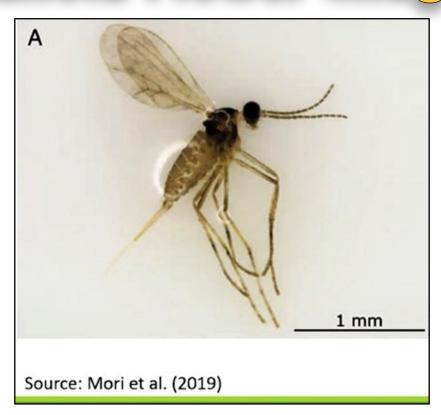


JANUARY 2025 AGRONOMY UPDATE

Canola Flower Midge



Canola Flower Midge (CFM) was first discovered in Saskatchewan in 2016 while researchers were investigating what they thought was an outbreak of Swede Midge. Instead, they found an entirely new species of Midge that seems to be native to Western Canada. On one level, this was welcome news since Swede Midge can be very destructive, as Ontario canola growers can attest. On the other hand, this discovery caused quite a stir as researchers were presented with a brand new species of pest that they hadn't even known existed previously. Once they knew what to look for though, it didn't take them long to figure out that the species is present throughout much of western Canada, including east central Alberta.

The good news appears to be that researchers feel it is unlikely that Canola Flower Midge will be very impactful on yield. Unlike Swede Midge, which attacks any growing point on a host plant, severely impacting canola yield, CFM seems to be limited to laying eggs specifically on newly opening flowers. These flower petals then fuse, supplying CFM larvae with a safe growth environment and preventing the development of that individual pod. Recently researchers have also found that the larvae can develop within canola pods though, so it would seem there is more to this story that still needs to be figured out.



Midge damage and larvae – July 11 Pictures taken in a field near Sedgewick

Midge populations can vary wildly by year and by geography, and we still really have no idea how environmental conditions impact them or even the number of generations there are in a growing season. There does seem to be indications of "field edge effect" though. In other words, damage is generally found on the field margins. This might be a sign that the Canola Flower Midge may be a weak flyer, so it's likely that if we ever do have to take steps to manage this pest, most of that management will take place on the headlands. Researchers have also determined that there are parasitoids that attack CFM, but there is still much to learn on how much these parasites impact the population. The bottom line is that while discovery of this insect has caused a lot of excitement in the entomology world (how often do researchers get to discover and name a new species?), for all the articles dedicated to it over the last 5 years, it should be pretty low on the list of concerns for producers. The damage caused by CFM is subtle and can be often overlooked when scouting, but when you see fused flowers on the edges of your canola field next summer, you will know that you are looking at Canola Flower Midge

