



PLANT PATHOLOGY SERIES

# TIMELY INFORMATION

## Agriculture & Natural Resources

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

June 19, 2001

PP-505

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

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

### DISEASE POSSIBILITIES FOR JUNE

### COMMENTS

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

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

#### Auburn Plant Disease Report-May (J. Mullen)

May was generally good for plants and diseases, with normal rainfall (or slightly above normal) in most parts of the state. Some parts of the southern state sections were below normal in rainfall.

May-July tend to be our busiest months and this past May was typically busy with 154 plant samples.

Oak leaf blister has been more prevalent than in the previous dry years. The leaf spots usually are slightly puckered with one leaf side being concave and one side being convex. Some oak species are characteristically more puckered than others. This leaf spot disease (as with most leaf spot diseases on large trees) is not a serious threat to the overall health status of the tree. Severe leaf spot may cause early leaf fall. Leaf fall after mid July does not typically significantly affect the tree's health. Leaf fall before July will cause some weakening of the tree, but established trees will re-leaf later in the season or the following spring. Several early leaf falls over consecutive years will weaken the tree and could cause decline problems. Sanitation of fallen

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.

leaves in the fall is always a good idea, although, with this disease, some spores lodge in bark crevices until they germinate next spring. With small trees, protective fungicides are recommended, with application at bud swell next spring. See the Ala. Pest Management Handbook.

Tomato spotted wilt virus was identified on garden tomato twice in Lee County in May. Bronzing and brown line patterns and necrotic spots were present. Plants should be removed as soon as possible. Control of thrips will help.

Take-all patch was noted on centipede, St. Augustine, and zoysia. Patchy areas tend to yellow and thin out due to decay lesions of stolons and roots. See ANR-823.

Table 1. Diseases Seen at the Auburn Plant Diagnostic Lab in May.

<u>PLANT</u>	<u>DISEASE</u>	<u>COUNTY</u>
Amaryllis	Bacterial Soft Rot	Calhoun
	Fusarium Bulb Rot	Calhoun
Bean, Pole	Southern Blight ( <i>Sclerotium rolfsii</i> )	Choctaw
Bermuda	Brown Patch ( <i>Rhizoctonia</i> )	Montgomery
	Spring Dead Spot ( <i>Gaeumannomyces graminis var graminis</i> )	Jefferson, Pickens
Blackberry	Cercospora Leaf Spot	Lee
Cantaloupe	Fusarium Crown Rot	Blount
	Pythium Crown Rot	Blount
Centipede	Take-all Patch ( <i>Gaeumannomyces graminis var graminis</i> )	Clarke, Covington, Shelby
Cotton	Rhizoctonia Stem Blight	Monroe
Crabapple	Cedar Apple Rust ( <i>Gymnosporangium juniperæ-virginianæ</i> )	Lee
Daylily	Cercospora Leaf Spot	Marshall

<u>PLANT</u>	<u>DISEASE</u>	<u>COUNTY</u>
Fescue	Anthracnose ( <i>Colletotrichum</i> )	Cullman
	Brown Patch ( <i>Rhizoctonia</i> )	Madison
Iris	Anthracnose ( <i>Colletotrichum</i> )	Lee
	Bacterial Soft Rot (of Corm)-Rhizome	Calhoun
Juniper	Fusarium Needle Blight	Cullman
Liriope	Anthracnose ( <i>Colletotrichum</i> )	Houston
Maple	Pythium Root Rot	Elmore
Maple, Japanese	Pythium Root Rot	Limestone
Marigold	Bacterial Leaf Spot	Lee
Oak	Oak Leaf Blister ( <i>Taphrina</i> )	Lee, Montgomery
Pear	Fireblight ( <i>Erwinia amylovora</i> )	Montgomery
Petunia	Phytophthora Crown Rot	Limestone
Pine, Loblolly	Needle Rust ( <i>Coleosporium</i> )	Tuscaloosa
Rose	Botrytis Blossom Blight	Mobile
Satsuma	Dothiorella Gummosis	Baldwin
Snapdragon	Phytophthora Crown & Root Rot	Geneva
St. Augustine	Take-all Patch ( <i>Gaeumannomyces graminis var graminis</i> )	Barbour, Colbert, Houston, Lee, Pike, Tallapoosa, Tuscaloosa
Tomato	Bacterial Wilt ( <i>Ralstonia solanacearum</i> )	Geneva
	Fusarium Root & Stem Rot	Colbert
	Southern Blight ( <i>Sclerotium rolfsii</i> )	Choctaw

<u>PLANT</u>	<u>DISEASE</u>	<u>COUNTY</u>
	Tomato Spotted Wilt Virus	Lee
	White Mold ( <i>Sclerotinia sp.</i> )	Fayette
Watermelon	Phoma Stem Rot	Pike
	Southern Blight ( <i>Sclerotium rolfsii</i> )	Fayette
Wheat	Scab ( <i>Fusarium sp.</i> )	Randolph
	Stripe Rust ( <i>Puccinia striiformis</i> )	Limestone
	Tan Spot ( <i>Cercospora sp.</i> )	Limestone
Willow	Rust ( <i>Melampsora</i> )	Mobile
Zoysia	Brown Patch ( <i>Rhizoctonia solani</i> )	Covington, Cullman
	Pythium Foliage & Root Decay	Montgomery
	Take-all Patch ( <i>Gaeumannomyces graminis var graminis</i> )	Tuscaloosa

Birmingham Plant Disease Report-May (J. Jacobi)

Rainfall and temperatures in May were slightly above average, providing favorable conditions for plant diseases. Of the 120 samples during May, problems related to the drought and cold winter temperatures continue to be very common. Two of the common diseases seen were azalea gall (or leaf gall) and Phytophthora blight on petunia. Azalea gall is caused by the fungus, *Exobasidium vacinii* and infects leaves, blossoms, and occasionally young twigs and shoots. Developing leaves and flowers are thickened, fleshy and distorted. As the galls develop, they become white or pink with masses of spores being produced. In addition to azalea, rhododendron and blueberries are also susceptible to this disease. A similar disease occurs on camellia and is caused by the fungus *Exobasidium camelliae*. The most practical control in the landscape is to hand remove and destroy all galled leaves before they become white or pink with spores. See ANR-942, 'Azalea Gall', for more information on controlling this disease; including a list of azalea cultivars that are resistant to infection. Phytophthora blight was seen on several 'wave' petunia samples brought to the lab. This disease is very hard to control and persists in infected beds for several years. Possible replacements for petunia and vinca (also very susceptible) in Phytophthora-infected beds include ageratum, begonia, celosia, coneflower,

geranium, marigold, scabiosa, thyme, verbena, and zinnia. See ANR-1023, 'Diseases of Annual Vinca in the Greenhouse and the Landscape', for more information.

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

<u>PLANT</u>	<u>DISEASE</u>	<u>COUNTY</u>
Apple	Aphids	Jefferson (2)
	Frog-Eye Leaf Spot	Jefferson
	Powdery Mildew	Jefferson
Aucuba	Phytophthora Root Rot	Jefferson
Azalea Azalea Leaf Gall	Shelby (2)	
	Phomopsis Dieback	Jefferson
Barberry	Scale, Botrosphaeria Canker	Jefferson
Bermuda	Helminthosporium Leaf Spot	Jefferson (3)
Boxwood	Phytophthora Root Rot	Jefferson
Centipede	Brown Patch	Jefferson
	Fairy Ring	Shelby
Chaste Tree	Alternaria Leaf Spot/Blight	Jefferson
Crabapple	Apple Scab	Jefferson
Cypress, Hinoke	Spider Mites	Jefferson
Dahlia	Powdery Mildew	Jefferson
Eleagnus	Vole Damage	Jefferson
Fescue, Tall	Brown Patch	Jefferson
Holly, Youpon	Pythium Root Rot	Jefferson

<u>PLANT</u>	<u>DISEASE</u>	<u>COUNTY</u>
Iris	Didymellina ( <i>Cladosporium</i> ) Leaf Spot	Walker, Jefferson
Jack-In-The-Pulpit	Rust ( <i>Uromyces spp.</i> )	Marshall
Juniper	Phomopsis Tip Blight	Jefferson
	Phytophthora Root Rot	Jefferson (2)
	Spider Mites	Jefferson (2)
Leyland Cypress	Botryosphaeria Canker	Shelby
Maple, Florida	Anthracnose	Jefferson
Maple, Red	Anthracnose	St. Clair, Jefferson
Oak, Southern Red	Oak Leaf Blister	Jefferson
Oak, White	Oak Vein Leaf Gall (Vein Pocket Gall)	Shelby
Pecan	Shoot Circulios	Jefferson
Petunia	Phytophthora Blight	Jefferson (3)
St. Augustine	Brown Patch	Jefferson
	Take-All Root Rot	Jefferson
Zoysia	Brown Patch	Jefferson (5)
	Fairy Ring	Jefferson

### Disease Possibilities For June

Table 3 lists some of the plant diseases which arrived in our lab during previous Junes. Brief comments on disease symptoms and control recommendations are included. For specific disease control recommendations, see the Alabama Pest Management Handbook or individual 2001 spray guides. Also, remember the importance of sanitation. This far in June, the following are some of the disease samples we have seen: fireblight on Bradford pear; Botryosphaeria canker on peach;

Pythium & Fusarium stem rot on bean; powdery mildew on dogwood; anthracnose on iris; Botrytis on rose; Septoria leaf spot on cherry; lots of oak leaf blister on oak; brown patch on bermuda; bacterial stalk rot on sweet corn; anthracnose on blueberry fruit; tomato spotted wilt virus on tomato; take-all on St. Augustine, zoysia, and centipede grass; Rhizoctonia ‘shoreshin’ on cotton; brown patch on St. Augustine grass; Rhizoctonia ‘sore-shin’ on pea; Rhizoctonia blight on thrift; southern blight on tomato.

Table 3. Brief Disease Descriptions and Control Recommendations For Diseases Often Seen in June.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Apple	Bitter Rot ( <i>Colletotrichum</i> )	Brown circular-irregular spots develop on fruit. The spots enlarge internally as cone shaped areas of brown rotted tissues. Masses of spores develop in tiny clumps (sometimes in concentric rings) on the surface of the browned fruit spots. Spores may be cream-colored or salmon-colored. Leaf spots are not commonly seen.	Follow the regular spray schedule as described in the Ala. Pest Management (P.M.) Handbook. Sanitation.
	Cedar-Apple Rust ( <i>Gymnosporangium juniperæ-virginianæ</i> )	Large (3-6mm diam.), bright yellow spots; sometimes tiny black specks can be seen on upper leaf surface of spots; sometimes orange spores bodies can be seen on lower leaf surface spots.	See Ala. P. M. Handbook for protective spray treatments; collect and destroy all fallen leaves this fall; remove nearby red cedars and other junipers if possible.
	Frogeye Leaf Spot ( <i>Botryosphaeria</i> )	Brown, circular spots with purple margins and brown centers.	Sanitation; protective fungicide sprays.
Arbor-vitæ	Phomopsis Dieback	Tip browning and dieback.	Sanitation. See Ala. P. M. Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Bahia	Dollar Spot ( <i>Sclerotinia</i> )	Individual grass blades show white spots/blotches with dark borders. Small areas of the field are initially affected.	Maintain proper fertility.
Bean, Garden	Alternaria Leaf Spot	Brown circular-irregular reddish brown spots become circular with concentric rings.	Protective fungicide sprays; Sanitation at end of growing season.
	Anthracnose ( <i>Colletotrichum</i> )	Reddish, irregular spots of varying sizes on all parts of foliage.	See Ala. Pest Management Handbook.
	Bacterial Blight ( <i>Xanthomonas</i> )	Irregular spots (small and large) become dried and light brown in the center and dark, water-soaked on the edge.	Protective spray treatments.
	Fusarium Stem/Root Rot	Lower stems/roots become dried and reddish-brown.	Rotation for 7 or more years.
	Mosaic Virus	Yellow and green alternating patches on leaves.	Remove damaged plants. Control insects.
	Rhizoctonia Aerial Blight	Leaves develop brown spots and blotches. Damaged tissues may dry and fall apart.	Sanitation. See the Ala. Pest Management Handbook for anthracnose control.
	Rhizoctonia Stem Rot	Lower stems develop brown sunken lesions.	Rotation; Terraclor or Fumigation.
	Root-Knot Nematode ( <i>Meloidogyne</i> )	Galls on roots.	Rotation, solarization or fumigation.
	Southern Blight ( <i>Sclerotium rolfsii</i> )	White fungal mat on lower stems near soil line; crowns decay.	Terraclor; Sanitation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Begonia	Pythium Crown Rot	Lower stem tissues brown and soft.	See Ala. P. M. Handbook.
Bentgrass	Brown Patch ( <i>Rhizoctonia</i> )	Foliage develops brown blotches and circular-irregular brown patches of turf.	See Ala. P. M. Handbook.
	Pythium Blight	Turf grass develops greasy black spots, blotches on leaves. Foliage dies.	See Ala. P. M. Handbook.
	Ring Nematode	Roots poorly developed; plant yellowed, stunted.	See ANR-523.
	Rust ( <i>Puccinia</i> )	Foliage develops a red-orange powdery coating on leaf blades.	See Ala. P. M. Handbook.
Bermuda	Brown Patch ( <i>Rhizoctonia</i> )	Foliage develops brown blotches. Circular-irregular brown patches of turf.	See Ala. P. M. Handbook.
	Dollar Spot ( <i>Sclerotinia</i> )	White, bleached spots about the size of a silver dollar appear in lawn; individual grass blades show white spots with dark borders.	See Ala. P. M. Handbook; see Circular ANR-493; collect grass clippings.
	Helminthosporium "Melting Out" ( <i>Bipolaris cynodontis</i> ; <i>Exserohilum rostratum</i> )	Circular-elongate spots with brown centers and purple-black borders. Leaves, sheaths, stems, crowns and roots may be attacked.	Sanitation; protective fungicide sprays. See Ala. P. M. Handbook.
	Leaf Rust ( <i>Puccinia</i> )	Leaves are off-color, rusty colored and later brown.	See the Ala. P. M. Handbook.
	Ring Nematode ( <i>Criconemella</i> )	Roots poorly developed; plants yellowed, stunted.	See ANR-523.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Sting Nematode ( <i>Belonolaimus</i> )	Roots poorly developed; plants yellowed, stunted.	See ANR-523.
	Take-All Patch ( <i>Gaeumannomyces</i> )	Grass yellows and thins with black lesions on roots.	See ANR-823.
Blackberry	Anthracnose ( <i>Colletotrichum</i> )	Black irregular-circular spots, blotches on leaves, canes; dieback.	See ANR-50.
	Cercospora Rosette	Blossoms are abnormally thickened with pointed petals. Canes develop bunchy growth habit. Fruit does not set.	Sanitation and protective fungicide sprays.
	Crown Gall ( <i>Agrobacterium</i> )	Irregular swollen area (gall) develops on lower branches and crown and roots.	Sanitation; crop rotation; Galltrol.
Blueberry	Phytophthora Root Rot	Brown, water-soaked lesions that become dried.	Ridomil; See Ala. Pest Management Handbook.
	Botryosphaeria Blight	New shoots develop brown sunken cankers; growth beyond the canker dies.	Sanitation; Benlate protective sprays.
	Botrytis	Gray-brown blotches on leaves and fruit; gray fruit rot.	Sanitation; Benlate protective sprays.
Boxwood	Macrophoma Blight	Leaves and some twigs become yellowed/brown; affected tissues may contain tiny black specks, the fruiting bodies of the fungus.	Eliminate stress problems; pruning. See Ala. Pest Management Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Volutella Blight	Plants show yellowing and dieback. Cankers on stems & some dying leaves develop tiny orange specks, fruiting bodies of fungus.	Eliminate stress problems; pruning. See Ala. Pest Management Handbook.
Buddlea	Phyllosticta Leaf Spot	Numerous small brown circular spots.	Sanitation. Cleary's 3336 or Domain.
Butterbeans	Pythium Root Rot	Roots are brown and water-soaked.	See Vegetable Spray Guide.
Cabbage	Alternaria Leaf Spot	Gray irregular spots.	See Pest Management Handbook.
Cantaloupe	Bacterial Wilt ( <i>Erwinia</i> )	Leaves wilt; this is quickly followed by leaf/stem collapse.	Control cucumber beetles.
	Gummy Stem ( <i>Mycosphaerella</i> )	Elongated, brown, wet lesions on stems; cracking of stem lesions.	Protective fungicide sprays; sanitation in the fall.
	Watermelon Mosaic	Foliage and fruits develop alternating patches of yellow and green tissues. Growth and crop productivity is reduced.	Rogue out infected plants; control insects; control weeds.
Centipede	Brown Patch ( <i>Rhizoctonia</i> )	Foliage develops brown blotches. Circular-irregular patches of turf will turn brown.	See the Ala. P. M. Handbook.
	Dollar Spot ( <i>Sclerotinia</i> )	See Bermuda.	See Ala. P. M. Handbook.
	Slime Mold ( <i>Physarum</i> )	Black powdery sporangia on grass blades.	--

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Cherry	Septoria Leaf Spot	Reddish-brown circular-angular leaf spots ( $\frac{1}{4}$ inch diam.).	Sanitation.
Cherry Laurel	Shot Hole ( <i>Xanthomonas</i> )	Reddish spots with dark red or black edges; centers of angular spots may fall out.	Sanitation; See Ala. Pest Management Handbook.
Chrysanthemum	Pythium Crown/Root Rot	Lower stem/crown area becomes water-soaked, brown, rotted.	See Ala. P. M. Handbook.
Collards	Alternaria Leaf Spot	Gray circular-irregular spots.	--
	Black Rot ( <i>Xanthomonas</i> )	Leaf edges have V-shaped black lesions; veins become black; inner core of lower stem becomes black.	Rotation for 2-3 years; Fumigation.
Coreopsis	Anthracnose	Red, brown circular spots, sometimes with white centers.	Sanitation; keep foliage as dry as possible. Protective sprays of Cleary's 3336 may help.
Corn	Bacterial Stalk Rot ( <i>Erwinia</i> , <i>Pseudomonas spp.</i> )	Stalks disintegrated into a soft mass, often with an unpleasant odor.	Maintain balanced fertility, good soil drainage and good air circulation between plants.
	Crazy Top ( <i>Sclerophthora</i> )	Symptoms vary; generally excessive tillering with rolling and twisting of upper leaves; abnormal leafy development of the tassel.	Avoid wet soils; sanitation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Common Rust ( <i>Puccinia</i> )	Circular-elongate, brown pustules are scattered over upper & lower leaf surfaces. Yellowing & death of leaves and leaf sheaths may occur.	Resistant varieties.
	Northern Corn Leaf Blight ( <i>Helminthosporium turcicum</i> )	Long, elliptical, gray-green or tan lesions, 2.5-15 cm in length develop first on lower leaves. Disease progresses upward.	Resistant varieties.
	Southern Corn Leaf Blight ( <i>Helminthosporium-cochliobolus</i> )	Tan lesions (.25-1.5 inches long) are elongate with parallel sides and brown borders; yellow halos may be present.	Resistant varieties.
Cotton	Alternaria Leaf Spot	Gray-brown irregular leaf spots.	--
	Ascochyta Leaf Spot	Light brown circular spots with dark brown margins; spots will coalesce to involve large areas of the leaf surface.	--
	Fusarium Lower Stem Rot	Lower stems develop red-brown sunken lesions.	Seed treatment.
	Pythium Root Rot Seedling Disease	Roots become brown, soft, water-soaked. Seedlings may fall over at soil line.	Seed Treatment.
	Rhizoctonia Lower Stem/Root Rot	Brown lesions/cankers near soil line.	--
Crabapple	Cedar-Apple Rust ( <i>Gymnosporangium</i> )	See Apple - Cedar-apple rust.	--

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Crepe Myrtle	Cercospora Leaf Spot	Brown leaf spots (circular-irregular) of approximately ½ inch diameter.	--
	Powdery Mildew ( <i>Erysiphe</i> )	Leaves show white dusting; yellowing; new growth distorted.	See Ala. P. M. Handbook.
Cucumber	Powdery Mildew	White powdery dusting on leaves; blight.	See the Ala. Pest Management Handbook.
	Rhizoctonia Stem Rot	Brown elongated lesions on lower stems.	--
Daisy, Gerbera	Powdery Mildew ( <i>Erysiphe</i> )	Leaves show a white dusting; yellowing followed by browning.	See Ala. P. M. Handbook.
Daylily	Root Knot Nematode ( <i>Meloidogyne</i> )	Round-irregular galls on roots.	Crop rotation to grasses or other suppressive plants. See ANR-856.
Dianthus	Pythium Root Rot	Foliage wilts, yellows; collapses.	Sanitation; Reduce irrigation; improve soil drainage. Plant a different type of bedding plant.
Dogwood	Anthrachnose ( <i>Discula</i> )	Small-large irregular brown spots/blotches often with purple margins. Dieback usually follows.	See the Ala. P. M. Handbook.
	Phytophthora Root Rot	Roots become brown and water-soaked. With slight pressure, the outer cortex of the root will slip away from the central root core.	See the Ala. P. M. Handbook.
	Powdery Mildew ( <i>Microsphaera</i> )	White dusting on upper leaf surfaces.	Cleary's 3336 or Domain.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Spot Anthracnose ( <i>Elsinoe</i> )	Small reddish circular spots develop on blossoms and leaves. Defoliation may result when spotting is severe.	See the Ala. P. M. Handbook.
Elm	Dutch Elm Disease	Wilt; dieback; interveinal yellowing of leaves; vascular browning.	Sanitation of dying branches or trees.
Fescue	Brown Patch ( <i>Rhizoctonia</i> )	See Centipede.	See the Ala. P. M. Handbook.
	Helminthosporium Leaf Spot	Small, elongate, reddish-brown spots develop. Spotting may be severe enough to cause total blight (death) of the foliage.	See the Ala. P. M. Handbook.
Fescue, Tall	Pythium Blight	See Bentgrass.	--
Genseng	Fusarium Root Rot	Roots become decayed and dark brown-black. Decay is a dry rot.	Crop rotation for 10 or more years.
Geranium	Alternaria Leaf Spot	Black, small, angular leaf spots.	See Ala. P. M. Handbook.
	Botrytis Blight	Blossoms and leaves develop brown blotches.	See Ala. P. M. Handbook.
	Pythium Stem Rot	Dark brown, water-soaked lesions (cankers) develop on stems.	Sanitation.
Grape	Anthracnose ( <i>Colletotrichum</i> )	Brown round-irregular spots (about 1/8 inch or larger) on foliage/stem.	Sanitation; See the Ala. P. M. Handbook.
	Black Rot ( <i>Guignardia</i> )	Dark brown circular spots on leaves and fruit.	Protective fungicide sprays; Sanitation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Botrytis Blight	Leaves/fruit develop a gray brown blotches/rot.	See Ala. P. M. Handbook.
Hawthorne	Entomosporium Leaf Spot	Black spots develop on the foliage. Spot coalescence may occur.	See the Ala. P. M. Handbook.
Holly	Phytophthora Root Rot	Roots are black or brown and water-soaked.	See the Ala. P. M. Handbook.
Hydrangea	Colletotrichum Petal Blight	Orange-brown circular spots, blotches.	Cleary's 3336 or Domain.
	Phytophthora Crown Rot	Roots develop a wet brown decay that becomes dried with age.	Sanitation. See Ala. Pest Management Handbook.
Impatiens	Impatiens Necrotic Spot Virus	Black circular spotting occurs on the foliage. New growth becomes stunted.	Control thrips; sanitation.
	Pythium Root Rot	Roots become soft, brown and water-soaked.	See the Ala. P. M. Handbook.
	Rhizoctonia Stem Rot	Sunken, brown, dry, lesions.	Sanitation. See the Ala. Pest Management Handbook.
Ivy, English	Anthracnose ( <i>Colletotrichum</i> )	Brown circular-irregular spots on the foliage. Spot coalescence may occur.	See the Ala. P. M. Handbook.
	Bacterial Leaf Spot ( <i>Xanthomonas</i> )	Black, angular, water-soaked spots on foliage.	See Ala. P. M. Handbook.
	Rhizoctonia Leaf & Stem Rot	Brown, dry lesions on leaves/stems.	Sanitation; Cleary's protective sprays.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Juniper	Cercospora Blight	Inner sections of branches turn brown and needles drop.	Benlate protective sprays. Sanitation.
	Phoma Needle Blight	Needle Browning.	Sanitation. Fungicides labeled to control Phomopsis should help.
	Phomopsis Blight	Branches dieback beginning at twig tips.	Sanitation; see the Ala. P. M. Handbook.
	Phytophthora Root Rot	Roots become browned, water-soaked.	See the Ala. P. M. Handbook.
Leucothoe	Pythium Root Rot; may be secondary	Roots become water-soaked, slightly brown, rotted; foliage yellows; dieback; wilt.	Sanitation; reduce irrigation; improve soil drainage; remove some soil in root zone area of damaged plant before replanting.
Liriope	Anthracnose	Brown spots, blotches on leaves and leaf tips.	Sanitation; See AL P. M. Handbook.
Maple	Anthracnose ( <i>Kabatella</i> )	Brown circular-irregular spots/blotches occur on leaves; large leaf areas may be involved. Defoliation may result.	Sanitation. See the Ala. P. M. Handbook.
	Phyllosticta Leaf Spot	Circular (sometimes) irregular leaf spots. Leaf spot borders are often distinctive. Severe spotting will result in defoliation.	Sanitation. See the Ala. P. M. Handbook.
Mondo Grass	Anthracnose ( <i>Colletotrichum</i> )	Brown spots blotches develop on leaves, often at/near leaf tips.	Sanitation. Cleary's or Domain protective sprays or a benomyl product labelled for ornamentals.
Nectarine	Bacterial Spot	See Peach.	--

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Brown Rot	See Peach.	–
Oak	Algal Leaf Spot ( <i>Cephaleuros</i> )	Red-green circular spots.	Sanitation.
	Anthracnose ( <i>Apiognomonina</i> )	Brown, irregular-shaped and-sized spots/blotches on leaves. Often, blotches will follow along leaf veins. Early leaf drop will occur when disease is severe.	Sanitation of leaves in the fall. See Ala. P. M. Handbook.
	Oak Leaf Blister ( <i>Taphrina</i> )	Brown, puckered spots (½ inch diameter) develop. Spots may merge. Leaf drop will occur when disease is severe.	Sanitation. See Ala. P. M. Handbook.
	Xylella Scorch	Oaks develop brown leaf edges; dieback.	Tree removal.
Okra	Rhizoctonia Crown Rot	Brown, dry lesions on lower stems.	Sanitation; crop rotation for 1-2 years.
Paspalum	Brown Patch ( <i>Rhizoctonia</i> )	Foliage blight in patches.	See Ala. P. M. Handbook in Turfgrass Section.
Pea, Field	Anthracnose	Reddish circular-irregular spots.	See Ala. P. M. Handbook.
	Black Eye Cowpea Mosaic Virus/Other Mosaic Virus	Yellow and green mosaic pattern on leaves; reduced growth.	Plant resistant varieties - 'Mississippi Cream' or 'Pink Eye Purple Hull BVR'.
	Charcoal Rot ( <i>Macrophomina</i> )	Lower stems become dried and off-color. When stem is split, inner tissues are gray and appear as if sprinkled with fine charcoal powder.	Sanitation; crop rotation or fumigation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Fusarium Crown Rot	Brown or reddish-brown lesions at soil line.	Long crop rotations.
	Fusarium Wilt	Plants become yellow and wilted, starting with lower foliage. Sometimes damage is on one side of plant only. Vascular tissues are brown-streaked.	Rotation for 6-12 years.
	Rhizoctonia Stem Rot	The stem area just above the soil-line becomes browned with a large lesion that often develops on one side of the stem. Eventually the whole stem may become affected.	See the Ala. P. M. Handbook.
	Root-Knot Nematode ( <i>Meloidogyne</i> )	Galls, irregular, on roots.	Rotate to grasses.
Peach	Bacterial Leaf Spot ( <i>Xanthomonas</i> )	Brown or reddish-brown, irregular-circular spots which fall out leaving shot holes; may be yellowing around spots.	Sanitation; spray for commercial growers.
	Brown Rot ( <i>Monilinia</i> )	Twigs may die; fruit develops a gray-brown rot. Gray mycelium & spores of fungus will develop during humid weather.	See Ala. P. M. Handbook; Sanitation.
	Gummosis ( <i>Botryosphaeria</i> )	Bark becomes sunken and cracked; oozing of sap.	Sanitation.
	Rhizopus Soft Rot	Fruit becomes brown, rotted, and watery.	---

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Scab ( <i>Cladosporium</i> )	On the fruit, small (1/16" diam.) olive, velvety spots may develop into large blotches. Spots/blotches are superficial. On twigs small (1/4 inch diam.), slightly raised, green-brown spots develop on lower leaf surfaces.	Protective fungicide sprays; sanitation.
Peanut	Crown Rot ( <i>Aspergillus niger</i> )	Lower stem becomes dry rotted.	See A. Hagan.
	Early Leaf Spot ( <i>Cercospora</i> )	Brown spots with halos develop on lower leaf surfaces.	Protective fungicide sprays; sanitation.
	Rhizoctonia Limb Blight	Brown lesions on stems.	See the Ala. P. M. Handbook.
	Rhizoctonia Seedling Disease	Brown sunken lesions on lower stems.	Seed treatment.
	Tomato Spotted Wilt Virus	Yellow ring-spots and line patterns on foliage; stunted plants.	Sanitation; control thrips.
Pear	Cedar-Hawthorne Rust ( <i>Gymnosporangium globosum</i> )	Cedar cankers with orange urediospores and witches brooms. Pears with yellow leaf spots and orange aecial 'cups' on lower leaf surface and fruit.	See control for cedar apple rust.
	Fabraea Leaf Spot	Black circular leaf spots (2-4 mm) develop on the foliage. Severe spotting may cause early defoliation.	Sanitation. The regular spray schedule for apples/pears may give some protective control. For flowering pear, see the Ala. P. M. Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Fireblight ( <i>Erwinia</i> )	Dieback develops on branches. Dead branches become black. Black spots/blotches may develop along the leaf margins.	Prune out damage 10-14 inches beyond the margin of the damaged tissue.
	Frog Eye Leaf Spot ( <i>Botryosphaeria</i> )	Brown circular spots with purple margins.	Sanitation; protective sprays of benomyl. See Ala. P. M. Handbook.
Peony	Tomato Spotted Wilt Virus	Yellow ring spots & line patterns.	Sanitation; control thrips.
Pepper	Anthracnose Fruit Rot	Black blotches (sometimes with orange spore pustules).	See Ala. P. M. Handbook.
	Bacterial Spot ( <i>Xanthomonas</i> )	Dark brown, circular to irregular spots; shot holes; leaf yellowing & drop.	Protective fungicide sprays; sanitation.
	Bacterial Wilt ( <i>Pseudomonas</i> )	Plants rapidly wilt while green.	Crop rotation away from tomato, potato, pepper, eggplant for 3-5 years.
	<i>Phytophthora capsici</i> Crown Rot	Lower stems become brown and water-soaked.	Sanitation. Solarization or fumigation. See handbook.
	Southern Blight ( <i>Sclerotium rolfsii</i> )	The lower stem near the soil line becomes softened and browned and decayed. A white mold will develop during humid warm weather.	See the Ala. P. M. Handbook.
	Tomato Spotted Wilt Virus	Plants stunted. New growth distorted. (Sometimes ring spots and bronzing are present.)	Sanitation. Control thrips.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Petunia	<i>Phytophthora</i> Foliage Blight/Root Rot	Brown, sometimes wet-looking lesions; dieback.	Sanitation; See Ala. P. M. Handbook.
Pine	Lophodermium Needle Cast ( <i>Ploioderma</i> )	Needles turn brown and drop; very small (1-2 mm or 1/32 inch) football shaped, black fruiting bodies.	Protective fungicide sprays during the spring and fall.
Pittosporum	<i>Cercospora</i> Leaf Spot	Brown, circular-irregular blotches about ½ inch diameter.	Sanitation of fallen leaves; protective Daconil or Bravo sprays.
Plum	Bacterial Leaf Spot ( <i>Xanthomonas</i> )	See Peach Bacterial Leaf Spot.	--
	Black Knot ( <i>Dibotryon</i> )	Black, elongated, irregular gall-like tissue on branches; dieback.	See Circular ANR-217. Only captan and ferbam are available for spray treatments.
	Plum Leaf Scald ( <i>Xylella</i> )	Leaf edges become brown, often zonated-brown. Dieback.	Remove trees to prevent disease spread.
Potato, Irish	Late Blight ( <i>Phytophthora infestans</i> )	Brown blotches on leaves/stems.	See Ala. P. M. Handbook.
	Rhizoctonia Lower Stem Rot	Dry, brown decay.	Sanitation.
	Root-Knot Nematode	Tubers develop knots on skin surface.	Rotation; solarization.
	Scab ( <i>Streptomyces</i> )	Small (0.12-0.25 inch or 5-8 mm diam.) brown lesions which may be sunken or raised.	Crop rotation; Maintain soil moisture; Avoid over-liming; Maintain soil pH at 5.3-5.5. Use scab tolerant varieties.
	Stem Soft Rot ( <i>Erwinia</i> )	Stems become black, soft, watery, with a foul smell.	Sanitation. Avoid wounding.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	White Mold ( <i>Sclerotium rolfsii</i> )	Plants wilted; a white mold often present at the soil line.	See Ala. P. M. Handbook (commercial).
Privet	Cercospora Leaf Spot	Medium brown circular spots.	See Ala. P. M. Handbook.
Rhododendron	Phytophthora Root Rot	Roots become brown and water-soaked.	See the Ala. P. M. Handbook.
Rose	Black Spot ( <i>Diplocarpon</i> )	Black spots with fringed borders develop on leaves. Defoliation will result from severe spotting.	Sanitation. See the Ala. P. M. Handbook.
	Mosaic Virus	Yellow line patterns, mosaics.	Plant removal.
	Powdery Mildew	White dusting on leaf surfaces; new growth distortion.	See Ala. P. M. Handbook.
	Rhizoctonia Crown Rot	Brown lesions at soil line.	Sanitation; Cleary's protective drenches.
Salvia	Phytophthora Root Rot	Roots brown, water-soaked.	Sanitation. See Ala. P. M. Handbook.
Snapdragon	<i>Phytophthora parasitica</i> Crown Rot	Crowns become water-soaked, brown, rotted.	Sanitation. Avoid excessive irrigation. See Ala. P. M. Handbook.
Sorghum	Anthracnose ( <i>Colletotrichum</i> )	Leaves/stems develop black lesions	--
	Rhizoctonia Root Rot	Dry brown rot on roots.	--
Soybean	Pythium Seedling Disease	Usually lower stem tissues and/or roots become translucent, brown and watery.	Use treated seed.
	Rhizoctonia Seedling Disease	Red-brown, dry decay of lower stems and roots.	Use treated seed.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Cyst Nematode ( <i>Heterodera</i> )	Plants are stunted and yellow. Root systems are reduced and show a low incidence of Rhizobium nodules. White-yellow female bodies and brown cysts about the size of a small pin head may be seen on roots with the aid of a hand lens.	Rotation; resistant cultivars; See Soybean Pest Management, Circular ANR-413.
	Root Knot Nematode ( <i>Meloidogyne</i> )	Plants are stunted and yellowed. Roots develop knots or galls of variable shape and size.	Crop rotation; Use of resistant cultivars. See Ala. P. M. Hand-book.
Squash	Bacterial Wilt ( <i>Erwinia</i> )	Individual leaves wilt and turn brown. A sticky ooze will stream out of petiole when it is placed in warm water.	Control cucumber beetles; sanitation.
	Cucumber Mosaic Virus (CMV)	Leaves develop a mottled green-yellow or dark green-light green coloration; new growth is stunted.	Remove affected plants; Control insects and weeds.
	Tobacco Ringspot Virus	Leaves show mosaic, stunting.	Sanitation; crop rotation for 2-4 years.
	Watermelon Mosaic Virus (WMV) II	See comments for CMV.	--
Squash, Zucchini	Mosaic Virus	A somewhat regular pattern of green and light green or yellow-white discoloration.	Sanitation. Control insects.
St. Augustine	Brown Patch ( <i>Rhizoctonia</i> )	Brown leaf spots, blotches.	See the Ala. P. M. Handbook.
	Gray Leaf Spot ( <i>Piricularia</i> )	Gray-brown oval or irregular spots on grass blades; spots may merge.	Protective fungicide sprays; Sanitation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Take-All Patch ( <i>Gaeumannomyces</i> )	Plants yellow and die. Stolons, roots develop black lesions.	See ANR-823.
Strawberry	Common Leaf Spot ( <i>Mycosphaerella</i> )	Young leaf spots are small, round and deep purple. Older spots are about 1/16 inch diam. with white or brown centers and purple borders. Spots may coalesce.	See Ala. P. M. Handbook.
Sweet Potato	Fusarium Root Rot	Surface of root becomes browned and shrivelled.	See Ala. P. M. Handbook.
Sycamore	Powdery Mildew ( <i>Microsphaera</i> )	White coating develops on leaves; new leaves are deformed.	Sanitation of leaves in the fall.
	Xylella Scorch Disease	Leaf edges become browned; dieback.	Tree removal.
Thrift	Rhizoctonia Blight	Foliage become brown.	Cleary's 3336 or a benomyl labelled for ornamentals will give protective control; sanitation.
Tomato	Bacterial Canker ( <i>Corynebacterium clavibacter</i> )	Elongate brown, wet-looking lesions or cankers on stems; centers of cankers dry and look white.	Protective sprays; Sanitation.
	Bacterial Canker ( <i>Pseudomonas corrugata</i> )	Stems become hollow with surface development of adventitious roots.	Sanitation.
	Bacterial Spot ( <i>Xanthomonas</i> )	Small, dark, greasy irregular spots on leaves and stems. Fruit spots are raised, brown and scabby.	See Ala. P. M. Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Bacterial Wilt ( <i>Pseudomonas solanacearum</i> )	Rapid wilting of green plants.	Rotation. Fumigation.
	Blossom End Rot	Hard, black lesions at blossom end of fruit.	See the Ala. P. M. Handbook.
	Buckeye Rot ( <i>Phytophthora</i> )	On fruits, spots are pale brown with concentric rings; spots small or large; fruit flesh decomposes.	Keep fruit off soil; Ridomil.
	Cucumber Mosaic Virus	Leaves become thin and narrow (strap-shaped). Plants have reduced growth.	Remove damaged plants; control insects, weeds.
	Early Blight ( <i>Alternaria</i> )	Brown circular-irregular spots with target-like ring pattern.	Fungicide sprays; Sanitation in the fall.
	Fusarium Wilt	Lower leaves become yellow and yellowing/wilting progresses up the plant. One sided effects may occur.	Rotation; Plant varieties resistant to Fusarium wilt.
	Late Blight ( <i>Phytophthora infestans</i> )	Brown lesions (blotches) on leaves/stems.	See Ala. P. M. Handbook.
	Leaf Mold ( <i>Falvia falva</i> )	Gray fungal growth in blotches on leaves.	See Ala. P. M. Handbook.
	Potato Virus Y Group	Foliage stunted and mottled.	Sanitation. Control weeds. Control aphids.
	Southern Blight ( <i>Sclerotium rolfsii</i> )	White fungal mat occurs at soil line where stem becomes decayed; plants die due to death of lower stem.	Terraclor; crop rotation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Tomato Spotted Wilt Virus	New growth becomes abnormally small, small yellow spots appear. Young leaves become bronzed in spots, patches or whole leaf areas involved. Fruit spotted. Plants wilt & die.	Sanitation; Control thrips.
	White Mold ( <i>Sclerotinia</i> )	See Tomato Southern Blight.	--
Verbena	Powdery Mildew	White dusty coating on leaves; leaves yellow and later turn brown.	A benomyl product labelled for ornamentals or Cleary's 3336 or Domain.
Vinca, Catharanthus (Annual Periwinkle)	Anthracnose ( <i>Colletotrichum</i> )	Brown cankers on lower stems.	See Ala. P. M. Handbook.
	Fusarium Crown Rot	Brown, dry rotting on stem at soil line.	Rotation or solarization.
	Phomopsis Stem Blight	A brown canker develops on stems.	Sanitation. Apply protective sprays of Cleary's 3336. See the Ala. P. M. Handbook.
	Phytophthora Foliage Blight	Dark brown lesions on stems and leaves; dieback.	Sanitation. Avoid wet situations. See the Ala. P. M. Handbook.
	Pythium/Phytophthora Crown/Root Rot	Roots become brown, watersoaked.	Sanitation. Avoid wet situations. See the Ala. P. M. Handbook.
	Rhizoctonia Aerial Blight	Leaves become dull green and then brown. Large areas of leaves become browned.	See Ala. P. M. Handbook.
Vinca Minor	Anthracnose ( <i>Colletotrichum</i> )	Small-large brown blotches on leaves.	See the Ala. P. M. Handbook under perennial vinca.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Watermelon	Anthracnose ( <i>Colletotrichum</i> )	Roughly circular, black-brown lesions with irregular margins on leaves; black spots occur on fruit; lesions on stems and petioles are tan and elongated.	See the Ala. P. M. Handbook.
	Bacterial Fruit Blotch ( <i>Acidovorax</i> )	Dark brown blotches on fruit.	Sanitation. See Ed Sikora.
	Gummy Stem ( <i>Mycosphaerella</i> )	Elongate, brown and wet lesions form on stems; cracking. Brown-black spots may develop on leaves.	Protective fungicide sprays; Sanitation in the fall.
	Fusarium Crown Rot	Brown dried lesions near soil line.	Plant Fusarium resistant varieties; crop rotation for 6-12 or more years.
	Fusarium Wilt	Vines become yellowed and wilted, beginning with the oldest foliage.	Rotation out of watermelon for 6-12 years.
Wheat	Scab ( <i>Fusarium</i> )	Heads covered with pink spores.	Sanitation.
Yaupon, Dwarf	Phytophthora Root Rot	Roots become brown, water-soaked.	Sanitation.
Zoysia	Bipolaris Blight, Leaf Spot (also <i>Exserohilum rostratum</i> )	Small, brown, elongated spots on leaves.	See Ala. P. M. Handbook; Collect grass clippings.
	Brown Patch ( <i>Rhizoctonia</i> )	See Centipede.	See Centipede.
	Dollar Spot ( <i>Sclerotinia</i> )	See Bermuda.	See Bermuda.
	Rust ( <i>Puccinia</i> )	Red-orange powdery dusting on leaf blades.	Collect grass clippings; Usually fungicides are not needed.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Take-All Patch ( <i>Gaeumannomyces</i> )	Scattered, individual plants yellow & die in an area; sections/areas of turf thin and yellow.	Keep soil pH near 6.0 (or slightly below); use only ammonia-based fertilizers.
Grasses	Slime Molds	White, gray, or brown thin, translucent sheet-like bodies on turf or other areas; turf may be covered by black, gray, or green powdery spores.	Physical removal; See Ala. P. M. Handbook.

### Comments

Please fill out the blue sheet with as much information as possible on the problem. Also, please tell us your name, county, and phone number, including area code. This will help!