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PP-519

**DECEMBER PLANT DISEASES FROM THE AUBURN
PLANT DIAGNOSTIC LAB**

**DECEMBER PLANT DISEASES FROM THE BIRMINGHAM
PLANT DIAGNOSTIC LAB**

DISEASE POSSIBILITIES FOR JANUARY

PLANT DIAGNOSTIC LAB ANNUAL REPORT

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Auburn Plant Disease Report-December (J. Mullen)

December was relatively quiet in the area of plant samples with 23 samples received. The lab was, however, busy with soil nematode analysis samples.

Warm temperatures during the first part of December allowed brown patch to be active on bermuda and centipede grasses. We also saw rust disease on tall fescue. Other diseases seen included daylily rust, Collectotrichum leaf spot/blight on fern, Botrytris blight on poinsettia, and Fusarium pitch canker on pine. Also, the take-all patch fungus was identified on centipede. John Olive reported seeing daylily rust again in Mobile. See [Timely Information PP-506 by A. Hagan](#) (also on ACES website).

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

<u>Plant</u>	<u>Disease</u>	<u>County</u>
Bermuda	Brown Patch (<i>Rhizoctonia</i>)	Montgomery

<u>Plant</u>	<u>Disease</u>	<u>County</u>
Centipede	Brown Patch (<i>Rhizoctonia</i>)	Covington, Mobile
	Take-All Patch (<i>Gaeumannomyces</i>)	Montgomery
Fern	Colletotrichum Leaf Spot and Blight	Jackson
Fescue, Tall	Rust (<i>Puccinia</i>)	Jackson
Pine	Fusarium Pitch Canker	Lauderdale
Poinsettia	Botrytis Blight	Lee

Birmingham Plant Disease Report-December (J. Jacobi)

December started unseasonably warm, but ended with near normal weather conditions. Some broad-leaved evergreens that were fooled by the mild temperatures in November through mid-December were injured as temperatures dropped into the teens latter in the month. The mild, wet weather at the beginning of the month did provide conditions favorable for the development of brown patch on »Emerald= and »Meyer= zoysiagrass. Other diseases seen included Rhizoctonia stem rot on basil, and Phytophthora and Pythium root rot on boxwood. Armillaria root rot was seen on Chinese hollies stressed from circling roots and possible lingering effects of the severe drought in 2000. Remember that container grown shrubs and trees with intact circling roots should not be planted. Plants with root deformities may not fail for several years after planting. Additional information on Armillaria root rot can be found in extension publication, [ANR-907](#).

Two active mite infestations were also seen early in the month. Southern red mites were found on elaeagnus and eriophyid mites on wax myrtle. Southern red mites are most common during spring and fall. These mites can cause damage on a wide range of plants, but prefer azalea, rhododendron, elaeagnus, holly, rose, pyracantha, and others. Refer to extension publication, [ANR-192](#), for more information on control of this pest. The damage from eriophyid mites on wax myrtle appeared as small, greenish pimples or blisters on the leaves. These mites are extremely small and can not be seen without the aid of a microscope or 20X handlens. The mites are white to colorless and wormlike in appearance. Very little information is available on the long-term potential damage to wax myrtle growth and development.

Table 2. 2001 December Diseases Seen In The Birmingham Plant Diagnostic Lab.

<u>Plant</u>	<u>Disease</u>	<u>County</u>
Basil	Rhizoctonia Stem Rot	*

<u>Plant</u>	<u>Disease</u>	<u>County</u>
	Mealybugs	*
Boxwood	Boxwood Leafminer	Jefferson
	Phytophthora Root Rot	Tuscaloosa
	Pythium Root Rot	Jefferson
Elaeagnus	Southern Red Mite	Shelby
Holly, Chinese	Armillaria Root Rot	Jefferson
	Scale, sooty mold	Jefferson
Wax Myrtle	Eriophyid Mites	Jefferson
Zoysiagrass	Brown Patch	Jefferson, Shelby

*Counties are not reported for samples from commercial greenhouse and nursery operations.

Disease Possibilities For January

In January, we may see rust diseases and barley yellow dwarf virus show up on oats and wheat. In the southern sections of the state, fungal and bacterial diseases of vegetables (especially crucifers) and brown patch on turf grasses may be problems. Pythium blight/root rot may occur on cool-season grasses; this is mostly a problem on golf course areas. Black root rot (*Thielaviopsis basicola*) may occur on pansies and container hollies. Botrytis is a common problem on greenhouse crops.

The list below includes some common disease problems received in the lab in January of the past few years. Comments on control practices are brief. Refer to appropriate fact sheets, timely informations, and the [2001 Alabama Pest Management Handbook](#).

Table 3. Disease Descriptions and Brief Control Comments on Some Common Diseases Often Seen in January.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Alfalfa	Sclerotinia Blight	Plants unthrifty, yellow and die. Shiny, black, irregular resting structures (1-2 mm diam) some-times present on roots and lower stems at the soil line.	Crop rotation.
African Violet	Pythium Root Rot	Roots become brown and wet-rotted.	Sanitation and reduce watering practices.
Azalea	Cercospora Leaf Spot	Medium brown circular-irregular leaf spots (about 3 inch diam.)	See the Ala. Pest Management Handbook; Sanitation.
Bentgrass	Brown Patch (<i>Rhizoctonia</i>)	Foliage blight in circles or areas of a few inches to a few feet diameter.	See the Ala. Pest Management Handbook or ANR-342.
	Pythium Blight (Root Rot)	Irregular areas become yellowed and eventually grass dies. The disease may develop rapidly if wet conditions with mild temperatures occur.	See the Ala. Pest Management Handbook or ANR-594.
Bermuda	Brown Patch (<i>Rhizoctonia</i>)	Foliage blight in circles or areas of a few inches to a few feet diameter.	See the Ala. Pest Management Handbook or ANR-342.
Cabbage	Botrytis Damping-Off	Seedlings collapse as a result of soil-line decay.	See Ed Sikora.
Camellia	Anthracnose (<i>Colletotrichum</i>)	Circular-irregular brown-gray spots on leaves.	Sanitation. Cleary's 3336.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Camellia, Sasanqua	Edema	Pale yellow leaf spots on upper leaf surfaces; corky, light brown scabby spots on lower leaf surfaces.	Reduce soil water content; especially a problem during cloudy weather.
Centipede	Slime Mold (<i>Physarum</i>)	Thin, often ruffled, sheets of jello-like consistently on grass blades and soil; spores cover the grass/soil with a powdery, dusty coating.	No control needed; physical removal.
	Brown Patch (<i>Rhizoctonia</i>)	Foliage blight in circles or areas of a few inches to a few feet diameter.	See the Ala. Pest Management Handbook or ANR-342.
Collards	Black Rot (<i>Xanthomonas</i>)	Black V-shaped lesions may develop at leaf edges. Veins leading away from lesions may become dark. Eventually the central core of the stem becomes black & decayed.	Sanitation; rotate away from crucifers for 2 years.
	Oedema	Small, buff, brown colored, corky, slightly raised dots form on the lower leaf surfaces. Corresponding spots on upper leaf surfaces become yellowed.	Reduce irrigation practices on cloudy days.
	Pythium Root Rot	Roots become soft, brown and rotted. The outer root tissues will easily pull away from the central stele or core.	Plant the crop where good drainage exists. Crop rotation.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Euonymus, Winged	Phytophthora Root Rot and Poor Soil Drainage	Dieback; yellowing of lower foliage; root decay.	Improve soil drainage; reduce watering schedule if appropriate; see AL Pest Management Handbook.
Fern	Botrytis Blight	Brown dis-coloration of fronds and a gray fungal growth when conditions are cool and damp.	Daconil is labelled for use on fern and it will control Botrytis.
	Rhizoctonia Aerial Blight	Brown irregular lesions on fronds.	Sanitation. See the Ala. Pest Management Handbook.
Fescue	Bipolaris Leaf Spot	Small, brown, or reddish-brown elongated spots (1-6 mm long) on leaf blades.	--
	Rust (<i>Puccinia</i>)	Small, red-orange, powdery spots and blotches form on leaf blades. Leaves turn yellow and brown.	---
	Pythium Crown & Root Rot	See Bentgrass.	See the Ala. Pest Management Handbook or ANR-594.
Fescue, Tall	Net Blotch (<i>Drechslera</i>)	Small, often elongated, medium-brown or reddish-brown spots (1-2 mm long). Usually spots are abundantly scattered over leaf blades.	See Ala. Pest Management Handbook.
	Pythium Blight	See Bentgrass.	See the Ala. Pest Management Handbook. or ANR-594.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Foliage Plants	Bacterial Leaf Spot	Small, angular, black, water-soaked spots (1-3 or more mm diam) on foliage. As spots age, centers become dry, papery and may fall apart. Some centers may become light in color. Spots may be surrounded by yellow "halo".	Sanitation. See Ala. Pest Management Handbook.
Fuchsia	Botrytis Blight	Brown-gray spots/blight.	Sanitation. Cleary's 3336.
Geranium	Bacterial Leaf Spot (<i>Pseudomonas</i>)	See Foliage Plant Description.	Sanitation. See Ala. Pest Management Handbook.
	Fusarium Stem & Root Rot	Lower stem and roots become black colored with a dry decay.	Sanitation. Cleary's protective drenches/sprays will help.
	Oedema	Small (1/8 inch diam. or less), light brown, corky slightly raised spots scattered over lower leaf surfaces. Corresponding areas on upper leaf surfaces are yellowed spots.	Reduce watering on cool, cloudy days.
	Pythium Stem and Root Rot	Black cankers (rotting) of lower stem, crown and roots.	Sanitation. See the Ala. Pest Management Handbook.
Gerbera Daisy	Bacterial Leaf Spot (<i>Pseudomonas</i>)	See Foliage Plants.	See Foliage Plants.
Greenhouse Crops	Botrytis Blight	Gray-brown spots and blotches on the foliage. During moist, cool conditions, this fungus will produce a delicate gray web of fungal growth.	See Ala. Pest Management Handbook; Sanitation.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	Downy Mildew (<i>Peronospora</i>)	Faded, yellow blotches on upper leaf surfaces. Lower leaf surfaces showed gray-purple, powdery masses of fungal growth.	Reduce humidity; raise temperatures; refer to the Ala. Pest Management Handbook.
Greenhouse & Nursery Crops	Pythium/Phytophthora Root Rot	Root tissues become brown and water-soaked. Foliage shows yellowing, wilt and/or dieback.	See Ala. Pest Management Handbook; sanitation; reduce watering schedules.
Holly, Helli	Thielaviopsis Root Rot	Black spots and areas on roots and root tips; foliage yellows, wilts, and/or shows dieback.	Sanitation; Cleary's 3336, Domain drenches may help as a preventative measure. See the Ala. Pest Management Handbook.
Hydrangea	Powdery Mildew	White powdery dusting on leaves and shoots; dieback; blight.	See the Ala. Pest Management Handbook.
Irish Potato	Scab (<i>Streptomyces</i>)	Rough, slight sunken lesions on tubers, usually about 5 mm but size may vary greatly.	See the 2001 Ala. Vegetable Control Guide.
	Scurf, Black (<i>Rhizoctonia</i>)	Black, hard, slightly raised spots/irregular lesions of variable size but usually about 5 mm diam.	See the 2001 Ala. Vegetable Control Guide under Rhizoctonia.
	Soft Rot (<i>Erwinia</i>)	Soft, brown or cream-colored watery areas with a foul smell.	Sanitation. Avoid wounding. Keep cool.
Ivy, Swedish	Bacterial Leaf Spot	See Foliage Plants.	See Foliage Plants.
Leucothoe	Colletotrichum Leaf Spot	Reddish-brown irregular spots about 3 inch diameter.	Sanitation. Cleary's 3336 may help.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	Pestalotia Leaf Spot, usually secondary to cold damage	Large, light gray, irregular spots and blotches.	Sanitation.
Nandina, Dwarf	Colletotrichum Leaf Spot	Medium brown circular to irregular spots (about 3 inch diam.).	Sanitation; Cleary's 3336 or Domain may help. (Test on a few plant first.)
Oats	Blotch (<i>Drechslera avenae</i>)	Small brown flecks that become large longitudinal strips and blotches of dead tissue. Outer edges of spots fade into irregular areas of brown, red-brown or yellow.	See Ala. Pest Management Handbook.
	Crown Rust (<i>Puccinia coronata</i>)	Bright orange-yellow, round or oblong pustules develop mostly on leaves but sheaths, stems and panicles may also have pustules. Plant yellowing and lodging may result from infection.	Plant resistant cultivars.
Oxalis	Rust (<i>Puccinia sp.</i>)	Rusty orange powdery spots develop on leaves; eventually leaves wither and die.	Sanitation.
Pansy	Alternaria Blight	Small, brown, irregular lesions.	Sanitation. Daconil may help.
	Botrytis Blight	Gray or gray-brown circular-irregular spots/blotches on foliage.	See Ala. Pest Management Handbook; sanitation or ANR-596a.
	Pythium Root Rot	Plants unthrifty, wilt, yellow and die. Roots become brown and watersoaked.	See Ala. Pest Management Handbook; sanitation or ANR-596a.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	Rhizoctonia Foliage Blight	Spots/blight of brown color.	See Ala. Pest Management Handbook.
	Thielaviopsis Root Rot	Black spots and areas on roots and root tips. Plants wilt, yellow and die.	Sanitation; Cleary's 3336 or Domain drenches, as a preventative measure, may give some control. See Ala. Pest Management Handbook or ANR-596a.
Pear	Root Knot Nematode (<i>Meloidogyne</i>)	Pear decline. Roots develop irregular galls.	Sanitation. Crop rotation or fallow.
Photinia	Colletotrichum Leaf Spot	Brown, circular leaf spots develop.	Sanitation. See Ala. Pest Management recommendations for Entomosporium.
	Entomosporium Leaf Spot	Red-black circular-irregular spots on foliage; spots may coalesce; leaf fall will result.	Sanitation; protective fungicide sprays. See Ala. Pest Management Handbook or ANR-392.
Pothos	Anthracnose (<i>Colletotrichum</i>)	Small-large brown lesions.	Sanitation. See the Ala. Pest Management Handbook.
Rye	Spot Blotch (<i>Bipolaris sorokiniana</i>)	Usually on lower leaves, dark brown spots of varying shapes and sizes appear. Spots may coalesce so that large leaf areas are involved. Older lesions are olive colored when spores are present. Severely infected leaves completely die.	See Ala. Pest Management Handbook.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Ryegrass	Pythium Blight	Roots become brown and water-soaked. Grass blades may also become brown and water-soaked or they may yellow and decline from root rot problem.	See the Ala. Pest Management Handbook or ANR-594.
Southern Magnolia	Algal Leaf Spot (<i>Cephaleuros</i>)	Green or reddish circular spots, usually 3-5mm diam., slightly raised.	See the Ala. Pest Management Handbook.
Spinach	Pythium Root Rot	Dieback; roots appear brown, rotted, and water-soaked.	Sanitation; reduce soil water content.
St. Augustine	Brown Patch (<i>Rhizoctonia</i>)	Brown blotches develop on grass blades; circular to irregular patches turn brown.	See the Ala. Pest Management Handbook and Circular ANR-324.
	Take-All Patch (<i>Gaeumannomyces graminis</i> pv. <i>graminis</i>)	Patchy areas show scattered plants turning yellow and dying; roots/stolons show black cankers.	See ANR-823.
Strawberry	Phomopsis Blight/Leaf Spot	Brown, V-shaped areas develop at edges of leaves. The blotches may involve a or more of the leaf area.	See the Ala. Pest Management Handbook or 2001 Ala. Fruit Control Recommendations.
Sweet Potato	Fusarium Root Rot	Dry, dark brown rotted patches on the surface of the root. Rot area usually does not extend beyond vascular tissues.	Sanitation and careful handling during harvest.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	Scurf (<i>Monilochaetes</i>)	Dark brown to black spots/areas develop on the surface of the roots. Surface cracking may develop.	Sanitation, rotation for 3-4 years, fungicide protective dips (see 2001 Vegetable Control Recommendations).
Turnip	Cercospora Leaf Spot	Light brown or cream-colored irregular spots on foliage.	See the 2001 Ala. Vegetable Control Recommendations.
Vinca	Botrytis Leaf Spot	Gray-brown blotches on foliage.	Increase the temperatures to 70°F or above. Decrease humidity. Apply protective fungicide treatments.
	Pythium Root Rot	Roots become brown, water-soaked.	Sanitation. See the Alabama Pest Management Handbook.
	Thielaviopsis Root Rot	Black spots and areas on roots and root tips. Plants wilt, yellow, and die.	Sanitation; Cleary's 3336 or Domain drenches may help.
Wheat	Bipolaris Leaf Spot	Tan flecks first appear on both sides of lower leaves. (Later, younger leaves may be infected and spotted). Flecks gradually may become much larger and elongated (up to 12 mm). These spots are generally tan with brown centers and yellow borders. Lesions may coalesce.	Generally no control needed.
	Powdery Mildew (<i>Erysiphe</i>)	Gray-white or buff-colored powdery blotches on leaf blades. Distortion and yellowing of new growth.	See the 2001 Small Grains Control Recommendations.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	Rust-Leaf (<i>Puccinia recondita</i>)	Small, dark red dots of spore masses on leaves and leaf sheaths. This disease is commonly seen in Alabama.	See the 2001 Small Grains Control Recommendations.
	Rust - Stem (<i>P. graminis</i>)	Reddish-brown dots or ovals or elongated masses of spores on stems, leaf sheaths and occasionally on leaf blades and spikes. This disease is occasionally seen in the state.	See the 2001 Small Grains Control Recommendations.
	Rust - Stripe (<i>P. striiformis</i>)	Yellow-orange, narrow stripes of spore masses on leaves and spikelets. Heads may be infected. Disease usually restricted to cool temperatures. This disease is rarely seen, but it was observed in 1990 in one location.	---
	Septoria Blotch	Yellow flecks on lower leaves become elongated lesions (1-5 x 4-15 mm) that change from yellow to red-brown with some spots developing gray centers.	Generally no control needed.
	Take-All (<i>Gaeumannomyces</i>)	Lower stem and roots at the soil line become blackened and decayed. Usually this disease does not occur until late in the wheat season, but it occasionally will develop on seedlings.	Crop rotation to oats, corn, or legumes for 1 year.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Zoysia	Rhizoctonia Patch	Brown Irregular areas or patches become brown.	If temperatures are warm and grass is not dormant, protective fungicide treatments are recommended.

The Plant Diagnostic Lab Annual Report

We hope to have it finished and mailed in February. I hope you will find the report useful as a reference for disease occurrences in the state.