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TEXAS AGRICULTURAL
EXTENSION SERVICE

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Texas Pecan Pest Management Newsletter

Government Publications
Texas State Document



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General

The mailing list for this newsletter has been updated and some names were deleted. If you know of anyone that would like to receive this newsletter I will be glad to add the name to the mailing list. Also I appreciated all of the comments.

Pecan Information

Occasionally I am asked by producers on where they can obtain pecan information. The following list are a few sources I came up with. This list is by no means complete.

- **Extension Service Publications/Fact Sheets:** Fact sheets and publications should be available through your county Extension office.
- **Pecan Organizations:** Most pecan producing states have a state organization.
- **Pecan South:** This is a monthly magazine published by the Texas Pecan Growers Association. Cost is \$15.00 per year. Send check, money order, MasterCard or Visa number and expiration date to: Pecan South, P.O. Drawer CC, College Station, TX 77841.
- **The Pecan Grower:** This is a quarterly publication published by the Georgia Pecan Growers Association. Subscription - Pecan Grower P.O. Box 7026, Tifton, GA 31793

- Books

Pecan Cultivars - Past and Present: Available through the Texas Pecan Growers Association

Pecan Culture by Fred Brison: Unfortunately this one is out of print. If you have a chance to obtain this one - do it.

Pecan Cultivars: The Orchard's Foundation: by Darrel Sparks: cost \$49.00. Send Check To: Pecan Production Innovations, P.O. Box 511, Watkinsville, GA 30677

Texas Pecan Handbook: Cost \$15.00, Send Check Payable to: Pecan Shortcourse: Extension Horticulture, Texas A&M University, Room 225, Horticulture/Forest Sciences Bld., College Station, TX 77840-2134

Pecan Production In The Southeast: a guide for growers. Cost \$42.50. Available through the Texas Pecan Growers Association.

- **Pecan Shortcourses:** Texas Pecan Short Course - Last week of January at College Station, Texas.

New Mexico Pecan Shortcourse - June 6-10, 1994.

- **State and Regional Pecan Meetings:** Watch for dates and locations in this newsletter.

- **County Pecan Meetings/Field Days:** Watch for dates and locations in this newsletter.

- **Other Pecan Growers**

Insects

Pecan Nut Casebearer: Beginning with this issue and continuing until about mid June there will be a pecan nut casebearer prediction model. The lines on the map are four days apart and indicate anticipated dates of first significant nut entry. Because the prediction model is based on temperature, the lines may shift as new temperature data is recorded. The most important prediction is the one published one to two weeks prior to anticipated spray date. The date in the upper left hand corner of the map is the date the model was run.

Last season, first generation casebearer activity was generally light across the state. At this time it is to early to predict what type of pressure there will be this year, but in one orchard in DeWitt County last week I did observe several terminals that had larvae tunneling in the shoots.

Sawfly

During this time of year you may find a few larvae feeding on the foliage. Most likely these are sawfly larvae. Sawfly larvae generally feed on the underside of the foliage and chew small circular holes in the leaves which gives the foliage a lacy appearance. Once the larvae have completed their development they

drop to the ground and enter the soil to construct a cocoon. There is only one generation per season and control is rarely needed.

Spittle Bug

A few small spittle masses produced by the immature stage of the spittle bug were observed on a few terminals in DeWitt County last week. Control for the spittle bug is generally not needed.

Diseases

The following information on pecan diseases is provided by Dr. Jerral Johnson, Associate Department Head, Department of Plant Pathology and Microbiology.

Strategies for Controlling Pecan Foliage and Nut Diseases

1. **Location:** Plant orchards in areas that are open and not susceptible to periods of air stagnation.
2. **Soils:** Select orchard soils that are deep and well drained.
3. **Disease Free Plants:** Plant only trees which are free of nematode and crown gall infection.
4. **Varieties:** Plant disease resistant varieties that are adapted to the area.
5. **Fungicides:** Apply fungicides during periods of disease development.
6. **Zinc Applications:** Apply zinc to prevent stress and poor growth
7. **Nitrogen:** Apply nitrogen as needed based on soil analysis.
8. **Sanitation:** Removal of debris in the orchard is important for removal of the fungus inoculum. Remove disease susceptible trees that can not be adequately sprayed.
9. **Air circulation:** Air circulation speeds the rate of

foliage and nut drying following rain, irrigation or dew. Space trees to insure air flow between trees.

10. **Sprayer Calibration:** Calibrate sprayer correctly to deliver desired amount of pesticide

11. **Coverage of Foliage and Nuts:** Complete coverage of foliage is important for disease control.

Fungicide Management:

To insure that existing fungicides will be available for future pecan producers, it is important to properly manage the materials. By alternating materials during the season, it is possible to avoid the buildup of fungicide resistant strains of the pecan scab fungus. Benlate®, Topsin M® and Orbit® are systemic fungicides that, if used repeatedly during a season may select for fungicide resistant strains. Benlate® and Topsin M® are benzimidazole fungicides and their repeated use in the Southeast has resulted in the development of strains of the pecan scab fungus that are resistant to the pesticides.

Orbit®, due to its systemic activity should be managed wisely. The other fungicides approved for use on pecans are protective and their repeated use would not result in the development of fungal resistance as can occur with Benlate®, Topsin M® or Orbit®.

In some areas Orbit® and Super Tin® have been tank mixed to control disease problems when pressure is especially severe. The Orbit label does indicate that the two products can be mixed, however, the Super Tin® labels do not indicate the two can be mixed.

Upcoming Meetings

County Meetings

April 22

Burleson County
David Reue CEA
409-567-3255

April 29, 1994

Falls County
Jeff Stapper CEA
817-883-2526

May 3, 1994

Lee County
Billy Gillum CEA
409-542-2753

May 5, 1994

Burnet County
Wade Hibler CEA
512-756-5420

May 5, 1994

Lampasas County
Michael Mallett CEA
512-556-8271

May 5, 1994

Guadalupe County
Gus Person CEA
210-379-1972

May 6, 1994

Bastrop County
Ron Lindsey CEA
512-321-2184

May 7, 1994

Washington county
Spencer Tanksley CEA
409-836-6128

May 11, 1994

Blanco County
Todd Swift CEA
210-868-7167

May 12, 1994

Robertson County
Ed Schneider CEA
409-828-4270

Table 1. Pecan Foliage and Nut Diseases and When They Are Most Likely To Occur In Texas.

Disease	Time
Scab	April - September
Downey Spot	April - May (symptoms visible in mid to late July)
Powdery Mildew	July - August
Vein Spot	April - June
Brown Leaf Spot	June - August
Fungal Leaf Scorch	July - early August

Table 2. Fungicides Cleared For Use on Pecans

Fungicides and Rate/A	Cost Per Acre	Diseases	Comments
Benlate® 50WP 0.5-1.0 lb.	\$7.78-15.55	Scab, brown leaf spot, powdery mildew, liver spot, fungal leaf scorch	Resistant Strains, Use around home, No grazing restrictions
Topsin M® 70WP 0.5-1.0 lb	\$8.75-17.50	Scab, downey spot, powdery mildew, brown leaf spot	Resistant strains, Grazing not allowed, Use around home
Super Tin® 4L 8-12 oz.	\$7.36-11.04	Scab, downey spot, liver blotch, powdery mildew, sooty mold	Restricted use pesticide, No homeowner use, Grazing not allowed, Protective cab on Tractor required, Will burn peach trees
Orbit® 4-6 oz.	\$10.20-15.30	Scab, downey spot, fungal leaf scorch, liver spot, vein spot	Grazing not allowed, No homeowner use, Protective cab on tractor required
Ziram® 3 pts/100 gal (200 gal/A)	\$15.18	Scab	No grazing restrictions, Weak fungicide, Irritating to skin
Basicop® 2 lb/100 gal (200 gal/A)	-----	Scab	No grazing restrictions, Weak fungicide, will burn peach trees
Syllit® 2-4 lbs	\$17.00-34.00	Scab, liver spot, brown leaf spot, downey spot, leaf blotch	Grazing not allowed, No homeowner use, Will burn when mixed with some insecticides

Table 3. Suggested Spray Schedule For Pecan Diseases.

Time	Homeowner	Commercial
Budbreak	Benlate or Topsin M	Orbit or Super Tin
Prepollination	Same as Budbreak	Same as Budbreak
Casebearer	Same as Budbreak	Super Tin
Cover Sprays ^{1/}	Same as Budbreak	Super Tin
Water Stage	Same as Budbreak	Benlate of Topsin M
August Sprays	Same as Budbreak	Orbit

1/ Number of cover sprays depends on weather and variety.

Precautions:

- Only Benlate, Basicop or Ziram are approved for orchards where cattle will be grazed during the year.
- Basicop is a copper sulfate fungicide and can be used in organic programs for control of foliage and nut diseases of pecans. It will not control scab during periods of moderate disease pressure or on susceptible varieties.
- Benlate or Topsin M are suggested for use around the home because of their wide label clearance. Both products are approved for use on fruit trees. Benlate is also approved for use on many garden vegetables. Thiophanate methyl, the active ingredient in Topsin M is approved for use on many ornamentals.
- Super Tin is the only restricted use fungicide used on pecans. To reduce exposure during mixing, it is now available as an 80%WP in a water soluble bags. One bag will treat 5-7.5 acres. A recent addition to the label requires a cab on the tractor.
- When using any pesticide make sure to follow all safety precautions listed on the label.
- Always read and follow the label directions. If there is any question about the use of a product, check with the company.

State Meetings

May 6-7, 1994

Georgia Pecan Growers Annual Meeting
Jane Crocker
912-759-2879

July 10-13, 1994

Texas Pecan Growers Annual Conference and Trade Show
Waco convention Center
Waco, TX
Cindy Wise
409-846-3285

June 15-16, 1994

Mississippi/Louisiana Pecan Growers
Baton Rouge, LA

The information given herein is for educational purposes only. References to commercial products or trade names is made with the understanding that no endorsement by the Cooperative Extension Service is implied.

June 19-21, 1994

Oklahoma Pecan Growers Fountainhead Resort
Lake Eufaula
Robert Knight
918-299-0409