July 15, 2004

COTTON PEST MANAGEMENT NEWSLETTER #7

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending July 11th listed the crop as 90 percent squaring and 43 percent setting bolls. This week, heat and the need for moisture is stressing cotton in some areas.

INSECT SITUATION: Mixed populations of tobacco budworm and corn earworm are infesting cotton at this time. Boll feeding bugs, stink bugs and plant bugs, are being treated in several areas.

Corn Earworm: Corn earworm (CEW) activity has increased in many areas during the past week. Small larvae were recently observed feeding in blooms and under stuck bloom tags in Bt cotton at Stripling Irrigation Research Park in Mitchell County. If CEW larvae attain ¼ inch in length, they are likely to survive and eventually damage several bolls. When escapes do occur on Bt cotton, often they occur in flowers, under stuck bloom tags, and on small bolls. If threshold levels of escaped CEW do occur, a pyrethroid should provide good control.

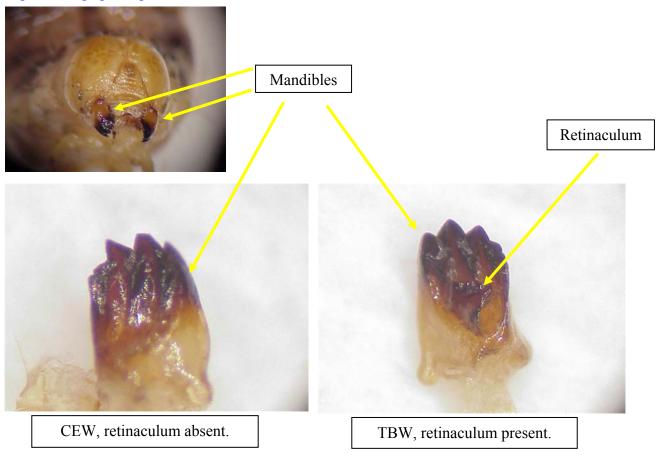




Small larva feeding in a pink bloom (left), most likely this is a CEW or fall armyworm. It is very difficult to distinguish FAW from CEW when small. Three-four day old CEW feeding into boll under a stuck bloom tag (right), be sure to look under and in stuck bloom tags for developing larvae.

Tobacco Budworm: Bt cotton provides excellent control of tobacco budworm (TBW). On non-Bt cotton, it appears infestations are mixed between TBW and CEW. Scouts should be observant in each field for moth activity which will give an indication of which is the primary species. When treating mixed infestations, insecticides should be selected for control of TBW. We have received a few

reports of poor control of TBW when pyrethroids were used. Due to the threat of pyrethroid resistance, non-pyrethroid insecticides such as Tracer, Steward, or Denim should be used for control of TBW. When troubleshooting poor control of TBW and CEW following a spray, it is beneficial to identify TBW and CEW larvae to species. Without magnification, larvae of TBW and CEW appear identical. However, larger larvae (@ ½ inch in length), can be identified by close examination of the mouthparts. Remove the mandibles (jaws) and look for the presence or absence of the mandibular process or retinaculum (tooth-like projection). The retinaculum is absent on CEW and present on TBW. For more detailed information on larval identification of CEW and TBW see http://www.gaipm.org/cotton/larvaid.html.



INSECT UPDATES: Check the **Cotton Insect Hotline** (1-800-851-2847) for updates on current insect conditions. The Cotton Pest Management Newsletter is also posted on the UGA Cotton Homepage at: http://www.griffin.peachnet.edu/caes/cotton/

Sincerely,

Phillip Roberts Extension Entomologist