Recent rain events have been welcome to most of the agricultural regions in south Texas although some areas have had more than then they could possibly ask for. The Valley has missed some of the heavy rain but their crops look outstanding! The first part of the season was quiet as far as insect activity was concerned but things are heating up…quite literally!

**Corn:**

South Texas corn looks exceptional and should yield very well as long as diseases and arthropods are held at bay…and it can avoid a mid- to late-season drought. Corn water use is peaking and, depending on weather conditions, may use up to 3” of water per week. A couple of weeks of dry conditions can deplete soil moisture in a corn crop.

Corn, especially drought stressed corn, can be susceptible to mites. The two-spotted mite (TSM) is most common species on corn grown in south Texas. It also is a little more difficult to control than the Banks grass mite. TSM may occur anywhere on the plant and can produce heavy webbing. Populations of TSM can increase rapidly if not managed properly. It is advisable to keep watch on mites through the remainder of the season.

**Cotton:**

Much of the cotton in the Coastal Bend and Wintergarden areas is out of danger for damage by thrips. Although a few fields were treated, it was a relatively quiet year for thrips, possibly because of frequent heavy rain events.

The Cotton aphid has presented some challenges, especially for cotton producers in the Lower Rio Grande Valley. Late last week I found cotton aphids on cotton in several trials at the Texas A&M Agrilife Research and Extension center at Corpus Christi. Their populations are light to moderate and the aphid populations seem slow to increase based on recent observations.

The aphid should not be confused with the sugarcane aphid. The cotton aphid nymph may vary in color from tan to green and are often marked with a dark head, thorax, and wing pads. The cornicles will be the same color as the body. Wingless adult cotton aphids vary in color from a light green mottled with dark green (most common) but may be whitish, yellow, pale green, and dark green forms. The legs are pale with the tips of the tibia and tarsi black (only the tarsi are black on the sugarcane aphid). The adult cotton aphid
will have black cornicles (tailpipes…similar to the sugarcane aphid).

The cotton aphid reaches maximum reproduction at temperatures ranging from the lower 70’s to ~ 80 degrees F. An Insecticide application for cotton aphid may be warranted when infestations exceed 50 aphids per leaf. It is advisable to wait a couple of days and recheck the field prior to making an insecticide application if the aphid happens to reach the economic threshold. It is not uncommon for their populations to abruptly decline possibly due to environmental conditions or pandemics of entomopathogenic fungi.

I have observed predators feeding on cotton aphids and they may be responsible for keeping the aphid in check. The cotton aphid’s occurrence may be important to build predator populations that will help keep sugarcane aphid populations at bay later in the season.

It is time to focus attention on cotton fleahoppers. Cotton fleahopper has been reported around the region and some cotton fields have been treated around the Victoria area. The recommendation for scouting is to examine the main terminal buds of 25 randomly selected plants at each of four or more locations across the field. During the first 3 weeks of squaring, 15 to 25 cotton fleahoppers per 100 terminals may cause economic damage. As plants increase in size and fruit load, larger populations of fleahoppers may be tolerated without economic yield reduction. If an insecticide treatment for fleahopper is warranted, consider other beneficial arthropods and pests (such as the cotton aphid) that are present prior to selecting an insecticide. Some insecticides are less harmful to beneficial arthropods than others and protecting these biological control agents may prevent a secondary pest outbreak. If other pests, such as the cotton aphid, are present, beneficial arthropods are absent, and a fleahopper application is warranted, consider an insecticide that will control both pests. Please access the following link for more information about the cotton fleahopper:


Last week I had a few questions about applying Transform® (Dow AgroSciences) to cotton for fleahopper management. Currently, the EPA has not
approved the Section 3 request for Transform (for use on cotton and other labeled crops). This means that purchases of Transform in 2016 cannot legally be applied to previously labeled crops (including cotton). Dow AgroSciences is working with the EPA to reinstate the section 3 label but it is unlikely that the Section 3 label will be approved before the end of the production season. **If you have carry-over product from 2015 it can be used on cotton (and other labeled crops).** Transform did receive a Section 18 approval from the EPA for use on sorghum against the sugarcane aphid. However, this label does not include other crops or crop pests.

**Sorghum:**  
Much of the sorghum around the area is in late-vegetative growth to heading. Scouting activities are focusing on sugarcane aphid, sorghum midge, and sorghum headworm. Economic populations of sugarcane aphid are occurring in the Valley while light populations of headworm have recently been reported infesting sorghum in the Valley. I have not heard of any sorghum midge issues to date.  

Although it is always wise to consider the entire complex of insects prior to making a management decision, I have always been of the opinion that a person should address the most limiting factor to production and deal with others if they arrive. If headworm and/or midge reach threshold and sugarcane aphid populations are not present to very light and the decision is to use a pyrthroid insecticide, then monitor the aphid population carefully. If their populations reach threshold then manage them appropriately to prevent economic damage. Another option would be to consider premium products such as the diamides (will not control midge) or products containing spinosin because they are less disruptive to non-target organisms that may limit population increases by sugarcane aphid. Just keep in mind that either of these options have no effect on sugarcane aphid nor will their use ensure that the sugarcane aphid will not reach an economic threshold.

In short, there are numerous options and combinations of options to manage insects infesting foliage and/or sorghum heads and it is generally a matter of economics as to the best insecticide or combination of insecticides to protect production.

And what is going on with the sugarcane aphid? Sugarcane aphid populations in the Valley are increasing rapidly in some fields. A number of sorghum fields have been treated and many more will likely be treated before the season is finished. Scouting and timely insecticide applications have been successful in
protecting yield from economic injury by the aphid.

The sugarcane aphid in the Coastal Bend and Winter Garden regions is becoming easier to find in some field but its occurrence is hard to detect in most fields. It appears that there has been some local movement by the aphid from overwintering hosts into neighboring sorghum (local movement) but it also appears that there has been some longer distance movement as well.

Managing the the sugarcane aphid is no different from managing other crop pests. alert to sugarcane aphid activity by using detection techniques to monitor the aphid (keep an eye on johnsongrass on field edges) and weekly to twice weekly scouting once the aphid colonizes a field.

Keep in mind that the sugarcane aphid reproduction potential peaks during periods of dry, hot, and humid conditions. The aphid in this environment can increase its populations to large numbers in a relatively short period of time. Insecticidal seed treatments have passed the point of protecting the crop from sugarcane aphid so watch your sorghum carefully to detect the aphid in the Coastal Bend and Wintergarden aphid. I suspect more sorghum fields to be sprayed for the aphid this year when compared to 2015 but scouting will limit the number of fields treated to only those at or above the economic threshold (50 to 125 aphids/leaf).

Just a reminder…The Section 18 for Transform restricts its use on sorghum 3 days prior to flowering until seed set. If your field is flowering you will need to apply another product if management is required for sugarcane aphid.

Odd Events: Although the cotton aphid is not an odd occurrence, its activity this year can be described as rare.

Each year is different and, occasionally, a combination of factors results in odd occurrences. This has been one of those years. In April, I had a call about southern corn rootworm (SCR)
Rolling with Bowling
South Texas Field Crop and Pasture Entomology News and Views
May 5, 2016 Vol. 1 Edition 3

infesting wheat in the Rolling Plains. A few weeks later I had a second report of SCR in wheat near San Antonio. This raised a few eyebrows but does not suggest a host shift to wheat. It is just another one of those freak occurrences that happen from time to time.

A second odd event was reported by Clyde Crumbly. He found millipedes feeding on the cotton cotyledons and young leaves. They were present in fairly large numbers in some fields and their presence was a little disconcerting. And like that…they are gone and we move on to other things to occupy our time. Some good and some not so good but there will always be new challenges that make life a little more interesting.

You can now follow south Texas insect and production news on Facebook and Linkedin (Better Yield in the Field) and our website is coming together (http://agrilife.org/sca/). Check us out as we grow and expand our offerings.

Robert Bowling, Ph.D.
Assistant Professor and Agrilife Extension Entomology Specialist

Texas A&M Agrilife Research and Extension Center at Corpus Christi
10345 Hwy 44
Corpus Christi, TX 78406
wk. (361) 265-9201