Fall Armyworm Moth Captures Soars: Corn Earworms Also Rise

PRINCETON, KY.

The largest-ever recorded capture of fall armyworm moths occurred during the week ending on Aug. 27 in the Integrated Pest Management traps at the University of Kentucky Research and Education Center in Princeton. Grain crops and alfalfa/grass forage producers should be on alert for the first appearance of caterpillars, which should occur in the next week or two, said Doug Johnson, extension entomologist with the University of Kentucky College of Agriculture.

Trap counts on Aug. 27 were 1,038 moths. This is a phenomenal increase from 52 moth captures the week before. In the 15 years the IPM traps have been collected in Princeton, the second-highest number of moth counts came in at 326 for the week of Oct. 5, 2007, which was an outbreak year.

"It is always possible that nothing unusual will happen, but fall armyworm damage to forage fields has already occurred in at least four Western Kentucky counties this season," he said.

While Western Kentucky trap count numbers are extremely high, the moth captures in Lexington have remained low.

The fall armyworm is a pest that migrates to Kentucky from the South each summer, usually arriving in late June or early July. While fall armyworms are typically not a major pest, they cause the greatest damage in late-planted corn, grain sorghum, alfalfa and double-crop soybeans. Due to the timing of this large capture, grasses and alfalfa-especially newly seeded stands, late-maturing beans and wheat seedlings will be at the greatest risk of infestation.

While it is a pest of cattle and horse pastures, the fall armyworm should not affect horses. It should not be confused with the eastern tent caterpillar that causes mare reproductive loss syndrome. Fall armyworms appear in Kentucky

only in late summer and fall. Eastern tent caterpillars appear in the spring. A third caterpillar species, the fall webworm, might cause additional confusion. It produces silken webs in trees that some people might mistake for those of the eastern tent caterpillar. Again fall webworms appear in the late summer and fall, not in the spring, Johnson said.

Forage and soybean producers should closely monitor their fields for this pest. Wheat producers may likely avoid any significant damage by planting after the Hessian fly free date. It is likely too late in the growing season for fall armyworms to cause damage to corn or grain sorghum.

Early detection is the key to fighting this pest. The pest varies in color from light tan to black with three yellow stripes down its back. The middle stripe is usually darker and the ones on each side are wavy and yellow-red blotched. Fall armyworm has a dark head with

blotched. Fall armyworm has a dark head with a light-colored, inverted "Y" mark on front. If producers find significant populations of the fall armyworm in their fields, they can apply an insecticide. A list of insecticides for various crops is located in the 2010 Insect Management Recommendations for Field Crops and Livestock, which is accessible online at http://pest.ca.uky.edu/EXT/Recs/welcomerecs.html. Johnson cautioned against making any preventative insecticide applications, as these could harm beneficial insects that natu-

rally control the fall armyworm. Captures of adult corn earworm moths, also

known as the soybean podworm, also rose dramatically in Princeton, but their increase wasn't as phenomenal as the fall armyworm. The corn earworm moth trap count for the week ending Aug. 27 was 484, which is up from 82 during the Aug. 20 trap week.

"In the nearly 18 years of monitoring this pest, this is the second-largest capture with the largest being 525 in August 2001," Johnson said.

While it is too late in the season for corn earworm to do any significant damage to corn or grain sorghum, the pest will also feed on soybean pods and seeds. Like the fall armyworm, the moths should turn into caterpillars in a week or two. Soybean producers, especially those with late-maturing varieties, should scout their fields for this pest.

"Corn earworm is difficult to scout, as it does not feed to any great extent on soybean leaves," Johnson said. "One has to get into the plants and look directly at the pods to find this pest." Corn earworms are tan to pale green with several dark stripes down the back. But some vary





in color and may look almost black. Adults are usually about 1 to 1.5 inches long.

Should corn earworm populations infest soybeans, producers and consultants are advised to check their fields at least once a week. The economic threshold for corn earworm in soybeans is two worms per row foot of beans in 30foot rows. Since most Kentucky grown soybeans are in 15-foot rows, this number would need to be somewhat higher because of the increased plant population. Alternatively, one might use a 15-inch sweep net when rows are 15 inches or narrower. The research is not yet solid on this threshold, but a capture of three to four worms per 10 sweeps would warrant consideration of control.

Weekly trap counts and graphs of both insects are available on the UK IPM website at http://www.uky.edu/Ag/IPM/ipm.htm. Δ