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# IN A NUTSHELL

Newsletter

EXTENSION PROGRAMS  
Agriculture and Forestry  
Community Leadership  
Economic Development  
Environmental Sciences  
Family and Consumer Sciences  
4-H Youth Development  
Natural Resources

March 26, 2009

Number 1

## **Pecan Phylloxera**

High numbers of phylloxera crawlers were found the past three weeks in Foreman, Arkansas; however budbreak had not occurred and no gall formation was occurring. Phylloxera crawlers have also been observed in orchards in Cloutierville the past three weeks; however the numbers have been very low. If phylloxera galls were present last year, pecan buds or tape strips should be examined for phylloxera crawlers. Budbreak is starting to occur on pecan trees; so it is time to consider spraying for phylloxera if they were a problem last year or if crawlers are present. The timing of phylloxera appearance on pecan buds can vary with varieties. Phylloxera generally appear on the buds starting at budbreak. If phylloxera are present on buds an insecticide application should be applied as soon as possible.

Trimax Pro at 2.8 fl. oz./acre or Provado 1.6 F at 4.0 fl. oz./acre or Lorsban 4E at 32 fl. oz. / acre should give good control of phylloxera. It is important to check the pH of the water used in the spray. Water with a high pH can quickly deactivate some insecticides. The spray water should be buffered to a pH of 5.5 to 6.5.

Due to the extended emergence of phylloxera crawlers observed during April and May in recent years, buds should be checked at least through April and additional insecticides applications made when necessary.

## **May Beetles**

May beetles have been numerous around lights at the Pecan Research-Extension Station this week. May beetles cut off the new growing shoot tips of pecan trees. The beetles can only be found on the trees at night. They spend the day buried in the grass areas around the trees. Signs of May beetle damage are cut green shoots on the ground under the trees and tender shoots on the trees with damage on the sides in the morning. The beetles are usually more prevalent in young orchards with large grass areas. In extreme cases they can defoliate trees over 50 feet tall.

Control May beetles by spraying young trees and turf around the trees. Late afternoon and early evening applications are best. Sevin, Malathion, Lorsban and several pyrethroid insecticides should control May beetles. Follow label rates.

### **Fungicide Application: When to Begin?**

At this time of year, a frequently asked question is, “When should I make the first fungicide application on my pecan orchard?”. This is an important decision, and not always one with an easy answer. The safest answer for someone who has some responsibility for answering this question is to be conservative and suggest spraying early and spraying often. By doing that, even though the pecan grower may make some unnecessary sprays the person making the recommendation looks good because lost from scab disease was prevented. In order for growers and schedule writers to be better safe than sorry, printed fungicide schedules usually have more applications listed than is really necessary for every orchard in every year. If a pecan grower wants to make the best use of their pecan management money and get adequate control of scab disease, there are several factors that can be considered to help make a decision on the appropriate time to start your scab disease control program. These include the disease history of the orchard, cultivars in the orchard, rainfall forecasts, and temperature. These factors are discussed separately, but of course, they all need to be considered together when making the decision on when to start fungicide applications.

Scab disease in March through mid-May is essentially limited to new leaf and stem growth because the initiation of nut growth has not begun prior to then. Infection of stems can limit terminal growth and extreme infection can even kill terminals. Infection of leaves can reduce food production and if leaves are killed then the trees will waste energy in the growth of new leaves on the terminals. Infection of leaves and stems reduces the overall growth of trees and reduces both quantity and quality of nut production. Infection of leaves and stems also provides an abundance of scab pathogen spores adjacent to the growing nuts, making control of nut scab even more challenging. The conventional logic is that the greater the infection of leaves/stems, the more difficult it is to control nut infection. Although all of us have witnessed severe nut scab disease when there was no infection of the leaves and stems.

Orchard History: Some orchards seem to develop damaging levels of scab disease on the leaves and stems almost every year. Orchards with a history of scab disease on leaves and stems are often located in topography with poor air drainage, have persistent fog periods, and crowded tree spacing. In these situations, obviously early season fungicide is needed to reduce the level of early season infection. Unless infection is historically severe very early, it is usually not necessary to begin fungicide applications at true bud-break. Even in orchards that tend to develop some leaf and stem infection, I generally do not recommend making a fungicide spray until there is enough foliage growth to catch some of the fungicide. There should be about an inch of growth throughout the trees of the most susceptible cultivar in the orchard.

Many orchards seldom have a significant level of early season scab on the leaves or stems. In such orchards it may not be vital to apply fungicide to protect against scab infection in the initial leaf growth stages of the orchard. Or if one cultivar in the orchard does have a problem with leaf/stem scab it may be useful to target just that cultivar for an early application or two. In many instances I suspect that it would be sufficient to begin fungicide applications in mid-May. The history of the orchard should provide useful insight into the best timing of the first fungicide spray.

Cultivar Susceptibility: As was mentioned in the previous section, some cultivars in an orchard may have more of a problem with leaf and stem scab disease than others. Just as the orchard is composed of different pecan cultivars, there are different races of the scab pathogen population in the orchard. Some orchards may have a resident pathogen population with a higher level of virulence than other orchards composed of the same cultivars. The mixture of pathogen races and virulence will vary from orchard to

orchard and is one of the factors that will determine the tendency of orchards to have or not have significant scab disease on the leaves and stems.

Rainfall: Perhaps the most important thing to know about the use of fungicide to control pecan scab disease is this – Scab disease control with fungicides is preventative, fungicide protects against infection. Infection occurs during rainfall periods – thus fungicide has to be applied before a rainfall. Most fungicides are believed to be effective for at least two weeks following application. Rainfall forecasts are crucial for scheduling fungicide applications to get adequate control without over-spraying. For example, if an orchard has an occasional problem with leaf/stem scab and a frequent rainfall period is forecast, it would be wise to have a fungicide applied to protect against infection during the rainfall period.

Temperature: We don't normally include temperature as a factor for scheduling fungicide sprays, but it should be considered in the early spring. It is not unusual to have a warm period with the initiation of bud-break, followed by an extended cool period when growth is static. Experience has suggested that when daytime temperatures do not get above the 50's or low 60's little infection will occur even with the presence of rainfall. Fungicide protection during such cool periods is probably not necessary. Randy Sanderlin, Pecan Research-Extension Station, e-mail: [rsanderlin@agcenter.lsu.edu](mailto:rsanderlin@agcenter.lsu.edu).

### **Pecan Seminar April 30**

A pecan seminar presented by LSU AgCenter Pecan Research-Extension Station faculty will be held Thursday, April 30 from 9:30 a.m. – 4:00 p.m. at the Pecan Station in Shreveport. There is a \$15 registration fee which includes lunch and pecan board materials.

**RSVP by April 22** by contacting the Pecan Research-Extension Station. RSVP by email at [jpyzner@agcenter.lsu.edu](mailto:jpyzner@agcenter.lsu.edu); by mail John Pyzner, Pecan Research-Extension Station, P.O. Box 5519, Shreveport, LA 71135 or by telephone and for additional information John Pyzner (318)797-8034 ext 2319 or Randy Sanderlin (318)797-8034 ext 2311.

Topics to be presented include: Disease Control Methods by Randy Sanderlin; Pecan Cultivar Board Preparation by Charlie Graham and John Pyzner; Fertilizer Application and Tissue Analysis by John Pyzner; Herbicides for Pecan Orchards (Emphasis on Broadleaf Control) by Charlie Graham; Pecan IPM-PIPE Program (Casebearer Project) by Natlie Hummel and Pecan Sprayer Calibration and Insecticide Update by Mike Hall.

The Pecan Station is located at 10300 Harts Island Road, Shreveport, LA. It is located 6 miles south of LSU-Shreveport just west of HWY 1. Look for the Pecan Station sign and the blue and white Shreveport/Bossier Port Water Tower near the station on Hwy 1.

### **2009 Pecan Show**

The 2009 Louisiana State Pecan Show made an excellent exhibit at Ag Expo in West Monroe, January 16 and 17 with 92 entries from 15 yard and commercial grower from across the state. Entries included representatives from 26 named cultivars and 17 native selections.

Ag Expo had an attendance of approximately 9,300 people which gave good exposure to the Pecan Show. Show visitors became more knowledgeable about pecan cultivars, nut quality, culture, pest management, cultivar selection, recipes and health benefits. Pecan show blue ribbon winners will also be displayed at the Pecan Producers of Louisiana and the Louisiana Pecan Growers Association annual meetings, both held in June.

Ben Littlepage of Colfax won Grand Champion In-shell Pecan and Best of Show with a Jackson cultivar at the Louisiana State Pecan Show. Bill Beasley of Ferriday had the Reserve Champion In-shell entry with a Cape Fear Cultivar.

Bill Beasley won Grand Champion Shelling Pecan with a Caddo cultivar. The Reserve Champion Shelling Pecan entry was a Melrose cultivar exhibited by Ben Littlepage.

Susan Wilson exhibited the Grand Champion Native/Seedling pecan entry which was a small native designated "RT3". Ben Littlepage took Reserve Champion Native /Seedling with a medium native designated "Littlepage".

Novelty class winner for the Largest Pecan was Paul Laird of West Monroe. His Podsednik cultivar weighed in at 26 nuts per pound. Nathan Allbritton of Mansfield exhibited the smallest pecan entry with a small native designated "Allbritton" weighing in at 454 nuts per pound.

The following entries are cultivar blue ribbon winners:

In-shell Division winner and pecan cultivars: Natchitoches Pecan, Inc. of Cloutierville – Branch, Desirable and Stuart; Bill Beasley – Cape Fear, Creek, Nacono, Oconee, Pawnee, Sumner; Ben Littlepage – Choctaw and Jackson; Ole South Pecan Farm, L.L.C. of West Monroe – Owens; Rosalie Pecans of Alexandria – Kiowa; The Company Farm of Baskin – Mahan; and Paul Laird – Forkert, Podsednik and Surprise.

Shelling Division: Bill Beasley – Caddo, Candy, Elliott, Gafford and Moreland; Ben Littlepage – Melrose; and Gunter Mansford farms of Tallulah – Carman.

Native/Seedling Division: Ole South Pecan Farm, L.L.C – Large Seedling (Sierra-Audry); Ben Littlepage – Medium Seedling ( Littlepage); and Susan Wilson of Coushatta – Small Native (RT3).

### **Insecticide Chart**

A pecan insecticide rating chart is provided with this issue of In A Nutshell. The chart is designed to provide information about likely effectiveness of particular insecticides on different insects. Ratings are based on insecticide tests, observations, and label information. The effectiveness of insecticides may vary at different locations. Insecticides will frequently lose effectiveness with time as insects develop resistance.

The chart lists restricted-entry intervals (REIs). This is the time interval workers must stay out of a sprayed area unless specified personal protective equipment (PPE) is worn. The restricted-entry interval is usually given in hours or days. A pre-harvest interval (PHI) is also given. This is the required time interval between the last insecticide application and harvest. It is usually given in days.

Always follow the label when using pesticides.

Sincerely,

John Pyzner  
Associate Professor, Pecan / Fruit Extension Specialist  
LSU AgCenter Pecan Research-Extension Station  
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# 2009 Ratings of Registered Pecan Insecticides

(Ratings

are based on tests, observations, and label information. Effectiveness may vary at different locations.)

|                | Yellow aphids | Black aphids | Scorch mites | Green stinkbug | Brown stinkbug | Hickory shuckworm | Pecan nut casebearer | Pecan spittlebug | Fall webworm | Pecan phylloxera | Pecan weevils | Walnut caterpillar | Leaf-footed bug | Re-entry interval (REI) | Preharvest interval (PHI) |
|----------------|---------------|--------------|--------------|----------------|----------------|-------------------|----------------------|------------------|--------------|------------------|---------------|--------------------|-----------------|-------------------------|---------------------------|
| Admire 2F      | G             | G            | P            | P              | P              | P                 | P                    | G                | P            | G                | P             | P                  | P               | 12H                     | 7-15                      |
| Ammo 2.5 EC    | G             | G            | P            | G              | P              | G                 | G                    | G                | G            | G                | P-M           | G                  | G               | 12H                     | 21D                       |
| Asana          | P-F           | P-F          | RS           | G-E            |                | E                 | E                    | G                | E            | E                | G             | E                  |                 | 12H                     | 21D                       |
| Belt           |               |              |              |                |                | G-E               | G-E                  |                  |              |                  |               |                    |                 | 12H                     | 14D                       |
| Centric 40WG   | G             | G            | P            |                |                | P                 | P                    |                  | P            | M                | P             | P                  |                 | 12H                     | 14D                       |
| Confirm 2F     | P             | P            | P            | P              | P              | G                 | G                    | P                | G            | P                | P             | G                  | P               | 4H                      | 14D                       |
| Dimilin 2L     | P             | P            | P            | P              | P              | G                 | G                    | P                | G            | P                | P             | G                  | P               | 12H                     | 28D                       |
| Dipel D F      | P             | P            | P            | P              | P              | M                 | M                    | P                | M            | P                | P             | M                  | P               | 4H                      | 0D                        |
| Endigo ZC      | P             |              |              |                |                | G-E               | G-E                  |                  |              |                  |               |                    |                 | 24H                     | 14D                       |
| Entrust        | P             | P            | P            | P              | P              | G                 | G                    | P                | G            | P                | P             | G                  | P               | 4H                      | 14D                       |
| Fulfill        | G             | G            | P            | P              | P              | P                 | P                    |                  | P            |                  | P             | P                  | P               | 12H                     | 14D                       |
| Imidan 70 W    |               | G            | P            | M              | M              | G                 | G                    | G-E              | M-G          |                  | M             | G                  | M               | 24H                     | 14D                       |
| Impulse 1.6 FL | G             | M-G          |              |                |                |                   | G                    |                  |              | G-E              |               |                    |                 | 12H                     | 7D,SS                     |
| Intrepid 2F    | P             | P            | P            | P              | P              | G                 | G                    | P                | G            | P                | P             | G                  | P               | 4H                      | 14D                       |
| Javelin WG     | P             | P            | P            | P              | P              | M                 | M                    | P                | M            | P                | P             | M                  | P               | 4H                      |                           |
| Lorsban 4E     | P-M           |              | P-M          | P              | P              | G                 | G                    | G                | L            | G-E              | P             | G-E                | P               | 24H                     | 28D                       |
| Movento        | E             |              |              |                |                |                   |                      |                  |              |                  |               |                    |                 | 24 H                    | 7D                        |
| Mustang Max    | G             | G            | P            | G              | P              | G                 | G                    | G                | G            | G                | M             | G                  | G               | 12H                     | 21D                       |

|                | Yellow aphids | Black aphids | Scorch mites | Green stinkbug | Brown stinkbug | Hickory shuckworm | Pecan nut casebearer | Pecan spittlebug | Fall webworm | Pecan phylloxera | Pecan weevils | Walnut caterpillar | Leaf-footed bug | Re-entry interval (REI) | Preharvest interval (PHI) |
|----------------|---------------|--------------|--------------|----------------|----------------|-------------------|----------------------|------------------|--------------|------------------|---------------|--------------------|-----------------|-------------------------|---------------------------|
| PennCap-M      | M             | M            | P            | E              | E              | G                 |                      |                  |              |                  | P             |                    | E               | 4D                      | SS                        |
| Proaxis        | L             | L            |              |                |                | L                 | L                    | L                |              | L                | L             |                    |                 | 24H                     | 14D                       |
| Provado 1.6F   | G             | M-G          | P            | P              | P              | P                 | P                    | G                | P            | G-E              | P             | P                  | P               | 12H                     | 7D,SS                     |
| Savey 50 DF    | P             | P            | G            | P              | P              | P                 | P                    | P                | P            | P                | P             | P                  | P               | 12H                     | 28D                       |
| Sevin 80S      | P             | P            | P            | P              | P              | G                 | G                    | P                | G            | G                | E             | G                  | P               | 12H                     | 14D                       |
| Sevin XLR plus | P             | P            | P            | P              | P              | G                 | G                    | P                | G            | G                | E             | G                  | P               | 12H                     | 14D                       |
| Spintor 2SC    | P             | P            | P            | P              | P              | G                 | G                    | P                | G            | P                | P             | G                  | P               | 4H                      | 14D                       |
| Tri-Max Pro    | E             |              |              |                |                |                   |                      |                  |              |                  |               |                    |                 | 12H                     | 7D                        |
| Vendex 50 WP   | P             | P            | G            | P              | P              | P                 | P                    | P                | P            | P                | P             | P                  | P               | 48H                     | 14D                       |
| Warrior        | G-E           | G-E          | P            | G              | G              | G                 | G                    | G                | G            | G-E              | M             | G                  | G               | 24H                     | 14D                       |

**E** = Excellent control **G** = Good control **M** = Moderate control **P** = Poor control **Blank**=No information **SS**= Prior Shuck split  
**D** = Days **H** = Hours **7-15** = Last application date **L** = Label use **RS** = Resurgence (makes situation worse)