MSU: Fast Fonz Facts

Last day of June 2017

Several insects are emerging now, in time for July 4th fireworks.

- 1) Western bean cutworm moths are flying in southern and central counties. Numbers will pick up over the next few weeks, with peak flight (the target for corn scouting) expected from the last week of July into early August. Visit the WBC trap Network site (https://www.cornpest.ca/wbc-trap-network/) sponsored by the Canadian Corn Pest Coalition to view trap counts from Ontario and Michigan. On the Interactive Map of Weekly Catch, hit the small clock icon on the upper left corner of the map. This will 'play' the trap catches from the start of the season. If you have a trap on your farm make sure to join the network and report your trap counts.
- 2) Asiatic garden beetles are also emerging this week. Those of you in southwest Michigan will likely see these small, chestnut-colored scarab beetles at lights on warm nights. This beetle is a recent invader into Michigan, Indiana, and Ohio over the last 15 years. It is well-documented turf pest, but not much is known about impact in field crops. Infestations tend to be in sandy fields or parts of fields, and in corn following soybean or potato. But it is still mystery where and why adults lay eggs in certain fields, but not others. We also lack good info on the impact of tillage, annual weeds, and insecticide use on grub numbers, and on yield losses from this critter.

You may have AGB and not even realize it. Bruce Mackellar, the extension educator in SW Michigan, is in the worst-hit area. Bruce provided a list of signs of AGB that he is seeing in corn fields in his neighborhood.

- ** Look for patches of corn that are stunted and /or yellowing with no obvious cause (such as water logging or water stress). If the grub infestation is heavy, the damage will be obvious, with severe stunting or stand loss. But the height difference may not be great. Instead, the color of the corn will be lighter than other parts of the field. There may be purpling on the lower leaves.
- ** Look for emergence holes. AGB grubs pupate underground and beetles emerge through small round holes. A lot of holes means significant numbers of beetles emerged from that area.
- ** If there is marestail in the area, pull a few of the plants and look for grubs or cinnamon colored adult beetles. Be sure to check around the empty hole, as there may be additional AGB in the soil. Colleagues at Ohio State have noted heavy AGB grub infestations around marestail plants, and today Bruce found numerous adult beetles near marestail. Some of the plants he pulled up had 50 or more adult beetles hanging out under the soil surface near the roots.

Asiatic Garden Beetle infestation in Van Buren County, SW Michigan -- taken by Bruce Mackellar, MSUE, on June 30



Affected part of the field (foreground) is a bit yellower and smaller than the surrounding area.

The cause is not apparent until you look at the soil surface...



Numerous holes where adult beetles exited the ground.

Note how sandy this field is.



Adult AGBs in the soil where a marestail plant was pulled up.

Bruce counted 50 under one plant.

Ohio State and MSU entomologist are teaming up to answer some of the questions about AGB. If we get funding, we will be able to survey dozens of fields in northern Ohio into southern Michigan, starting next spring. If you farm or have customers in the southern tier of counties (Cass, St. Joe, Branch, Hillsdale) and suspect you have had fields infested with AGB this year or in the past, give me a call (517-353-5328) or an email (difonzo@msu.edu) with your contact info and location. You can also call Bruce at the Van Buren Extension office. We are accumulating sites now that can be sampled and hopefully provide some feedback on the impact of these grubs on seed and field corn in our states.

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