

# **Pest Cast**

The Row Crops IPM Newsletter for the LRGV, a cooperative project of Texas AgriLife Extension Service and the Cotton & Grain Producers of the lower Rio Grande.

John W. Norman, Jr. Editor

#### Volume XXXIV

Issue 4, May 4, 2012

**General Situation:** Weather this week was dry and windy. All crops continued to make good progress. Hailed fields showed much regrowth and recovery as well.

**Cotton:** A few blooms were observed in very early planted fields. Most fields were still in the squaring stage but some of those fields had large squares which likely will be blooms by this weekend or early next week. Plant heights ranged from just coming out of the ground in a few fields to about 18 inches. Soil moisture was still good but with the rapid growth, fruiting, and increasing temperatures, more moisture will be needed to keep the cotton crop headed for very good yields.

*Cotton fleahopper* infestations increased this week. More fields were found with adults and many had very small nymphs as well. Some fields reached treatment threshold with counts from 10 to 40 fleahoppers per 100 plants. If fields are blooming, fleahoppers should not pose as much of a threat as less mature fields which still need another week or more before blooming starts. Many field reports have come in this week about small blasted squares which are often associated with fleahopper feeding. However, a disproportional number of apparently blasted squares to the actual number of fleahoppers was also reported, Valley wide. Dr. Chris Sansone, Professor and Associate Head of the Department of Entomology, spent many years doing exacting research on cotton fleahoppers. His research showed that apparently blasted squares can also be caused by physiological problems in cotton and not necessarily by fleahoppers alone. His advice was that if you have experience checking for fleahoppers and are not finding them in large numbers, then likely square loss could be from adverse field and atmospheric conditions and not necessarily related entirely to cotton fleahoppers. Our cotton crop has endured zinc deficiency, hail damage and wet and then dry field conditions, all of which can contribute to less than perfect square set. So, check fields carefully and if fleahoppers are at or near threshold, then treatment may be warranted. If, on the other hand, fleahopper numbers are low to non-existent and still square damage is found, then other field problems may be the culprit.

Generally, once fields begin to bloom, the size of fleahopper infestations we have encountered so far will not be enough to cause a reduction in yield. However and there can be a "however", square set can be severely damaged if fleahopper numbers exceed 30 or more fleas per 100 plants even when cotton has just started blooming. Every field is different and all should be checked to be certain fleas are not overwhelming the fruit-setting ability of the plants. Fruit- set this week ranged from 85-95 percent.

One *Verde bug (Creontiades)* was reported from a field in eastern Willacy County. Verde bugs are those "giant fleahoppers" which move like fleahoppers with superchargers. Verde bugs can be a serious threat to small squares and young bolls. We do not have an established treatment threshold on Verde bugs. But, based on the last several years experience, low numbers found may mean there is a reason to spray. There is an obvious need to watch those critters very carefully. Eastern Willacy and Cameron counties tend to be the early infestation points, but other areas in Hidalgo County were also infested last season and thus all fields need to be checked for the Verde bug from now on.

Aphids were reported on the increase in many fields around the Valley this week. Most fields had

few, but more aphids than last week's reports. This week a few fields were treated for aphids in scattered locations.

*Whiteflies* were also reported to be increasing this week. Small infestations of 2 to 3 whiteflies on a single plant in scattered fields were observed. Even a few dryland fields had minuscule numbers of whiteflies. No reports of spraying for whiteflies were made.



Figure 1. One species of wild melon of at least two in the Valley. This is a young specimen that has just begun to flower.



Figure 2. Another species of wild melon found in the Valley.

Many fields have a few pie melon plants scattered in or near cotton and grain fields. If whiteflies are appearing in your cotton, look for the melons. Check the undersides of melon leaves for whitefly adults. If you see the whiteflies then you could also have whiteflies just starting to infest your nearby cotton.

There are at least two species of wild melons in the Valley. Often referred to as pie melons or coyote melons, either can be a source of irritation in weed control since they are very hard to control in cotton. The



Figure 3. Red winged black bird waiting on mature sorghum seed in a dryland field.

melon from the picture on the left above grows a smaller lemon sized melon while the one on the right can grow melons nearly the size of cantaloupes. Cotton-approved herbicides do not do much to pie melons once they get beyond the very early seedling stage. And cultivation equipment can move a mature vine with anywhere from 1 to 20 or more near-ripe melons to other spots in the field. Coyotes like the bitter tasting melons just fine and when they "dump their loads" in or near row crops, new melons most likely will get a start there. Thus, new infestations of melons can take-off and then potentially at least, new infestations of whiteflies may begin if either melon type gets a foothold.

*Spidermites* were reported this week. Heavy infestations in the southeastern part of Cameron County were reported. Farmers with infested fields were spraying for the mites. Other isolated infestations in Hidalgo County were rated as light and scattered. Despite the recent rains, the current hot temperatures and dry winds are good for spidermite build-up. Any insecticide use, even seed treatments, may enhance

spidermite infestations. So, if you have treated for other pests recently, follow-up with further field checks to determine if mites are building in those and untreated fields.

**GRAIN SORGHUM:** Many fields were in early bloom stage this week. Most were nearing heading stage. Fields appeared to be in great shape with flowers or near-flowering large heads. No insect activity was reported this week.

Leaf blight, a common, but minor leaf disease in grain sorghum has been reported from eastern Willacy County. Dr. Tom Isakiet, Extension Plant Pathologist, says that with increasing temperatures the fungus which causes leaf blight will cease to function. Dr. Isakiet also says that yields are not reduced by the fungus and that he absolutely does not recommend a fungicide treatment. A write-up by Dr.



**Figure 4**. Sorghum leaf blight. Picture courtesy of Mike Grey, Wilbur Ellis.

Isakiet on sorghum leaf blight which goes into considerable detail on the disease can be found at the end of this issue of Pest Cast.

**CORN:** Corn, like other crops, appears to be doing very well. Corn ranges from not yet tasseling to near mature ears. No reports of insect activity were received this week



Figure 5. Field corn nearly mature



Figure 6. Seedcorn pretassling.

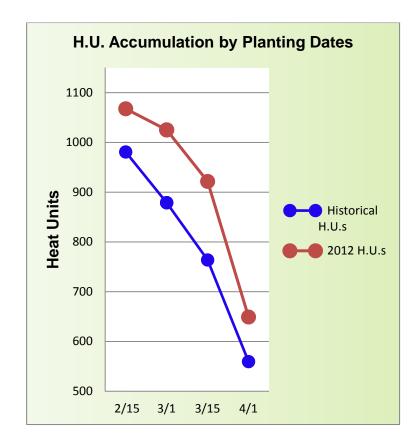
The landscape in Eastern Willacy and Northeastern Cameron counties is changing. Two hundred and eighty four wind turbines are under construction by Duke Energy and EON Energy. Although management does not foresee any problems spraying around wind turbines that are completed and running, both companies would appreciate a call if you need to spray around a turbine site when work crews are present.

Farm to Market road 498 is the dividing line between the two companies. Turbines north of FM498 are being constructed and operated by EON Energy, and those south of FM498, by Duke Energy. To contact EON



**Figure 7**.Willamar Gin office dwarfed by 5 nearby wind turbines just east of FM 1420. Picture courtesy of Webb Wallace.

Energy, call safety coordinators Mark Yankosky at 320-290-4566, or Dave Murray at 832-428-4766. To contact Duke Energy, call construction manager Tom Marra at 704-576-5909. If possible, please note the site number(s) where you need to spray.



#### Sorghum Leaf Blight

Leaf blight - A fungus, Exserohilum turcicum

*Symptoms:* Elongated, elliptical reddish purple or tan lesions. Reddish margins may be present. Under moist conditions which favor spore production by the fungus, the lesions may have a gray or black appearance. Symptoms usually appear first on lower leaves, then spread to upper leaves.

*Management:* Levels of foliar diseases are usually not high enough to cause economic loss. Most foliar diseases other than rust or leaf blight can be avoided by practices that reduce the survival of inoculum from one growing season to the next. Rotation and destruction of debris reduce initial levels of infection that can cause seed rot and seedling blight of sorghum. However, fully expanded mature leaves on plants in boot or older stages are unlikely to develop leaf blight.

Damage from many foliar pathogens can be avoided by cultivating taller genotypes of sorghum, because many pathogens invade primarily the leaves in the lower, more humid part of the crop canopy. Lower plant population, permitting better air flow, also contributes to less foliar disease.

Several air-borne foliar pathogens are little affected by cultural practices, and, consequently, host resistance is one of the only cultural controls available. Some sorghum hybrids are resistant to rust and leaf blight. Leaf blight inoculum spreads from infected collateral hosts such as plants of other Sorghum species. Eradication of these hosts will reduce the probability of losses. Sorghum should not be intercropped with leaf blight-susceptible sudangrass or sorghum-sudangrass hybrids.

Sorghum hybrids with moderate levels of resistance to most foliar pathogens are available. Highly susceptible varieties should not be grown. Alternatively, very high levels of resistance to any one foliar disease does not appear to be necessary. Generalized disease resistance (resistance that reduces the rate and spread of disease in a population of plants) is preferred for sorghum.

2007

2006

2005

### LRGV

	YTD								
		.01351	.00212	.00986	.24020	.15333	.33301	.44477	3.06271
	Week	2012	2011	2010	2009	2008	2007	2006	2005
	Ending								
	4/1/12	.03353	.00476	.00672	.19847	.08503	.64118	.48544	0
	4/8/12	.01617	.00360	.00592	.11633	.30512	.40392	.37552	0
	4/15/12	.01572	.00114	.00312	.23686	.17102	.36414	.88875	6.47392
	4/22/12	.00339	.00133	.01426	.38106	.05425	.23751	.15855	3.48685
	4/29/12	.00474	.00043	.01528	.09081	.09113	.18227	.08629	1.70269

### **BOLL WEEVIL TRAPPING INFORMATION**

2012 2011 2010 2009 2008

### Traps inspected for current week: 32,896



For details on sponsoring the Pest Cast Newsletter, please call Cotton and Grain Producers Executive Director, Webb Wallace, at 956-491-1793.

## **Contact Info**

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