July 31, 2003

COTTON PEST MANAGEMENT NEWSLETTER #9

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending July 27th listed the crop as 96 percent squaring and 74 percent setting bolls. Crop conditions changed very little with 1 percent rated very poor, 3 percent poor, 20 percent fair, 53 percent good, and 23 percent excellent.

INSECT SITUATION: The third field generation of tobacco budworm appears to have started in the southwest corner of the state. Corn earworm continues to be the predominant species in other parts of the state. Be observant for shifts in this species complex and adjust insecticide selection accordingly. Boll feeding bugs continue to be treated but economic infestations are sporadic. Little has changed compared with recent weeks.

Corn Earworm and Tobacco Budworm: Scouts have reported increased tobacco budworm (TBW) moth activity in the southwest corner of Georgia. To date corn earworm (CEW) has been the most common species of this complex in most areas. In our field plots, larval counts have outnumbered egg counts which suggests CEW moths have been laying eggs down in the canopy. We have observed eggs on bracts, blooms, bloom tags, and stems as well as the upper surface of newly expanded leaves. Only time will tell if this TBW flight will materialize in other parts of the state. Scouts should pay close attention to moth activity when walking fields as that will give us an indication of species makeup. Pheromone traps and HelID kits (egg identification kits) may also be used to aid in estimating species makeup. See http://www.agdia.com/helid/ for more information on HelID kits. On non-Bt cotton, non-pyrethroid insecticides such as Tracer, Steward, or Denim should be used for control of TBW. Insecticide applications, when needed, must target small larvae less than 1/4 inch in length to achieve optimal control. Afternoon showers have caused some growers to be late with sprays. TBW and CEW applications when needed on non-Bt cotton should be a priority. It is very difficult to control large TBW. Coverage is critical to achieve optimal control, especially when larvae are in the middle canopy of rank fields.

Bt Cotton: Some reports of escaped CEW in Bt cotton have been received. Bt cotton provides excellent control of TBW but in some situations supplemental control of CEW may be needed. Pyrethroids are the treatment of choice for controlling CEW in Bt cotton. In addition to providing good control of CEW, pyrethroids will also control many of the boll feeding bugs. Be sure to monitor blooms and bloom tagged bolls for surviving CEW larvae. When CEW escapes occur in Bt cotton, typically they are associated with the area of the plant where blooms are found. Image: corn Earworm larvae feeding under a dried bloom tag.



Boll Feeding Bugs: In fields which are setting bolls, scouts should be monitoring for boll feeding bugs and internal boll injury. A significant number of fields have been treated to date and some early planted fields have been treated twice for bugs. Decisions to spray must be based on thorough scouting. Not all fields will require treatment. To date the brown stink bug has been present in high numbers in some areas and thus organophosphates such as Bidrin or methyl parathion have been used for their control. During recent weeks, the southern green stink bug has become more common. Pyrethroids will provide very good control of southern green stink bugs. If brown stink bugs are not present in high numbers, a pyrethroid would be the preferred treatment especially if some CEW are also infesting the field.



Southern green stink bug (left) and brown stink bug (right) feeding on developing bolls. Other bugs such as plant bugs and leaf-footed bugs may also feed on developing bolls.

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 Internet at: http://www.griffin.peachnet.edu/caes/cotton/

Sincerely,

Phillip Roberts Extension Entomologist