



Texas Cooperative Extension TEXAS PECAN PEST MANAGEMENT NEWSLETTER



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This newsletter is being supported by the TEXAS PECAN GROWERS ASSOCIATION

Anyone wanting this newsletter by email please send me a note at the above email address and I'll put you the list. If on you have 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

It's hard to believe but another season is upon us. From the comments I have heard from producers everyone is expecting a good season. Some areas of the state had poor crops last year because of a couple of spring freezes and these orchards should have an on year. Lets just hope mother nature will help us out.

INSECTS

Phylloxera

For those producers that observed phylloxera infestations last year this is a reminder that insecticide applications for this pest are applied just after budbreak. Recommended insecticides include: Provado 1.6F (imidacloprid) @ 3.5-7 oz/A; Lorsban 4E (chlorpyrifos) @ 2-4 pts/A; and malathion 57% EC @ 1-2 pt per 100 gallons. Livestock grazing is only permitted with malathion. Since phylloxera infestations can be spotty, spot treatments of trees that had galls last

year would be recommended.

Dormant oil

I have written this section several times in the past but since I generally receive a few questions each spring on the use of "dormant"oil I thought I would rerun this information on some of the basics of horticultural oils.

Horticultural oils have been used in agriculture for over a 100 years to control various soft bodied insects such as scale, aphid, and mites. Horticulture oils can be used on pecan but because pecan and ALL members of the *Carya* (hickory) genus are considered oil sensitive, the use of any oil on pecan is restricted to the dormant season. A few other species of trees that are considered oil sensitive include: black walnut, junipers, cedars, redbud and maples to name a few.

Horticultural oils control insects either by penetrating the insect egg and interfering with metabolic processes or by preventing respiration through egg shells or the respiratory passages of mature or immature insects. Horticultural oils have no residual activity so only those insects which are coated will be controlled.

Technology in the refinement of oils has come a long way since the use of engine oil emulsions. Today horticultural oils are refined to certain specifications and can be used on a wide range of plants.

There are several types of horticultural oils on the market today which can cause some confusion. In addition, labels on horticultural oils will contain a different terminology. Not all horticultural oils are the same and an understanding of label information is necessary to know the difference. The following is a brief description of different types of oils and an explanation of some of the information that should be found on the label.

Dormant Oil: This class of oil is the heaviest of the horticultural oils and is formulated for use on dormant plants only. Apply these oils as late in the dormant season as possible but **before budbreak**. Dormant oil effectiveness increases as temperatures increase and insect metabolism is accelerated.

Summer Oils: Summer oils are slightly lighter than dormant oils and are formulated for use during the spring and summer on some plants.

Superior Oils: This class of oil is the most highly refined of all the horticultural oils. These oils are used primarily during the growing season, however, they may be used as a dormant oil by changing the rates.

When purchasing a horticultural oil it is important that you understand the information on the label. The following information should be on the label and will assist you in determining the quality.

Unulfonated Residue (UR): this number is a measure of purity or degree of refinement and is always listed as a percent with 92 being the minimum. The higher the percent the higher the purity.

Viscosity: This is a property used to define oil heaviness and is expressed in seconds. Horticultural oils fall into the 60 to 200 second range, with the heavier oils rating 100 or higher. The higher the number the more

persistent the oil on the plant. Dormant or semi-dormant plants will tolerate heavier deposits than trees in leaf.

Distillation: distillation temperature range is a measure of the volatility of an oil. Horticultural oils have a distillation range of 400 to 488 F. The lower the distillation temperature the quicker the evaporation. Dormant oils will have a distillation range of around 438 F while superior oils will be around 412 F.

Gravity: This is another method of weighing oil. When related to viscosity and the UR it can provide an index to oil paraffinicity. Oils should be largely paraffinic to be safe for plants. Gravity is measured in degrees and the higher the number the more paraffinic the oil. Thirty degrees is the minimum standard.

Horticultural oils are an effective and safe way to control scale on pecans. In Texas, dormant oils are permitted in the Texas Department of Agriculture certified organic production (Organic Food Standards and Certification, Texas Administrative Code, Title 4, Part 1 Chapter 18).

As I stated above, pecan is considered an oil sensitive crop therefore only dormant oils are recommended. Before purchasing and applying any type of horticultural oil **ALWAYS READ THE LABEL**. When applying, make sure there is good agitation in the tank. Even though you are making an application to a dormant tree, injury or tree death can occur if there is poor agitation which allows the oil and water to separate and trees receive high concentrations of oil.

Pecan nut casebearer

Although you might think it is a little early to be discussing PNC, this is a reminder that PNC pheromone traps should be in the orchard by the first week of April for the southern part of the state, mid April for central Texas and late April for the northern area.

The PNC pheromone trap has to be one of the most useful pest management tools you can use. These traps are inexpensive and will provide you with important information on the start of PNC activity. Although these traps can not tell you if you have to treat or not this trap will tell you when egg lay starts and when nut entry starts. From many years of trap monitoring I am confident that egg lay starts between 7 to 10 days after your first initial catch with nut entry starting 12 to 16 days after this initial catch.

PNC traps have been around for awhile now and should be available at most dealerships that cater to the pecan industry. Traps can be purchased as "kits" with kits containing from 1 to 3 traps plus extra lures and trap bottoms. Remember that any lure not being used should be stored in the freezer. We recommend 3 to 5 traps be used for orchards of 50 acres or less and at least 5 traps for orchards larger than 50 acres.

I always recommend that producers purchase at least twice what they might need. For example if you have a 25 acre orchard and want to use 3 traps, order at least 6. If one of our Spring storms blows you traps into the next county or into the river, you have extras on hand and will not lose valuable monitoring time by having to wait for another order.

Additional information on PNC and the use of the pheromone traps can be found in our Extension publication. You can access this publication through the Texas A&M Entomology web site:
<http://insects.tamu.edu/extension/publications/crops.html>

Anyone needing help in locating a source for PNC pheromone traps please give me a call.

MEETINGS:

State/Regional Meetings

May 6, 2004

Georgia Pecan Growers Annual Conference
Perry, GA

Contact: Jane Crocker, 229-372-5416

June 11-13, 2004

Oklahoma Pecan Growers Annual Conference
Idabel, OK
Contact: OPGAShelton@aol.com

June 16-18, 2004

Louisiana Pecan Growers Annual Conference
Baton Rouge, LA
Contact: Frances Knox 318-747-3003 or
francesknox@bell-south.net

July 11-14, 2004

83rd Annual Texas Pecan Growers Conference
and trade Show
San Antonio, TX
Contact: TPGA - 979-846-3285

Texas County Meetings:

March 30, 2004

Central Texas Pecan Meeting
Goldthwaite, TX

April 3, 2004

Bell County
Contact Dirk Arron 254-933-5305

April 7, 2004

Eastland county Field Day and Grafting Clinic
Cisco Jr. College, Cisco, TX
contact Bob Bailey 254-629-1093

April 20, 2004

Guadalupe County field Day
Contact: Travis Franke 830-379-1972

May 3, 2004

San Saba County Field Day
Contact: Neal Alexander 325-372-5416

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