



PLANT PATHOLOGY SERIES

# TIMELY INFORMATION

## Agriculture & Natural Resources

---

EXTENSION PLANT PATHOLOGY, EXTENSION HALL, AUBURN UNIVERSITY, AL 36849-5624

December 14, 2001

PP-518

### NOVEMBER PLANT DISEASES FROM THE AUBURN PLANT DIAGNOSTIC LAB

### NOVEMBER PLANT DISEASES FROM THE BIRMINGHAM PLANT DIAGNOSTIC LAB

### DISEASE POSSIBILITIES FOR DECEMBER

Jackie Mullen (jmullen@acesag.auburn.edu)  
Extension Plant Pathology Specialist-Auburn

Jim Jacobi (jjacobi@acesag.auburn.edu)  
Extension Plant Pathology Specialist-Birmingham

[Auburn Plant Disease Report-November \(J. Mullen\)](#)

Fall continued to be very dry for much of November until the end of the month when welcomed rain arrived on two different occasions. Plant samples were more numerous than usual (We received 44 samples.), but most of the samples appeared to be related to environmental stress. Nine samples were diagnosed with infectious diseases.

Pythium root rot was diagnosed on American boxwood and holly. On woody ornamentals, Pythium root rot usually develops only on previously weakened plants in wet situations. The decay is typically confined to small feeder roots. This feeder root decay can slowly damage the plant and cause a slow dieback to develop. Control of Pythium requires removal of the wet conditions. Healthy, vigorous plants in well drained situations do not have problems with Pythium. Fungicide drenches are sometimes recommended in greenhouse and nursery situations.

Botryosphaeria cankers often occur on weakened plants. The cankers are typically sunken and cracked around the edges. Control requires removal of the cankered areas. Branches should be pruned off, making cuts 3-5 inches beyond the edge of the canker.

The powdery mildew on Leucothoe was severe with whole leaves appearing white on the upper leaf surfaces. With older infections, leaves become brown-black and necrotic. See the AL Pest Management Handbook for fungicide recommendations.

ALABAMA A&M AND AUBURN UNIVERSITIES, AND TUSKEGEE UNIVERSITY, COUNTY GOVERNING BODIES AND USDA COOPERATING

The Alabama Cooperative Extension System offers educational programs, materials, and equal opportunity employment to all people without regard to race, color, national origin, religion, sex, age, veteran status, or disability.

Cercospora blight on Leyland cypress usually begins as a blight of the lower, inner foliage where humidity is higher. Needles turn brown and some needle drop will occur. This fungus has been called by three different names - Cercospora, Asperisporium, and Cercospora, the most recent taxonomic name revision. Disease control usually involves protective sprays of Cleary's 3336. Some recent reports indicated that Kocide may be more effective.

Pansy diseases seen were anthracnose, and Phytophthora crown and root. Anthracnose appears as circular white spots. Tiny black specks, the fruiting bodies of the fungus, may be seen on the surface of the leaf spots. Disease control involves sanitation and protective fungicide sprays. See the Alabama Pest Management Handbook for fungicide recommendations. The Phytophthora crown and root rot is a common problem on pansy where conditions are wet. Infected tissues become brown and water-soaked such that the outer tissue layers easily slip away from the central cylinder of the root. Disease control involves sanitation (plant removal) and application of protective fungicide drenches (see AL Pest Management Handbook) to prevent disease spread. Replanting pansies in the damaged area is not a good idea unless root associated soil is removed and soils are not kept continually wet. Fungicides are usually recommended for commercial operations only, unless a landscape has an extensive planting of pansies.

Table 1. 2001 November Plant Diseases Seen In The Plant Diagnostic Lab at Auburn.

<u>Plant</u>	<u>Disease</u>	<u>County</u>
Boxwood, American	Macrophoma Blight	*
	Pythium Root Rot	*
Holly	Pythium Root Rot	*
Italian Cypress	Botryosphaeria Canker	Dallas
Leucothoe	Powdery Mildew	*
Leyland Cypress	Cercospora Blight	*
Pansy	Anthracnose ( <i>Colletotrichum</i> )	Montgomery
	Phytophthora Crown & Root Rot	Montgomery
St. Augustine	Take-all Patch ( <i>Gaeumannomyces</i> )	Montgomery

---

\*Counties are not reported for greenhouse and nursery samples.

Birmingham Plant Disease Report-November (J. Jacobi)

Thirty-eight samples were received during November. The weather was warmer and drier than normal for most of the month. With the mild, dry weather, lacebugs and mites remained active throughout the month. Many of the pest problems including Shothole borers on Southern magnolia and yaupon holly, Botryodiplodia dieback on Southern magnolia, and Pestaliopsis tip blight on arborvitae were secondary to various stress factors. One of the magnolia samples had stem girdling caused by the failure to remove the strapping and the wire basket at planting. Always make sure that synthetic or plastic cord and strapping is removed prior to planting. These synthetic materials will not decompose and pose a significant threat to the long-term survival of the tree or shrub. Correct planting is one of the key steps to disease prevention. More planting tips are available in extension publication ANR-958, Care and Maintenance of Landscape Plants. number of samples received in November decreased significantly due to the normal seasonal slow

Table 2. 2000 November Diseases Seen in the Birmingham Plant Diagnostic Lab.

<u>Plant</u>	<u>Disease</u>	<u>County</u>
Allspice ( <i>Pimenta dioica</i> )	Rust	Jefferson
Arborvitae	High Soluble Salts, Spider Mites Pestalotiopsis Tip Blight	
Azalea	Iron Chlorosis	Jefferson
	Lacebugs (3)	Jefferson
Boxwood	Leaf Miner	Jefferson (2)
	Macrophoma Dieback	Jefferson
	Phytophthora Root Rot	Jefferson (2)
Cypress, Leyland	Seridium Canker, Spider Mites	Jefferson
Ficus	Scale	Jefferson
Gardenia, Dwarf	Pythium Root Rot	Jefferson
Holly, Yaupon	Shothole Borer	Jefferson

<u>Plant</u>	<u>Disease</u>	<u>County</u>
Cherry Laurel ↳Otto luyken=	Eastern Red Mite	Jefferson
	White Peach Scale	Jefferson(2)
Ligustrum	Cercospora Leaf Spot	Jefferson
Magnolia, Southern	Botrydiplodia Dieback	Jefferson
	Shothole Borer (2)	Jefferson
Oak, Red	Powdery Mildew ( <i>Phyllactinia</i> spp.)	Jefferson
Rose	Chemical Injury	Jefferson
Ryegrass, Perennial	Pythium Blight	Jefferson
St. Augustinegrass	Brown Patch	Jefferson

#### Disease Possibilities for December

December is usually our month of least plant samples and most paper work catch-up as well as lab inventories and re-organization. Our usual December diseases include black rot (*Xanthomonas campestris*) and Cercospora or Cercosporella leaf spots on crucifers in the southern sections of the state. Also, Drechslera and/or Bipolaris leaf spots are seen on small grains and forages including oats, wheat, fescue, rye and also ryegrass. Of course, greenhouse plant diseases develop every month of the year.

The list below includes some common disease problems received in the lab during December of the past few years. Comments on control practices are brief. Refer to the Alabama Pest Management Handbook for details. Also, remember that sanitation is important in most control situations.

Table 2. Disease Descriptions and Brief Control Comments on Some Common Diseases Often Seen in December.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Apple	Botryosphaeria Canker	Sunken, elongated lesions develop on branches and/or trunks. The lesion edges may be cracked at lesions margins. Lesion tissues are brown beneath the branch/trunk bark.	Cankered areas should be pruned out, making cuts 3-5 inches beyond the lesion edge. Disinfest shears between cuts.
Azalea	Cercospora Leaf Spot (Stress Related)	Brown, circular-irregular spots (3-2 inch, 0.6-1.2 cm diam.) on yellowed or otherwise weakened/stressed plants.	Remove stress factors; sanitation.
	Powdery Mildew ( <i>Microsphaera</i> ) (Greenhouse location)	White, buff-colored dusty coating on leaves.	Apply a protective fungicide (See the Ala. Pest Management Handbook.); Sanitation.
Bedding Plants	Bacterial Leaf Spot (Greenhouse location)	Wet, water-soaked/black spots become dried and cracked in the centers with water-soaked margins.	Sanitation; reduce humidity; increase spacing between plants; See Ala. Pest Management Handbook.
	Pythium Root Rot (Greenhouse location)	Roots become brown and water-soaked.	Sanitation; See handbook; reduce irrigation schedule.
Bentgrass	Brown Patch	Brown blotches on foliage; blight.	See Ala. Pest Management Handbook.
	Pythium Blight/Root Rot	Plants yellow and die from root rot phase of the disease.	See Ala. Pest Management Handbook.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Boxwood	Macrophoma Blight	Foliage turns reddish, yellow or brown with small black dots (about 1 mm diam.) scattered across leaf surfaces.	Remove stress situation; sanitation.
Broccoli	Black Rot ( <i>Xanthomonas</i> )	Yellow, V-shaped lesions on leaf edges become darkened and slowly spread down the leaf causing veins to darken. Eventually, tissue rot and decay spreads into the vascular system with the lower center stalk becoming rotted.	Crop rotation; seed treatment; see Ala. Pest Management Handbook.
Centipede	Brown Patch ( <i>Rhizoctonia</i> )	Foliage develops gray-brown spots, blotches; patches of turf die.	Sanitation; apply protective fungicide treatment if grass is not dormant. See Ala. Pest Management Handbook.
Collards	Black Rot ( <i>Xanthomonas</i> )	See Broccoli.	See Broccoli.
Cucumber	Anthrachnose ( <i>Colletotrichum</i> )	Light brown angular leaf spots.	Sanitation and protective fungicide sprays.
Dianthus	Anthrachnose ( <i>Colletotrichum</i> )	Reddish brown irregular spots on foliage.	Sanitation. Cleary's 3336 may help.
	Rhizoctonia Shoot Blight	Brown elongated lesions.	Sanitation. See Ala. Pest Management Handbook.
	Oedema	Small, corky, slightly raised spots on lower leaf surfaces sometimes accompanied by yellowish spots on corresponding upper leaf surfaces.	Reduce watering on cloudy days.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Fern, Boston	Rhizoctonia Aerial Blight	Blight areas on fronds.	See Ala. Pest Management Handbook.
Fescue (Lawn)	Helminthosporium Crown Rot	Leaf blades were yellowed and shrivelled. Tissues at the soil-line were brown and decayed.	See ANR-621.
Fescue, Red	Cool-Season Pythium Blight (Root Rot)	Turf areas become thinned, yellowish, and slow-growing.	See the Ala. Management Handbook.
Fescue, Tall (Forage Crop)	Drechslera Leaf Spot (Net Blotch)	Small, brown, elliptical spots become irregularly-shaped brown blotches with uneven internal pigmentation that appears to be in a transverse and longitudinal net-like pattern.	---
Geranium	<i>Botrytis</i> Blight	Spots and blight may develop on leaves, flowers, stems. When humidity is high, a gray mold will develop.	Sanitation; increase temperatures; increase air circulation to decrease humidity; protective fungicides.
	Phytophthora Stem Rot	Lower stem areas become black and water-soaked.	Sanitation; See Alabama Pest Management Handbook.
Holly	Phytophthora Root Rot	Roots, especially feeder roots, show a wet, water-soaked, rotted condition where the outer layer easily slips off the central cylinder.	Sanitation; See the Ala. Pest Management Handbook.
Jerusalem Artichoke	Fusarium Root Rot	Roots become decayed with a brown, dry rot.	Remove infected plants from the area and do not replant artichokes for 10-15 years.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Juniper	Phytophthora Root Rot	Roots, especially feeder roots, show a wet, water-soaked, rotted condition where the outer layer slips off the central cylinder.	Sanitation; See the Ala. Pest Management Handbook.
Kiwi	Phytophthora Crown Rot	Dark brown decay.	Sanitation. Crop rotation. Avoid wet locations.
Leyland Cypress	Seiridium Canker	Slightly sunken, elongated lesions develop on branches and/or trunk. Resin often oozes out onto bark at points along lesion edge. Tissues beneath bark are brown.	Cankered areas should be pruned out, making cuts 3-5 inches beyond the lesion edge. Disinfest shears.
Ligustrum	Cercospora Leaf Spot	Large, brown circular, oval or sometimes angular leaf spots. Sometimes spots have dark brown borders.	Sanitation; protective sprays of Cleary's 3336 or Domain.
Mondograss	Anthracnose ( <i>Colletotrichum</i> )	Brown blotches on leaf blades; blotches may begin at leaf tips or they may be centrally located on the leaf blade.	Cleary's 3336 or Domain; Protective sprays; Sanitation.
Oak	Botryosphaeria Canker	Sunken, elongated lesions develop on branches and/or trunks. The lesion edges may be cracked at lesions margins. Lesion tissues are brown beneath the branch/trunk bark.	Cankered areas should be pruned out, making cuts 3-5 inches beyond the lesion edge. Disinfest shears between cuts.
Oats	Bipolaris Spot Blotch	Brown-black, elongated spots (1 cm) on leaf blades.	See Ala. Pest Management Handbook.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	Drechslera Leaf Spot (Net Blotch)	Small brown flecks become longitudinal strips of dead tissue. Often the uneven blotchy discoloration of the dead tissue gives spots a net-like appearance. Outer edges of the brown strips have diffuse areas of yellow or red which may involve the entire leaf blade. Diseased leaves often die.	Rotation; deep plowing; resistant cultivars. See Ala. Pest Management Handbook.
Onion	Sclerotinia Blight	Water-soaked lesions at soil line/crown area.	---
Pansy	Botrytis Bud Rot	Buds become brown, sometimes with gray over-tones.	Sanitation. See 1998 recommendations.
	Myrothecium Crown Rot	Plants wilt and yellow and dieback. Crowns become brown and limp; sometimes tiny white & black cushions are visible on crowns.	Sanitation. Daconil treatments may give some protective control.
	Pythium Crown Root Rot	Dark brown, water-soaked decay at crown area.	Sanitation. See handbook.
	Thielaviopsis Root Rot	Black lesions on stunted roots. Plants stunted.	Sanitation. See handbook.
Pine, Loblolly	Sooty Mold	Black, sooty layer develops on needles. Black layer may be powdery or as thin dry sheets on needle surfaces.	Physically remove superficial coatings. Identify and control insects (may be aphids, scales, or other sucking-mouth parts insects).

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Poinsettia	Botrytis Blight (Greenhouse location)	Gray-brown blotches on foliage; during humid conditions a delicate fungal wet may be present over blotch areas.	Increase temperatures; decrease humidity; sanitation; see Ala. Pest Management Handbook.
	Pythium Root Rot (Greenhouse location)	Roots are brown and water-soaked; outer root tissues slide easily away from inner root core.	Sanitation; See Ala. Pest Management Handbook.
Pothos	Bacterial Leaf Spot ( <i>Erwinia</i> )	Angular, dark, water-soaked spots on foliage.	Sanitation; Do not irrigate over-head.
Rose	Crown Gall ( <i>Agrobacterium</i> )	Hard, rough-surfaced galls on the lower cane near the soil-line and on the roots.	Remove infected plants. Keep area free of susceptible plants for 2-3 years. Avoid wounds.
Rye	Bipolaris Spot Blotch	Brown, elongated spots on leaf blades.	---
Ryegrass	Bipolaris Leaf Spot	Small, brown elliptical leaf spots.	See Ala. Pest Management Handbook.
	Pythium Blight	Leaf blades yellow and die; roots become discolored brown with a soft, wet rot.	See Ala. Pest Management Handbook.
Snapdragon	Rhizoctonia Stem Canker	Brown Sunken Cankers on lower stems.	Sanitation; Cleary's 3336 or Domain.
St. Augustine	Brown Patch ( <i>Rhizoctonia</i> )	See Centipede.	See Centipede.
Strawberry	Anthracnose Crown Rot ( <i>Colletotrichum</i> )	Plants wilt. Crowns develop red-brown firm rot.	Sanitation. Use resistant cultivars. Use healthy trans-plants. See Ed Sikora.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	Bacterial Leaf Spot ( <i>Xanthomonas</i> )	Black, water-soaked (when in early stages), angular-shaped leaf spots.	Strict sanitation. Avoid overhead irrigation. See ANR-500A for protective bactericide recommendations.
	Phytophthora Crown/Root Rot	Stunted, wilted plants. Roots with reddened core or center. Roots and crowns decay with brown rot.	Avoid wet areas. Use disease free and resistant cultivars. Use protective fungicides when disease has been diagnosed in the area.
Sweet Potato	Fusarium Surface Root Rot	Light to dark brown surface decay that is firm and dry. Infected roots eventually become hard & mummified.	Avoid wounds. Remove infected plants.
	Fusarium Root Rot	Similar symptoms to Fusarium surface rot except rot extends below vascular ring.	Avoid wounds. Remove infected plants.
Tulip	Penicillium Bulb Rot	Brown blotches on bulb, sometimes with green/gray spore masses.	See Ala. Pest Management Handbook for dip recommendations.
Turnips	Cercospora Leaf Spot	Small to large, circular-irregular, off-white to pale brown leaf spots.	See Ala. Pest Management Handbook.
Vinca	Phytophthora Root Rot	Roots are brown, water-soaked and the surface tissues will slip easily off the central root cylinder with a small amount of pressure.	Sanitation. See Ala. Pest Management Handbook.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	Pythium Root Rot	Roots are brown, water-soaked and the surface tissues will slip easily off the central root cylinder with a small amount of pressure.	Sanitation. See Ala. Pest Management Handbook.
	Thielaviopsis Root Rot	Roots show black lesions and blotches. Tops grow poorly.	Keep potting mix or soil pH on the low side of normal, about 5.5-6.0. Cleary's or Domain drenches may help.
Wheat	Bipolaris Leaf Spot	Brown-black, elongated spots (1 cm) on leaf blades.	See Ala. Pest Management Handbook.

WE 'EXTENSION PLANT PATHOLOGY FOLKS' WISH YOU ALL A HAPPY AND RESTFUL HOLIDAY SEASON!