# Fast Fonz Facts

13 July 2017
Time to Scout & Manage WBC in Southern MI!

**This email has important reminders and clarifications about how to scout for and manage western bean cutworm. At the end of this email, see an important note from Dr. Marty Chilvers about fungicides for ear mold control. Visit msuent.com for several info sheets with helpful pics, scouting tips and management recommendations for corn and dry beans. You are welcome to reprint, pass, or hand these out to customers.**

WBC moth flight has ramped up in Southern MI (the lower two tiers of counties) plus northern IN and OH. It is critical to scout pretassel and freshly tasseling fields for WBC egg masses in this region, given the overwintering population that was generated last year. For those of you in central Michigan, flight should be increasing next week. Scouting for this pest isn't too difficult. WBC egg masses are large, initially white, and laid on the upper third of pretassel plants. With some practice, they are easy to spot, especially if you put the sun behind the corn leaves and look for their shadows. Scouting is important because infestations can differ a lot among fields. There is also a risk of developing pyrethroid-resistant WBCs if blanket or insurance spraying is done across a wide area. We have already lost several Bt toxins against this insect, so insecticide resistance is a concern!

Entomologists in the Great Lakes region have adopted a **threshold of 5%** of plants with egg masses. This is lower than the threshold used in the western states, because of the high risk of grain quality problems (ear molds) due to favorable climate conditions near the lakes. WBC does not impact yield in most cases, but it opens the ear up to fungi that produce mycotoxins. It is important to understand that **this is cumulative threshold**, since fields can be attractive for egg laying for 2 or 3 weeks. In other words, if a field is not at threshold, scout a week later and accumulate % infestation towards the 5% threshold (add % week 1 + % week 2). Careful scouting is needed to detect low levels of egg-laying that add up to a damaging population over several weeks.

Here is my scouting strategy for pretassel fields.
First, dress the part – long sleeve shirt and a face shield. You need concentrate on the plants, not on the corn leaves cutting into your eye balls.

Second – do a quick scan for a high or low infestation. Motor at a steady pace, scanning rows with the sun behind.
*Heavily-infested fields (10% or more of the plants with an egg mass) are 'no-brainers' and immediately apparent without more-tedious counts. These fields should be treated. Fields with high infestations tend to be **sandy** where overwintering is very successful (larvae get deeper in the soil) or out-of-synch – **early- or late-planted** compared to the surrounding landscape - acting essentially as a trap crop.
*If you find NO egg masses after scanning a few rows (= hundreds of plants), the infestation is probably very low (altho I would scan several parts of the field to be sure, and check the field again in a week if it's still attractive).
*The trickier situation is when you see just a few egg masses …on to step 3.

Third – if needed, do a careful scouting for infestations at or below the 5% threshold. Count out plants individually or by length of row, and examine them carefully for egg masses. Remember, the threshold is cumulative, so even a low infestation of 1-2% can be important when it is added together with low % infestation from the next week.

Tips for Treating *Use a long-lasting pyrethroid. *Time the spray for when eggs are hatching. *Under wet conditions, ear mold infection is also a concern. If Proline fungicide is to be sprayed with a pyrethroid for WBC, adjust the timing of the tank mix to target fresh silks, which is the optimum fungicide timing to reduce infection. That timing is still adequate for WBC control.

And last but not least, an important note from Dr. Marty Chilvers, MSU Field Crops Pathologist, about ear mold management and fungicides:
If you are considering making a fungicide application for ear mold suppression, it is best to use a DMI-group fungicide. Currently **Proline is the only fungicide labelled for ear mold suppression** in Michigan. The application timing concept is similar to that for management of head scab in wheat. Application timing needs to coincide with silking, as this is the primary infection point for Gibberella ear mold. Studies in Ontario demonstrated that an application at full silking gave the best suppression. Applications of the QoI or strobilurin group of fungicides (such as Headline) during flowering are demonstrated to <u>increase</u> DON levels (vomitoxin) in corn, just like it can in wheat. These fungicides should be applied prior to tassel/silk stages (ie not in tank mix with an insecticide for WBC control)

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