

## AGRONOMY UPDATE

**AUGUST 2022** 

## CANOLA FLOWER MIDGE

As you are out scouting your canola for bugs in the next few weeks, you are very likely going to run across a scattering of petals that never opened and appear to be fused together. These galls, forming where the flower should have been, are being caused by a relatively recently discovered insect pest that uses canola as a host.



"Bottle shaped" galls formed by the larvae of the Canola Flower Midge

In 2017, researchers studying the formation of galls on canola flowers in Saskatchewan expected to find that an invasive species called Swede Midge had made its way onto the prairies. Instead, they discovered something completely different. They found that a previously unidentified midge species was the culprit. This new pest has since been named the **Canola Flower Midge**. We still don't know a lot about this fellow, and there are not any economic thresholds set for it, but I can tell you there is quite a bit of it around the country this summer. So if you see deformed flowers that look like the ones in this picture, (taken south of Killam) this is what you are dealing with.

The adults emerge from overwintering cocoons in the spring and lay eggs on the developing canola buds. The larvae hatch and develop in the flowers of canola, which causes swelling and prevents opening, pod formation, and seed set. Mature larvae exit the galls, fall to the soil, and form cocoons. The cycle may then repeat itself one more time before the canola is done blooming. Generally, early seeded canola will see more injury than later seeded fields, but trials conducted so far don't connect the damage observed to decreased yields. If you pull open the galls, you will find the larvae busily feeding away on the tissue inside.



Shelley Barkley, Insect Management Specialist with Alberta Agriculture and Forestry tells me she has seen as many as a dozen larvae feeding inside a single gall. You will know you have the right species if they begin to wriggle and jump when disturbed.

While I can find Canola Flower Midge damage in most fields I have looked at this week in Flagstaff County, there does not seem to be a correlation between seeding date and the number of galls in a particular field this year. Possibly, as has happened with the wheat midge this year, the soil was too dry for normal emergence this year and the midge emerged later than usual. That combined with a more favourable environment that has allowed a prolonged canola flowering period, possibly has led to an extended period for the midge to lay their eggs. I know this year is certainly the first time I have seen these galls in any significant amount.

As we get into August, remember to keep scouting! Whether it's disease or insects, you never know what you will find lurking in your fields!



