

TEXAS COOPERATIVE EXTENSION

SOUTHERN BLACKLANDS

PEST MANAGEMENT NEWS

WILLIAMSON AND MILAM COUNTIES

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GENERAL SITUATION

Producers in the Southern and Eastern parts of the Southern Blacklands received between 0.1 to 1 inch of rain on May 6. Most received less than 0.25 inches, which may have helped for a day or two. Some of the corn and sorghum is "holding in" pretty well, however it is only a matter of time before all of it begins showing more moisture-related stress. Many fields of corn have been losing stand for about 3 weeks now. The overcast weather has noticeably slowed down the development of cotton, especially the latest planted. The wheat crop is maturing quickly and most fields are approaching harvest time.

CORN

The corn has suffered the most from the dry conditions. Fortunately, over the past 7 days or so, the wind has lessened and the overcast weather has decreased evapo-transpiration. Some corn fields are under more stress than others. This is due to several factors, including drier conditions, soil that is more compact, and inadequate root development as a result of the compaction.

Chinch bugs remain the pest of most concern in corn. Numbers of chinch bug nymphs have increased dramatically in some fields over the past 10 days. This was when fields that were more heavily infested really start showing signs of significant damage. The fields that are showing the greatest levels of chinch bugs either did not have any insecticide/seed treatment down or had one that is not effective at controlling chinch bugs.

Other insects being found in corn in limited numbers include, root-worms, and June beetles, (which are waiting a rain to trigger their emergence).

SORGHUM

For the most part, sorghum is progressing well. There are some areas where stands could be thicker. In the last newsletter, yellow sugarcane aphids (YSA) were discussed. Since then, fields that had economic levels of YSA have been treated and these numbers have subsequently remained low. Chinch bugs can be found increasing in many fields of sorghum and need to be regularly monitored, especially as long as the area stays relatively dry.

COTTON

Cotton ranges from still yet to be planted to first square. Most cotton is at 5-6 true leaves. Thrips range from light to moderate, with counts ranging from <1 to >3 per plant. Some fields are requiring insecticide applications for thrips, although the majority of the fields will make through the thrips treatment window without triggering a treatment.

Aphids remain light in cotton fields. In addition, good levels of adult lady and scymnus beetles can be found in most cotton searching for food.

Cotton Fleahoppers are quickly migrating into many fields of cotton. Fleahopper levels are ranging from 6 to 38 per 100 plants. The majority of the fleahoppers are adults, but a few nymphs are being found.

Expect fleahoppers to continue migrating into fields of cotton as many of the wild host plants continue to dry down.

As is usual most if not all fields will require one or more fleahopper insecticide applications. When deciding on whether or not to make a fleahopper insecticide application consider number of fleahoppers present and percent square retention or percent blasted squares. Do not spray just because the cotton is beginning to square. Also, make sure that there are enough developing fruiting sites present to justify an application. It is probably not justifiable to treat cotton if plants are averaging only a fruiting site per plant. I think we sometimes “pull the trigger to early on fleahopper applications.

If the cotton is just starting to square with less than one fruiting node per plant, more damage may be tolerated to allow a greater percentage of plants in fields to begin squaring. However, once the cotton is averaging one or more fruiting nodes per plant and fleahoppers are present and percent square set is below 80%, consider making an insecticide application, quickly. Percent square set can decrease from 90% to less than 50% in less than a week’s time under conducive conditions are correct; therefore, it may be advantageous to treat for fleahoppers when counts are approaching economic thresholds and square set is falling and if the field will not be scouted for another week. Also consider making consecutive applications at 4-7 day intervals if fleahopper migration continues to be high.

During the first three weeks of squaring, 10 fleahoppers per 100 terminals may cause economic damage. Be sure and carefully monitor fields for adult and nymph fleahoppers.

Some recommended insecticides to manage fleahoppers include Bidrin at 1 gal/40 ac, Centric at 2 oz/ac, Dimethoate 4E at 1 gal, Intruder 0.6 oz./ac, 1/16 Othene (90S) at 4 oz/ac, Trimax 1.0 to 1.5 oz/ac, and Vydate CLV at 8 oz/ac.

FERTILITY RESIDUAL

The following was provided by Dr. Mark McFarland, Extension Fertility Specialist, College Station.

With the extended dry conditions encountered this spring, many are wondering if the fertilizer they applied weeks ago will still be there when the moisture comes. In general, the answer is yes, if the fertilizer (and particularly the nitrogen) was applied properly.

Nitrogen is the most dynamic of the nutrient elements and is susceptible to loss by both leaching (when we get rain) and volatilization. The potential for nitrogen to volatilize depends largely on the source which is used. Anhydrous ammonia is subject to loss at the time of application since it forms a gas when not under pressure. But, if it is applied to a minimum depth of 3-4 inches and the slot is closed, losses should be minimal.

If the depth and/or slot closure are not adequate, losses can be significant (20% or more). Soil moisture content at the time of application is not a major factor (except as it affects slot closure) since there is adequate moisture even in a fairly dry soil to hold the nitrogen. Heavier textured soils also are better able to retain N applied as anhydrous ammonia.

Other forms of nitrogen typically are less subject to significant losses, except under certain conditions. For example, ammonium sulfate and urea can volatilize if surface applied to a calcareous (high pH) soil. This occurs when very light rain (0.1 inches or so) or heavy dew occurs after application and is followed by hot, drying conditions. Under these situations, both of these forms of nitrogen can be converted into N gas and lost. Similarly, if urea ammonium nitrate (also called UAN or 32 Solution) is surface applied, some nitrogen can be lost on high pH soils. The loss occurs from the nitrogen supplied as urea in UAN, which although dissolved in the liquid is still subject reaction the same as dry urea.

With any form of N fertilizer, the best way to reduce loss is incorporation. Injection of anhydrous and liquid forms of N, or incorporation of dry forms will dramatically reduce any potential for volatilization. Once placed beneath the soil surface, the nitrogen should be reasonably stable and available for plant uptake.

Once nutrients, such as phosphorus and potassium, are very stable and not subject to leaching or volatilization. If adequate amounts have been provided to the crop based on soil test recommendations, these nutrients should be available when moisture comes.

Texas IPM Network Web Site Launched

The Texas A&M University Entomology Department and Texas Cooperative Extension have launched a new internet web site that focuses on web based IPM information available through the TAMU system. The web site may be accessed at <http://txipmnet.tamu.edu>. The web site

offers web visitors an array of topics that pertain to various agricultural commodities (including fruits and vegetables), ornamental plants, lawn care and much more. The web site provides links to various information regarding plant pests and diseases, with additional links to harvest aids, plant variety information, and weed control methods. It draws from a number of web sites managed by different departments at TAMU and regional centers.

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