FOCUS on South Plains Agriculture

Texas AgriLife Research and Extension Center at Lubbock 1102 E. FM 1294, Lubbock, Texas 79403

Cotton Insects

Lygus threat increases Bollworms hanging on

Corn Insects

Mite and insect situation SmartStax gets EPA approval

Sorghum Insects

Headworms Midge might be higher this year



Cotton Insects

For the most part things are still relatively quite on the insect pest front. Lygus appear to be content in the alfalfa and flowering weeds, aphids are scarce, and bollworms and beet armyworm are mostly light.

Lygus

Lygus numbers are actually pretty high; just not in the cotton. With all of the rain and the fact that our cotton is still fairly short in stature, the Lygus are preferentially sticking to alfalfa and weeds rather than invading cotton. However this could quickly change. Once we see some decent canopy cover, Lygus adults will drift in and out of the cotton laying a few eggs, and before you know it, we have a problem. I am picking up a few Lygus nymphs in cotton here and there. So we need to keep an eye out for initial Lygus colonization, but be careful not to count fleahopper nymphs as Lygus nymphs. Although fleahoppers were scarce early in the season, they are now pretty common. They do not pose an economic concern at this point, but we do not want to confuse them with Lygus. To tell a fleahopper nymph from a small Lygus nymph, we will need at least a 10X hand lenses. The Lygus will tend to have a broader head and body than the fleahoppers and are often a brighter color of green. Fleahopper nymphs will also be hairier and will often have red eyes (click here to view the cotton fleahopper life stages and here to view the Lygus life stages.

At this point in the season, the best technique for sampling Lygus is with a drop cloth. Preferentially, black drop cloths work better than white ones since small light colored insects such as Lygus nymphs show up better on the black drop cloths. Simply place the drop cloth between the rows and vigorously shake and beat about 1.5 row-ft for each side onto the drop cloth and then quickly inspect the cloth. Most adult Lygus will be stunned, but watch for those able to quickly fly. Two drop cloth samples constitute a single sample unit. Take at least four sample units or eight drop cloth samples per field side. If the total number of Lygus equals or exceeds 4 per 6 row-ft (2 per drop cloth sample); then an insecticide application is justified.



Sampling with a drop cloth

Bollworms

Scattered bollworms are still being picked up, particularly south of Lubbock. I have heard of a number of non-Bt cotton fields requiring treatment. Most of the infestations we are seeing are chronic infestations; never reaching threshold but lingering just below threshold for several weeks, prompting concern about getting "nickel-and-dimed". Additionally, I have heard of difficulty in getting control of some of these populations with pyrethroids. The reason for the less than acceptable control is not clear at this point. I seriously doubt that it is a resistance issue, but I would not rule that out. The fact that we are dealing with chronic infestations may mean that a good proportion of the worm population has had time to grow and are living deep in the canopy, in squares, bolls, bloom or under bloom tags. Under these conditions spray coverage may be the biggest problem. If treating a field with bollworms greater than 1/4 inch in size, use a ground sprayer if possible. If going out by air, make sure you use at least 5 gallons of spray solution per acre, and use higher rates of the pyrethroid. I covered more information on bollworms in the previous issue of FOCUS and would encourage you to re-visit that issue for more details on bollworms. <u>Click</u> <u>here to view the previous issue of FOCUS</u>. DLK

Corn Insects

Mite and Insect Situation

Spider mite numbers were rising quickly in some fields early in the week, but the cool and rainy weather in places has given a little advantage to the predatory species, especially six-spotted thrips, that feed on mites. If a field is not yet at treatment threshold and six-spotted thrips are easy to find, it would be a good idea to consider holding off from treatment a while to give the thrips a chance to do their magic. The sixspotted thrips looks like a little tan torpedo, about 1/32 inch long and can be seen moving (grazing) inside of mite colonies.



Six-spotted thrips eating a spider mite

Non-Bt corn should be scouted for fall armyworm and southwestern corn borer. Both of these species have been more numerous in the traps the last two weeks.

SmartStax Corn Gets EPA Approval

Monsanto and Dow AgroSciences have received EPA approval for SmartStax corn. This corn has three toxins for caterpillar pests and two corn rootworm toxins. The corn is also Roundup Ready and Liberty herbicide tolerant. Significantly, the refuge requirements are reduced as well. In our area, the "cotton belt" as defined by EPA, the refuge for this corn only needs to be 20 percent, not the 50 percent mandated for all other transgenic corn on the market today. The refuge requirement will only be 5 percent in areas north of Amarillo and in the Corn Belt that currently have a 20 percent mandate for existing transgenic technologies. Some of you know that I have been involved in refuge policy since 1991, and I want to say that I think the new refuge requirements for SmartStax corn are scientifically justified. I welcome EPA's decision.

Sorghum Insects

Moth trap captures are showing an increase in fall armyworm and corn earworm, which together comprise the headworm complex. Fall armyworm is not as abundant as it was last year, but it is still plenty abundant. The good news is that both of these species are easy to kill with insecticides on the panicle if sprayed while they are relatively small. We have a very wide range of sorghum maturity across the area and it is entirely possible that this could be a bad sorghum midge year for later planted sorghum. Midges reproduce early in the season on johnsongrass, and this host seems to be quite healthy in many places. The midges then move to blooming sorghum. Early blooming sorghum might have a few midges, but it is the later blooming crop that often suffers more damage after the midge population has had time to increase. Please

consult our recently revised publication, <u>Managing Insect and Mite Pests of Texas</u> <u>Sorghum</u> for midge scouting procedures and treatment thresholds. RPP

Trap Captures as of July 28th

- Cotton bollworm Lubbock Co.
- Beet armyworm Lubbock Co.
- Fall armyworm Lubbock Co.
- Southwestern corn borer Lubbock Co.
- Fall armyworm Hale Co.
- Southwestern corn borer Hale Co.

FOCUS on South Plains Agriculture

Fair use policy

We do not mind if others use the information in FOCUS for their own purposes, but please give the appropriate credit to FOCUS on South Plains Agriculture when you do. Images may or may not be copyrighted by the photographer or an institution. They may not be reproduced without permission. Call 806-746-6101 to determine the copyright status of images.

Editors

David Kerns and Patrick Porter, Co-editors

SEND US A COMMENT BY E-MAIL

Contributing Authors

David Kerns, Extension Entomologist Patrick Porter, Extension Entomologist

Useful Web Links

Applied Research Reports (Goldmine) Texas High Plains ET Network Irrigation at Lubbock Pest Management How-To Videos Lubbock Center Homepage Texas Agricultural Experiment Station Home Texas Cooperative Extension Home Plains Cotton Growers

County IPM Newsletters

Castro/Lamb Dawson/Lynn <u>Crosby/Floyd</u> Gaines Hale/Swisher Hockley/Cochran Lubbock Moore Nolan/Scurry/Mitchell/Jones Parmer/Bailey Terry/Yoakum



