



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.

Lilac

Lilacs are long-lived trouble free shrubs as a rule. They grow best in full sun in 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, poor fertility, poor site choices, and/or have been 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 shepherds 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*



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



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Southern Yew

Podocarpus macrophyllus is commonly called Southern yew, Plum yew, Buddhist 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 in 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 tolerate quite a bit of shade and grow well in full sun also. They are not reliably winter hardy in zones colder than 8b. As a consequence 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 evidence of their white cast-off exoskeletons are evidence of their presence. Many insecticides are effective against rust mites, including insecticidal soaps,



carbaryl, Malathion, imidicloprid, abamectin, and spiromesifen.

Southern yew-Eriophyid mite damage



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Southern yew-Eriophyid mite exoskeleton

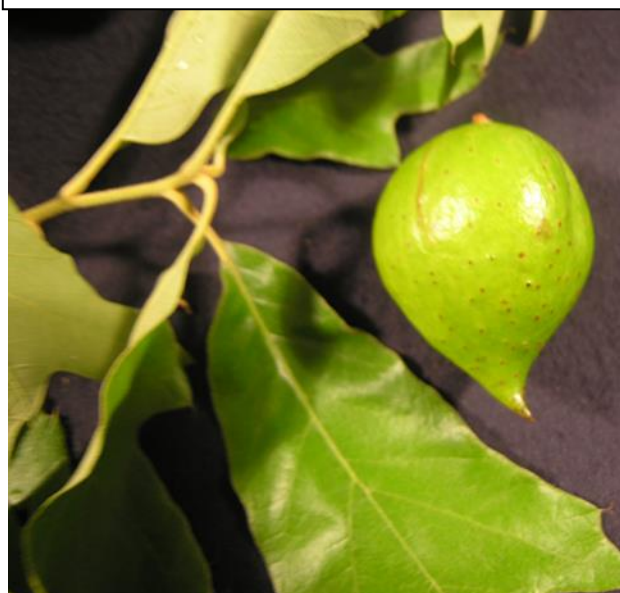


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Oak

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 as a result of these galls, although heavy infestations can cause some twig or branch dieback. Galls are formed as a consequence 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 may be hand removed and destroyed. Small trees may be protected by applications of a systemic insecticide.

Oak beaked gall- Cynipid wasp species



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Oak Spindle gall- Cynipid wasp species



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plainly identified by plant host, location (City County, physical address, collector and date of collection). Please send samples to us at the follow address:

Dr. Robert Robbins
Cralley-Warren Research Center
2601 N. Young Ave
Fayetteville, AR 72701
Phone 479-575-2555
Fax 479-575-3348
Email: rrobbin@uark.edu

Request for help from Dr. Robbins:

Root knot nematode populations are needed for our Arkansas species study. I am a nematologist in the department of Plant Pathology in Fayetteville. My student and I are trying to amass populations of as many species of Root knot nematode (*Meloidogyne* sp.) as possible for species identification using molecular techniques. At present no root knot species in Arkansas have been identified using molecular technology. We are interested in receiving populations from home gardens, shrubs, flowers, trees and grasses. For samples we need about a pint of soil and feeder roots in a sealed plastic bag that is