and scouting techniques for them. Getting comfortable with the process now will pay back many times over when we get a year (and it will happen) where management decisions will need to be made around this issue.

Wayne Spurrill P.Ag.

Battle Rive Implements Agronomist