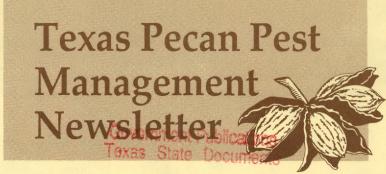


Bill Ree, Extension Pest Management-Pecans Jerral D. Johnson, Extension Flant Pathologist George Ray McEachern, Extension Horticulturist Charles Cole, Extension Entomologist



OCT 2 3 1992

September 18, 1992 92-9

### **General Situation**

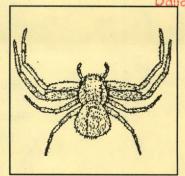
Harvest of early maturing varieties is underway in much of the southern part of the state. In the Winter Garden area (Uvalde and surrounding counties) harvest of Pawnee is complete or nearly so. Some harvest of Pawnee and Shoshoni has occurred in Bastrop county. Shuck split of Pawnee was been reported 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 (Phaser\*, Thiodan\*) can be used up to shuck split. **Beneficials - The Spiders** 



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Figure 1. Crab Spider

Figure 2. Jumping 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

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## **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	and the same of th
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	Particular and the second and the se
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

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

<sup>\*</sup> 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		
A						
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		
CT LTD CTLL	<b>DV</b> 011 0111					
STATE CHAM	PION - SMAL	LEST NATIV	E			
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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