Issues in Agriculture

The Newsletter about Integrated Pest Management for the El Paso Valley

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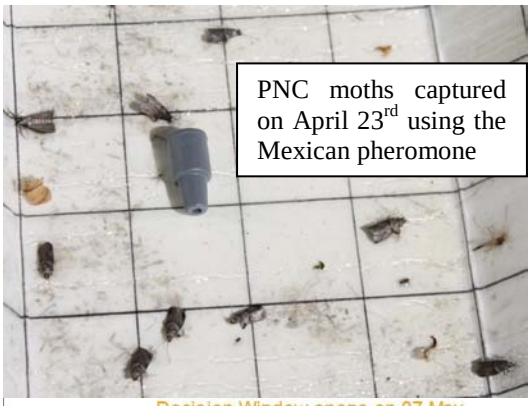
Texas AgriLife Extension El Paso County: http://elp.tamu.edu/ **Pecan IPM Pipe:** http://pecan.ipmpipe.org/ **TPMA** www.tpma.org/

ANNOUNCEMENTS

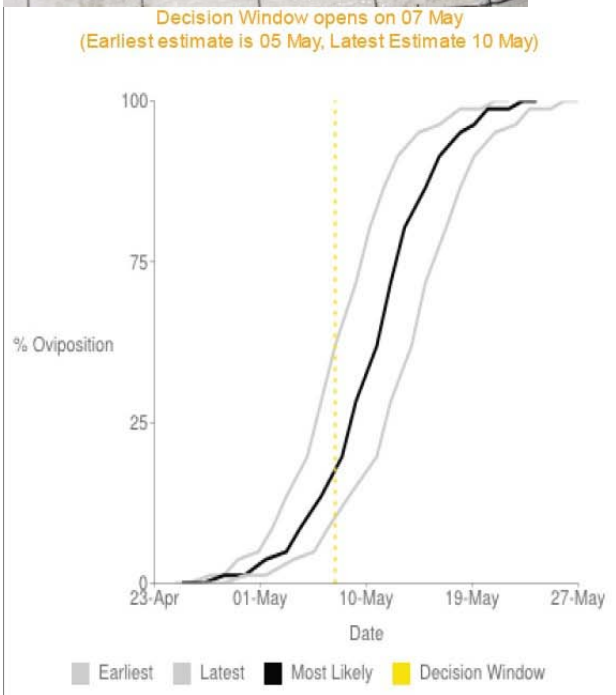
- The **2014 El Paso Pecan Pest Management Workshop** will be conducted at the Texas AgriLife Research Center, 1380 A&M Circle, El Paso, TX 79927 **on Wednesday, May 7th**, from 8:30 AM to noon. Topics: Pecan nut casebearer management and pests that may threaten El Paso pecans; presented by Bill Ree. Blackmargined and black pecan aphids; presented by Dr. Mark Muegge. Pecan emerging issues; presented by Dr. Jaime Iglesias. Contact: Dr. Salvador Vitanza (915) 860-2515. Three CEUs will be provided to licensed pesticide applicators. SEE YOU THERE!
- **Gardening 101 Workshop Series**: All workshops are free of charge and will be held at the Multipurpose Center on 9301 Viscount. On May 9th, the topic of discussion will be plant propagation techniques. Information: Denise Rodriguez Texas A&M AgriLife Extension (915) 860-2515.
- **Texas Pecan Growers Association Annual Conference & Trade Show:** July 13-16, 2014. Embassy Suites, San Marcos, TX. Contact TPGA, 979-846-3285 or pecans@tpga.org
- You can download this and other IPM newsletters, check updates, and view upcoming events at the El Paso Texas A&M AgriLife Extension IPM **website**: http://elp.tamu.edu/integrated-pest-management/

COTTON:

Many cotton fields were planted this past week and the majority of cotton seedlings have not emerged. Planting is currently ongoing. The attached photos show the earliest planted field that I could find today. This field has plants barely emerging from the ground and others at the cotyledonary node or node 0. The plant emergence percentage seems good and seedlings look healthy.



PNC moths captured on April 23rd using the Mexican pheromone



% Oviposition	Most Likely Date	Earliest Date	Latest Date
10.0	04 May	02 May	06 May
25.0	07 May	05 May	10 May
50.0	11 May	08 May	14 May
75.0	14 May	10 May	17 May
90.0	17 May	13 May	20 May

PECAN: The main reason why I am mailing a newsletter today is to let pecan growers know that the pecan nut casebearer (PNC) moths started appearing yesterday April 23rd in El Paso Lower Valley. Two growers, a Consultant, and me have observed two consecutive days of PNC moth captures. The lures containing the Mexican pheromone are attracting more PNC moths. Last year, some growers reported a capture ratio as high as 15 to 1 in favor of the lures containing the Mexican pheromone. I am attaching a recently updated brochure of the PNC Forecast System that provides instructions on how to use this tool to assist you in your pest management decisions. You can develop your own graph and table by using your local weather data and the date of the first flight of PNC moths in your orchard. As an example, I used April 23rd as the initial date of moth captures. This means that you should begin scouting your orchard for PNC eggs between May 7th and May 11th (the dates when 25-50% of all eggs are expected to be present). If you find that the PNC egg numbers are not at a treatment threshold at that time, return to sample between May 11th and May 14th (the dates of 50-75% egg lay). If the numbers of eggs and larvae are still below threshold, scout a third and final time between May 14th and May 17th (the dates when 75-90% of the eggs are expected) to determine if PNC infestations have increased to a threshold level justifying an insecticide treatment. If PNC eggs or damage are still below threshold, it is not necessary to make insecticide applications at this time. However, you should continue monitoring this pest for the second and third generations later in the season. The Texas A&M AgriLife Extension publication E-173 provides the following guidelines to scout for PNC eggs or nut entry: "*…examine 10 nut clusters per tree. A cluster is considered infested if it has a casebearer egg or nut entry. If, on this date, you find two or more infested clusters before 310 nut clusters are sampled, the casebearer population is large enough to damage more than 5 percent of the harvest. Apply an insecticide within the next few days.*"

The Texas AgriLife El Paso IPM Program is partially supported by the following organizations:

West Texas Pecan Association
Ag Market Resources
El Paso Pest Management Association
Texas Pest Management Association
Valley Gin Company, Tornillo

Once you capture PNC moths on <u>two consecutive dates</u>, the sustained moth flight is underway. Choose the <u>first date</u> of the two consecutive dates as the date of first moth capture. The table below shows trap captures in 3 orchards, A, B and C, and the determination of the date of the "first" moth.

	5/1	5/3	5/4	5/6	5/7	5/8	FirstMoth
A	0	1	2	1	6	8	May 3
B	0	1	0	0	3	5	May 7
C	0	4	0	1	3	0	May 6

Disclaimer. The information provided by PNCforecast is for educational purposes only. Treatment decisions should not be based solely on a PNCforecast output. The PNCforecast can not account for differences in environmental conditions at weather stations and actual orchard conditions. Growers should base management decisions regarding PNC on their assessment of numbers of eggs and larvae and nut set as determined by scouting in their orchards.

Allen Knutson
Texas A&M AgriLife Extension Service
Texas A&M University System.
April, 2014.

The pecan nut casebearer moth is a gray to almost black moth about 1/3 inch long. It can be identified by the ridge of raised scales running across the forepart of the wings.

TEXAS A&M AGRILIFE EXTENSION

The PNCFORECAST SYSTEM

Predicting Activity of Pecan Nut Casebearer in Your Orchard.

http://pecan.ipmpipe.org/

TEXAS A&M AGRILIFE EXTENSION

The PNCforecast System. The PNCforecast System allows you to predict when first generation pecan nut casebearer (PNC) eggs will be present in your orchard using PNC moth data from your pheromone traps and local temperatures. The best way to use PNC moth trap counts is to generate a PNCForecast so you know when to expect eggs to be present in your orchard. PNCforecast calculates dates when first generation eggs are expected to be present in the orchard and helps anticipate the optimum dates to begin scouting the orchard for PNC eggs. Knowing when eggs are expected can help you time insecticide treatments, if needed, to when they are most effective.

To generate a PNCforecast, you need to know the date when PNC moths begin flying in your orchard. Place your traps in the orchard before the first moths fly and inspect traps every 1-2 days. Once traps are in the orchard, there should be several days when no moths are captured to be sure the first moths that appear in your traps are indeed the first ones of the spring flight.

Selecting the date when you first capture PNC moths in your traps is very important. Sometimes 1-2 PNC moths are captured and then none are captured on subsequent dates. Ignore these early "stragglers" if no new PNC are present in your traps on the next inspection date. Once you capture moths on two consecutive dates, the sustained moth flight is underway. Choose the first date of the two consecutive dates as the date of first moth capture (see back page).

How To Generate a PNC Forecast.

Once you know the date of first moth capture in your traps, you are ready to generate a PNCforecast for your orchard. Log onto: **http://pecan.ipmpipe.org/** At the home page, select "Public Maps" and then "PNC Forecast Map". At the top left, select "Choose Location" and use the arrows in the circle at the top left to find you orchard on the map. Use the magnifying glass to zoom in our out on the map. Once the map is fully magnified and the cursor is at your orchard location, right click. This will place a red pin at your orchard site. The PNCForecast will use the average temperature expected during the next 3-4 weeks to predict PNC development. Next, at the top right at "Set Biofix", click on "Select Date" and use the calendar to enter the date on which you captured the first PNC moths in traps at this orchard location. Once you enter this date, the site will then generate a PNC forecast both as a graph and table.

How To Use PNCForecast Results.

PNCForecast will generate a table showing the dates when 10, 25, 50, 75 and 90% of all first generation PNC eggs are expected to be present in the orchard. In the example below, 25% of total eggs expected should be present on May 10 and most (90%) of eggs should be present May 19. The PNCForecast for your orchard will likely be different.

Percent of All Eggs	Date
10%	May 7
25%	May 10
50%	May 13
75%	May 16
90%	May 19

Begin scouting your orchard for PNC eggs on the dates when 25-50% of all eggs are expected to be present. If PNC egg numbers are not at a treatment threshold at that time, return on the dates of 50-75% egg lay (2-3 days later) and scout for eggs again. If the numbers of eggs and larvae are still below threshold, scout a third time on the dates when 75-90% of the eggs are expected to determine if PNC infestations have increased to a threshold level justifying an insecticide treatment.

The percentages in the table are NOT the expected percent of nutlets infested with eggs, but an estimate of what proportion of total eggs are expected to be present on a given day. The orchard must be sampled (scouted) to determine if the PNC infestation justifies treatment and when to apply the insecticide.

Track PNC Activity.

You can also see PNC activity at other sites across the pecan belt as reported by cooperating growers. At: http://pecan.ipmpipe.org/, under Maps select PNC Risk Map. The Decision Window refers to the dates when 25-50% egg lay is predicted and indicates when orchards near that site should be sampled to determine if infestations justify treatment.

Where to Buy Traps and Lures. A list of supplies is available at:

http://pecankernel.tamu.edu/suppliers/index.html