

May 22, 2003

COTTON PEST MANAGEMENT NEWSLETTER #1

COTTON SITUATION: The Georgia Weekly Weather and Crops Report for the week ending May 18th listed the crop as 62 percent planted. This is only slightly behind the five year average of 64 percent planted.

INSECT SITUATION: Thrips populations and resulting plant injury from thrips feeding increased during the past week, some foliar sprays for thrips are being made. Cutworm and grasshopper infestations have also been reported in a small number of conservation tillage fields. Both cutworms and grasshoppers may potentially reduce stands to unacceptable levels. Growers, scouts, and consultants should be reminded to monitor stands at a minimum of once per week from emergence until first square.

Thrips: Thrips populations appeared to significantly increase during the past 7-10 days. The majority of cotton which has emerged remains susceptible to thrips injury. Seedlings should be monitored for thrips and damage until plants reach the five leaf stage and are growing rapidly.

Typical symptoms of thrips damage include crinkling and cupping of expanding true leaves, stunting of plants, and in severe situations loss of apical dominance and stand loss. On cotyledon cotton, cotyledons will have a silvery appearance when heavily infested. Foliar sprays are recommended when 2-3 thrips per plant are observed, especially if wingless or immature thrips are observed. The presence of immature thrips suggest that the preventive treatment used at planting is no longer effective. Immature thrips are creme colored and lack wings, whereas adult thrips may be brownish black or yellowish brown and have two pair of fringed wings. A hand lens will aid in separating adults and immatures. Foliar treatments for thrips include Orthene, Bidrin, and dimethoate. The next 1-2 expanding leaves following a foliar spray may continue to exhibit injury symptoms since thrips had damaged the unfurled leaves in the terminal.

Thrips injury:



Grasshoppers: Grasshopper infestations are very sporadic, but have been reported at economic levels in a small number of conservation tillage fields. Grasshopper infestations appeared to occur later than during recent years. Grasshopper damage may include feeding on leaves, but more importantly, feeding on the stem of young seedlings. This type of feeding looks very similar to cutworm injury, but grasshoppers typically do not completely cut plants down. However, the stem is weakened on damaged plants which will often tip over and eventually die. Unfortunately we do not have an established threshold for grasshoppers, decisions to treat will have to be made based on stand counts. If the stand is threatened, treatment should be made. Immature or wingless grasshoppers are relatively easy to control, however winged adults tend to be more difficult to control and higher rates of insecticide will be needed. Several insecticides are registered for grasshopper control. In a field demo in Cook County, good control was achieved with a pyrethroid. Dimilin, which is an insect growth regulator with long residual, has provided good control of immatures in this trial. In this trial, grasshoppers are continuing to emerge from egg cases laid in the soil last fall. The added residual of Dimilin will have benefit in providing some control of these immatures. The images below are characteristic of grasshopper feeding on seedling cotton. Severely damaged plants will often tip or fall over as the seedling grows. Images 1-4. Grasshopper feeding injury on stem of seedling cotton plants. Grasshoppers may also feed on foliage.



Cutworms: Cutworms may also reduce stands. Isolated reports to date have been received. Fields which have green vegetation present at planting are at greatest risk of cutworm attack. Cutworms feed primarily at night. During the heat of the day, cutworms may be found in the soil or under cover crop residues. Treatment is suggested if the stand is threatened. Cutworms damaged plant and larvae below.



Scout Schools: The annual cotton scout school will be held in Tifton on June 2, 2003. As in years past pre-registration and a \$7.00 registration fee is required. Additional cotton scout schools are also planned in other areas. The dates, location, and contact for each are listed below:

May 31, 2003	Terrell Co. Ext. Office, Dawson- <i>Will Duffie (229)995-2165</i>
June 2, 2003	RDC, Tifton- <i>Phillip Roberts (229)386-3424</i> (pre-registration required)
June 11, 2003	SE GA Branch Exp. Station, Midville- <i>Richard McDaniel (229)995-2165</i>
June 12, 2003	Evans Co. Ext. Office, Claxton- <i>Mike Dollar (912)739-1292</i>
June 16, 2003	Jeff Davis Co. Ext. Office, Hazelhurst- <i>Tim Varnedore (912)375-6648</i>

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