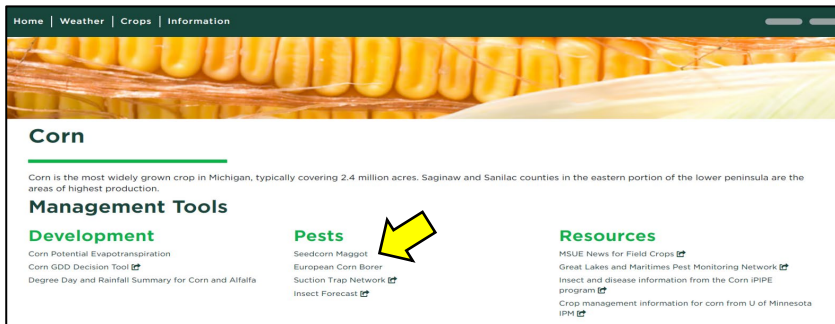


Using the seedcorn maggot model on MSU EnviroWeather



<https://enviroweather.msu.edu>

Choose CORN in the crop list

Select seedcorn maggot

Current example from the Constantine area

green stuff still decaying

tillage

Heavy pest pressure overwhelmed the seed treatment

- Field had an oat cover crop that did not winterkill
- Oats burned down and tilled under, then planted soon after
- planted April 22; seed-treated with an insecticide
- soybeans started to emerge May 5, 2 wks later
- about a quarter of the field lost to seedcorn maggot
- picture taken 12 May shows five maggots on a cotyledon
- fairly large maggots, likely close to pupation

The model predicted peak flight of overwintering adults & egg laying on April 14, very close to when the field was planted. Flies were attracted to the dying but still green cover crop which was tilled-in just before planting. This created perfect conditions for a heavy infestation that overwhelmed the insecticidal seed treatment.

As of today (May 14) pupation should have started, thus the damage in the field is done. In a replant situation, I do not recommend an insecticide. The decaying stuff is dried up and unattractive for egg laying and the beans should emerge quick.



This model was run on Tuesday, May 14th 2024, 9:06 am, for the Constantine weather station.

Inputs used: Select Date: 05/14/2024;

Model output

Key Event (DD Base 39°F)	Prediction
Overwintering generation: Adult flight and egg laying (200 to 813 DD after 3/1)	3/31 through 5/10
Overwintering generation: Peak flight and egg laying (342 DD after 3/1)	Occurred on 4/14
Generation 1: Adults start to emerge (842 DD after 3/1)	Occurred on 5/12
Generation 1: Adult flight and egg laying (901 to 1650 DD after 3/1)	Expected on 5/14 and expected to continue beyond 7 day forecast range.
Generation 1: Peak flight and egg laying (1234 DD after 3/1)	Outside of 7 day forecast range.

Peak egg laying

Pupation & new adults