TEXAS A&M GRILIFE EXTENSION



Crop and Pest Situation

WEST PLAINS IPM UPDATE

News about Integrated Pest Management in Hockley, Cochran, and Lamb Counties from Kerry Siders

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<u>COTTON</u>

Based on the **IPM scouting program fields** here is what an average cotton plant looks like:

Average number of total nodes is 15 (range 10 to 18) 1st fruiting branch at node 7 (range 5-9) Square retention of 1st positions is 83% (range 72-100%) Node length is 1.2" (range of 0.6"-2.1") Plant populations average 32,700 per acre (range 17,200 to 54,000) Nodes above white flower 7.2 (76% of scouting fields blooming) 1st position bolls = 1



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Scouting this week has yielded mostly grasshoppers along some field edges near rangeland, and green stinkbugs



found at not alarming levels but consistently across the area. I think we are still a few days away from really being concerned with these stink bugs, primarily since we are just now developing cotton bolls.

Stink bugs have piercing-sucking mouthparts and damage cotton by piercing the bolls and feeding on the developing seeds. Stink bug infestations can cause substantial economic losses through reduced yield, loss of fiber quality, and increased control costs. Although stink bugs favor medium-sized bolls, they can feed on any size boll. Although stink bugs may feed on bolls 25

or more days old, bolls of this maturity are relatively safe from yield loss. Their feeding on young bolls (less than 10 days old) usually causes the bolls to shed. In larger bolls, stink bug feeding often results in dark spots about 1/16 inch in diameter on the outside of bolls. These dark spots do not always correlate well with the internal damage—callus growths or warts and stained lint. There may be several spots on the outside of a boll without internal feeding damage being present. Damage to the internal boll wall is a good indication that lint and seed are affected. Excessive stink bug feeding causes reduced yield, stained lint, poor color grades, and reduced fiber quality. In addition to direct damage, stink bug feeding can transmit plant pathogens that cause boll rot.

Scouting and Decision Making for Stink Bugs

Stink bugs are difficult to scout, especially in tall, vigorous cotton. Adults tend to aggregate, and the distribution of stink bugs within a field may be highly concentrated, particularly along field margins. Use any of the sampling techniques such as visual inspection, drop cloth, and sweep net for scouting. However, recent research by entomologists at the University of Georgia and Clemson University suggests that decisions to treat for stink bug infestations are best made based on the percentage of bolls with evidence of internal damage (warts or stained lint associated with feeding punctures). To use this technique: \blacklozenge Remove about 10 to 20 bolls, one inch in diameter (about the size of a quarter), from each of four parts of the field, avoiding field edges. \blacklozenge Break open the bolls by hand or cut them with a knife. Look for internal warts on the boll walls and stained lint on the cotton locks. \blacklozenge Check bolls with visible external lesions first to determine if the internal damage threshold has been met because bolls with external lesions are more likely to also be damaged internally. Once the cotton has reached 450 DD60 (degree days 60) beyond cutout (five nodes above the white flower), sampling and treating for stink bugs may no longer be necessary since bolls produced after this point will not become fully mature or contribute significantly to the crop yield. However, it is possible that this value may shift slightly due to factors such as boll shading, variety, and water stress.

Chemical Control and Action Threshold

Based on boll sampling, treat cotton with an insecticide when stink bugs are present and 20 percent or more of the quarter-size bolls have internal warts or stained lint. In general, the pyrethroids work best on stink bug but can cause secondary pest problems.



My priorities this next week are:

1. Keep up with crop water demands, we are approaching peak use in flowering cotton, and all peanuts.

2. Wrap up all fertilizing, with exception of some light fertilizer in irrigation water.

3. Keep close watch on green stink bugs, aphids, cotton bollworms over next month.

4. Maintain our good square set going into flowering on late cotton and maintain a good boll set with limited damage and losses.

5. Be proactive on peanut diseases.

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