

# Phylloxera Gall on pecan

Prepared by  
Camille Goodwin, MG 2008

Texas AgriLife Extension Service  
Galveston County Office  
Dickinson, TX 77539



Educational programs of the Texas AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

The Texas A&M System, U.S. Department of Agriculture and the County Commissioners Courts of Texas cooperating.



FIG. 1

**Type Pest:** piercing/ucking insect (*Phylloxera devastatrix*)

**Type Metamorphous:** simple (egg, nymph, adult stages)

**Other Common Names:** Pecan Phylloxera

**Period of Primary Occurrence:** April – June

**Plants Affected:** Pecan and grape

### Identifying Characteristics of Insect Pest

- Round galls  $\frac{1}{4}$  – 1" diameter on pecan twigs and leaves
- Galls split open in late May to early June releasing small greenish, winged aphid-like insects
- Galls then dry, which cause twig dieback and leaf drop
- Tree appearance and tree vigor reduced
- Severe infestations of pecan phylloxera can cause loss of pecan crop for the current and following year

### Description / Symptoms

- Dot-sized insects called pecan phylloxera
- Young phylloxera are soft bodied insects resembling tiny orange aphids and appear in spring when buds unfold
- They inject a toxin into new growth that forms a gall around the insect
- There are two species:
  - pecan leaf phylloxera (galls only occur on leaves)
  - pecan phylloxera, the most damaging because it attacks shoots and nuts

### Best Management Practices (BMP)

#### NON-CHEMICAL CONTROL

- Plant native trees and improved varieties less susceptible to phylloxera
- Unless tree is stressed for other reasons, they usually recover
- Once galls are present, no effective control of Phylloxera is available



FIG. 2



FIG. 3



FIG. 4

- Spraying after the galls split open will kill some of the insects, but is not effective because of the extended time over which galls release insects
- Most effective control is in spring when eggs hatch and insects crawl to buds (early April), but before nymphs are protected inside gall

#### CHEMICAL CONTROL

- Carbaryl (Sevin XLR 4F, or other formulations of Sevin) are available for home use
- Dormant oil spray applied to tree trunks and limbs in dormant season is also effective, thorough coverage is essential to ensure that the eggs are killed



## Resources

Texas AgriLife Extension Services

[http://www.lsuagcenter.com/en/lawn\\_garden/home\\_gardening/fruits\\_nuts/Pecan+Phylloxera.htm](http://www.lsuagcenter.com/en/lawn_garden/home_gardening/fruits_nuts/Pecan+Phylloxera.htm)

<http://www.treehelp.com/trees/hickory/pecan-hickory-iandd-pecan-phylloxera.asp>

<http://entopl.okstate.edu/ddd/insects/phylloxera.htm>

The information given herein is for educational purposes only. Reference to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas AgriLife Extension Service is implied.

Use pesticides only according to the directions on the label. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. If the information does not agree with current labeling, follow the label instructions. The label is the law.

Always remember to read and heed six of the most important words on the label: "KEEP OUT OF REACH OF CHILDREN"

All images are copyrighted by the Galveston County Master Gardener Association (GCMGA). These images are for educational use only and may not be used for commercial or non-educational purpose without written permission from GCMGA.

**Texas AgriLife Extension Service • Galveston County Office • 5115 Highway 3 • Dickinson, TX 77539  
281-534-3413 • <http://aggie-horticulture.tamu.edu/galveston>**