



## **Arkansas Plant Health Clinic Newsletter**

Follow us on social media



### **Rose**

Sawflies are non-stinging members of the wasp family. Their larvae feed on the leaves of roses and other plants. Three species in particular feed on rose leaves, the Roseslug, *Endelomyia aethiops*, the Bristly Roseslug, *Cladius difformis*, and the Curled Roseslug, *Allantus cinctus*. Depending on species they grow to ½ inch to ¾ inches in length. They feed mostly at night, on the surfaces of leaf tissue between the veins, leaving an area of translucent tissue that turns brown when exposed to the air. Extensive damage can occur as large areas are skeletonized. The adult sawflies emerge early in the spring and lay eggs on the underside of the leaves. Larvae hatch, feed on the leaves for approximately a month, and then drop into the soil to pupate. Depending on species, there are one to six generations per year. Roseslugs may be handpicked and destroyed. Products containing acephate, bifenthrin, carbaryl, cyfluthrin, esfenvalerate, lambda cyhalothrin, permethrin or spinosad are effective. Soil drenches or granular applications of dinotefuran or imidacloprid can also be used to control sawflies.

### **Roseslug-*Endelomyia aethiops***



Photo by Cory Tyler, University of Arkansas Cooperative Extension



## Roseslug-*Endelomyia aethiops*



Photo by Kami Green, University of Arkansas Cooperative Extension

## Onion

Members of the onion family, including onions, garlic, chives, and leeks are all susceptible to White Tip, caused by *Phytophthora porri* when environmental conditions are favorable for disease development. This pathogen is soil-borne and spreads through water-splash or leaf contact with soil. Disease typically occurs after bouts of prolonged cool, wet weather. Symptoms are yellowing of the leaf tips followed by white water-soaked lesions. Leaves become distorted, shrivel, and eventually dieback. Often the base or whole bulb becomes soft, and water soaked. Infection is prevented by a 3-year crop rotation with non-host plants, avoiding sprinkler irrigation, and planting in well-drained sites that are not prone to waterlogging. Some control can be achieved through application of azoxystrobin, trifloxystrobin, metalaxyl-M, or dimethomorph based fungicides, though wet soil conditions reduce efficacy.

## Onion White Tip-*Phytophthora porri*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension



## Onion White Tip-*Phytophthora porri*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

## Pecan

The **Pecan Bud Moth**, *Gretchena bolliana* (Slingerland), is a native pest of pecan and hickory. Although they can defoliate mature trees, the most damage occurs on nursery stock and newly transplanted trees. Feeding by the larvae in buds and shoot apices destroys the buds, causing multiple branching (crow's feet) of the terminals and growth of unwanted lateral branches, delayed growth, and even tree death. This can result in decreased height and poor structure. Adult pecan bud moths have a wingspan of approximately two-thirds of an inch.

Both males and females are gray with blackish-brown patches on the forewings. The hindwings are a dark gray brown with a fringe-like border of scales. The scales beneath the hind wings reflect a green-white iridescence. The moth overwinters as an adult under bark scales. In the spring they lay flat, clear, iridescent eggs on twigs, buds, and shoot apices. The newly hatched larvae feed on, and in new buds, shoot apices, and leaves. The larvae are cream colored to dirty white before becoming yellow green with dark brown head capsules. They pupate in rolled up leaf litter. There may be as many as 5 to 6 generations a year. Insecticides applied for other pecan pests are effective in control of Pecan Bud Moth.

Another pest of Pecan is the **Pecan Shoot Curculio**, *Conotrachelus aratus*. The larvae are legless grubs that tunnel into new buds, stems and shoots of hickory and pecan. Their feeding and tunneling activity cause early leaf drop and death of affected twigs. This insect rarely causes serious damage to a well-managed orchard, where insecticides applied for more serious pecan pests also keep the Hickory Shoot Curculio in check. However, unmanaged orchards next to wooded areas containing native hickory and pecan may see more than half of the new shoots in the spring infested.



**Pecan Bud Moth damage-**  
*Gretchena bolliana*



Photo by Jennifer Caraway, University of Arkansas Cooperative Extension

**Pecan Bud Moth damage-**  
*Gretchena bolliana*



Photo by Jennifer Caraway, University of Arkansas Cooperative Extension



## **Pecan Shoot Curculio Damage- *Conotrachelus aratus***



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

This bulletin from the Cooperative Extension Plant Health Clinic (Plant Disease Clinic) is an electronic update about diseases and other problems observed in our lab each month. Input from everybody interested in plants is welcome and appreciated.

"This work is supported by the Crop Protection and Pest Management Program [grant no. 2017-70006-27279/project accession no. 1013890] from the USDA National Institute of Food and Agriculture."

## **Pecan Shoot Curculio Larva- *Conotrachelus aratus***



Photo by Jerry A. Payne, USDA Agricultural Research Service, Bugwood.org

The University of Arkansas System Division of Agriculture offers all its Extension and Research programs to all eligible persons without regard to race, color, sex, gender identity, sexual orientation, national origin, religion, age, disability, marital or veteran status, genetic information, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.