

FOCUS on South Plains Agriculture

A newsletter from the Texas AgriLife Research and Extension Center at Lubbock



Corn earworm (cotton bollworm). Photo Credit: Patrick Porter

Volume 52 number 11

2 August 2013

<http://texashighplainsinsects.net>

<http://lubbock.tamu.edu/focus>

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Cotton Disease Update

Several calls have come in over the past few days regarding the onset of Verticillium wilt. Mild symptoms of this disease were observed prior to the rains received earlier this month; however, the disease is generally observed earlier in the growing season. Delayed planting, crop establishment and growth and development of cotton have negatively impacted the expression of disease symptoms. Furthermore, the hot and dry weather experienced in the past few years has masked potential damage that Verticillium wilt may cause. The cooler temperatures that accompanied rain received across the High Plains in conjunction with the increased water demand of plants required during boll fill all favor development of the disease. In fields where the disease has been observed, both incidence and severity should increase over the next few weeks, especially as temperatures warm up. I have received a few phone calls inquiring about the impact the application of fungicides and/or foliar fertilizers will have on Verticillium. In short, the answer is applications of these products alone or as tank mixtures will have no effect on the disease as infections have already occurred. Likewise, the use of growth regulators will have no effect on symptom expression and will not reduce the amount of disease severity. Refer to the [previous issue of FOCUS on South Plains Agriculture](#) for more information on Verticillium wilt. If you have any questions regarding this or any other cotton diseases, contact Jason Woodward @ 806-632-0762, or via e-mail jewoodward@ag.tamu.edu. **JW**

Peanut Disease Update

The cool and rainy conditions experienced earlier this month were ideal for the development of Sclerotinia blight, caused by *Sclerotinia minor*. Initial symptoms of Sclerotinia blight include a yellowing and/or wilting of lateral branches. A closer examination within the plant canopy will reveal a cottony, white, moldy growth; which is most commonly observed early in the morning. As the disease progresses, infected stems have a bleached appearance and become shredded. Small, black, irregular-shaped structures (sclerotia), which serve as over-wintering structures, may be produced on or within infected tissues. Sclerotinia blight is very destructive and can develop quickly, especially when there is lush growth and a dense canopy. Management of Sclerotinia blight is achieved through the use of resistant varieties, such as Tamrun OL07 and Tamrun OL11 (runners) or Jupiter (virginia), as well as preventative applications of the fungicides Omega or Endura. Several experimental fungicides are being evaluated for activity against Sclerotinia blight, but are not yet commercially available.

Prior to the rain events, several reports of leaf spot were made. While these reports have not been confirmed, scouting should be conducted to monitor disease development. Initial symptoms of leaf spot generally occur in the lower canopy and consist of small, chlorotic flecks on the leaf surface. These lesions may be easily confused burns caused by herbicide damage. As the disease progresses lesions become evident throughout the canopy. The production of microscopic fungal

seed, called spores, within lesions can be used in the diagnosis of leaf spot. Spores from these lesions are disseminated by wind, rain, or irrigation. Under favorable conditions, leaf spot can develop quickly with new lesions appearing every 10 to 14 days. For additional information of peanut production or disease management refer to the [latest issue of the Peanut Progress Newsletter](#) or contact Jason Woodward @ 806-632-0762, or via e-mail jewoodward@ag.tamu.edu.

JW

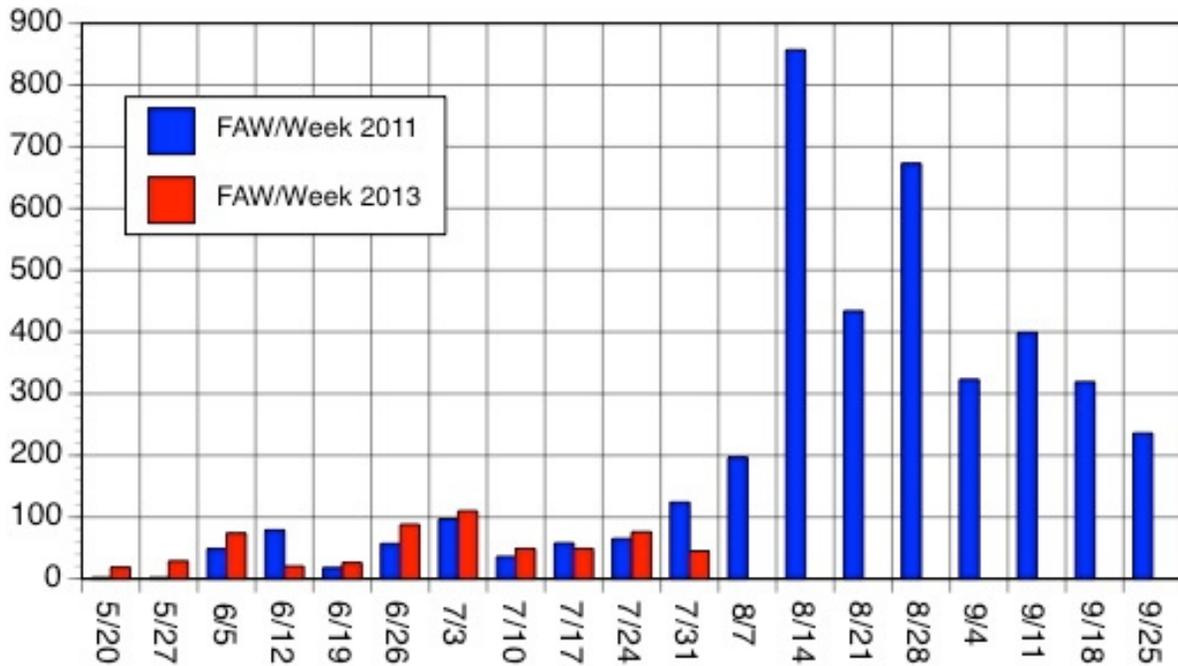
Corn and Sorghum Insects

What a change from my article two weeks ago wherein I predicted a heavy fall armyworm flight and the potential for reduced spider mite pressure after the heavy rain. Reality is not exactly matching up with my predictions. Spider mite populations are highly variable. Monti Vandiver, IPM Agent in Bailey and Parmer counties, has recommended treatment on about one half of the fields in his scouting program. However, there are other fields where mites are hard to find. I am not seeing any appreciable numbers of spider mites in my fields. The bottom line for mites is that fields should be scouted and it would be a mistake to make assumptions based on other area fields.

What happened to the moths? I am not sure. Corn earworm (cotton bollworm) numbers are high in some areas and not in others. Manda Anderson, IPM Agent in Gaines County, is reporting treatable numbers in non-Bt cotton. My late planted corn, however, has fewer earworms than I expected – only about two per ear. Fall armyworm trap captures in Lubbock declined this week and are now considerably behind their trajectory of keeping up with 2011 captures (see graph below). This does not mean we are safe, it just means there was one week of lower trap captures. I am confused as to why my trap captures are down this week but I am finding lots of first instar (just hatched) fall armyworm larvae in brown silk corn.

Greg Cronholm, retired IPM Agent in Hale and Swisher counties and now a crop consultant, is reporting some headed sorghum fields that are approaching treatment threshold for headworms. (And his fall armyworm trap captures are down this week as well.) Greg was the one who revised our thresholds a few years ago and they can be found in [Managing Insect and Mite Pests of Texas Sorghum](#) on page 22. Note that the thresholds were revised lower and vary depending on the number of large, medium and small larvae per acre, control costs and crop value. RPP

Fall armyworm moths per trap per week, Lubbock, Texas.
 2011 had a very heavy moth flight and is used for comparison.



Sunflower Moth Insecticides

Head moth treatments are continuing and newer head moth insecticides were discussed in the [June 21 issue of FOCUS](#). **Note that the data presented in both tables are for two or three applications.** Questions are being asked as to how many days of protection can be expected with these new insecticides. The real answer is that we have not done the research yet and we do not know.

I am hearing reports of some people saying that a mid-range rate of one of the new products “should” last two weeks. The problem is that there are no solid data to back up this statement and it is better to be conservative until we know for sure. Durability will depend on the nature of the insecticide itself, the rate used per acre, stage of bloom when it was applied, gallons of spray volume per acre and the amount of moth pressure in the field. Given our lack of present knowledge on longevity it would be prudent to expect 7 – 10 days at the higher end of the rate range and then recheck the field after a week to make sure the insecticide is still working. RPP

Cotton Insects

In the last few days I have spot checked (using the beat bucket method) cotton fields in several counties stretching from Bailey in the north to Gaines in the south. Basically, I have not seen any one particular insect pest in high numbers, except bollworms on non-Bt cotton in Gaines County. I noticed some (2-3 per 20 plants) cotton fleahopper nymphs in few fields located in Hale and Lubbock counties. However, I did not find any Lygus (both adult and immature) in the sampled cotton fields. Also, myself, Dr. Megha Parajulee and Stanley Carroll have sampled many patches of voluntary alfalfa, ragweed, and Russian thistle but did not find any sizable number of Lygus as one would expect in these preferred host plants. As of now it appears that we will probably have a very light Lygus year and that will certainly be a relief to those who have seen Lygus damage in their cotton fields in earlier years. Having said that, at the time of writing this report, Blayne Reed, IPM-Agent of Hale and Swisher counties confirmed that in few of his program fields there are Lygus populations which are close to treatable level. I think the situation with Lygus in Blayne's area is localized and it is unlikely that we will see Lygus infestation in cotton in other areas of High Plains. Of course, it does not mean that we should quit monitoring for Lygus bugs in cotton.

During this time of the year we might see some aphid infestation in cotton. Although I did not find any aphids in my sampling efforts, I got to see some aphid infested plants in the Texas Tech research farm on Quaker Ave. in Lubbock. Those cotton plants had good numbers of aphids earlier as evident by curling of leaves and aphid skin casts. A number of predators were also seen in those plants, and that explains why there are no aphids left on those plants. Among the efficient predators of aphids are: Lady beetle (both adult and immature), scymnus beetle (both adult and immature) and lacewing (immature, adults are not predatory). Unless cotton is heavily infested and these predators are abundant, the cotton aphid problem should usually disappear by itself. To know more about the beneficial insects, consult the Texas A&M AgriLife Extension publication, "[Recognizing the Good Bugs in Cotton: Field Guide to Predators, Parasites and Pathogens Attacking Insect and Mite Pests of Cotton](#)".

In terms of significant insect pest issues in cotton, currently a few cotton fields in the Gaines County have experienced above threshold levels of cotton bollworms. These cotton fields are planted with non-Bt cotton cultivars and have high yield potential. But, bollworm infestations have certainly caused a quantifiable amount of fruit shed. Some of these bollworm infested cotton fields have already received at least one insecticide application targeted against bollworm. Manda Anderson, Gaines County IPM-Agent, and I inspected three of these fields and we are still finding some actively feeding bollworm larvae. It appears that while the first insecticide application did lower the population, the desired level of bollworm control was not achieved. Meanwhile, we are continuing to monitor the bollworm population in those fields. More details in this regard will be available from Manda Anderson in the "Gaines County IPM newsletter". AB

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Editors: Patrick Porter and Apurba Barman

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Contributing Authors

Apurba Barman (AB), Extension Entomologist
Patrick Porter (RPP), Extension Entomologist
Jason Woodward (JW), Extension Plant Pathologist

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County IPM Newsletters

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