



INSECTS AND WEEDS IN FOCUS

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COASTAL BEND COTTON INSECT REPORT

Again last week (May 17-18) we received timely rains. Kleberg County reported up to 7 inches of rain near Sarita and 2-3 inches in the Kingsville area. The Nueces County weather station at the Perry Foundation reported over 3 inches while the Orange Grove area got about 0.75 inches. In general, those centrally located within Nueces County received around 1.25 inches of rain. Reports from San Patricio County indicate general rainfalls of approximately 0.75 inches. The Bee County weather station reported only 0.18 inches of rain. With these rains came strong winds and perhaps some hail. Fortunately, I've heard of no severe crop injury besides some tattered leaves.

Kleberg County. As expected, cotton in Kleberg County continues to look very good. About half the county's fields are now into bloom. Aphids continue to decline in area fields. None of the fields scouted by the IPM Program had anything other than light aphid abundance. Under current circumstances, I would say that this should be considered a beneficial aphid population since aphids provide a food source to pull beneficial insects into the field. If a bollworm egg-lay occurs, we'll all be glad that the beneficials are present. With the recent rains, moisture should be adequate for the next couple of weeks. Rains have not only aided our cotton crop, but have greened up alternate hosts for the fleahopper. Most fields that are sitting right in the middle of the fleahopper damage window (first square to 1/3 grown

square) had very low fleahopper numbers this past week. I think that fleahoppers are not having to congregate in cotton to find the kind of lush, succulent growth they prefer and are therefore real spread out right now across all their different weed hosts and cotton. Hopefully, my hypothesis is correct and this actively fruiting cotton can get its crop set before the fleahoppers move back in. Finally, much of the area's cotton has been well into bloom for at least two weeks now. There is some debate on how far into bloom producers should continue treating for fleahoppers. I do not know what the correct answer is here, but if you believe fleahoppers are "blasting" greater than 50% of your small squares remaining on the blooming plant you might consider one last insecticide application. Other factors to consider late-season would include current fruit set, propensity for bollworm/budworm and aphid outbreaks, and the chance of drought conditions returning. For example, you would not want to spend the extra money on a very late-season fleahopper application if it turns dry because the plants would probably end up shedding most of the small squares in which you just invested money. Finally, again this past week bollworm abundance was very low. By my calculations, we checked a total of 2,275 plants in 26 fields in Kleberg County - of these plants we found a total of 5 bollworm eggs and 12 bollworms. Not bad!

Nueces County. A number of fields in Nueces County were inundated with water this past week. Of our IPM Program fields, 3 were not scouted; 1 because of water in the field and the other 2 because they had been treated with Furadan. Cotton maturity ranges from first square to a couple weeks into bloom. Generally, most fields are still several weeks away from bloom. Like Kleberg County, aphid and fleahopper abundance was light across the county. Despite the fact that a lot of cotton is right in the middle of the fleahopper damage window, no fields reached the threshold minimum of 15 fleahoppers/100 terminals. Hopefully, the cotton will go ahead and get its fruit set before the fleahoppers return in great numbers. Bollworm eggs and larvae were essentially non-existent this past week in Nueces County. Of the 650 plants we checked in 7 fields, we found a single bollworm larva. Currently, the cotton and grain looks real good.

San Patricio County. Three of the 11 fields included in the IPM Survey Program in San Patricio County were not scouted last week. Each of these fields had been sprayed;

2 with Furadan and 1 with Bidrin. With the exception of 2 fields, all of the IPM fields are now into bloom. Fortunately, just as in Nueces County, there is not much to report in the way of insect pest activity. No IPM field had anything greater than light aphids and only 1 field had threshold fleahopper abundance. Bollworms were very light again this past week. In 8 fields we checked 650 plants and found a grand total of 2 bollworm eggs and 7 larvae. However, of these totals, 1 of the eggs and 6 of the worms were found in one field south of Sinton. It means that for the county as a whole, bollworm abundance is very low but there may be scattered fields with more worms. Again, cotton is looking good, as are all the grains thanks to the timely rains. EDB

AREA PRODUCERS BEWARE: BOLLWORMS LIKELY

Despite astonishingly low numbers of bollworms in most Coastal Bend cotton fields, don't be lulled into thinking we will escape the season without at least one big egg-lay. Two weeks ago in the Rio Grande Valley up to 150 bollworm eggs/100 plants and 60 worms/100 plants were reported in some fields. I had fully expected this egg-lay to make its way to the Coastal Bend, but it has not yet appeared. However, consultants have reported insecticide applications for bollworms in some fields in northeast San Patricio County. We have also received reports this week (May 24) of 4 fields being treated for bollworms in western Nueces County. Of these 4 fields, 3 had recently been sprayed with malathion ULV for the boll weevil. In Kleberg County, today (May 24) we found one field with 8% worms and 8% worm damaged squares. Like those fields in Nueces County, this field too had been treated for boll weevils recently. It seems that we are better off than normal since few fields have required treatment compared to past years in which most all fields would have been treated twice for boll weevils.

Remember, once cotton has reached bloom, insecticide applications may be justified when 8-12 or more small larvae are present per 100 plant terminals and 5-15% of the squares are worm damaged. If worm numbers are high it might not be appropriate to wait until the square damage threshold is reached. In cases where the cotton is past first bloom and has been sterilized by previous insecticide applications, treatment may be necessary when only 4-5 small worms/100 terminals and 5% worm damaged squares and small bolls are present. Those concerned about pre-bloom cotton should consider insecticide applications for bollworms when 15-25% of the green squares are worm damaged. EDB

HEAT UNITS FOR COTTON - CORPUS CHRISTI

Date	Daily H.U. ¹	Acc. H.U. ¹	Date	Daily H.U. ¹	Acc. H.U. ¹
Mar	-	250.7 ²	5/12	16.3	887.0
Apr	-	428.3 ²	5/13	16.1	903.1
5/1	14.2	693.2	5/14	18.7	921.8
5/2	14.3	707.5	5/15	20.5	942.3
5/3	17.6	725.1	5/16	21.4	963.7
5/4	22.9	748.0	5/17	21.8	985.5
5/5	20.8	768.8	5/18	15.3	1000.8

5/6	14.9	783.7	5/19	15.1	1015.9
5/7	14.7	798.4	5/20	17.0	1032.9
5/8	15.9	814.3	5/21	18.9	1051.8
5/9	20.5	834.8	5/22	18.9	1070.7
5/10	18.5	853.3	5/23	18.5	1089.2
5/11	17.4	870.7	5/24	17.5	1106.7

¹ H.U. = heat units. Accu. H.U.= accumulated heat units

² Monthly accumulation

RDP

BOLL WEEVIL NUMBERS REMAIN LOW, BEET ARMYWORMS VARIABLE

Comparing this week's boll weevil trapping data to this same week from last year proves that weevil captures remain amazingly low. Boll weevil trap captures in the Robstown area are down 97%, down 92.7% in the Sinton area, and down an astonishing 99% in the Kingsville area since just last year. However, beet armyworm numbers are quite variable across the Coastal Bend. In Robstown and Kingsville the numbers are up 180% and 525%, respectively. On the other hand, Sinton area beet armyworm captures were down 49%. Let's keep the pressure up. Right now it looks like we are on the verge of making the weevil a thing of the past. EDB

NO LABEL OR SECTION 18 FOR PIRATE

Much effort has been expended to obtain a Federal label for Pirate, an insecticide developed by American Cyanamid for use on the beet armyworm. This product has obtained Section 18 status during the past several years but the company will not support another Section 18. Therefore, it appears that Pirate will not be available for the 1999 season. RDP

SCOUT FOR SORGHUM INSECT PESTS

Insects that could be of concern in sorghum over the next 2 week period include sorghum midge, headworms, rice stink bugs and greenbugs. After an initial observation of rice stink bugs in sorghum, additional infestations have not been observed. In addition, greenbug numbers continue to be low in most fields. It would be a good idea, however, to check fields for both these pests.

Scout weekly for headworm infestations (corn earworm or fall armyworm). We have observed fairly light infestations on average but that situation could change or there may be fields with heavy infestations at this time. Inspect sorghum grain heads soon after flowering and continue until hard dough by shaking grain heads vigorously into a 5-gallon bucket. Since many young headworm larvae die naturally, do not apply insecticide until they are at least 1/2 inch long. The economic injury level is about 1 to 2 larvae per grain head of commercial sorghum.

Economic injury levels based on number of corn earworm and fall armyworm larvae per sorghum grain head.

Control cost (\$) per acre	Crop market value (\$) per acre								
	100	125	150	175	200	225	250	275	300
	Number of headworms								
6	1.5	1.2	1.0	0.9	0.8	0.7	0.6	0.6	0.5
8	2.0	1.6	1.3	1.1	1.0	0.9	0.8	0.8	0.7
10	2.5	2.0	1.6	1.4	1.2	1.1	1.0	1.0	0.9
12	3.0	2.4	1.9	1.7	1.5	1.4	1.3	1.2	1.1

Insecticides for headworm control include carbaryl (Sevin), Baythroid, Karate, Asana and ethyl parathion.

We expect to see a rapid increase in sorghum midge sometime during the next 2-week period. Infestations will probably be observed first in late blooming sorghum fields that are near early blooming fields since midges move from early blooming fields to younger fields. Late blooming fields must be scouted daily generally between 9-12 a.m. In many cases we have been able to treat strips along field margins since midges sometimes do not move very far into fields.

Base the need for insecticide treatment on the number of adult midges per flowering grain head after at least 20% of the grain heads in a field are flowering. Insecticides are generally required at 3-day intervals (72 hour) under heavy infestation levels. Unless the insecticide is washed off by rain, applications applied at less than 3 day intervals cannot be justified.

Insecticides for sorghum midge include Asana, Lorsban, Baythroid, Karate, ULV malathion, Lannate, ethyl parathion. Consult label restrictions for grazing and harvest instructions.

Economic injury levels based on number of adult sorghum midges per flowering grain head of a susceptible sorghum hybrid.

Control cost (\$) per acre	Crop market value (\$) per acre								
	100	125	150	175	200	225	250	275	300
	Number of sorghum midges								
6	2.4	2.0	1.6	1.3	1.2	1.1	0.9	0.8	0.8
8	3.0	2.5	2.2	1.8	1.6	1.4	1.2	1.1	1.1

INTERESTING INSECTS

10	3.5	3.0	2.6	2.2	1.9	1.7	1.5	1.4	1.3
12	3.9	3.5	3.1	2.7	2.3	2.0	1.8	1.6	1.4

For more detailed information call us for a copy of B-1220, Managing Insect and Mite Pests of Texas Sorghum dated 6/98. Note: Asana was not listed in that publication since the label occurred after publication. RDP

Earwigs make up the insect order, Dermaptera (derma=skin,

aptera=wings). The order name refers to the texture of the front wings. Earwigs are slender insects with forceps-like cerci. They are generally nocturnal in habit, tend to hide during the day and are mainly scavengers but some feed on plants. Eggs laid in burrows in the ground are carefully guarded by the female until they hatch. Some species have scent glands opening on the abdomen from which a foul-smelling liquid can be ejected. It is probably a means of protection. The name "earwig" is derived from an old superstition that these insects enter people's ears. Earwigs are quite harmless to man. Outside the U.S. there are some species that are ectoparasites on bats and rodents. RDP

European earwig

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