

Issues in Agriculture

The Newsletter about Integrated Pest Management for the El Paso Valley

Volume: 31
Issue: 9
Date: June 22, 2007

Salvador Vitanza, Ph.D.
Extension Agent- IPM
svitanza@ag.tamu.edu



190 San Elizario RD. ★ Clint, Texas 79836 ★ Phone: (915) 851-2515 ★ Fax: (915) 851-5312

Announcements

Pecan seminar. If you are making more than one insecticide application against first generation pecan nut casebearer, are worried about increasing control costs and pest resurgence, or would like to get the most updated information on aphid management, then, mark your calendars for this event. Several pecan entomologists will cover these important topics and will be glad to assist you in solving any of your pecan pest management concerns. Other topics that will be covered during the series of presentations include a discussion on pecan nutrition, recommended pesticides, and recent developments in the industry. Date: June 27, 2007. Meeting time: 9:00 AM, Location: Texas A&M University, El Paso Agricultural Research & Extension Center, 1380 A&M Circle, El Paso, Texas 79927. Three CEUs will be assigned to licensed pesticide applicators (2 IPM, 1 General).

A **new weather station**, part of the Texas Evapotranspiration Network, is now operating and available to provide real time weather data, daily calculated heat units and potential evapotranspiration by crop commodity through the internet. This station is located at Mr. Ramon Tirres Farm, on the North Loop Road, between Clint and Fabens. If your farm is nearby and you want to download data, please check this link: <http://texaset.tamu.edu/el Paso.php> and go to Tirres Farm. Please do not hesitate to call us if you need assistance on navigating and making full use of the site.

PECAN:

Although **pecan nut casebearer** builds three to four generations annually, usually only one well-timed insecticide application per year is necessary to keep pecan nut casebearer damage under control. However, some small pecan orchards may not have been sprayed at all due to limitations in spray equipment availability or some other reasons. Therefore, PNC nut damage and infestation levels in non-treated orchards are expected to be larger than in insecticide-treated ones. These orchards may serve as PNC refuge and be a potential source of infestation of second generation PNC. The moth flight of second generation PNC should be expected around June 27-30, depending on environmental conditions. Make sure to place your traps in your pecan orchards prior to those dates to be able to monitor moth flight and determine when to start scouting for eggs or nut entry.

Very light levels of **yellow aphids** at this time. I have noticed from 0 to 2 aphids per compound leaf. Control is recommended when 25 or more aphids are found per compound leaf. Also consider abundance of beneficial insects. You should monitor for aphid levels more closely if you have the cultivar "Cheyenne" or if you used pyrethroid insecticides for PNC control. If instead you have the var. "Pawnee", you could probably tolerate greater yellow aphid levels without yield loss.

COTTON:

Most fields are developing nicely with the warm weather that we are experiencing. We have been accumulating 21 heat units daily during the last week. A cotton plant needs approximately 50 heat units to make a new main stem node. Most fields look great, but others are patchy, have lots of skips, and plants in poor condition. I suspect that differences in plant health status among fields are mainly due to different irrigation regimes and maybe fertilizer usage. Initial problems in seedling emergence may partly account for these differences too. Sampled fields have 9 to 11 nodes and from 43,000 to 56,000 plants per acre (3.3 to 4.13 plants/foot of row). Research reports in the Texas high plains recommend an optimum plant stand of 2 to 4 plants/foot of row to maximize yield. I have noticed few blasted squares, but nothing significant. Check your fields for cotton rust, I have observed initial symptoms in young plants.

Cotton fleahopper (FH) levels are very light at this moment. I have not seen the need to control FH for now, but it is time to be scouting for them, especially in weeds around field margins and in alfalfa which is neighboring cotton. Published thresholds for FH suggest control when detecting 25-30 FH/100 plant terminals combined with 95, 85, and 75 % of square retention during the first, second, and third weeks of squaring respectively. Cotton fleahoppers usually cease to be a problem after the fourth week of squaring and definitely after bloom. They actually play the role of a beneficial insect once the flowering stage is reached because the first and second position bolls are past the time when they are sensitive to FH damage, and also because FH preys on eggs of other pests.

Lygus bugs are showing up in cotton fields, but at low levels not requiring control. Lygus will continue affecting fruiting sites after FH is no longer an issue.

Beneficial insects are relatively abundant. Lady beetles are the most prevalent beneficial insect species out there, followed by damsel bugs, spiders, and some lacewings. I have not encountered many pirate bugs or big eyed bugs yet. As a group, I estimate natural enemies to be at least between 9 – 10 thousands per acre. Make every attempt to preserve beneficial insects by spraying pesticides only when needed and by choosing selective, “soft” insecticides.

EPA approves natural refuge in Bollgard II® cotton. To reduce the likelihood that insects will become resistant to Bt (*Bacillus thuringiensis*) plant-incorporated protectant (PIP), EPA has approved the use of alternative crop plants and weeds - a natural refuge - instead of a structured non-Bt cotton refuge for Bollgard II® cotton. Previously, farmers planting this cotton were required to cultivate a certain percentage of non-Bt cotton and specifically deploy it relatively close to the Bt cotton fields to reduce the likelihood that Bt resistance would develop. The structured refuge requirements for Bollgard II® cotton (before this recent EPA approval) will remain in place for pink bollworm resistance management in the trans-Pecos area of Texas (Brewster, Crane, Crockett, Culberson, El Paso, Hudspeth, Jeff Davis, Loving, Pecos, Presidio, Reeves, Terrell, Val Verde, Ward, and Winkler), Arizona, New Mexico, and California. More on plant-incorporated protectants is available on EPA's Web site at: <http://www.epa.gov/opb/ppd1/biopesticides/pips/index.htm>

SUGGESTED INSECTICIDES FOR CONTROL OF COTTON FLEAHOPPERS AND LYGUS.

Insecticide	Formulated amount per acre		Insecticide	Formulated amount per acre	
	Fleahopper	Lygus		Fleahopper	Lygus
Address® 75S	4 - 5.33 oz.	10.66 - 21.33 oz	Dimethoate® 5E	3.2 - 6.4 oz	6.4 oz
Address® 90S	3.34 - 4 oz	9 - 17.77 oz	Asana XL® 0.66E	-	5.8 - 9.6 oz
Orthene® 90S	3.34 - 4 oz	9 - 17.77 oz	Proaxis 0.5 E	-	2.56 - 3.84 oz
	3.10 - 3.71		Prolex 1.25 E	-	1.02 - 1.54 oz
Orthene® 97	oz	8 - 16 oz	Provado® 1.6F	3.75 oz	3.75 oz
Intruder 70 WP	0.6-1.1 oz	-	Trimax 4F	1.5 oz	
Capture® 2E	-	2.6 - 6.4 oz	Steward® 1.25SC	9.2 - 11.3 oz	
Baythroid® 2E	-	1.6 - 2.6 oz	Lannate® 2.4LV	6 - 12 oz	0.75 pt
Leverage® 2.7SE	-	3.75 oz	Methyl Parathion		
Karate® 1E	-	2.56 - 3.84 oz	4E	3.2 oz	1 - 2 pts
Karate® 2.08 CS	-	1.28 - 1.92 oz	Vydate® 2L	1 pt	1 pt
Ammo® 2.5 E	-	2 - 5 oz	Vydate® 3.77 C-LV	8.5 oz	12.7 - 34.0 oz
Decis® 1.5 E	-	1.11 - 1.62 oz	Centric 40 WG	1.25-2.5 oz	
Lorsban® 4E	6 - 16 oz	-	Parathion 8E	-	8 - 16 oz
Bidrin® 8E	0.8 - 3.2 oz	8 oz	Scout®X-tra 0.9E	-	2.28 - 2.84 oz
Dimethoate®			Fury® 1.5 E	-	2.99 - 4.26 oz
2.67E	5.3 - 10.5 oz	10.7 oz			
Dimethoate® 4E	4 - 8 oz	8 oz			

NOTE: The use of synthetic pyrethroid insecticides, early in the season, may increase cotton aphid numbers.

TEXAS BOLL WEEVIL ERADICATION FOUNDATION - Trapping data for 06/18/07 - 06/22/07

	Pink bollworm	Boll weevil	Beet armyworm
Traps inspected	2,614	2,607	*
Total insects collected	67	0	*
Average insects/trap	0.03	0	*

Trapping Data Ending: 06/08/2007

Total Acreage of El Paso Area (Lower and Upper Valley): 28,320

Bt Acreage: 4,834.3 / Non-Bt Acreage: 23,485.7 / Total Fields Being Monitored: 1,070

* No data is being collected for Beet Armyworm for the 2007, growing season due to the decrease of acreage being treated.

IMPORTANT NOTICE: If you know of any cotton fields that are not being monitored with pink bollworm or boll weevil traps, please report to the TBWEF, phone: 915-765-2139

DEGREE DAY AND WEATHER INFORMATION

	2007 Upper Valley	2007 Lower Valley	2006 Upper Valley	2006 Lower Valley
PBW Jan. 1 (base 55)	1445	1478	*	1705
Cotton April 15 (base 60)	804	800	*	1029
Pecans Jan. 1 (base 38)	3806	3887	*	4245
PNC March 19 (base 38)	2971	2999	*	3228

Temperatures as of June 24, 2007

* Due to technical difficulties at the Texas Evapotranspiration Network, data from the Deputy Farms (Upper Valley) were not available in 2006.

The above information was obtained from the Texas Evapotranspiration Network (<http://texaset.tamu.edu/>). Weather data were collected from Deputy Farms for the Upper Valley and from Art Ivey's Farm for the Lower Valley. Except for the period from January 1 to April 18, 2007 when, due to technical problems at both weather stations, data are reported from Veterans Park for the Upper Valley and Capistrano Park for the Lower Valley.