

# INSECTS AND WEEDS IN FOCUS

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VOL. XXVII NO. 6

ENTO/WS

May 21, 2002

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## COASTAL BEND CROP TOURS

Crop tour dates have been set for our region. In order to see if any changes have occurred and for detailed tour information, please contact individual counties. RDP

COUNTY	DATE
Lavaca 361/798-2221	May 22 - PM
Jim Wells 361/668-5705	May 30 - PM
Bee 361/362-3281	May 31 - AM
Goliad 361/645-8204	May 31 - PM
Refugio 361/526-2825	June 4 - AM&PM
Karnes 830/780-3906	June 5 - AM
San Patricio 361/364-6234	June 5 - PM
Kleberg 361/595-8566	June 6 - AM
Nueces 361/767-5223	June 7 - AM
DeWitt 361/275-5132	June 11 - PM
Wharton 979/532-3310	June 12 - PM
Fort Bend 281/342-3034	June 13 - AM
Calhoun 361/552-9747	June 13 - PM
Colorado 979/732-2082	June 17 - PM
Matagorda 361/782-3312	June 18 - AM
Jackson 361/782-9258	June 18 - PM
Fayette 979/968-5831	June 19 - PM
Victoria 361/575-4581	June 20 - PM
Austin 979/865-5911, ext.170	June 21 - AM

## DENIM SECTION 18 ON COTTON

A Section 18 type label was granted through October 31, 2002 by EPA for use of Denim (emamectin benzoate) on cotton for control of beet armyworm. Among other special requirements are the following important points:

- Denim® 0.16EC may be applied using ground or aerial equipment at a rate of 0.0075-0.01 lb a.i. (6-8 fl. oz. of product) per acre. No more than 3 applications may be made. Applications must be made in a minimum of 5 gallons of finished spray per acre for aerial application and 10 gallons for ground. A 5-day application interval and a 21-day pre-harvest interval must be observed. Denim may not be applied through any type of irrigation system and livestock may not be grazed in treated areas. Application is limited to a maximum of 24 oz. product per acre per season.
- A Restricted Entry Interval (REI) of 48 hours must be observed.
- The following restriction, which appears on the labeling, must be strongly adhered to:  
Contamination of water, whether from drift or runoff, must be avoided in order to protect aquatic organisms from potential harm. Application may not be made to areas less than 100 feet from permanent natural bodies of surface water or reservoirs. RDP

## GENERAL COTTON INSECT SITUATION

Fleahoppers have been relatively high in fields for several weeks and treatments, generally two, spaced about one week apart have been required. On younger cotton continue to pay attention to fleahopper numbers.

Aphid numbers have been highly variable throughout the area. Generally, their numbers have decreased, but in other areas their numbers seem to be increasing. Large numbers of

predators and small parasitic wasps are at work in most fields at this time. My guess is that aphid populations will continue to decline for a period of time.

There are several caterpillar pests to consider. Expect to see continued bollworm activity and be ready to switch insecticides in case budworms increase. So far we have caught very few budworm moths in our pheromone traps. Weather has been correct for beet armyworm, and some fields have had relatively high numbers in southeast San Patricio County. In general beet armyworm survival has not been high. As reported in this newsletter, Denim has a Section 18 label for beet armyworm. If the product is used for beet armyworm control, be aware that it is also very effective on other caterpillar pests. Loopers have been observed but, at this time, I know of no infestations of great concern. RDP

### **ADDITIONAL COTTON APHID TEST DATA**

An additional cotton aphid control test has been conducted by A.N. Sparks and J.W. Norman, Texas Cooperative Extension at Weslaco. The experiment was conducted on the TAES Hiler Annex Farm near Weslaco, Texas. All treatments were made on May 9, 2002 with a backpack sprayer using 3 nozzles/row at 10 gpa total solution. Silwet surfactant at the rate of 0.5% by volume was used with each of the insecticides.

Effect of insecticides on cotton aphids, Weslaco, Texas, 2002.

Treatment	Rate (oz/acre)	Aphids per leaf			
		1 DAT <sup>a</sup>	4 DAT	6 DAT	8 DAT
Untreated		86.4 a	84.90 a	58.95 a	29.80 a
Centric	2.0	26.4 b	2.75 b	1.20 b	1.35 c
Leverage	3.0	23.9 b	10.80 b	15.60 b	25.05 ab
Intruder	0.8	22.4 b	3.95 b	2.85 b	2.15 c
Furadan	8.0	14.1 b	13.90 b	7.55 b	13.85 bc
Trimax	1.5	12.9 b	10.50 b	9.30 b	13.70 bc

<sup>a</sup> DAT = days after treatment

RDP

### **BOLL WEEVIL NUMBERS VERY LOW**

Boll weevil numbers are very low in most regions and probably are not at high enough numbers to sustain the population in most regions. A total of 5 boll weevils have been captured in our traps this year; all were found in traps in the Clarkwood-Violet-Annaville area. Table 1 is somewhat misleading in that traps outside our historical line have captured almost no boll weevils this calendar year compared with the

number captured in that same trap line last year (Jan-May).

Foundation trap captures averaged 5 times fewer weevils in April 2002 compared with April of 2001. Needless to say with continued pressure on pockets of boll weevils, elimination is in sight except for migration into the zone naturally or on equipment/vehicles. The Upper Coastal Bend counties will initiate a program with diapause in July this year which, in timem should relieve migration from the northeast. See Wharton County trap data in Table 1. Counties to the south (such as Brooks), outside our zone could be a source for weevils as well as equipment movement from the lower Rio Grande Valley. I believe the foundation will be able to handle this situation. The original budgets were set to account for some re-infestation but the areas to the south and northeast without a program were not anticipated in original planning. RDP

Table 1. Boll weevils per pheromone trap per month, Texas Cooperative Extension operated traps.

Month	Nueces & San Pat. Co.			Wharton Co <sup>b</sup>
	6 yr avg <sup>a</sup>	2000	2001	2002
Jan	5.3	9.93	0.00	.05
Feb	5.5	1.60	0.00	.00
Mar	7.7	1.72	0.11	.10
Apr	7.4	1.27	0.11	.05
May	2.8	0.83	0.17	.05 <sup>c</sup>
Jun	4.9	0.67	0.00	-
Jul	188.9	12.89	0.35	-
Aug	645.7	14.04	0.94	-
Sep	309.7	1.39	0.11	-
Oct	165.4	0.72	0.06	-
Nov	55.3	0.50	0.11	-
Dec	15.7	0.03	0.00	-
Avg	117.9	3.80	0.16	

<sup>a</sup> 6 yr. avg. is 1977-1982 by Segers et al.

<sup>b</sup> Traps operated by Dan Fromme, IPM agent, outside the boll weevil eradication zone.

<sup>c</sup> Trap catches through the first 3 weeks in May.

### **WEED CONTROL CONSIDERATIONS**

Devil's Claw continues to show up in cotton and soybean fields and can be a devastating yield robber. Because it is such a prolific spreading plant, it can shade-out large areas covering as much as a 12-foot diameter circle. If not eradicated soon after introduction into a field, devil's claw can impair harvest operations and the seed can be moved into other fields with farm

equipment. It is also moved about by wild animals, on clothing, by surface runoff, flooding and with the spreading of gin trash. Given a few years to become established, devils claw will drop curved pods containing hard seed that will germinated randomly over the next 4-5 years.

Although it may be getting late for some postemergent weed control treatments, smart growers will want to eliminated these weeds as soon as they are noticed. Hand-hoeing, pulling, spot spraying or cultivation should be ruthlessly used. Most pre-emergent herbicides are not effective on devils claw because of its large seed size. If there are lots of broadleaf weeds like cocklebur, morning glories and devils claw present, then using a BXN variety and Buctril herbicide might be a good bet. If pigweed is dominant, then another weed control might be better. Buctril also has no activity on grasses and would have to be augmented with another grass control herbicide.

If RR cotton is being used, Roundup Ultra offers good control of a large weed spectrum and will take out grasses. About half the normal rate of Staple herbicide with early, over-the-top Roundup applications will help control morningglories and add some residual weed control (Staple can be used OT, but you have to get it on early). With Staple, small 1-2 inch plants are controlled well, but larger plants are not. Crop oil concentrates or a good surfactant will help if permitted by label. Plants larger than 2-3 leaves may also be controlled, depending on conditions at the time of application (check with DuPont if you have questions).

Devils claw in soybeans can be controlled with post directed sprays such as Blazer, Basagran, Cobra, 2,4DB, Galaxy (Basagran/Blazer pre-mix) and others

Devil claw is easy to recognize before it blooms or begins to vine. It is a sticky, fleshy, pubescent plant with hollow stems and makes a pungent odor when injured. Its lobed leaves and pinkish tinge of plant color stand out easily in cotton and soybean fields at this time of year.

SDL

### **SORGHUM INSECT WATCH**

It is apparent that greenbugs are increasing in sorghum at various locations in Coastal Bend counties at the same time corn leaf aphids are declining. The predators (lady beetles, lacewing larvae, pirate bugs, spiders, etc.) and parasitic wasps which increased in number on corn leaf aphids are present in high numbers. These natural enemies are expected to bring greenbug numbers down rapidly in

most fields. However, there may be situations where control measures would be appropriate.

Greenbugs feed in colonies on the underside of leaves. Infestations may be detected by appearance of reddish top surface leaf spots which is caused by the toxin infected by greenbugs. Damage leaves begin to die, turning yellow then brown.

Larger sorghum plants tolerate more greenbugs. Yield reductions during boot, flowering and grain-development stages depend on greenbug numbers, length of time greenbugs have infested the plants, and general plant health. Many greenbugs on booting and older plants can reduce yields and weaken plants that may later lodge.

When deciding whether to control greenbugs, consider the amount of leaf damage, number of greenbugs per plant, percentage of parasitized greenbugs (mummies), numbers of greenbug predators (lady beetles) per plant, moisture conditions, plant size, stage of plant growth and overall conditions of the crop. It is important to know from week to week whether greenbug numbers are increasing or decreasing. For example, insecticide treatment would not be justified if the recommended treatment level (based on leaf damage) had been reached but greenbug numbers had declined substantially from previous observations.

Plants can tolerate about 30 percent leaf loss before yield is reduced. Greenbug infestations after sorghum flowering and before the hard-dough stage should be controlled before they kill more than two normal-sized leaves on 20 percent of the plants.

Insecticides include Furadan 4F (state 24C label), Lorsban, dimethoate, Disyston, malathion, and ethyl parathion.

Begin now to think about sorghum midge control, especially in fields that will reach the bloom stage 3 or more weeks after older sorghum began to bloom. Scouting fields for sorghum midge on a daily basis and determining the extent of field area infested is time consuming and labor intensive, but close attention can pay big dividends in money saved and crop protected.

I would suggest you contact us for a copy of Extension publication B-1220 dated June 1998, titled "Managing Insects and Mites on Texas

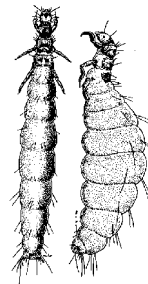
Sorghum” and read carefully information dealing with the greenbug and the sorghum midge. RDP

### INTERESTING INSECTS

The caddisflies (7,000 species), insect order Trichoptera (tricho=hair; ptera = wings), somewhat resemble small to medium-sized moths. Wings of adults are hairy (some have scales also) and are usually held rooflike over the abdomen when at rest. Antenna are long and slender. Most species are dull-colored insects but many do have observable patterns. Unlike moths, adult caddisflies have chewing mouthparts. They undergo complete metamorphosis, and larvae are aquatic. Larvae live in ponds or lakes and others occur in streams. Some larvae make cases from leaves, twigs, sand grains, pebbles, or other materials. These cases are held together with silk, or they may be cemented together. Casemaking larvae feed on plants including algae. Species that make nets spend their time near their nets and feed on materials caught in these nets. The free-living caddisfly larvae, which construct neither cases nor nets, are usually predators. Larvae are considered important as part of the food of many fish and other aquatic animals. Larvae usually require nearly a year to develop, but adults usually live about a month.



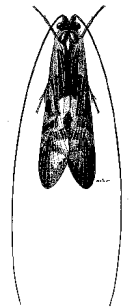
Casemaking larva



Larvae



Adult



Adult

Adult females of some species enter the water and attach their eggs to stones or other objects. Adults are often attracted to lights.

Adults are best collected near water at night using a blue light and they can also be swept from vegetation. Both larvae and adults are best preserved in alcohol.

RDP

View our newsletter earlier on the internet on the TPMA website (<http://www.tpma.org/>) by selecting "IPM newsletter" on the drop-down menu by going to "Coastal Bend" and "go". Another site is <http://agfacts.tamu.edu/~rparker>. Also pest management information is available at [www.txaac.org](http://www.txaac.org).

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