

Western Bean Cutworm Affecting Fields in Area

The annual flight of Western Bean Cutworm (WBCW) moths has reached the Marinette County area. As you read the name, you would think that this is an insect which would affect green bean fields being raised for the Gillett cannery, or maybe soybean fields in the

area. However, their primary target is actually corn. They can affect all types of corn, and can affect sweet corn patches in home gardens, along with corn fields.

This moth lays its eggs onto either corn stalks, leaves, or developing ears. The larvae crawl to the developing ear and either chew the silks or chew through the husks which protect the ear, and eventually feed on the kernels of the ear. The feeding damage they do reduces yield a bit, but their damage usually allows fungal pathogens to get into the corn ear. These fungi cause more problems than the insect feeding itself, for two different reasons. First, the diseases can impact yield fairly significantly. Second, and often most importantly, the fungi may produce toxins. The presence of toxins make feeding the corn grain or corn silage to a farm's animals difficult and reduce the economic value of the corn crop if the farm is selling the crop.

This species is somewhat new to the Midwest, but has been an issue for 15 or more years now. Many years, their populations are low enough that there is no economic reason to consider either an insecticide application or having a Bt trait in the corn which would help control the larvae. However, their populations are very unpredictable, and the only way that a farm knows, with certainty, what they should do is by thoroughly scouting their fields.

One thing that helps WI farms know when to scout and a relative idea of their numbers in a given year is a state-wide WBCW trap system. Marinette County Agriculture Agent Scott Reuss manages two of these traps, with the 2020 traps near Crivitz and Porterfield. Both of the Marinette County traps caught a reasonable number of adults in the last week of July, firmly indicating that the WBCW moth flight is in full force in our area. State-wide numbers this year are showing a moderate overall flight of WBCW, indicating that it may be well worth it for farms in our area to scout for these insects in 2020.

Scouting for this insect does take some effort, as they can have high populations in one spot of the field and lower populations in the rest of the field. As such, it is recommended to inspect for egg masses on at least 20 consecutive corn stalks in at least 5 different areas of the field. The egg masses are usually laid on leaves in the upper portion of the plant, at least at ear height. They are very light colored just after being lain onto the plant, but become nearly purple just before the caterpillars hatch.

If the corn is pollinating or silking, you will also need to inspect the tassels and silks for feeding larvae. Count a plant as infected if you find either larvae or an egg mass. Treatments are recommended if you find 5% or more of a field's plants are infected. Foliar insecticides should be applied after the ear has started forming, to maximize the effectiveness of an

application. Farms which have the Vip3A Bt trait in their corn hybrids should not need to apply insecticide, as this is the only Bt trait which effectively controls WBCW.

Bryan Jensen, Field Crops Entomologist with UW-Madison, has a more complete article on this insect, including the WBCW monitoring card with photos of the moth, caterpillar, and egg masses, at https://ipcm.wisc.edu/blog/2020/07/western-bean-cutworm-3/ Farms can also link to either the WI Pest Bulletin or WI Crop Manager newsletters from this page and sign up to receive these valuable weekly information pieces.

Area farms which want to know more about this, or any other field crop affecting pest, can also contact Scott Reuss, UW-Madison Division of Extension Agriculture Agent. He can update you on area insect or disease populations, help you understand scouting protocols for various pests, and get you recommended treatment options. He can be reached by phone at 715-732-7510 or e-mail to <u>scott.reuss@wisc.edu</u>