



INSECTS AND WEEDS IN FOCUS

VOL 36 ISSUE 4

ENTO/SCS

April 20, 2011

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GENERAL CONDITIONS

Although there is subsoil moisture in most of the region the surface dried so rapidly that plant stands were adversely affected, especially in fields that were planted on later dates. No rain was received to correct that situation. Furthermore, additional crop planting had to be suspended since seed beds were drying before germination and rooting of seedlings could take place. Needless to say we need rain.

There is one insect that may become a problem on multiple crops, and that is the **false chinch bug** (or a near related species). It is likely to be more abundant on field margins near weed such as in ditches and along turn rows because they are moving from the weeds to cultivated crop plants. Killing these weeds with herbicide or shredding causes the false chinch bug to migrate as nymphs and adults to living plants. It should be possible to treat field margins for the insect unless the field itself supports weeds that harbor the false chinch bug. The insects are usually found in large numbers running all over the plant and surrounding soil. All stages and sizes of the false chinch bug are present on the weeds at this time.

RDP

EMERGENCE FIRST BLOOM

This second program of the 2011 cotton season will include discussions aimed at managing the cotton crop from emergence to early bloom with most of the information directed to the early fruiting period. The meeting will be held **Thursday, April 28 from 1:30 p.m. to 5:00 p.m.** at the Texas AgriLife Research and Extension Center, Highway 44 between Corpus Christi and Robstown. The guest speaker will be Dr. Megha Parajulee, Professor and Cotton Entomologist, from Lubbock. His overview will be on the ecological considerations in managing early season insect pests. Other topics will be marketing updates and risk

management strategies for the season, crop weather tools to follow crop development and water use, demonstration of how the crop weather program is being used in the area, agronomic considerations for the growth period, insect management through first bloom, and growth regulator uses and misuses.

RDP

SORGHUM AND CORN

Except for chinch bug infestations to the north and inland from the coast, little insect activity has been reported in corn. However, that could change as **corn earworm** moth numbers are relatively high as indicated in our pheromone traps for the past several weeks. Their numbers are much greater than that for the same time period for the last several years. I suspect these numbers will reflect, more-or-less, what will end up in the whorl and/or ears of corn. We may see **fall armyworm** in corn, but pheromone trap numbers have been low with an average of 6 per trap for last week.

Yellow sugarcane aphid and **greenbug** infestations have been generally low but nevertheless present in some field throughout the Gulf Coast region. In the case of the yellow



Yellow Sugarcane Aphid

sugarcane aphid, higher numbers can be sustained as plants increase in size. In many fields we may be past significant damage from the yellow sugarcane aphid.



Greenbug

The following discussion is directed to the thought process I use in determining whether to apply insecticide for yellow sugarcane aphid in **sorghum that has reached a foot or more in size**. This aphid colonizes the underside of the lower leaves. For sorghum over a foot tall the loss

of the very smallest lower leaves can be tolerated without yield loss. However, larger lower leaves which sustain the aphid population for a period of time could result in enough damage for yield loss. Where yellow sugarcane aphid numbers are high enough for long enough period the leaves will first turn a purple color followed by yellowing and finally death. Generally a treatment is needed before the aphid kills more than one “normal sized” leaf on 20% of the plants. Colonies of more than 40 aphids on these leaves over a period of time can cause leaf death. Therefore, a general procedure would be to find out if at least 20% of the plants have yellow sugarcane colonies on lower leaf surfaces and then estimate if their numbers average more than 40 on these leaves. Once these criteria are met or exceeded wait 48 to 72 hours to examine the field a second time to determine whether the population is increasing and if additional leaves are dying. If the populations and infestations continue to increase treatment most likely would be warranted. Dimethoate 4E (8-12 ounces/acre) applied with hollow cone nozzles has provided control where volume rates of 7-10 gpa were utilized. **It is critical to use hollow cone spray nozzles.**



We are likely to see **corn leaf aphid** in the whorls of sorghum. Plants can sustain much greater numbers of this aphid since it does not inject a toxin as do greenbug and yellow sugarcane aphid. In fact even under very heavy corn leaf aphid

numbers with abundant honeydew and seemingly a lot of damage I have not been able to show a yield increase through insecticidal control.

It would also be advisable to watch for increasing numbers of **greenbug** as plants increase in size. This aphid also has a toxin which affects the leaves. The aphid can cause economic damage up to hard dough. Consult B-1220 *Managing Insect and Mite Pests of Texas Sorghum* dated May 2007 for a thorough discussion. RDP

WHAT WE SEE IN COTTON

Concern has been expressed about the number of aphids and spider mites in pre-squaring cotton fields along the Gulf Coast. One should be cautious about making a decision to treat for either of these pests at this stage of growth. In the case of **cotton aphid** predators are beginning to build and aphid “mummies” (parasitized aphids) are just beginning to appear. The **spider mite** case is a little more difficult to decide what to do as there are

no real economic treatment thresholds established for spider mites at this stage of plant development. I have observed spider mites on pre-squaring cotton over the years where little yield impact was observed even under extended dry conditions. However, it seems to me that we finally got enough rain to cause decrease in spider mite numbers. In general, I think it necessary to see sustained heavy mite buildup before treatments are considered.

Many cotton fields are just starting to produce squares; therefore, **cotton fleahopper** scouting should intensify. Some people have wondered if the treatment threshold should be lowered due to the cotton price; the answer to that question is “no” as the interaction of plant fruiting and the fleahopper make is such that as fleahopper numbers begin to exceed 10/100 plants and approach 15/100 plants treatments should be made especially by the second week of squaring. There are signs, at least in the Corpus Christi area, that fleahopper buildup in cotton may not be as high and will probably be delayed in time beyond what occurred in 2010. Unlike the case with early season aphids and spider mites, the fleahopper is more often a real yield reducer and should be addressed by chemical control where appropriate through the first week of bloom. Below (Table 1) are results from a field study last season and although we could not demonstrate a statistical increase in yield (probably caused by variation due to a spindle picker problem) it seems obvious to me that the increased yield was a result of fleahopper control. RDP

Table 1. Cotton lint production in plots treated with various insecticides for fleahopper, Michael Watz Farm, Wharton County, TX, 2010.

Treatment ^{1/} (rate)	Yield lb. lint/acre	\$ return over nontreated
Centric 40WG (1.25 oz/acre)	894 ^a	54.79
Intruder 70WP (1.0 oz/acre)	863 ^a	30.30
Trimax Pro 4.44 (1.25 oz/acre)	865 ^a	51.72
Orthene 97 (8.0 oz/acre)	861 ^a	44.00
Bidrin 8E (3.2 oz/acre)	867 ^a	44.79
Bidrin 8E+Discipline 2EC (1.6 oz/acre + 2.6 oz/acre)	839 ^a	27.04
Discipline 2EC (5.2 oz/acre)	899 ^a	55.75
Nontreated	767 ^a	

Means in a column followed by the same letter are not significantly different by ANOVA.

^{1/}Treatments were applied on 5/10, 5/21 and 6/1.

MANY HOUSEHOLDS FACING FLEA PROBLEMS

Reports of flea problems have been received from throughout the area. It is common for fleas to increase as weather warms. Control will involve attention to pets, outdoors, and inside buildings all at the same time to get a flea problem under control. In many places other animals play a part by bringing fleas into the area. Where heavy infestations develop outside and inside it usually requires two thorough treatments at a 5-7 day interval to eliminate the infestation.

Look for products containing bifenthrin, cyfluthrin (Tempo), cypermethrin (Demon) or other products of similar chemistry. Usually, stores which specialize in such products can make suggestions as to products. Inside, consider adding an insect growth regulator (IGR) to the spray mix. Make sure the products used inside buildings have an "inside" use label. RDP

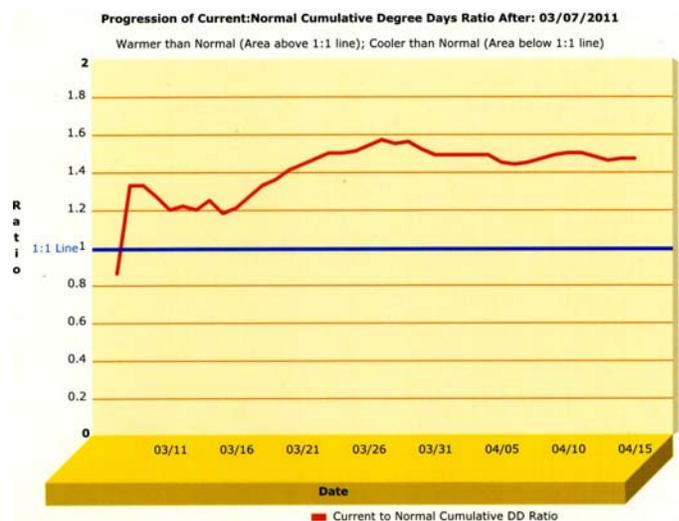
INTERESTING INSECTS

Bacteria in wasp antennae produce antibiotic cocktails. April 11, 2011, <http://tinyurl.com/3wsscbx> Bacteria that grow in the antennae of wasps help ward off fungal threats by secreting a 'cocktail' of antibiotics explains a scientist at the Society for General Microbiology's Spring Conference in Harrogate. Dr Martin Kaltenpoth describes how this is the first known example of non-human animals using a combination prophylaxis strategy similar to the one used in human

medicine. This discovery could help us find novel antimicrobials for human use and lead to more effective strategies for using them. RDP

CURRENT TO NORMAL CUMULATIVE DD60s RATIO

Just how much warmer has it been this year for growing cotton? The table below shows the current to normal cumulative DD60s ratio from March 7-April 15. For this time period daily heat units (base 60°F) have been on average 4.38°F warmer than normal. At the end of this period, the cumulative heat units or DD60s value is 47% higher than normal. (Source: cwp.tamu.edu) DDF



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We're on the Web!

Newsletter available at <http://agfacts.tamu.edu/~rparker/>

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RANGE MANAGEMENT FIELD DAY

Focus: "Drought Management"

FRIDAY, APRIL 29, 2011 8:30 AM–3:30 PM

AgriLIFE EXTENSION
Texas A&M System

**Rob & Bessie Welder Wildlife Refuge
8 Miles N of Sinton, TX (Off Hwy 77)**

AGENDA

**PRE-REGISTRATION REQUIRED BY APRIL 27, 2011
BY CALLING (361) 364-6234 or (361) 767-5223
REGISTRATION FEE: \$25.00/person (Lunch included)
\$45.00/couple (Lunch included)**

- 8:30 AM** **REGISTRATION**
- 9:00 AM** **"MANAGING PASTURES WITH FIRE"**
By Dr. Megan Dominguez, Assistant Professor & Ext. Range Specialist
- 9:30 AM** **"COASTAL BEND PRESCRIBED BURN ASSOCIATION"**
By Dr. Terry Blankenship, Director of Welder Wildlife Refuge
- 10:00 AM** **"POND MANAGEMENT"**
Jon Herrmann, Herrmann's Fish Farm
- 11:15 AM** **"DROUGHT MANAGEMENT STRATEGIES FOR CATTLEMAN"**
By Dr. Joe Paschal, Extension Livestock Specialist
- 12:00** **LUNCH**
- 12:45 PM** **"SOUTH TEXAS BRUSH MANAGEMENT"**
By Dr. Megan Dominguez
- 1:45 PM** **"MANAGING RANGELAND TO SUSTAIN WILDLIFE"**
By Dr. Terry Blankenship
- 3:00 PM** **"RANGELAND RISK MANAGEMENT TOOLS"**
Dr. Larry Falconer, Professor and Extension Economist
- 3:30 PM** **ADJOURN**



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