

August 25, 2005

COTTON PEST MANAGEMENT NEWSLETTER #13

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending August 21st listed the crop as 4 percent open which is behind the five year average of 18 percent. As a whole the crop can be rated as good, however some fields have had boll retention problems. Crop conditions are rated as 1 percent very poor, 3 percent poor, 21 percent fair, 60 percent good, and 15 percent excellent.

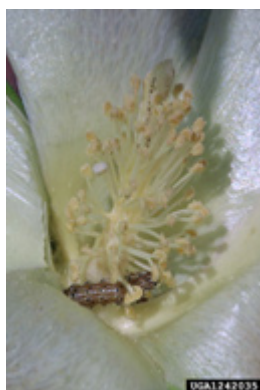
INSECT SITUATION: High populations of soybean loopers and sustained corn earworm pressure are being reported in some areas. Other larval pests such as southern armyworm, beet armyworm, and a few fall armyworms are also being reported. Stink bug damage also continues to be reported.

Soybean Looper: Soybean loopers (SBL) are a common pest infesting fields in many areas. SBLs will initially feed on foliage in the lower canopy and eventually work the way up the plant feeding on foliage in the mid and upper canopy. Some feeding in the lower canopy may actually be beneficial, especially in rank fields. However, foliage which is feeding immature bolls must be protected. The decision to treat SBL is a judgment call based on the level of defoliation and crop maturity. Treatment is necessary if SBL threaten to defoliate cotton with immature bolls. If SBL exceed eight per row foot it is likely that excessive defoliation will occur. SBL larvae consume incrementally more foliage as they mature. Large larvae are capable of causing a lot of defoliation in a few days. Several insecticides are recommended for control of SBL. Steward at 7 ozs/acre has performed well to date and provides control fairly quickly. Intrepid at 4-6 ozs per acre has also performed well but has slower activity since it is an insect growth regulator. Diamond is a relatively new insecticide and is also an insect growth regulator. Although we have less on-farm experience with Diamond, we anticipate good activity with Diamond at 9 ozs per acre. Both Intrepid and Diamond have very good residual activity. Coverage and penetration of the canopy are important when treating SBLs.



Soybean looper larva and adult. Photos by Russ Ottens and David Jones, www.ipmimages.org

Corn Earworm (Bloom-Tag Larvae in Bt Cotton): We continue to receive reports of corn earworm (CEW) being observed under dried bloom tags from several parts of the state. When escaped CEWs occur in Bt cotton, generally they are found in blooms or a few nodes below the uppermost bloom under dried bloom tags or feeding on small bolls. Scouts are reminded to examine at least one flower, one bloom tagged boll, and an additional boll at every stop. Prior to blooms opening (10:00 a.m.) scouts should open and examine pink blooms since larvae are enclosed in the bloom from the previous day. After blooms open scouts may monitor any open bloom. The threshold for treating Bt cotton is 8 larvae ¼ inch in length per 100 plants. Pyrethroids at medium rates are the treatment of choice for control of CEW.



Corn earworm larvae feeding in blooms and under a dried bloom tag. Photos by Ron Smith, Russ Ottens, and Bill Lambert, www.ipmimages.org

Stink Bugs: Stink bug populations range from moderate to high depending on location. In the coming weeks we may see bugs concentrate on later planted fields. We have effectively controlled stink bugs in most areas but we have had to treat more than normal. Continue to monitor boll damage and treat as needed. Bolls are susceptible to yield loss from stink bugs until they are 25 days of age.

Southern Armyworm: Southern armyworm (SAW) populations are somewhat sporadic but are present at the highest populations I have observed. Some fields have been treated specifically for SAW. A complex of foliage feeders is present in many fields and includes beet armyworm and/or soybean looper in addition to SAW. Insecticides recommended for beet armyworm and soybean loopers will also control SAW. Pyrethroids are will not provide effective control of soybean looper or beet armyworm. However pyrethroids will provide good control of SAW.



Small southern armyworm. Photo by Ron Smith, www.ipmimages.org

Two Gene Bt Cottons: A limited number of acres of Bollgard II and WideStrike are planted in Georgia. These two gene technologies provide better and a broader spectrum of control. To date both Bollgard II and WideStrike have performed well.

When Can We Terminate Insecticide Applications? The answer to this question depends on identifying the last harvestable boll which will significantly contribute to yield. Once identified, these bolls need to be protected from insects until they are relatively “safe” from damage by insects. The duration or length of time bolls need to be protected varies by insect species. The table below list selected insect pests and accumulated DD60s past white bloom (and approximate boll age in days) which bolls need to be protected. It is assumed that the field is relatively insect pest free when the decision to terminate insecticide applications is made.

Insect Pest(s)	DD60s past white bloom	Approx. Boll Age (days)
Plant Bugs	250	12
Corn Earworm Tobacco Budworm	350	18-20 bolls fully sized
Stink Bugs	450	25
Fall Armyworm	bolls mature	bolls mature
Foliage Feeders soybean looper beet armyworm southern armyworm	bolls mature	bolls mature
Sucking Insects whiteflies aphids	harvest (honeydew accumulation on lint)	harvest (honeydew accumulation on lint)

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.ugacotton.com>

Sincerely,

Phillip Roberts
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