

Corn

Texas A&M System

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Integrated Pest Management Calhoun, Victoria And Refugio Counties

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Corn maturity ranges from in the V6-V10. I have not found any insects that may be yield limiting in corn fields thus far.

The next possible application will be for management of Aflatoxin. In the past five years, I have had field trials with Aflaguard in corn which is recommended to be applied between V10 and tasseling. However, none of my research has been conducted in fields containing levels of Aflatoxin greater than 150 ppb. Thus, my research on the ability of Aflatoxin reducing products has been inconclusive.

Grain Sorghum

Sorghum fields should be inspected for sorghum downy mildew (SDM). This disease has two forms in the field; systemic infection and local lesions. Systemic infection is what you want to look for right now. Systemic infection has the appearance of light colored stripes on the leaves or a "variegated" look. Local lesions tend to appear later and will be in the form of reddish lesions on the leaves. Both forms of the disease usually have a white powder (spores) found on the underside of the leaves.



SDM Local Lesions



SDM Systemic Infection

Soybeans

Soybeans should be inspected for 3-cornered alfalfa hoppers (3-CAH). This insect does most of its damage before the crop is 10 inches tall. The 3-CAH causes damage by girdling the stems of young plants. These plants usually continue to grow but lodging may occur later in the season. The treatment threshold for insecticidal control before bloom is when the infestation has reduced the number of non-girdled plants to 6 or fewer per row foot and insects are still present.

Cotton

Most cotton is showing symptoms of wind damage. This should not be confused with thrips injury. Check plants for thrips and treat fields when thrips populations exceed one thrips per true leaf.

I have been asked about changing economic thresholds of cotton insect pests to correspond with the high value of the cotton crop. This may be acceptable with insect pests after bloom but for cotton fleahoppers and other early-season pests, I would continue to use the same thresholds we have used in the past.

The difference between early season pests and pests of cotton bolls has to do with plant compensation. The cotton plant has a great ability to compensate for fruit lost early in the growing season or before bloom. For example, a mature cotton plant with 15 fruiting nodes has produced more than 50 squares during the season. In reality, we usually see fewer than 10 bolls per plant at the end of the season in cotton fields producing 2 bales of cotton per acre. Thus, more than 80% of cotton squares do not become mature bolls.

Seven days after first square, a cotton plant will have 4-5 squares. These squares are probably not worth protecting with insecticide applications. Research I conducted in 2010 suggests that protecting the cotton plant from cotton fleahoppers in the first week of squaring may not be justified. Table one shows yields from insecticide treatments timings to evaluate the value of the first week of squaring. No yield was gained by treating the first week versus initiating insecticide treatments the second week of squaring.

Table 1. Lint yield of insecticide timing treatments for control of cotton fleahopper. (Calhoun County, 2010).

Week of Insecticide Treatment Timings	Total Lint Yield (lbs/A)
Untreated	630.5
Week 1 Only	572.3
Week 1, 2 and 3	762.4
Week 2 and 3	760.9





