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TEXAS AGRICULTURAL

EXTENSION SERVICE Pub

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Texas Pecan Pest
Management
Newsletter

April 19, 1994 #94-3

General

Moisture conditions in counties where I have talked to county Extension agents range from very dry to adequate. Some areas of the state received some rain last week, however some of these areas, Gonzales and Guadalupe counties, also received some hail. The extent of hail damage is unknown at this time.

Some grafting is being done and zinc and fungicide applications are being made. There are several county pecan meeting and field days being held over the next four or five weeks. Try and attend one of these county meetings if possible. The county Extension agent and phone number are listed for each meeting location.

Pecan Information:

In this section I will begin making references to articles that contain information on insect biology or control methods, diseases, wildlife or weed control. Most of my references will come from Pecan South, but as I find additional sources I will list them too.

Insects
Identifying Phylloxera:
Pecan South Vol. 21, No.3, p.5,
May-June 1987.

Monitoring Tool Developed for Hickory Shuckworm. Pecan South, Vol. 21, No. 4, p. 29, July-August 1987.

Sound Management Vital to Minimize Impact of Pecan Nut Casebearer. Pecan South, Vol. 22 No. 6, p.4, November-December 1988.

Trunk Injections Gave Poor control of Phylloxera. Pecan South, Vol. 23, No. 2, p. 4, March-April 1989.

Biology, Identity of Sexual, Egg Stages of Three Pecan Aphids. Pecan South, Vol. 24, No.1, p. 27.

Fire Ants: Do the returns justify control efforts. Pecan South, Vol. 24, No. 4, p. 4.

Louisiana Trials Evaluate Materials For control of Pecan Leaf Scorch Mite. Pecan South, Vol. 25. No. 1, p.13.

Hickory Shuckworm - Biological and Seasonal Activity. Pecan South, Vol. 25 No. 2. p. 4, September-October 1991.

Product Update

It was recently brought to my attention that SunSpray Ultra Spray Oil, which is marketed by its basic manufacture, Sun Company, in addition to Mycogen Corporation, has a label for a summer application to pecan. This oil is a horticultural oil, which I have discussed in previous newsletters, and is of higher quality than a dormant oil. At this point I would be hesitant, at least until this has been checked out, about using an oil on pecan during the summer.

Pests, rates and time of application as listed on the label are: Dormant Season: For aphids (eggs), scale and mite (eggs) - 7.5 tablespoons per gallon. Summer: For aphids and mites - 2.5-4.0 tablespoons per gallon.

The main concern about using an oil during the summer is causing some phytotoxicity or leaf burn. Several factors, such as temperature, humidity, drought conditions, tree health and sensitivity to oil, and rates of material used can influence phytotoxicity.

As with any pesticide always read the label before purchase and application for rates, mixing instructions and safety precautions.

Insects

Phylloxera: Some phylloxera galls are showing up in the central and southern part of the

Extension programs serve peop e of all ages regardless of socioeconomic level, race, color, sex, religion, disability or national origin. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating

state. It is to late to apply any control measures this season, however, trees that have galls this spring should be marked or noted so treatments can be applied next spring.

Pecan Nut Casebearer: A prediction model is included with this newsletter. I did observe some shoot tunneling by the overwintering larvae in DeWitt county on April 7. Insecticide treatments for the overwintering larvae are not recommended.

Asian ambrosia beetle: New county records for distribution in Texas during late March and early April were reported from Wharton and Victoria counties. The Victoria county infestation was from a single pecan tree.

Beneficial Insects -

Calliephialtes grapholithae is a known primary parasite of the pecan nut casebearer, leaf casebearer and hickory shuckworm. In a 1931 Texas study, 2.7 percent of 1,264 first generation nut casebearer larvae were parasitized. In a 1982-83 study of hickory shuckworm parasites in Brownwood, Texas this insect parasite accounted for 1.8 and 3.9 percent parasitism respectively.

In 1983 C. grapholithae was found to parasitize 11.4 percent first generation pecan nut casebearer collected from the Adriance orchard west of College Station. However, in 1984 it was not found. This was thought to be due to the fact that this parasite attacks late instar larvae and collections of PNC larvae made in 1984 were made much earlier than in 1983.

Yesterday

The eighteenth annual meeting of the Texas Pecan Growers Association was held August 9-10, 1938 in Breckenridge, Texas. during this meeting there were three papers presented on controlling pecan insects. A short summary of one of the papers follows.

C.B. Nickels, USDA, Bureau of Entomology and Plant Quarantine discussed "The Timing of Spray Applications For Control of The Pecan Nut Casebearer". During 1936 and 1937 studies were made at Brownwood, Texas to devise an accurate method for defining dates for effective spray applications for the first generation pecan nut casebearer. Orchard observations for PNC eggs were made after moths had emerged from overwintering larvae collected from pecan shoots. As soon as eggs could be found examinations were made at frequent intervals. The collected data from this study indicated that a large portion of the first-brood eggs hatched within a 14 day period. The data also indicates that a single spray application of lead arsenate, (6 pounds per 100 gallons) may be made with satisfactory results at any time within a period of 7 days when approximately 5 per cent of the eggs have hatched an ending one week later.

County Situations
Anderson County: Dry, some rain last week but wind is removing surface moisture. No insect problems at this time. Some grafting is being done.

Guadalupe County: Good moisture. County received 0.4-2.5 inches last week, but had some hail on the 15th. Extent of

hail on pecan is unknown at this time. Had freezes on March 27 and April 5.

Gonzales County: Moisture wise the county is not in to bad of shape. Some hail was reported in the Hocheim area but the extent of the damage is not known at this time.

Lampasas County: Very dry. Lot of freeze damage from last year showing up. Had some leaf burn from a march freeze.

Navarro County: County received 0.6 to 1.7 inches of rain on April 11. County is in good shape moisture wise. Cool weather seems to have slowed some trees. No freeze damage visible.

San Saba County: Dry and getting worse each day. Some producers are irrigating.

Wharton County: County received up to 1.5 inches of rain on the 15th and 16th, but could use more. Area had a freeze on March 27. The Asian ambrosia beetle was detected in a survey trap on April 13.

Meetings

County April 28 (Changed from May 3) Lee County Billy Gillum CEA 409-542-2753

April 29
Falls County
Jeff Stapper
817-883-2526

May 5 (AM) Lampasas County Michael Mallett CEA 512-556-8271 May 5 (PM) Burnet County Wade Hibler CEA 512-756-5420

May 5 Guadalupe County Gus Person CEA 210-379-1972

May 6 Bastrop County Ron Lindsey CEA 512-321-2184

May 7 Washington County Spencer Tanksley 409-836-6128

May 11 Blanco County Todd Swift CEA 210-868-7167

May 12 Robertson County Ed Schneider CEA 409-828-4270

May 18 Comanche County Bob Whitney CEA 915-356-2539

May 19 Caldwell County Glen Holub CEA 512-398-3122

May 21 El Paso County John White CEA 915-859-7973

June 1 Scurry County Mark Logan CEA-Ento 915-573-5423 June 2 Terry County Dirk Aaron CEA 806-637-4060

State Meetings

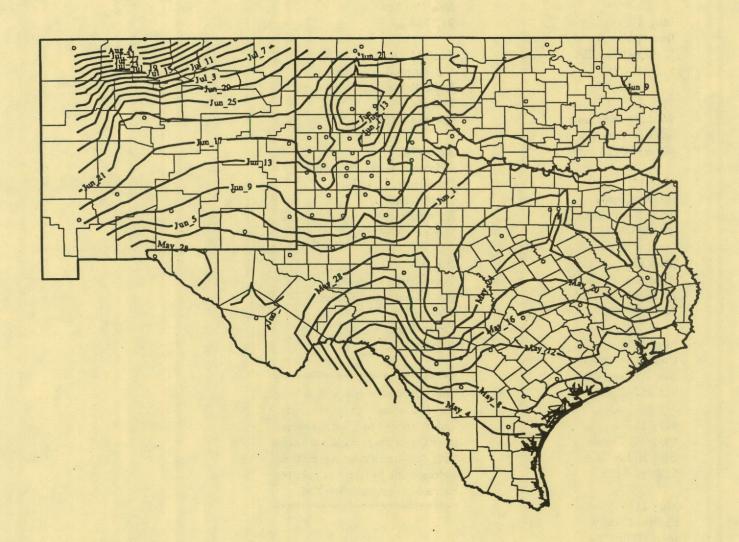
May 6-7 Georgia Pecan Growers Jane Crocker 912-759-2879

June 15-16 Mississippi/Louisiana Baton Rouge, LA Earl Puls 504-388-2222

June 19-21 Oklahoma Pecan Growers FountainHead Resort Lake Eufaula Robert Knight 918-299-0409

July 10-13
Texas Pecan Growers
Waco Convention Center
Waco, TX
Cindy Wise
409-846-3285

Pecan Nut Casebearer First Significant Nut Entry Date Prediction April 18, 1994



Contour Interval: Four Days

Data Source: Current data from 90 National Weather Service weather stations Station locations represented as points on map

John A. Jackman Bill Ree Robert W. Redding St