





Arkansas Plant Health Clinic Newsletter

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Yucca

Yuccas are plants well adapted to hot, dry, sunny locations. They are tough plants, able to withstand drought and other adverse conditions once established. Generally healthy, they are prone to Brown Spot disease in wet, humid climates. This is a fungal disease caused by Coniothyrium concentricum. Tiny clear spots appear on older leaves. These spots turn yellow and then brown with a purple to black border. Old lesions may appear nearly black. Lesions are usually elliptical and slightly sunken. Black fruiting bodies develop in the center of the older Although individual lesions seldom lesions. grow larger than $\frac{1}{2}$ inch in diameter, lesions may coalesce and form large, blighted areas. Diseased leaves should be removed to limit inoculum. Avoid overhead irrigation and apply fungicides. Copper based fungicides and are effective when used in Mancozeb conjunction with good cultural practices.

Yucca Brown Spot-Coniothyrium concentricum



Photo by Sherrie Smith, University of Arkansas Cooperative Extension







Yucca Brown Spot-Coniothyrium concentricum



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Aucuba

Aucuba is a spectacular evergreen ornamental shrub for shady locations. They prefer welldrained, moist soil with high organic matter and a slightly acidic pH. The average size is 4-6 feet, but they have been known to reach 12 feet. Aucuba are not reliably winter hardy in zones colder than zone 7. We are seeing samples in the Clinic with cold damage. This is particularly obvious when coupled with too sunny a location. Leaves become crunchy and black in color. Wait until all danger of frost is past to prune out the damage.

Aucuba Freeze Injury-Abiotic



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Euonymus

Euonymus Scale

Euonymus Scale is an aggravating and serious insect pest of euonymus. Euonymus Scale can also attack pachysandra, bittersweet (Solanum), camellia, celastrus, ivy, hibiscus, holly, and ligustrum. Scale insects damage plants by using their piercing, sucking mouthparts to feed on sap. Heavily infested plants grow slowly and become chlorotic and stunted. Severe infestations may cause branch dieback and plant death. The males, with their elongate white bodies, are the most noticeable symptom. They can heavily encrust the leaves and stems of the plant. Females are larger (over 1/16 inch long), brown, and pearshaped. Plants growing next to buildings suffer







greater damage as a rule than do those with good air circulation. There are several generations a year. Crawlers are active in May, June, and July. Over-fertilization and poor watering practices promote scale infestations. Heavily infested plants may be pruned back, and new growth protected with insecticide treatments. Dormant oils applied during the winter months help reduce over-wintering Fine horticultural oils and populations. insecticidal soaps are options for summer control. Bayer Advanced Tree and Shrub Insect Control is a systemic insecticide that gives good results, or Bio Advanced Garden Power Force Multi-Insect Killer.

Euonymus Scale-Unaspis euonymi



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Euonymus Scale-Unaspis euonymi



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Euonymus Powdery Mildew

Powdery Mildew, caused by *Oidium euonymijaponici*, is a common disease problem on Euonymus. The main symptom is flat, white to gray powdery areas on foliage, particularly young foliage and buds. Heavily infected







growth may yellow and become distorted by the fungus. Powdery Mildew can be persistent once established on a plant. Fungicides protect new uninfected growth, but do not rid the plant of the existing mycelia mats. Euonymus should be planted in a sunny location with good air Avoid overhead irrigation as the circulation. prolonged leaf wetness favors disease development. Rake up any fallen leaves and Heavily diseased branches destroy them. should be pruned out and destroyed or otherwise removed from the property. Begin fungicide applications at new growth in the spring. Spectracide Immunox, Fertilome Liquid Systemic Fungicide, Fertilome Halt Fungicide, Green Light Systemic Fungicide, Cleary's 3336, and Green Light Fung-Away are fungicides effective against Powdery mildew.

Euonymus Powdery Mildew-

Oidium euonymi-japonici



Euonymus Crown Gall

Crown Gall, caused by the bacterium Rhizobium radiobacter, also known as Agrobacterium tumefaciens, is a serious disease of roots, stems, and crowns on many woody plants. It is commonly found on cherries, grapes, apples, plums, roses. blackberries, raspberries, and several other ornamental trees and shrubs. Euonymus is very susceptible to Crown Gall. Galls develop at the crown where the soil line meets the crown and main roots. Lateral roots may also develop the galls. Young galls are light tancolored and soft. As they age, they become hard, woody, and nearly black-colored. A few small galls have no visible effect on plants. Where the galls are large or numerous, the plants may become stunted and have small, vellow or red leaves, resulting from a restriction The bacteria enter the plant of nutrients. through wounds made by insects, other animals, and grafting and cultivation tools. Care should be taken with weed eaters and mowers to avoid injury to stems. Infected plants in landscapes should be pulled up and Growing non-susceptible crops destroyed. such as grass for three years will nearly eliminate the bacterium from the soil. Traditional bactericides are ineffective.

Photo by Sherrie Smith, University of Arkansas Cooperative Extension







Euonymus Crown Gall-

Rhizobium radiobacter also known as *Agrobacterium tumefaciens*



Photo by Penn State Department of Plant Pathology & Environmental Microbiology Archives, Penn State University, Bugwood.org

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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