# ${ }_{T}^{2} A 265.6$ <br> Bill Ree, Extension Pest Management- Pecans Jerral D. Johnson, Extension Plant Pathologist George Ray McEachern, Extension Horticulturist Charles Cole, Extension Entomologist <br> <br> \section*{P331.93 <br> <br> \section*{P331.93 <br> <br> <br> TEXAS AGRICULTURAL <br> <br> <br> TEXAS AGRICULTURAL EXTENSION SERVICE} 

 EXTENSION SERVICE}}

September 18, 1992

## General Situation

Harvest of early maturing varieties is underway in much of the southern part of the state. In the Winter Garden area (Uvalde and surrounding counties) harvest of Pawnee is complete or nearly so. Some harvest of Pawnee and Shoshoni has occurred in Bastrop county. Shuck split of Pawnee was been reported this week as far north as San Angelo.

Most insect and disease problems are over at this time, although producers in the northern part of the state still need to watch for black aphids and stink bugs.

## Insects

Black Pecan Aphids: Last week moderate to heavy black pecan aphid populations were observed in Guadalupe and Maverick Counties. During visits to these areas the question was brought up as to how late in the season should control measures for this insect be applied. A rule of thumb would be to control this pest up to 4-6 weeks prior to the average first frost date.

One situation which may occur is the need to control black aphids close to harvest. Malathion can be used up to the day of harvest and endosulfan (Chaser ${ }^{\text {® }}$, Thiodan ${ }^{\text {® }}$ ) can be used up to shuck split.


Figure 1. Crab Spider

Generally when people think of beneficials the first thing that comes to mind are lacewings and lady beetles. However, spiders also play an important role in biological control. Although they are general predators their beneficial aspect out weights any negative factors.

In a study conducted during 1985 and 86 at the Adriance Orchard, Texas A\&M, by Suvarian Bumroongsook, spider predation in pecan appeared to be important in biological control of blackmargined aphids.

During the study, 42 species of spiders were collected during weekly inspections of pecans. Spiders collected included both hunting and web making spiders. Of the species collected, 26 species were observed to feed on blackmargined aphids.

In feeding studies conducted in the field, spiders were observed to consume from 3.8 to 21.2 aphids per day, depending upon the species. In laboratory feeding studies, spiders consumed 1.8 to 36.6 aphids per day.

The appetite of spiders for aphids is modest when compared to lacewings and lady beetles but because spiders are not as apt to disperse during periods of low aphid populations their presence in pecans during periods of low populations.

Government Publications Texas State Documents

## Diseases

The following ratings on susceptibility of pecan varieties to pecan scab in east Texas were made available by Dr. George Philly, Extension Plant Pathologist, Overton, Texas and Mr. Glenn Huddleston, County Extension Agent, Anderson County.

Location: Thurman Gibson Orchard, Palestine, TX
Ratings conducted September 9, 1992

|  | Nut | Leaf | 1991 Nut |  |
| :---: | :---: | :---: | :---: | :---: |
| Variety | Rating | Rating | Rating | Comments - 1992 |
| Apache | 5.0 | 2.0 |  | One tree rated |
| Brake/Candy | 1.0 | 1.0 |  | One tree rated |
| Caddo | 1.0 | 1.0 |  | Few pecans |
| Cape Fear | 1.0 | 1.0 | 1.5 | One cluster rated a 3, sparse foliage |
| Cherokee | 5.0 | 1.0 | 5.0 |  |
| Cheyenne | 3.5 | 1.0 | 2.0 |  |
| Chickasaw | 1.0 | 1.0 |  | Over produces, pecans don't fill |
| Choctaw | 1.3 | 1.0 | 1.3 | One cluster rated 5 |
| Delmas | 5.0 | 3.5 | 4.0 | Trace of downy spot |
| Desirable | 3.2 | 1.0 | 1.0 | Six trees rated |
| Forkett | 1.5 | 1.0 | 1.5 | One tree rated |
| GraBohls | 5.0 | 2.0 |  | One tree rated |
| GraKing | 1.0 | 1.0 |  | One tree with few pecans |
| Gloria Grande | 1.0 | 1.0 |  | One tree rated |
| Houma | - |  |  | No production, young tree |
| Imperial | 2.5 | 1.0 | 2.0 | One tree rated |
| Kiowa | 2.1 | 1.0 | 3.0 | Six trees rated |
| Mahan | 5.0 | 1.0 |  | One tree rated |
| Mohawk | 2.2 | 1.0 |  |  |
| Moneymaker | 1.3 | 1.0 | 1.0 |  |
| Oconee | 1.0 | 1.0 |  | One tree rated |
| Osage | 1.0 | 1.0 |  | One tree rated |
| Pabst | 1.0 | 1.0 |  | One tree rated |
| Pawnee | 3.1 | 1.0 | 1.5 | Two trees rated, many clusters clean |
| Rome | 1.5 | 1.0 |  |  |
| Schley | 4.8 | 2.2 |  |  |
| Shawnee | 2.6 | 1.0 |  |  |
| Shoshoni | 1.92 | 1.3 |  | One cluster rated 4 |
| Sioux | 3.0 | 1.0 |  | One tree rated, few pecans |
| Stuart | 1.0 | 1.0 | 1.5 |  |
| Tejas | 5.0 | 3.0 |  | One tree rated |
| Tesche | 1.0 | 1.0 |  |  |
| Texas Giant | 1.0 | 1.0 |  | One tree rated |
| Van Demon | 1.0 | 1.0 |  |  |
| Wichita | 5.0 | 1.0 | 5.0 | One tree rated |
| 53-9-100 | 1.75 | 1.0 |  | One tree rated |
| 61-6-67 | 1.0 | 1.0 |  | One tree rated |
| 64-11-17 | 2.0 | 1.0 |  | One tree rated, shuck split |
| 49-20-112 | 1.0 | 1.0 |  | One tree rated |

Rating: $1=$ no disease; $5=$ severe infestation
Fungicide spray schedule, 1992. April 4 - Orbit, April 21 - Orbit, May 21 - Orbit, July 22 - Benlate, August 10 Supertin, September 4, Supertin. Orchard was not sprayed in 1991-light crop.

Pecan Variety Ratings*
Location: L\&M Farms, Palestine,TX

|  | 1992 | 1991 |  |
| :--- | :--- | :--- | :--- |
| Variety | Nut Rating | Nut Rating | Comments -1992 |
| Cape Fear | 1.0 | No Crop |  |
| Cheyenne | 1.3 | 1.37 | 6 Trees rated |
| Chickasaw | 2.4 | No Crop | 2 Trees rated |
| Choctaw | 2.35 | 1.25 | 5 trees rated |
| Desirable | 4.4 | 4.7 | 6 trees rated |
| Kiowa | 4.2 | 4.1 | 6 trees rated |
| Mohawk | 2.8 | 4.0 |  |
| Shawnee | 4.0 | 5.0 |  |
| Shoshoni | 2.9 | 2.2 |  |
| Sioux | 3.25 | no Crop |  |
| Sumner | 1.5 | - | 1 tree rated |
| Tejas | 5.0 | No Crop | 2 trees rated |
| Wichita | 5.0 | 5.0 |  |

* Ratings are an average of three trees unless noted. $1=$ no disease; $5=$ sever infection

Fungicide spray schedule: April 4 - Orbit, April 18 - Orbit, May 15 - Topsin M, June 4 - Orbit (Wichita only), June 27 - Benlate, July 23 - Topsin M, August 17 - Supertin, September 5 - Supertin.

## OOOPS

In my last letter I inadvertently omitted the winners of the native division at the state pecan show.

|  | VARIETY AWARDS - NATIVE DIVISION |  |  |  |
| :--- | :--- | :---: | :---: | :--- |
| GROWER | COUNTY | \#/LB | \%KERNEL | AWARD |
|  |  |  |  |  |
| NATIVE |  |  |  |  |
| Alice Janak | Lavaca | 60.97 | 56.25 | 1st CH |
| Frank Bohuslav | Lavaca | 78.14 | 58.25 | 2nd RC |
| Bradley Fritz | Washington | 59.05 | 54.36 | 3rd |
|  |  |  |  |  |
| STATE CHAMPION - SMALLEST NATIVE |  |  |  |  |
| Jerry Lackey | Lavaca | 799.82 | 0.00 | 1st |
| Austin Barry | Navarro | 509.55 | 0.00 | 2nd |
| Joshua Dawn | Kimble | 397.46 | 0,00 | 3rd |

## Around The State

El Paso County: A few producers are spraying for black aphids. All varieties are full shell hardening and about 30 days from shuck split. Producers are preparing orchard floors for harvest. Good crop for the area.

Maverick County: Improved varieties look good. Part of the county received rain on $9 / 10$ and $9 / 11$. Black aphids were observed to be a problem in an orchard near Eagle Pass and will have to be treated.

Tom Green County: Shuck split was observed this week on Pawnee. Late maturing varieties are finished filling. Some black aphid problems and scorch mite problems have been observed. Scorch mites seem to be a problem in orchards where pyrethroid insecticides were used. Area has not had a significant rain for about 3 weeks.

Wichita County: Native crop looks good along the Red River, improved varieties also look good. No aphid problems reported as of lst week.

## Upcoming Meetings

## September 28

Fayette County Field Day
Larry Nickel, CEA - Fayette Co. 409-968-5831

September 29
Robertson County Area Wide Pecan Field Day
Ed Schneider, CEA - Robertson Co.
409-828-4270
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