

BLACKLANDS IPM UPDATE

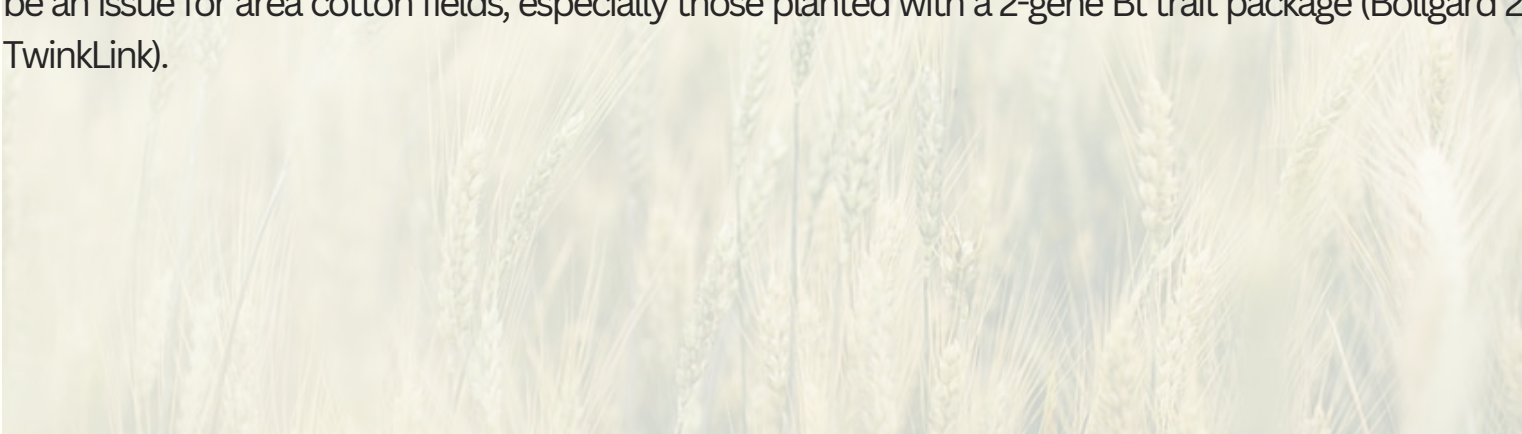
D. TYLER MAYS, EXTENSION AGENT-IPM, HILL AND MCLENNAN COUNTIES
ZACH T. DAVIS, CEA-AG/NR, HILL COUNTY

July 7, 2023

Volume 5, Issue 11

GENERAL:

Cotton is holding nicely with the bulk of the acres in the peak bloom stage, while our later cotton is just now starting to set squares. Spider mites are starting to be found in area fields, and with our hot and dry weather pattern predicted to continue for the next week or so, they could increase to populations that would justify treatment. There are a good number of fields in the area with active spider mite colonies, that currently are not at the economic threshold. Stinkbugs have been abundant this year in other crops including sorghum and corn, as well as being highly populated in wild host plants. This could be an indication of stink bug issues in our area cotton crop this year. I have started to find some stink bugs floating around area cotton fields but have not seen many bolls damaged yet. Late planted cotton fields should be monitored closely for cotton fleahopper as they start to set squares, as their numbers have started to increase in the late planted cotton field I am scouting. Bollworms could soon be an issue for area cotton fields, especially those planted with a 2-gene Bt trait package (Bollgard 2, TwinkLink).



BLACKLANDS IPM UPDATE IS A PUBLICATION OF TEXAS A&M AGRILIFE EXTENSION IPM PROGRAM IN HILL & MCLENNAN COUNTIES.



213 STADIUM DR.
P.O. BOX 318
HILLSBORO, TEXAS 76645
PHONE: 254-582-4022
FAX: 254-582-4021
MOBILE: 979-482-0111
EMAIL: TYLER.MAYS@AG.TAMU.EDU



SPIDER MITES:

Spider mites are a common pest of corn, cotton, and sorghum during periods of hot and dry weather. Last week I noticed a few leaves, but this week I started picking them up in more fields. They are currently concentrated in the field margins near corn, or grassy areas that were recently mown. In cotton spider mites can infest and damage the leaf tissue enough to defoliate entire plants if left untreated. Spider mite feeding causes the upper leaf surface to develop a red to maroon discoloration (**Figure 1**) and can cause a silverish to brown discoloration on the lower leaf surface (**Figure 2**). The reddening of the upper leaf surface tends to start near the base of the leaf, or along leaf veins and grows as the mite continues to feed on the leaf. Early signs of spider mite damage can be difficult to see at first, cause a slight mottling of the upper surface, with light green to yellow spots. Treatment for spider mites is warranted when about 40% of the plants are infested with active mite colonies. Miticides available for use in cotton include abamectin (Agri-Mek SC, ABBA Ultra), Oberon 4SC, Zeal 72WSP, Portal, and Fanfare (bifenthrin). These miticides do take time to control the pest, and treatments would perform better when applied before the population gets out of hand. Spot treating infested areas or treating end rows as they are moving into the field can reduce the applications cost, and hopefully prevent the need of treating the entire field.



Figure 1. Redding of the upper surface of a cotton leaf caused by spider mite colony.



Figure 2. Discoloration of the lower leaf surface and webbing caused by spider mite infestation.

STINK BUGS:

Stink bug numbers have been high this year in wheat, corn, and sorghum; and now threaten to cause economic damage to area cotton fields. Stink bugs pierce small developing bolls to feed on the seed, which can cause stained lint, introduce boll rot pathogens, prevent lint from fluffing out when the boll opens (hardlock), and in some cases can cause small bolls to be shed from the plant. The greatest impact stinkbugs have on cotton is reduced lint quality, leading to lower loan values. Bolls that are fed on by stinkbugs develop wart like growths on the internal carpel wall of the boll (**Figure 3**). Stink bugs should be treated when they have damaged 10% of bolls during the 3rd through 5th week of bloom, 20% of bolls during the 2nd and 6th week of bloom, and 30% of bolls during week 7 of bloom and beyond. Treatment options for stinkbugs include pyrethroids, acephate, and Bidrin. If the predominant stink bug species present is brown stink bugs a pyrethroid may not be effective, however, bifenthrin (Fanfare) does appear to be stronger on brown stink bugs than the other pyrethroids. The insecticide options available for stink bug management will wipe out our beneficial insect population, leading to secondary insects like spider mites and aphids to increase. IF you need to be treating fields for stink bugs, and spider mites are present you could include abamectin in the tank, or even use bifenthrin which can provide control of the stink bug population and spider mites (rate:3.84-6.4 fl oz). Sadly there is not a good option to keep aphids suppressed when treating for stink bugs.



Figure 3. Three different types of stink bug injury to cotton.
Photo credit: Philip Roberts, University of Georgia