

Southwestern Corn Borer Flights On The Rise

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Adult flight of southwestern corn borer (SWCB) is on the rise and has many producers asking questions. This insect can be problematic in Kentucky's major corn growing region, is more problematic in the western half of the state and is particularly important in the Purchase Area. The UK-IPM program runs pheromone baited traps to monitor this pest in Lexington and Princeton, KY experiment farms and cooperates with Mr. Cam Kenimer, the Agriculture and Natural Resources agent in Fulton County, who monitors SWCB traps in his county. See: http://www.uky.edu/Ag/IPMPrinceton/counts/swc_b/swcbgraph.htm and <http://ces.ca.uky.edu/fulton/InsectTraps>

Current Flight Status: This pest is rare in the eastern half of the state and no moths have been captured in the Lexington trap this year. In Princeton, moths are being captured and these captures are increasingly greater than the rolling five-year average. Thus far, the Fulton county trap has captured the largest numbers and, like Princeton, the captures are increasing (at this writing 75 moths per week).

This increase in captures has alarmed some individuals. Nevertheless, the capture rates thus far are nowhere near as large as the historic captures of the previous decade. See: <http://www.uky.edu/Ag/IPM/trapdata/trapdata.htm> Before the widespread use of corn products containing "B.t. corn borer traits", the peak weekly captures were much greater. Consider the current 75 moths per week in light of the historic five-year average peak for 1999-2003 which exceeded 350 moths per week. In some years peak captures were in excess of 800 moths per week and it was not unknown to capture more than 1000 moths per week!

With a few local exceptions it is unlikely that there will be widespread damage to corn from this pest. Nonetheless, infestation rates in a

specific field cannot be predicted by captures in distant traps. One must scout those fields to know the pest level. Field corn products which contain "corn borer B.t. traits" will be largely protected from this pest. However, field corn refuges, sweet, pop and other food grade corns that do not contain "corn borer B.t. traits" should be scouted for the presence of this pest.

One should scout for SWCB from June through August. There are at least two and possibly three generations per season. Monitor fields in June for "shot hole" feeding to whorl leaves. If damage is noted while walking through the field, examine 20 consecutive plants for each of several locations and record the number of plants that are damaged.

If "shot hole" damage is recorded for 35 percent of the plants sampled, an insecticidal control is warranted. This is the most important time to treat as the second generation is very difficult to detect and control. If insecticidal control is warranted, you may find a list of approved products in ENT-16, Insecticide Recommendations for Corn. This publication is available from your County Extension office or on the web at: <http://pest.ca.uky.edu/EXT/Recs/welcomerecs.html>

Remember it is not the moths (Figure 2.) but rather the larvae aka caterpillars or worms (Figure 3.) that cause the destruction. Spraying when moth flight peaks is not really doing you any good. You need to wait until the larvae begin to appear. Using May 31 as a starting point (the peak of the current moth flight) a 50°F degree day model predicts that SWCB caterpillars should be showing up just about now!

In addition, you must treat while the larvae are still active in the whorl. Once they are in the stalk, foliar application will not provide control. For more information on the southwestern corn borer see: Entfact-108.asp, Southwestern Corn Borer, available at your county extension office or on line at: www.ca.uky.edu/entomology/entfacts/ef108.asp.

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Figure 2. Adult southwestern corn borer.



Figure 3. Summer phase the southwestern corn borer larva.