Texas Cooperative Extension TEXAS PECAN PEST MANAGEMENT NEWSLETTER

Bill Ree, Extension Pest Management - IPM (Pecan)
P.O. Box 2150, Bryan, TX 77806-2150
Ph: 979-845-6800
Email: w-ree@tamu.edu
http://pecankernel.tamu.edu

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This newsletter is being supported by your TEXAS PECAN GROWERS ASSOCIATION
Ph: 979-846-3285
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Anyone wanting this newsletter by email please send me a note at the above address and I'll put you the list. If anyone has had an address change from a rural route box number to a 911 address please let me know so I can make the change. I have had to drop several producers because of returned letters with incorrect/old addresses.

GENERAL

Although there are some orchards with good to very good crops, I think overall the crop is just moderate to light. During the past week I've seen some "June drop" or nutlets aborting because of poor pollination. Although parts of the state received some rain over the Memorial day weekend, most of the state is in a real need for rain - and soon!!

INSECTS

Grasshoppers

In the Bryan, College Station area I'm seeing lots of grasshoppers and have received several reports of high grasshopper numbers from several counties. The Texas Cooperative Extension has an excellent publication on grasshoppers, "E-209, "Grasshoppers and Their Control", authored by Dr. Carl Patrick, Professor and Extension Entomologist, Amarillo, TX and Steve Davis, IPM agent, Crosby, TX.

This publication can be found and viewed on line at:
http://insects.tamu.edu/extension/publications

Some information from this publication follows:

There are about 150 species of grasshoppers in Texas with 90% of the damage to crops and trees caused by just five species:

- Differential grasshopper, *Melanoplus differentiialis*

- Red-legged grasshopper, *Melanoplus feumrrubrum*

- Migratory grasshopper - *Melanoplus sangurnipes*

- Two-striped grasshopper, *Melanoplus bivitattus*

- Packard grasshopper, *Melanoplus packardii*

The main factor affecting grasshopper populations is weather. High populations are usually proceeded by several years of hot dry summers and warm autumns. Dry weather increases the survival of nymphs and adults while warm autumns allow grasshoppers more time to feed and lay eggs.

- Female grasshoppers lay an average of 200 eggs per season but sometimes a many as 400. Eggs are laid in pods beneath the soil surface with each pod containing 20 - 120 eggs.

- Eggs begin hatching in late April or early May and peaks around mid-June

- Nymphs go trough 5 or 6 stages and become adults in 40 to 60 days.

Control options: There are several types of control options ranging from biological, mechanical and cultural to insecticide use. Of these, only insecticide treatments will provide a quick knock down if control is needed immediately.

Examples of some of these methods are:
- mechanical control: grasshoppers prefer undisturbed areas for oviposition so tilling in mid to late summer will reduce oviposition sites. In CRP acreage, tilling is not permitted but shredding can reduce the food supply.

-cultural control: control weeds in fallow fields to reduce available food; eliminate tall weeds and grass in and around crops you want to protect.

-biological control: a naturally occurring fungus *Entomophthora grylli* can kill grasshoppers during warm humid conditions. The spores of the protozoan *Nosema locustae* have been incorporated with bran to make insecticide baits. Baits containing *Nosema* are more effective on early instar nymphs with little effect on adults.

Insecticides: There are many insecticides labeled for pecans that can be used for grasshoppers. If grasshoppers are a problem treat the orchard floor and surrounding fence lines and ditches. Read the label for any restrictions on grazing.

Pecan nut casebearer
From all the reports I have received and orchards I have visited, the first generation was early, in some cases very early. This was a year then the PNC traps really paid for themselves by alerting producers to the early adult flight.

I feel that this is a year when we need to really pay attention to the second generation. We can still use pheromone traps to monitor adult flights and eggs can still be found. Although second generation larvae will not damage as many nutlets, maybe one or two, when the crop is light this can be significant.

By the time the second generation comes around the stigma end of the nutlet has gotten smaller so eggs are more likely to be found on the side of the nutlet as shown in the picture.

I feel it is definitely worth the time to monitor and scout for the second generation. Hopefully this next generation will be light and not a problem but then it might be serious.


PNC egg on side of nutlet

Spittle bug
Spittle masses caused by immature spittle bugs are apparent in most orchards. The guideline for spittle bug management, ie. “do I spray for spittle bugs?” is a little vague, but from studies in Texas there was no economic benefit treating for this insect.


Spittle bug spittle masses

COUNTY REPORTS

Burleson county: Both improved and natives are light. County is dry and in need of a rain. Grasshoppers problems are spotted but heavy where found.

DeWitt county: Crops looks pretty good so far but county is in need of a rain. PNC activity was 5 to 7 days early this spring and overall infestations were light. Some reports of grasshopper problems.

Guadalupe county: County finally received some rain with reports of ½ to 1 inch. Crop still looks good - so far. Pecan nut casebearer infestations were light with activity earlier than normal. Grasshopper numbers are increasing.

Navarro county: The county really needs a rain. Crop is extremely variable but overall is light, estimates of a 30 to 40% crop. PNC infestations were early and light. Grasshoppers infestations are spotted but where they are found they are heavy.

San Saba county: Crop is light to moderate at the best with natives being very light. County is hot and dry and needs a rain. PNC was light and early. No grasshopper problems reported at this time

Tom Green: Hot and dry conditions with several days exceeding 100 degrees. With the hot dray weather many producers are starting to irrigate. The nut set looks good so far.

MEETINGS:

State Meetings

June 7-9, 2006
Louisiana Pecan Growers
Clarion Hotel, Shreveport, LA
Contact Susan Wilson @ 318-932-8912

June 18-20, 2006
Oklahoma Pecan Growers Conference
Shawnee, OK
Contact: Janice Landgraf @ 580-795-7644

July 9 -12
Texas Pecan Growers Conference and Trade Show Embassy Suites
Frisco, TX
Contact: TPGA @ 979-846-3285

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