DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System
Sherrie Smith

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Arkansas Plant Health Clinic Newsletter

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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 Rose Slug, *Endelomyia aethiops*, the Bristly Rose Slug, *Cladius difformis*, and the Curled Rose Slug, *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. Rose Slugs may be handpicked and destroyed. Insecticidal soap, horticultural oil, and 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.

Rose Slug-*Endelomyia aethiops*

Photo by Kami Marsh, University of Arkansas Cooperative Extension

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Rose Slug-*Endelomyia aethiops*

Photo by Kami Marsh, University of Arkansas Cooperative Extension

Onion

by Raven Bough

Several species in the genus *Allium* are commonly grown commercially or in home gardens for use in cooking. This genus includes onions, garlics, chives, and leeks. In Arkansas, *Allium* species are typically cool season crops that require full sun and well-drained soils. During bouts of cool, wet weather, *Allium* species are susceptible to White Tip, causal agent *Phytophthora porri.* The pathogen is soilborne and spread through water-splash or leaf contact with soil. 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 3-year crop rotations 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 tend to limit efficacy.

Onion White Tip-*Phytophthora porri*

Photos by Raven Bough, University of Arkansas Cooperative Extension

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Pine

Pitch Canker is a serious fungal disease of pines in the south-eastern United States. Slash pine, Longleaf, and Loblolly are susceptible, among others. The causal agent is *Fusarium circinatum*, formerly known as *Fusarium subglutinans* f. sp. *pini*. The pathogen is seed borne and may also be transmitted by insects, especially bark beetles and beetles which feed in cones. Crown dieback, dying needles, stunted growth, and deformed crowns and shoots are symptoms. Large exudates of pitch around cankers on a branch or trunk are common and diagnostic of Pitch Canker. Resin-soaked wood is exposed if the tree's bark around the infected area is removed. Each canker or lesion is a separate and distinct infection. If there are only a few cankers present, Pitch Canker may be controlled by pruning out the cankered branches. There are no chemical controls. Avoid wounding trees, especially from July to November. Be careful when mowing or weed eating around the tree. Reduce stress by watering during drought periods. Many infected trees will recover, but trees with large trunk cankers may die. Dying and dead trees should be removed from the landscape to protect nearby healthy trees.

Pine Pitch Canker-*Fusarium circinatum*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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Pine Pitch Canker-*Fusarium circinatum*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Peach/Nectarine

The Clinic has received several samples of peach and nectarine with Peach Leaf Curl, caused by *Taphrina deformans*. Infection occurs at bud break early in the spring during cool, wet weather from spores that overwintered on twigs and bud scales. This is a fungal disease that causes dramatic leaf distortions. Symptoms are blister-like swellings, curling, thickening, puckering, and discoloration of the leaves. The blistered areas may turn white, yellow, or pink, but eventually turn brownish gray with sporulation. Defoliation, fruit deformity, and yield loss may occur. It is already too late this season to spray for Peach Leaf Curl. Peach Leaf Curl is easily controlled with one fungicide application containing either chlorothalonil or copper in the fall after 90% of the leaves have dropped, or very early in the spring before the buds begin to swell. Infected leaves should be handpicked and destroyed to help limit buildup of inoculum.

Peach Leaf Curl-*Taphrina deformans*

Photo by Michael Sullivan, University of Arkansas Cooperative Extension

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Peach Leaf Curl-*Taphrina deformans*

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.

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