

August 18, 2005

COTTON PEST MANAGEMENT NEWSLETTER #12

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending August 14th listed the crop as 95 percent setting bolls and 1 percent open. The USDA Crop Production Report released on August 12, 2005 estimated yield and harvested cotton acres for Georgia at 746 lbs. per acre on 1.19 million harvested acres.

INSECT SITUATION: Insect pest populations remain varied across the state. Stink bugs and other boll feeding bugs are being treated in most areas. Various caterpillar pests including fall, beet, and southern armyworms, soybean loopers, corn earworm, and tobacco budworm are more sporadic. Most reports of heavy populations are from southwest Georgia.

Stink Bugs and other Boll Feeding Bugs: Stink bug populations have been relatively high in many areas and occurred somewhat earlier during the year than expected. However, it appears most producers are successfully addressing these bug populations. Depending on where you are in the state, populations vary from primarily brown to primarily southern green. Be sure scouts are observant for bugs so we know which species is the primary target when an application is made. Pyrethroids provide good control of southern green but only fair control of brown species. However, pyrethroids offer added control of any corn earworms and small fall armyworms that are present. If brown species are the primary target, an organophosphate will provide the best control. In situations where brown stink bugs and corn earworms are present, a medium rate of a pyrethroid tank-mixed with a low rate of an organophosphate would be a good choice. Stay vigilant with scouting and treating as needed.

Corn Earworm: Escaped corn earworms in Bt cotton are being treated in some areas. Many of the escapes are being observed under stuck bloom tags. Pyrethroids should provide good control.

Fall Armyworm: Fall armyworm continues to be reported at low to moderate numbers in southwest Georgia. When detected early (less than 1/8 inch in length) pyrethroids will provide good control. However, once larvae are greater than 1/2 inch in length, they become very difficult to control. Good coverage and penetration of the canopy with insecticide is critical when targeting fall armyworm with an application since falls generally infest and feed in the mid to lower canopy. Small fall armyworm will either be found feeding in blooms or on the inner surface of boll bracts. Once larvae obtain some size, they will typically bore into the basal area of developing bolls. The threshold for fall armyworm is 10-20 larvae per 100 plants (about 2X that used for corn earworm).

Southern Armyworm and Beet Armyworm: We continue to receive reports of southern armyworm and a few reports of beet armyworm. Upon hatching, larvae of both species will feed gregariously on the underside of leaves near the egg mass. These "hits" appear very similar whether created by southern or beet armyworms. Be sure to properly identify which species is present. Southern armyworm has a series of black dots on the first abdominal segment that give the appearance of a black band or ring. Beet armyworm, on the other hand, have a single black dot directly above the middle pair of true legs. Southern armyworm is susceptible to most caterpillar insecticides (including

pyrethroids).

When Can We Terminate Insecticide Applications? The answer to this question depends on identifying the last harvestable boll that 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,

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