

The Integrated Pest Management (IPM) Newsletter for Row Crops in the Lower Rio Grande Valley

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## Dryland Grain Sorghum Field Day

June 5<sup>th</sup>

See Attached Flier for Details

### General Situation

We have seen little or no relief from the drought conditions in a majority of the fields in the LRGV. The cotton fields will need a good soaking rain during the next two weeks in order to retain the squares and bolls that have been set on the plants.

Spidermites, fleahoppers, and aphids continue to persist in several cotton fields across the LRGV. Some fields in the Rio Hondo were treated for spidermites this last week. Fleahopper populations have surpassed the economic threshold in several fields. Some fields have been reportedly treated three times for fleahoppers. Fleahopper treatments may continue in scatter fields depending on the square retention in each particular field.

Beneficial populations are starting to respond to the increase in aphid populations. We have observed an increase in beneficial insect (ladybug larvae and adults, lacewing larvae, syrphid fly larvae) populations in a several of the IPM Scouting Program Fields.

### Sorghum Midge Scouting

Scouting for midge is highly recommended in the later planted sorghum fields or later sorghum varieties that are just starting to bloom.

The following is a an excerpt from the Texas Cooperative Extension "Managing Insect and Mite Pests of Texas Sorghum."

Scout fields for sorghum midge adults at mid-morning when the temperature warms to approximately 85°F. Sorghum midge adults are most abundant then on flowering sorghum grain heads. Because adult sorghum midges live less than 1 day, each day a new brood of adults emerges. This fact requires **sampling almost daily during the time sorghum grain heads are flowering.**

The simplest and most efficient way to detect and count sorghum midges is to inspect carefully and at close range all side of randomly selected flowering gain heads.

Because they are relatively weak fliers and rely on wind currents to aid their dispersal, adult sorghum midges usually are most abundant along edges of sorghum fields. For this reason, inspect plants along field borders first, particularly those downwind of earlier flowering sorghum or johnsongrass. If no or few sorghum midges are found on sorghum grain

heads along field edges, there should be little need to sample the entire field.

However, if you find more than one on sorghum midge per flowering grain head in the border areas of a sorghum field, inspect at least 40 more grain heads from the entire field (avoiding plants within 150 feet of field borders).

Please see the table of estimated economic thresholds for sorghum midge in last weeks Pest Cast newsletter.

### **Rice stink bugs and Headworms in Sorghum**

Rice Stink Bugs and headworms (aka Corn Earworms or Bollworms) were observed in sorghum fields this last week. Please refer to the last weeks (May 14) Pest Cast newsletter for the two tables on the economic injury level for corn earworm larvae in sorghum. The first table is for corn earworm larvae that are larger than ½ inch and the second table is for corn earworm larvae that range from 1/4 to ½ inch. The reason for the differentiation in the tables is due to the high mortality rate of small corn earworms in sorghum.

The **table for economic injury level of rice stink bug attacking grain sorghum at the milk stage** has been included on the last page of this newsletter.

### **Bollworms in Cotton**

Bollworm/tobacco budworm larvae and/or damage has been found in a majority of the fields that the IPM Program is scouting (please refer to the attached LRGV IPM Scouting Report for Week of May 14). Bollworm larvae populations range from 0 to 7.5 larvae per 100 plants. The percentage of worm damage squares ranges from 0 to 14%.

### **Scattered Beet Armyworms**

Individual beet armyworms were found in fields in work units 1704 (Mission Sharryland), 1712 (Santa Rosa), 1711 (Combes), 1714 (Santa Monica), and 1716 (Brownsville). One "Hit" with 7 surviving larvae was observed in a field

north of Weslaco. A "Hit" is defined as an area of a cotton leaf or leaves where a **group** of beet armyworms feed and skeletonize the leaf.

### **No Boll Weevil Punctures Observed**

We have not observed any boll weevil punctures in the fields that the IPM Program is scouting.

### **Whitefly**

Whitefly adult populations ranging from 0 to 31 individuals per 40 plants have been found in work units 1704 (Mission), 1712 (Santa Rosa), 1713 (Progreso), 1715 (Rio Hondo), and 1716 (Brownsville). We have not found any whitefly nymphs in these fields. Therefore, the observed whiteflies could be migrating from nearby vegetable or melon fields. However, we need to be on the look out for whitefly reproduction in the cotton fields.

### **Whitefly Scouting**

Using the Arizona Cooperative Extension "Whitefly Management in Arizona Cotton 2006".

Sample 30 random leaves per field.

1. Locate the 5<sup>th</sup> leaf below the terminal
  - a. Score as infested when 3 or more adults are present
2. Examine quarter-sized leaf disk
  - a. Score as infested when 1 or more large nymphs are present
3. Determine % infestation of adults and nymphs

Treatment with an insecticide that is effective against the immature (nymph) stages of whiteflies is suggested when 40% of the leaves are infested with whitefly adults and 40% of the leaves are infested with whitefly nymphs.

Sampling for whitefly should be conducted twice a week in order to determine the rate at which whiteflies are increasing/decreasing in a field.

Please refer to the Arizona Cooperative

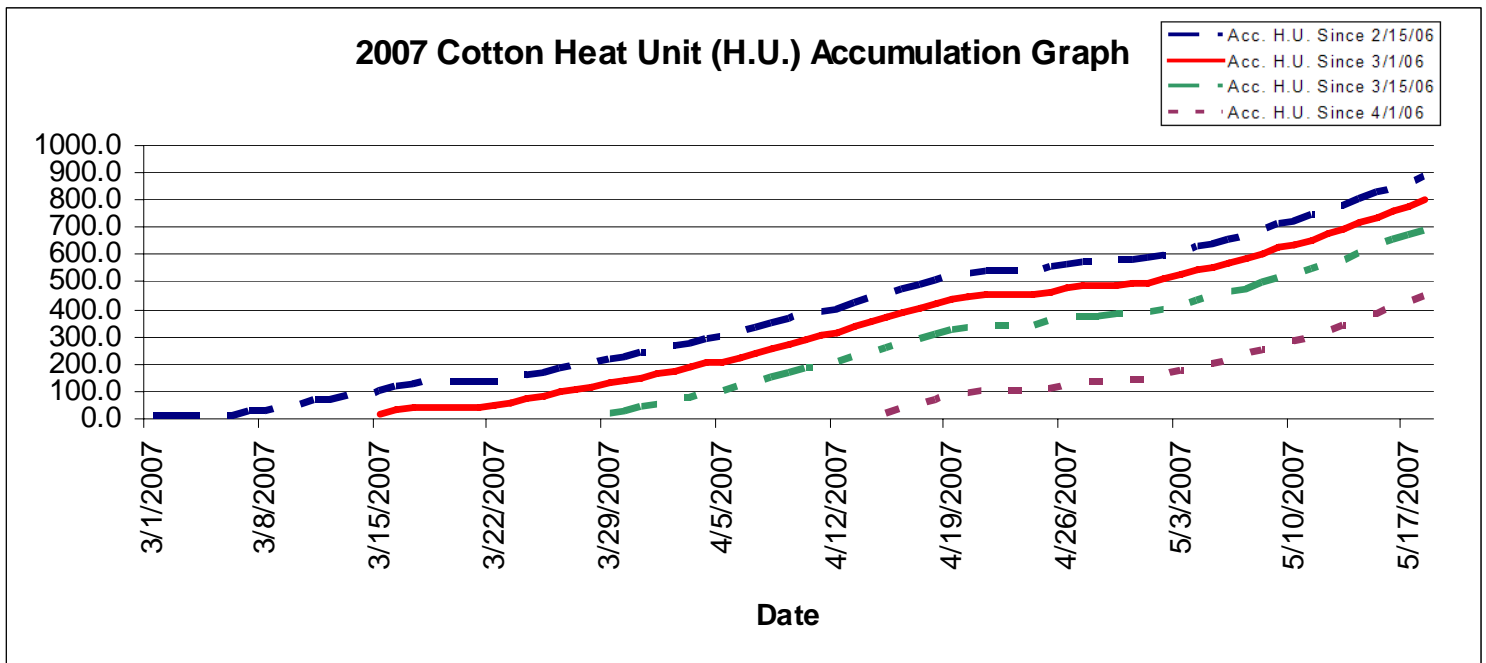
Extension "Whitefly Management in Arizona Cotton 2006",  
<http://cals.arizona.edu/pubs/insects/az1404.pdf>

to obtain further suggestions on whitefly insecticides use and timing of applications.

### Special Thanks to the 2007 IPM Program Sponsors

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Economic injury level for Rice stink bug attacking sorghum as number of bugs per acre at milk stage.

Control Cost \$/acre	Grain Value (\$/cwt)			
	\$6.00	\$7.00	\$8.00	\$10.00
6	30,500	27,000	23,000	18,500
8	40,500	35,000	30,500	24,500
10	51,000	43,500	38,000	30,500
12	62,000	52,500	46,000	36,500