



Arkansas Plant Health Clinic Newsletter

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Lilac

Lilacs are long-lived, trouble-free shrubs as a rule. They grow best in full sun and well-drained, evenly moist soil. A pH of 6.5-7.0 is ideal. However, we occasionally receive samples of lilac with Bacterial Blight caused by *Pseudomonas syringae* pv. *syringae*. Lilacs are most susceptible when stressed by drought, when soil fertility is poor, when the site chosen to grow them is poor, and/or when injured. White flowered cultivars seem particularly vulnerable, although all varieties are susceptible. Symptoms begin as olive-green, water-soaked spots that become brown to black water-soaked areas on leaves and stems. Blackened growing tips wilt and often form shepherd's crooks that resemble fire blight. All diseased stems and leaves should be pruned out during dry weather. Dip pruners in a 10% bleach solution (9 parts water to 1 part bleach) between cuts. Copper fungicides applied at bud break in the spring may reduce disease incidence. Spray three times at 7-10-day intervals in the spring as leaves are unfolding. Spray again once in the fall after leaves fall.

Lilac Bacterial Blight-*Pseudomonas syringae* pv. *syringae*



Photos by Sherrie Smith, University of Arkansas
Cooperative Extension



Buddhist Pine

Podocarpus macrophyllus is commonly called Yew plum pine, Buddhist pine, Fern pine, or Japanese yew. These attractive evergreens grow to 15-25 ft. tall by 8-15 ft. wide. Southern yew is widely used in borders, containers, espaliers, and hedges. They are quite drought tolerant once established and grow very well in average garden soil that is well-drained, with a slightly acidic pH. *Podocarpus* spp. tolerate quite a bit of shade and grow well in full sun also. They are not reliably winter hardy in zones colder than 8b. Therefore, we have seen some Southern yews damaged by unusually cold temperatures this past winter. Freeze injury has left them susceptible to attack by mites. Rust Mites are members of the eriophyid mite family. These are very tiny, carrot-shaped mites. Their feeding activity causes a bronzing of the leaves. The bronzing of foliage and signs of their white cast-off exoskeletons are evidence of their presence. Many insecticides are effective against Rust Mites, including insecticidal soaps, carbaryl, Malathion, imidacloprid, abamectin, and spiromesifen.

Southern Yew Rust Mite damage-Eriophyidae sp.



Photo by Sherrie Smith, University of Arkansas
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Southern Yew Rust Mite exoskeletons-Eriophyidae sp.



Photo by Sherrie Smith, University of Arkansas
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Oak

There are some 800 species of Gall Wasps in North America. Several hundred species of Gall Wasps in the family *Cynipidae* cause galls on oak trees. Healthy trees suffer little real damage because of these galls, although heavy infestations can cause some twig or branch dieback. Galls are formed because of the interaction between plant hormones and chemicals produced by the insect. Depending on Gall Wasp species, stems, leaves, fruit, or petioles may be attacked. The female wasp deposits her eggs into plant tissue. When the eggs hatch, the larvae produce chemicals that stimulate abnormal plant tissue growth. Some of the growths are quite spectacular or peculiar. They serve the purpose of providing food and protection for the growing insect. At maturity, the insect bores a hole and exits the gall to continue its life cycle. It is nearly impossible to control large populations of Gall Wasps. Where practical, galls are hand removed and destroyed. Small trees may be protected by applications of a systemic insecticide.

Oak Rough Bullet Gall- *Disholcaspis quercusmamma*



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Oak Fusiform Gall-*Amphibolips acuminata*



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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