FOCUS on South Plains Agriculture

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

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Cotton Insects

Thrips

Thrips continue to be troublesome throughout the High Plains. Over the past week I have observed high populations in Castro, Hale and Dawson counties, moderate populations in Lubbock and Bailey Counties, and low populations in Gaines and Floyd counties. It really been a crap shoot as to whether or not you have high thrips numbers and depends on your proximity and direction from a thrips source such as grains or alfalfa. There is no alternative to scouting your field.

We are still seeing mixed populations of onion and western flower thrips. In the Lamesa area the thrips have been running 70-100% onion thrips, about 50% onion thrips near Idalou and near 70% onion thrips near Dimmitt. The Muleshoe area had experienced some dramatic swings in thrips species composition. In the same field, on May 27 they were running almost 90% western flower thrips, but by May 31 the population had shifted to 90% onion thrips. The reason for the shift is not known. Keep in mind that insecticides are typically much more effective on onion thrips than western flower thrips, and we are seeing seed treatments providing much longer residual control of onion thrips than western flower thrips. This year, seed treatments provided complete protection from onion thrips but only last a couple of weeks against western flower thrips.

The best way to tell if your seed treatment or Temik are wearing off is to look for immature thrips. These are typically white to pale yellow in color, very small and without wings. Immature thrips like to hide and are difficult to see. They are usually found in groups hiding between the leaf veins near the

petiole, or in the curled up or cupped terminal leaves. You really need to use something like a pencil lead to "dig" through the small leave and flush them out. If immature thrips are common, you can be certain the preventative treatment is no longer working.



Adult thrips (top) and immature (bottom)

Foliar insecticide applications should be based on scouting. From emergence through 1 true leaves, I recommend treating if you are seeing:

Cotton stage:	Thrips/plant:
Cotyledon – 1 true leaf	0.5
2 true leaves	1.0
3 true leaves	1.5
4 true leaves	2.0
5+ true leaves	Rarely justified

Don't wait for damage. If you see damage, you are too late. The goal is to prevent the damage. Thus timing an insecticide application with a glyphosate shot may not always pay off.

Spider Mites

I have been seeing spider mite just about everywhere, from Muleshoe, to Lubbock, to Lamesa; much more prevalent than I have seen on seedling cotton than I have ever seen. I have been seeing some slight damage associated with mites, but still not enough to warrant treating. During most years, thrips will eat any early mites and hard rains tend to wash them off. We need to keep an eye out on these mites to see what they do.



Keep an eye out for early spider mites

Beet armyworms

Beet armyworms are typically more prevalent during dry years and Brant Baugh, IPM Agent in Lubbock County has already found a population of beet armyworms feeding on what may be the only careless weeds still alive in Lubbock County. DLK

Cotton Agronomy Update

Severe drought conditions continue across the High Plains. Although there were some reports of rainfall amounts of up to 0.4" in some areas

from the storm system that made its way across the area Tuesday night, those amounts provided little or no relief for producers trying to get a cotton crop up and going. Irrigated cotton producers, for the most part, have completed planting in spite of difficulties keeping the seed zone moisture levels adequate for germination due to high temperatures, low humidity and continued windy conditions. The latest crop reports from Texas AgriLife County Extension Agents indicate that planting continues for dryland cotton producers in spite of the lack of moisture as final planting dates draw near or, in some counties, have passed (click here for list of final planting dates). For counties with a June 5 final planting date, an average of ~60% of cotton acreage has been planted and ranges from a low of 20% for Floyd County to a high of 90% for Hale County. Planted acres in counties further south range from a high of 65% in Dawson County to a low of 10% in Garza County. Scurry County, with a June 20 final planting date, reports 20% planted. In areas with emerged cotton seedlings, 15% is reported as being in very poor condition, with 21% in poor condition, 35% in fair condition, and 29% in good condition. Most damage to cotton seedlings is attributed to blowing sand in most areas. Current longterm weather forecasts offer little hope for the extreme drought conditions to subside. MK

Cotton Disease Update

I received several calls this week and last week regarding stand loss due to seedling disease. With final planting dates looming or passed in some cases, producers are facing difficult decisions. Cases of Rhizoctonia and Pythium seedling disease and/or Black root rot have been confirmed. As discussed in the last issue of FOCUS, many producers are having to water cotton up. The addition of irrigation water can drastically cool the soil temperature, which may slow seedling emergence and create conducive conditions in the soil for seedling disease. Fields exhibiting seedling disease symptoms have been replanted despite adequate emergence (~90%). Major factors in such cases

were the condition of the taproot and the amount of irrigation water that had already been applied. The taproots of plants infected with Rhizoctonia or Pythium may appear necrotic and collapsed. Plants infected with the Black root rot pathogen (*Thielaviopsis basicola*) have a similar appearance; however, the dead tissue can easily be removed revealing healthy tissue below. Infected plants often lack lateral roots, or will have a very shallow root system.

Plants with a limited or compromised root system may be unable to reach submoisture that has been applied via prewatering. Furthermore, infected plants may begin to die as moisture requirements increase and hot dry conditions persist. Management options for seedling disease at this stage are essentially nonexistent. Several consultants have contacted me regarding the use of foliar applied fungicides; however, data on the efficacy of such products for seedling disease control is insufficient. Numerous seed treatment trials are being conducted this year and data are currently being analyzed, results from these trials are forthcoming. Rhizoctonia or Pythium seedling disease should not increase following the warmer temperatures forecasted over the next several days. If you have any questions regarding seedling disease or any other cotton diseases, contact Jason Woodward at the Lubbock Center, 806-746-4053. JW

Cotton and Grain Weeds

Pete Dotray sent the attached linked documents to provide information on how to control volunteer cotton in cotton and in grain crops. The formatting is a little wonky but it is Saturday night and the editor does not have the tools to fix it. We thought you would want to have these even if they looked a bit strange.

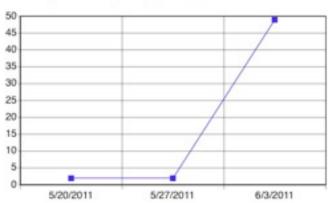
Controlling volunteer cotton in cotton Controlling volunteer cotton in grains

Corn Insects

Fall armyworm

Most of the corn I have been looking at is in pretty good shape, at least relative to cotton. I have observed some scattered fall armyworm feeding on single toxin Bt corn and non-Bt refuge corn. We do not have any thresholds for fall armyworm on corn, and for whorl stage control guide says, "insecticide treatments are seldom recommended and economical control is seldom achieved." That being said, our thresholds are not built for \$7.00 corn. Christian Nansen, Kathy Vaughn and I have a research trial this year to try and determine whether we in fact are getting economic damage from fall armyworm in whorl stage corn, and to quantify the economic losses when ears are infested. I will report fall armyworm trap captures at the Lubbock Center here in this column each week. Here is the first graph of the season, and it says that the first flight is starting. The big influx is probably from immigrants that came up with the humid southerly winds this week.

Fall armyworm moths per trap per week, Lubbock Research Center



Prevathon insecticide labeled

DuPont Coragen, active ingredient rynaxypyr, is labeled on field corn, sweet corn, seed corn and popcorn for control of corn earworm, beet armyworm, European corn borer and fall armyworm. Another DuPont product, Prevathon, has the same active ingredient and has a label PENDING (but not yet approved) for field, pop and seed corn. I have not done any

trials with Coragen or Prevathon in corn yet, but I did a research trial Prevathon trial last year in whorl stage sorghum and it provided good control of fall armyworm, especially when tank mixed with Asana. Here is a graph of the 5 DAT data. NOTE, Prevathon IS NOT LABELED IN SORGHUM. RPP

Non-cotton Agronomy

Alternative Crop Options for the Rest of the Summer

As final planting date for full-coverage crop insurance for cotton has passed for northern counties, and will complete by June 5 and June 10 for the rest of the South Plains, some producers are wondering about other planting options if rain occurs. That seems like a big "IF" right now, but several crops can be planted into early July.

For replanting and late planting I believe a key issue will be... Will eventual rains allow the soil moisture to 'meet'?

Once ample rain is received, the question then arises about whether there will remain a 'dry zone' below the moisture which will turn away any root penetration in dry soil. Producers will need to examine soils perhaps as deep as 24" to determine where there is at least some underlying moisture. It might take 2" or more of rain depending on soil type, soil dryness, etc. to enable planting subsequent crops. Otherwise, to plant on modest rainfall may lead to an additional crop failure for dryland.

Furthermore, if you have put out yellow herbicide for cotton but received no rainfall, then buster planting for grain sorghum is going to be difficult without significant rainfall.

Hailout/Replant/Late Plant Guide Update Will be Updated by mid-June

For early questions on replanting options last year's edition of "Alternative Crop Options after Failed Cotton & Late-Season Crop Planting for the Texas South Plains" remains available on the web. This document is published by Texas AgriLife Extension, Lubbock. The main update for 2011 will be mostly contract crop prices. Compiled by Extension agronomist Calvin Trostle the guide is a 'first things' approach to what you need for assessing hail damage and stands in current crops, possible replant options, and suggested last recommended planting dates. Tips for planting dates, seeding rates, herbicides already applied, and contractor contact information are noted throughout the document. The 2010 document is online here or is available by calling the Texas AgriLife Research & Extension Center at Lubbock.

Crop prices for alternative crops are considerably higher in 2011 than last year. Here are some recent contract prices:

- Grain sorghum in the region is currently priced at about \$0.80/bu under Dec2011 corn (bushel basis), or about \$11/cwt. for grain sorghum. Of course this is not relevant for dryland acres, but it indicates the price strength in the market of which surely a portion will carry over into this fall's cash market.
- Oilseed sunflower bids from Northern Sun, California Oils (preferably high oleic only), and Technology Crops International (high oleic only) are near or even above \$30/cwt.
- Guar prices are currently at \$0.30/lb., compared to \$0.20/lb. last year (contract will require stand emergence, however, by a certain date)
- Sesame, \$0.37/lb.
- Any forage crop like sorghum/sudan or hybrid pearl millet should command good prices due to the widespread shortage of hay. CT

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Texas High Plains ET Network

Irrigation at Lubbock

IPM How-To Videos

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