TEXAS AGRICULTURAL EXTENSION SERVICE

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Texas Pecan Pest Management Newsletter

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General Outlook

During the past couple weeks while scouting for the pecan nut casebearer I have noticed crop loads to be quite variable, particularly in native orchards. Although I have only observed a limited number of natives, those I have seen have been very light. In one orchard in Falls County I did not find a single pecan on at least a dozen trees. These trees were reported to have had a good crop in 1991 and probably did not retain foliage very well in the fall.

Improved orchards have also been quite variable but overall the crop looks pretty good.

During the past week much of the state has received rain with some areas reporting up to 6 inches. Even though much of Texas had above average rainfall earlier this year many areas were in need of the moisture.

Insects

Phylloxera: Galls or swellings on stems and leaves are the result of infestations of several species of phylloxera. There are several species of phylloxera that attack pecan and infestations from this group of insects are quite heavy in many areas of Texas. Infestations observed include the stem phylloxera and several species of leaf phylloxera. Unfortunately at this time of year nothing can be done about the problem.

During May and into June phylloxera galls will be opening and releasing winged adults. Because galls open over such a long period of time and no additional damage will be done, it is not practical to treat for phylloxera at this time. Where phylloxera infestations are heavy, insecticide treatments will need to be applied next spring beginning at budbreak.

Several times this spring I have heard people comment that some of the phylloxera problems may have come from other trees, such as hackberry. This is not true. The phylloxera that attack pecan originates on pecan and can not come from other trees. (There is one species of phylloxera, Pecan-oak leaf Phylloxera, *Phylloxera texana* Stoetzel that will attack both pecan and oak but it is not very common).

Where phylloxera infestations are heavy it is possible that populations of hickory shuckworm could be greater in August and September. Phylloxera galls serve as an early season feeding site for shuckworm. This allows for an early season build up of shuckworm.

If anyone has back issues of Pecan South, there is an excellent article on phylloxera in the May-June 1987, Volume 21 Number 3 issue. This article contains color pictures and descriptions of the different species of phylloxera attacking pecan.

Pecan Nut Casebearer: Casebearer infestations have been very erratic this season. The earliest reported activity was a 5 percent egg lay on April 24 from an orchard between Austin and Bastrop.

As of May 15 casebearer activity has either been observed or reported as far north as Longview, Corsicana and into Comanche County.

Infestations (oviposition and budfeeding) observed to date have ranged from less than one percent to around 25 percent. This in itself shows the importance of scouting.

Pecan nut casebearer can usually be controlled with one well timed insecticide application, however, under adverse weather conditions two applications may be needed. During periods of

rain or inclement weather the time when females will be ovipositing can be extended. This period may extend beyond the period of the residual activity of your insecticide and a second application may be needed.

Several times during the year I receive questions about the duration of different life stages of the casebearer. The following is taken from S.W. Bilsings original casebearer research which was conducted from 1918-1923.

Adult: Length of Life - Average 5 to 8 days (estimated from laboratory colonies). Number of eggs laid per female - 50 to 100. Adult females begin to lay eggs on the second, third or fourth night after emergence.

Egg: Four to 9 days to hatch depending on temperature, usually 4 to 5 days for 1st and 2nd generation and 4 to 6 days for third generation.

Larval: 17 to 51 days depending on temperature averaging around 25 days.

Pupal: 5 to 24 days, averaging 9 days in the summer and 12 to 14 days in the spring.

Number of generations per year: 2 to 4.

Average number of days between generations: 42

Yellow Aphids: While scouting for casebearer eggs I have noticed very light populations of yellow aphids, except in one orchard. At this particular orchard yellow aphid populations were higher than would normally be expected during early May. The high populations were the result of insecticides being added to early season zinc applications.

Beneficial Insects: In most of the orchards I have visited I have noticed high populations of lacewings and lady beetles. Lacewing and lady beetle eggs have been observed on the foliage, limbs and main trunks.

Eggs of green lacewings are usually laid singularly and elevated above the surface on a thin hairlike stalk. When eggs are first laid they are green in color but turning darker as the larvae matures. Upon hatching the empty egg will be white. Lady beetle eggs are yellow, laid in clusters and resemble footballs standing on end.

Diseases

Pecan scab has been observed in most of the orchards I have visited. With the recent rain and high humidity the potential for scab problems is high. With high potential for scab the use of Orbit® at the higher labeled rate of 6 fluid ounces per acre or Super Tin at 8 to 12 ounces per acre may be needed. These two products will require an enclosed cab for the tractor. Other fungicides recommended for pecan scab are Benlate®. Topsin-M® and Ziram®.

For the homeowner the use of benomyl at 1/2 to 1 Tbs. per gallon is recommended for scab control.

For a review of fungicides labeled for pecans you can refer to an article in the last newsletter #92-3.

Upcoming Events

June 1-5
Western Pecan Orchard Management Shortcourse
New Mexico State Univ.
Las Cruces, NM
Esteban Herrera
515-646-2921

June 17-18
Louisiana/Mississippi Pecan Growers Assoc. Annual Conference
Holiday Inn Downtown
Alexandria, LA
Freddie Rasberry
601-325-1681

June 21-23
Oklahoma Pecan Growers Association Annual Conference and Trade Show
Lake Texoma Lodge
Lake Texoma, OK
Bill Ihle
918-367-5529

July 12-15
Texas pecan Growers Annual Conference
Seguine, TX
Texas pecan Growers Association
409-846-3285

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The information given herein is for educational purposes only. References to commercial products or trade names is made with the understanding that no discrimination intended and no endorsement by the Cooperative Extension Service is implied.
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13 May 1992

Prediction Location		10% Adult Emergence	First Significant Nut Entry
ABERNATHY		MAY 28	JUN 9
ADA	OK	MAY 26	JUN 7
ALBUQUERQUE	NM	JUN 2	JUN 15
ALTUS	OK	MAY 21	JUN 2
AUSTIN		MAY 4	MAY 16
BEEVILLE		APR 23	MAY 4
BROWNFIELD		MAY 26	JUN 7
CHAMA	NM	JUL 18	AUG 5
CLOVIS	NM	JUN 2	JUN 14
CORPUS CHRISTI		APR 23	MAY 5
DALHART		JUN 10	JUN 23
DELLCITY		MAY 16	MAY 28
DILLEY		APR 26	MAY 7
DURANT	OK	MAY 23	JUN 4
EL PASO		MAY 14	MAY 26
FLOYDADA		MAY 29	JUN 10
FORT WORTH		MAY 15	MAY 27
GAGE	OK	JUN 2	JUN 14
GOODWELL	OK	JUN 8	JUN 20
*HASKELL		MAY 20	MAY 31
HOBART	OK	MAY 26	JUN 6
HONDO		MAY 5	MAY 17
JAYTON		MAY 26	JUN 7
KINGSVILLE		APR 21	MAY 3
LAMESA		MAY 27	JUN 7
LAVON DAM		MAY 18	MAY 30
LITTLEFIELD		MAY 31	JUN 12
LUBBOCK		MAY 29	JUN 10
MARFA		MAY 17	MAY 30
MCALESTER	OK	MAY 25	JUN 6
MORIARTY	NM	JUN 10	JUN 21
MULESHOE		JUN 7	JUN 19
OKLAHOMA CITY	OK	MAY 24	JUN 6
PADUCAH		MAY 25	JUN 6
PLAINVIEW		JUN 1	JUN 13
POST		MAY 24	JUN 5
ROSWELL	NM	MAY 24	JUN 6
SAN ANTONIO		MAY 1	MAY 13
SEMINOLE		MAY 26	JUN 7
SILVERCITY	NM	JUN 4	JUN 16
SPAVINAW	OK	MAY 27	JUN 9
STEPHENVILLE		MAY 14	MAY 26
TEXARKANA		MAY 17	MAY 29
TOHOKA		MAY 27	JUN 8
*TUCUMCARI	NM	JUN 5	JUN 17
TULSA	OK	MAY 24	JUN 6
UVALDE		MAY 4	MAY 16
WACO		MAY 10	MAY 22
WINK		MAY 16	MAY 27
ABILENE		MAY 17	MAY 28
ALAMOGORDO	NM	MAY 26	JUN 7
ALICE		APR 24	MAY 5
AMARILLO		MAY 23	JUN 2
BEAUMONT		APR 30	MAY 13
BIG SPRING		MAY 17	MAY 29
CARLSBAD	NM	MAY 19	MAY 31
CHILDRESS		MAY 23	JUN 4
COLLEGE STATION		MAY 3	MAY 16
CROSBYTON		MAY 27	JUN 9
DALLAS		MAY 13	MAY 25
DELRIO		APR 27	MAY 9
DIMMITT		JUN 4	JUN 16
EAGLE LAKE		APR 30	MAY 13
FARMINGTON	NM	JUL 21	AUG 7
*FORT SILL	OK	MAY 24	JUN 5
FRIONA		JUN 3	JUN 15
GALVESTON		APR 28	MAY 11
GUYMON	OK	JUN 8	JUN 20
HEREFORD		JUN 6	JUN 18
HOBBS	NM	MAY 27	JUN 8
HOUSTON		APR 28	MAY 11
JUNCTION		MAY 20	JUN 1
LAHOMA	OK	MAY 29	JUN 10
LAREDO		APR 21	MAY 2
LEVELLAND		MAY 30	JUN 11
LONGVIEW		MAY 13	MAY 25
LUFKIN		MAY 13	MAY 25
MATADOR		MAY 25	JUN 6
MIDLAND		MAY 20	JUN 1
MORTON		MAY 28	JUN 9
MUTUAL	OK	JUN 2	JUN 14
OLTON		MAY 31	JUN 13
*PAGE	OK	MAY 23	JUN 4
PONCA CITY	OK	MAY 27	JUN 8
RATON	NM	JUL 1	JUL 14
*RUIDOSA	NM	JUL 4	JUL 22
SAN ANGELO		MAY 13	MAY 25
SILVERTON		JUN 1	JUN 14
*SOCORRO	NM	JUN 3	JUN 15
SPUR		MAY 29	JUN 10
SNYDER		MAY 24	JUN 4
*TINKER	OK	MAY 31	JUN 11
TRUTH OR CONSEQ	NM	JUN 2	JUN 13
TULIA		JUN 1	JUN 14
TUSKAHOMA	OK	MAY 25	JUN 6
VICTORIA		APR 24	MAY 6
WICHITA FALLS		MAY 20	JUN 1

* Indicates that prediction was made using only historical temperatures

Predictions prepared by John A. Jackman, Extension Entomologist, TAEX. Weather provided by Southwest Agricultural Weather Service at College Station, an agency of The Oceanic and Atmospheric Administration/National Weather Service.