





Issue 28, September 3, 2018

Arkansas Plant Health Clinic Newsletter

Follow us on social media



Turf

Now that we are getting some cooler temperatures in many parts of the state, we are seeing Fairy Ring in lawns. Circular or arc shaped rings of darker green or faster growing grass may appear in the spring and early summer, reappearing in the fall. These rings are usually 3 – 20 ft across. Basidiomycete fungi in the order Agaricales (certain mushroom fungi) cause of fairv are the rinas. When environmental conditions are favorable. mushrooms may be produced in the outer zone of the ring. There are several types of fairy rings, but control measures are the same for all types. Fairy Rings found in woods are called tethered rings because they are formed by mycorrhizal fungi living in symbiosis with trees. Fairy Rings found in open meadows or lawns are called free, because they are not connected with other organisms. The effects on the turf depend on the type of fungus that is causing the ring. For example, Calvatia cyathiformis will cause the grass to grow more abundantly; however, Leucopaxillus giganteus will cause the grass to wither. Control includes soil wetting, soil mixing, and replacement of infested soil. Mushrooms may be pulled or raked up and discarded. Fungicides containing azoxystrobin, or flutolanil,

or pyraclostrobin, or metconazole, or tebuconazole help suppress Fairy Ring. In many instances control measures are too expensive or inconvenient to the homeowner. In these cases, promoting a healthy green lawn through irrigation and proper fertilization may mask the problem.

Turf Fairy Ring- Order Agaricales



Photos by Keiddy Urrea, University of Arkansas Cooperative Extension

The University of Arkansas System Division of Agriculture offers all its Extension and Research programs to all eligible persons without regard to race, color, sex, gender identity, sexual orientation, national origin, religion, age, disability, marital or veteran status, genetic information, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.







Issue 28, September 3, 2018

Dogwood

Septoria leaf spot, caused by Septoria cornicola, is a late season disease that under most conditions requires no chemical controls. However, on trees with a severe history of the disease, the use of fungicides may be necessary. Symptoms are grayish, angular spots with a dark red or purple border. Tiny, dark fruiting bodies of the fungus can be observed in the center of the lesions, using a hand lens. The spots first appear on lower leaves and move upward through the canopy. All dead leaves should be raked up and removed from the planting. Good air circulation. fertilization, and the avoidance of overhead irrigation help limit the incidence of Septoria leaf spot. Fungicides containing chlorothalonil, or mancozeb, or thiophanate-methyl can be used, beginning in the spring just before flower bracts are fully expanded and repeated 2-3 times 10-14 days apart. This also gives good protection against Dogwood Spot anthracnose.

Dogwood Septoria Leaf Spot-

Septoria cornicola



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Dogwood Septoria Leaf Spot-



Photo by Sherrie Smith, University of Arkansas Cooperative Extension

Blueberry

Blueberry stem blight, caused by *Botryosphaeria dothidea*, can severely limit the establishment of blueberry plantings in the southeastern United States. The disease enters the plant through wounds caused by winter injury, pruning, or insects. Rapid death

The University of Arkansas System Division of Agriculture offers all its Extension and Research programs to all eligible persons without regard to race, color, sex, gender identity, sexual orientation, national origin, religion, age, disability, marital or veteran status, genetic information, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.







Issue 28, September 3, 2018

Keiddy Urrea

of individual canes occurs, often killing the entire plant. Both High Bush and Rabbiteve blueberries may be affected, especially young plantings of the more susceptible cultivars. Symptoms are rapid wilting of individual branches. Stems recently killed by the fungus do not drop their leaves which turn brown or red. The entire bush dies when the infection reaches the base of the plant. A wilted stem may be split lengthwise as an aid to diagnosis. A stem blightinfected stem will have a uniform, light brown discoloration in the wood extending down the infected side of the stem. This discoloration is also highly visible in a cross section of the stem. The stem blight fungus does not respond well to fungicides. Control of the disease relies on good cultural practices and resistant cultivars. Disease is worse on very light sandy soils and on heavy black mucky soils. Stems with lesions pruned below should be the brown discoloration. The diseased clippings should be removed from the field and destroyed. Cultivars which are known to be very susceptible to stem blight should be avoided in areas where stem blight is a problem. Bounty, Bluechip, Pearl River', 'Emerald', 'Star', 'Sharpblue', 'Elliott', 'Misty', 'Bluecrisp', 'Darrow', 'Southmoon', 'Ozarkblue', 'Sapphire', and 'Brightwell are considered more resistant. 'Relatively susceptible include 'Legacy', 'Gulf Coast', 'Cooper', 'Georgiagem', 'O'Neal', 'Reveille', 'Jubilee', and 'Magnolia'. Harrison, Bladen, Croatan, Reveille, and the Rabbiteye cultivars Premier and Powderblue are considered susceptible but have been grown with losses averaging less than 10-20%. Young bushes are the most susceptible. Once established (3-4 yr), these cultivars tend to survive well. The most

resistant cultivars are Murphy, O'Neal, and Cape Fear, which may become infected, but have rarely been known to die due to this disease.

Blueberry Botryosphaeria Stem Canker- Botryosphaeria dothidea



Photo by Sherrie Smith, University of Arkansas **Cooperative Extension**

The University of Arkansas System Division of Agriculture offers all its Extension and Research programs to all eligible persons without regard to race, color, sex, gender identity, sexual orientation, national origin, religion, age, disability, marital or veteran status, genetic information, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.







Blueberry Botryosphaeria Stem Canker- Botryosphaeria dothidea



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.

"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."

The University of Arkansas System Division of Agriculture offers all its Extension and Research programs to all eligible persons without regard to race, color, sex, gender identity, sexual orientation, national origin, religion, age, disability, marital or veteran status, genetic information, or any other legally protected status, and is an Affirmative Action/Equal Opportunity Employer.