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

SPDN
Southern Plant Diagnostic Network
Issue 14-June 2, 2014

Arkansas Plant Health Clinic Newsletter

Follow us on social media

Facebook

Evening Primrose

Oenothera speciosa, Pink Evening Primrose, is a wildflower native to the central grasslands from Missouri and Nebraska south through Kansas, Oklahoma, and Texas, and into northeastern Mexico. Pink Missouri Primrose is a drought-tolerant, hardy perennial that forms large colonies. It blooms through May and most of June with pink to white, showy flowers. In the southern parts of its range, the flowers open in the morning. In the northern parts of its range, they open in the evening. We seldom receive a sample of this plant because they are so trouble free as a rule. However, the clinic received a sample with unusual mottling on the leaves. Virus testing showed the plant to be infected with a *Nepovirus*, Tobacco Ringspot Virus (TRSV). Nepoviruses are transmitted between plants by nematodes, varroa mites and honeybees, sap transmission, and has been reported to be transmitted by seed. Plants with viruses are not curable. Such plants should be pulled up and destroyed.

Pink Missouri Primrose Tobacco Ringspot Virus (TRSV)- *Nepovirus*

Photo by Ricky Corder, University of Arkansas Cooperative Extension

Cottony Camellia Scale

Cottony Camellia Scale, *Pulvinaria floccifera*, is a sap-sucking insect pest of camellia, euonymus, holly, hydrangea, English ivy, maple, mulberry, rhododendron, and yew, among others. These insects ingest plant sap and excrete the excess as a sugar-rich substance known as "honeydew." Saprophytic fungi called "sooty mold" colonize the honeydew and give a black appearance to leaves and twigs. The sooty mold does not harm the plant. However, a heavy coating of it can inhibit photosynthesis. Immature scale insects (crawlers) are easily killed with insecticidal soaps, horticultural oils, or growth regulators that prevent the insects from

maturing. Fall applications of systemic insecticides containing imidacloprid are effective for all stages.

Holly Cottony Camellia Scale-
Pulvinaria floccifera

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Holly Cottony Camellia Scale-
Pulvinaria floccifera

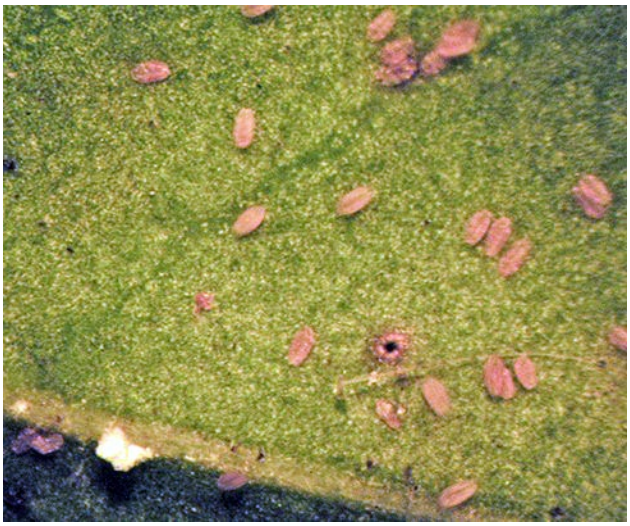

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Holly Cottony Camellia Scale-
Pulvinaria floccifera

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

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

SPDN
Southern Plant Diagnostic Network
Issue 14-June 2, 2014

Maple Cottony Camellia Scale-*Pulvinaria floccifera*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Slime Molds

This time of year, we often see Slime Molds in lawns and flower beds. Slime molds are fascinating organisms. They spend much of their lives as single-celled amoeba feeding on bacteria, yeast, and fungi. When there is little food available, they form large multicellular colonies. At that point, the cells reconfigure, changing their shape and function to form stalks, which produce fruiting bodies. The fruiting bodies contain millions of spores, which get picked up and transported mostly by the wind. The spores germinate into single-celled amoebas that start the cycle again. There are over 900 species of Slime Molds. They do no harm to living plants but are often mistaken for a disease when homeowners find them sporulating on turf or garden plants. It is particularly unsettling to people who notice the "blob" has moved across the flower bed or sidewalk.

Slime Mold on Plantain-*Physarum cinereum*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System

Sherrie Smith

SPDN
Southern Plant Diagnostic Network

Issue 14-June 2, 2014

Slime Mold on Fescue-*Physarum cinereum*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Dog Vomit Slime Mold-*Fuligo septica*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Bermuda

The Plant Health Clinic has had several calls about Bermuda Flower Smut. The causal agent is the fungus *Ustilago cynodontis.* The fungus invades seed heads and replaces the seeds with greenish-black masses of smut spores, giving a black dusty appearance to the grass. Bermuda Flower Smut causes a systemic infection against which fungicides are not effective. Flower Smut is controlled by keeping flower heads mowed off and providing adequate fertilization. This encourages vegetative growth over flower and seed production.

Bermuda Flower Smut-*Ustilago cynodontis*

Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Sherrie Smith

Issue 14-June 2, 2014

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."