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INTEGRATED PEST MANAGEMENT NEWSLETTER

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CALHOUN

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COTTON

Crop maturity in cotton fields ranges from 1/3rd grown square to mid-bloom. I am still finding relatively low populations of cotton fleahoppers and aphids, however, some fields have populations requiring treatment. Once the field has achieved bloom, it is generally safe from economic damage caused by the cotton fleahopper. This is because cotton fruit larger than matchhead square is no longer susceptible to fleahoppers and most of the harvestable fruit is past this stage at early bloom.

Aphids will need to be treated if their populations exceed an average of 50 aphids per leaf with a growing population. If a field has 50 aphids per leaf, come back to the field 3-5 days later to see what has happened to the aphid numbers. If they have gone down, then you have saved the expense of an insecticide application. If they went up then treat the field.

We are finding variable numbers of green mirid (*Creontiades signatus*). The green mirid is a plant bug that has become more common in the Lower Rio Grande Valley as well as our area of southeastern Texas. Adults are ½ inch long, narrow-bodied and light green. The insect goes through five molts or instars (nymphs). Differences between green mirid and cotton fleahoppers make identification between these two pests easier. Green mirid is generally bigger than a cotton fleahopper, with the smallest green mirid nymph about the size of a large cotton fleahopper nymph. The antennae of nymph and adult green mirid are longer than the length of their body, while the antennae of nymph and adult fleahoppers are approximately half the length of the insect body. Nymph and adult green mirid are light to dark green, fleahoppers are grayish green-colored insects. Both green mirid and fleahopper nymphs have red eyes. Young nymphs of green mirid have a red stippling on the antennae, but this usually is not observed after the third instar. In addition, adults of green mirid have a reddish band on the pronotum (segment behind the head). Squares and small bolls may suffer injury ranging from just surface feeding and boll malformation to complete fruit loss.



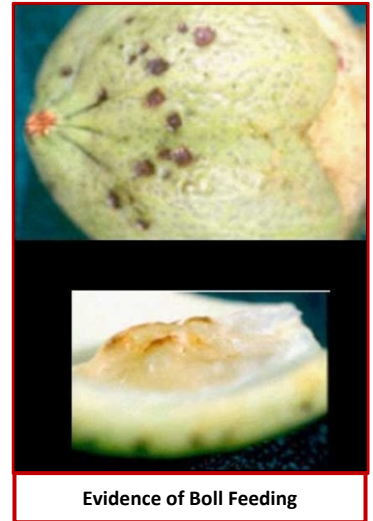
Green Mirid Nymph
Pictured by Stephen Biles



Adult Green Mirid

My current recommendations are to scout fields with a beat sheet or sweep net. Economic thresholds (ET) for this pest are not worked out so use an ET similar to that of Lygus; treat when plant bug counts exceed 15 to 25 bugs per 100 sweeps. Additionally, sample 100 thumb-sized bolls collected from 4-5 spots per field. Cut these bolls open and examine the inner boll wall for evidence of feeding which appears like wart-like formations caused by stink bug feeding. The green mirid feeding will result in a similar wart. The economic threshold for stink bugs is when more than 20% of the bolls examined have evidence of feeding. This threshold should be sufficient for green mirid.

Cotton fields should also be scouted for cotton bollworms. Treatment is justified when populations exceed 8-12 small worms per 100 terminals & 5-15% damaged squares/bolls 4-5 small worms per 100 terminals with eggs present and 5% damaged squares/bolls



Evidence of Boll Feeding

SOYBEANS

We still have not found soybean rust in Texas as of today and environmental conditions are too hot and dry for rust growth, thus fungicide applications are not recommended.

Stink bugs are slowly increasing in numbers but have remained below threshold in the fields I am checking. Thus far, I have seen Brown, Green and Red-banded stink bugs as well as predacious stink bugs. The predators (*Podisus* spp.) look similar to the brown stink bugs but their mouth parts are stouter due to its use as a weapon. Another different characteristic between brown stink bugs and *Podisus* is in the base of the mouthparts. If the base of the mouthparts is freely articulating the stink bug is a predator, however, if the base of the mouthparts is fused to the underside of the head the stink bug is a plant feeding bug. I have included a basic key to stink bugs of South Texas.

GRAIN SORGHUM

All grain fields should be scouted every 3-5 days for headworms and stink bugs. We are currently finding some of these pests in fields. I am currently looking for a sorghum field to conduct a headworm control trial.

SOME OF YOUR SUPPORTERS FOR THE IPM PROGRAM

Hlavinka Equipment Company
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