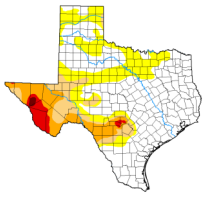
Texas A&M AgriLife Extension

Plains Pest Management News

JULY 26, 2024

General Status

There is always a lot of activity in the fields during the 'doldrums' of summer. This year is no exception. Most producers are busy trying to put the final nail in the surviving weeds and managing irrigation systems. There are plenty of pest species to be on the lookout for in all major crops, but in our fields, none were very threatening this week. If you can name a pest of our area crops, we likely seen it in our fields. Just not very many. This week our primary concerns revolve around the depleting soil moisture. With the effects of several years' worth of drought on our subsoil moisture levels, a decent spring worth of rains can only go so far. We have had opportunities for additional rain recently, and some have been received, but for most acres, accumulated amounts are far below 0.1-inch. There were acres receiving significant rains of higher amounts in the neighborhood of 0.2 to 1.1-inches but those only go so far as our crops near or are in peak water use and burning 0.2-0.4-inches per day with very little moisture below them left and surviving irrigation systems unable to producer any higher amounts. I firmly believe the drought monitor folks count each radar noted rain-shower that crosses through the area as double the amount that fell in the highest localized area. Either that or they have lost their orange colors. Still, even they are starting to note the drying condition here. Generally speaking, our crops still look pretty good, but will be gasping quick without additional moisture support.



Some area corn, seed millet, cotton, and black-eyed peas this week.

The boll load and potential on this southern Swisher field is pretty good, but the high NAWF indicates peak water use and a slowing of vegetative growth.

Cotton

Our PPM scouting program cotton ranged in stage from a late entry ¼ grown square through 3.8 NAWF (nodes above white flower). Most fields are clustering around 5 NAWF and peak water use. A surprising number of fields are rushing to this stage very quickly. This is at least a couple of weeks ahead of when we would like to reach this stage. This should be a result of limited deep soil moisture but a good start. Boll set and fruit load remains above average, but plants are already drastically slowing vegetative growth and new square production while they set these bottom bolls. If the situation does not change soon the natural fruit shed could be drastic over the next few weeks. Cotton is a tree that thinks it has years to live and never realizes a killing freeze is just a few months away. As each bloom sets, the plant decides if it has enough moisture to mature that piece of fruit. If it does not, the plant will rapidly abort the boll to save itself for a better tomorrow that will never come in time during our short growing season. Without sufficient moisture, many fields may start drastically dropping multiple bolls. With peak water use occurring earlier than normal, if irrigation volume can be increased over the next week or two, it might be recommendable.

Most of the area bollworms/corn earworms we found were in corn this week.

Bollworm egg

For pests, it might be easier to list species that feed on cotton we did not see this week. Primarily we are scouting for Lygus and bollworms. We did find some Lygus, but the heaviest fields only held 1 Lygus per 9 row feet with most fields having none found. Most bollworms in the area should be in older corn at this time but a couple of eggs and a small worm were found in some non-Bt cotton fields that did not have any corn in the vicinity. Areas in north-eastern Swisher near the caprock should be on the lookout for bollworms. We did see some egg lay in our fields in that area. In southern Hale we began finding a few spider mites on a few of the more mature upper leaves in cotton. We also found a few cotton aphids on late and well fertilized cotton in central Hale. In most well-watered non-Bt fields we are

we are picking up some cabbage loopers and a few armyworms, all less than 1,000 per acre with no associated fruit damage. Fleahopper populations were rebounding in most fields and could be a threat to late blooming fields.

Our most consistent pest this week, particularly south of Kress, were stink bugs of assorted species. Across most of Hale and southern Swisher County, we found populations in every other cotton field. This dropped to about 15% of the fields north of Kress. None of these populations brought up alarm bells this week as few were more than 1 stink bug per 13.5 row feet, but certainly should be watched. I will be surprised if this pest is not a larger factor for us late this summer. As this is a somewhat new pest for us, it could easily be missed, especially with their tendencies to cluster late in the season, after fields are past damage from most other cotton pests. Here is an exert from our Managing Cotton Insect in Texas Guide on how to scout for stink bugs:

- 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.
- 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.
- 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.

For the full guidelines for stink bugs in cotton, or any pest, please see the full guide at: https://extensionentomology.tamu.edu/resources/management-guides/managing-cotton-insects-in-texas/

Figure 36. Southern green stink bug adult.

Figure 37. Green stink bug adult.

Figure 38. Brown stink bug adult.

Figure 39. Conchuela stink bug adult.

Figure 40. Conchuela stink bug nymph.

Figure 41. Boll wall warts.

Corn

Late corn in central Hale this week.

Our PPM corn ranged between V5 and dough stage with late corn hovering around V5-6 and older corn coming in at blister. Mites were again our focused concern in our older corn, but with the exception of a few edges, most colonies shrank or were having a very hard time establishing for the second strait week. The higher humidity this week likely aided greatly in allowing fungal diseases to naturally kill much of the mites, but we also noted an increase in minute pirate bugs near the colonies also. All of our older fields came in at below a 1 on our 0-10 damage scale.

FAW hatching in SW Hale this week

We noted corn earworm in most non-VIP ears but with tip damage only. For field corn, this should not be an economic issue. For sweet corn, pressure will be high if your fields are between sild and dent stage and should remain high for several weeks based upon what we are seeing in the field and what our trap data hint at. We did see on fall armyworm egg mass hatch this week in field corn. As long as the larvae only feed on the tip, this should not be economic but if the caterpillars move down the ear, the damage could be serious. No other pest of note were noted in corn and no major increase in disease was found. Our LSD positive field did not experience any increase but the same rate of infection was found.

Small colony of BGM in SW Swisher this week with very little mite activity and showing diseased mites.

N Hale field that received a helpful 0.7-inch of timely rain this week will be looking for more soon.

Sorghum & Millet

Sorghum in soft dough this week.

All of our sorghum fields are in early dough this week. We still have a few fields to scout this weekend, but so far pests have been surprisingly quiet. The first infested sorghum aphid (pest formerly known as the sugarcane aphid) we announced last week actually experienced a drop in pressure this week. This is a very rare occurrence for this pests and we will continue to watch them closely. We are not noting an uncommon amount of predators associated with the colonies but several seem to simply not established. High humidity and insect disease could be the cause but any solid reason is not known but we will be giving this pest plenty of attention to maintain control.

YSCA damage this week in S Swisher

So far we have found no headworms of any species and the BGM in sorghum are remaining steady. The pressure does seem higher in sorghum compared to corn at this time, likely due to the dryer conditions in sorghum having to slit irrigation resources with cotton in peak water use and the drying of a few bottom leaves forcing the mites a bit farther up the plant. Yellow sugarcane aphids continue to cause some lower leaf damage a bit farther up the plant, similarly to the mites but this remains below threshold also. In our much younger seed millet fields still in early whorl, we did note some fall armyworm feeding, but no other damage.

Cabbage looper: bugwood images.

Non-Bt Specialty Crops, Peas, and Gardens

Corn with notable 5% foliar loss to grasshoppers, but no ear damage.

We have a few acres of black-eyed peas in our program. This week we noted an increase in looper and beet armyworm damage and population. These remain well below threshold coming in at around 1,000 worms per acre. This will result in notable foliar damage to most garden plants but should not be an economic issue. The general rule of thumb for most crops is 30% foliar damage before treating the pests causing the damage would be justifiable. These 1,000

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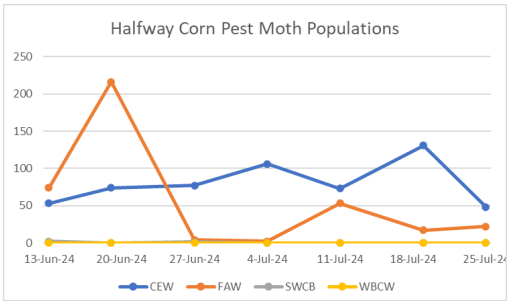
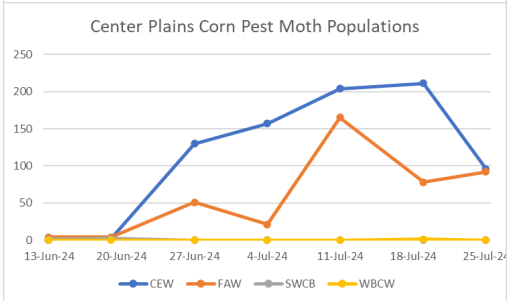
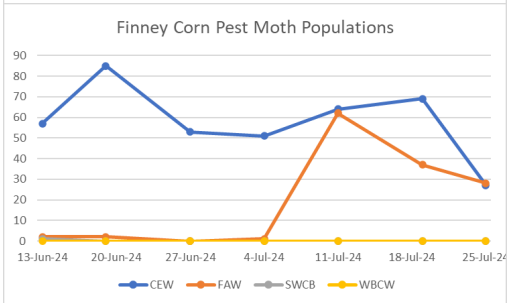
Swisher grasshoppers

loopers and BAW per acre are causing an inconsequential but unsightly 0-1% foliage loss. Grasshoppers feeding upon plants remain a major issue for a large portion of our area, for areas especially north of Plainview with serious pockets of grasshopper pressure. The same foliage rule applies to the grasshoppers, but any fruit feeding cannot be tolerated. This includes all types of corn. We have several corn margins with 5% foliar loss to grasshoppers, but no ear damage yet. We do have reports of peppers, of several types, peas, okra and multiple horticultural sites needing multiple treatments for grasshoppers this year. Unfortunately, this pressure form grasshoppers to these areas are likely to continue and possibly worsen as drought extends and area grass, weeds, and roadsides dry down.







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