May was busy as May usually is. We saw 126 plant samples come into the Auburn lab in May.

Some of the common diseases seen in May were the following: Exobasidium gall on azalea and camellia; southern blight (white mold-caused by *Sclerotium rolfsii*) on ‘Blue Lake’ beans and tomato; anthracnose on bentgrass; anthracnose leaf spots on a number of trees and shrubs; spring dead spot on bermuda grass; brown patch and take-all patch on turf grasses; powdery mildew on dogwood; several problems on Leyland cypress including Cercosporella blight; *Phyllosticta* leaf spot on maple; anthracnose on strawberry; suspect bacterial spot and bacterial canker on tomato; southern blight (*Sclerotium rolfsii*) on tomato; tomato spotted wilt virus on tomato.
Table 1. Diseases Seen at the Auburn Plant Diagnostic Lab in May.

<table>
<thead>
<tr>
<th>PLANT</th>
<th>DISEASE</th>
<th>COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azalea</td>
<td>Azalea Gall (<em>Exobasidium</em>)</td>
<td>Talladega</td>
</tr>
<tr>
<td>Beans, Blue Lake</td>
<td>Southern Blight (<em>S. rolfsii</em>)</td>
<td>Geneva</td>
</tr>
<tr>
<td>Bentgrass</td>
<td>Anthracnose (<em>Colletotrichum</em>)</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Bermuda</td>
<td>Brown Patch (<em>Rhizoctonia</em>)</td>
<td>Montgomery</td>
</tr>
<tr>
<td></td>
<td>Spring Dead Spot (<em>Gaeumannomyces</em>)</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Black Gum</td>
<td>Anthracnose (<em>Colletotrichum</em>)</td>
<td>Marshall</td>
</tr>
<tr>
<td>Camellia</td>
<td>Anthracnose (<em>Colletotrichum</em>)</td>
<td>Covington</td>
</tr>
<tr>
<td>Centipede</td>
<td>Brown Patch (<em>Rhizoctonia</em>)</td>
<td>Lee</td>
</tr>
<tr>
<td></td>
<td>Take-All Patch (<em>Gaeumannomyces</em>)</td>
<td>Mobile</td>
</tr>
<tr>
<td>Corn</td>
<td>Root Knot Nematode (<em>Meloidogyne</em>)</td>
<td>Not Recorded</td>
</tr>
<tr>
<td>Dogwood</td>
<td>Powdery Mildew</td>
<td>Russell</td>
</tr>
<tr>
<td></td>
<td>Spot Anthracnose (<em>Elsinoe</em>)</td>
<td>Russell</td>
</tr>
<tr>
<td>Elm, Chinese</td>
<td>Anthracnose (<em>Colletotrichum</em>)</td>
<td>Lee</td>
</tr>
<tr>
<td>Holly</td>
<td>Armillaria Root &amp; Crown Rot</td>
<td>Tallapooasa</td>
</tr>
<tr>
<td>Hydrangea</td>
<td>Bacterial Leaf Spot</td>
<td>Conecuh</td>
</tr>
<tr>
<td>Irish Potato</td>
<td>Anthracnose (<em>Colletotrichum</em>)</td>
<td>Henry</td>
</tr>
<tr>
<td>Itea</td>
<td>Colletotrichum Leaf Spot</td>
<td>Mobile</td>
</tr>
<tr>
<td>Kiwi</td>
<td>Pythium Root Rot</td>
<td>Macon</td>
</tr>
<tr>
<td>Leyland Cypress</td>
<td>Algal Leaf Spot (<em>Cephaleuros</em>)</td>
<td>Tuscaloosa</td>
</tr>
<tr>
<td></td>
<td>Black Mildew (<em>Septobasidium</em>)</td>
<td>Tuscaloosa</td>
</tr>
<tr>
<td>PLANT</td>
<td>DISEASE</td>
<td>COUNTY</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>Cercosporella Blight</td>
<td>Butler</td>
</tr>
<tr>
<td></td>
<td>Colletotrichum Leaf Spot</td>
<td>Tuscaloosa</td>
</tr>
<tr>
<td></td>
<td>Phoma Canker</td>
<td>Tuscaloosa</td>
</tr>
<tr>
<td>Magnolia</td>
<td>Colletotrichum Leaf Spot</td>
<td>Mobile</td>
</tr>
<tr>
<td>Magnolia, Sweet Bay</td>
<td>Anthracnose (Colletotrichum)</td>
<td>Lee</td>
</tr>
<tr>
<td>Maple</td>
<td>Phyllosticta Leaf Spot</td>
<td>Covington</td>
</tr>
<tr>
<td>Maple, Red</td>
<td>Botryosphaeria Canker</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Pythium Crown Rot</td>
<td>*</td>
</tr>
<tr>
<td>Mayhew</td>
<td>Cedar Quince Rust (Gymnosporangium)</td>
<td>Geneva</td>
</tr>
<tr>
<td>Oak</td>
<td>Actinopelte (Tubakia) Leaf Spot</td>
<td>Montgomery</td>
</tr>
<tr>
<td></td>
<td>Oak Leaf Blister (Taphrina)</td>
<td>Lee</td>
</tr>
<tr>
<td>Pansy</td>
<td>Cercospora Leaf Spot</td>
<td>Lee</td>
</tr>
<tr>
<td>Peach</td>
<td>Bacterial Leaf Spot (Xanthomonas)</td>
<td>Chilton</td>
</tr>
<tr>
<td>Pear, Bradford</td>
<td>Botryosphaeria Canker</td>
<td>Montgomery</td>
</tr>
<tr>
<td>Plum</td>
<td>Black Knot (P tlowrightia)</td>
<td>Talladega</td>
</tr>
<tr>
<td>Snapdragon</td>
<td>Phytophthora Root Rot</td>
<td>Choctaw</td>
</tr>
<tr>
<td>St. Augustine</td>
<td>Brown Patch (Rhizoctonia)</td>
<td>Mobile</td>
</tr>
<tr>
<td></td>
<td>Take-All Patch (Gaeumannomyces)</td>
<td>Butler, Montgomery</td>
</tr>
<tr>
<td>Strawberry</td>
<td>Anthracnose (Colletotrichum)</td>
<td>*</td>
</tr>
<tr>
<td>Tomato</td>
<td>Bacterial Spot (Suspect Xanthomonas)</td>
<td>Randolph</td>
</tr>
</tbody>
</table>
Heavy rainfall was the big story for many locations in North Alabama during May. The reported rainfall total was 17.23 inches at the Birmingham Airport (normal rainfall is 4.83 inches). The previous recorded rainfall during May was 11.1 inches recorded in 1969.

The lab received 187 samples during the month of May. Some of the problems seen last month included: frog-eye leaf spot on apple, rust on bermudagrass, downy leaf spot on hickory, Cladosporium leaf spot on iris, and fire blight on pear.

Fire blight has been very common this spring on apples, crabapples, and pears (both ornamental and fruiting cultivars). It’s too late to apply preventative treatment. However, removing all symptomatic branches by pruning 12 inches below any visible cankers and discarding the pruning can limit further spread of the disease. Remember to sterilize pruning tools between cuts. Refer to Extension publication, ANR-542 Fire Blight on Fruit Trees and Woody Ornamentals (http://www.aces.edu/pubs/anr/anr-542/anr-542.html) for more information on this disease including a list of fire blight resistant plants.

Rust on bermudagrass is not commonly seen, probably due to the high levels of resistance in most
Bermudagrass cultivars. Bermudagrass rust (Puccinia cynodontis) begins as small, grayish purple pustules on the underside of older leaves. As pustules mature, the leaf tissue ruptures to expose red-brown urediospores. In contrast, zoysiagrass rust (Puccinia zoysia) has yellow-orange urediospores and only affects zoysiagrass. Following nitrogen fertility recommendations is a critical factor in rust control strategies for warm-season turfgrasses. The fungicides propiconazole (Banner Maxx, and Fertilome Systemic Fungicide), triadimefon (Bayleton, and Bayer Fungus Control for Lawns), and myclobutanil (Eagle, and Spectricide Immunox) are labeled for rust control. For more information refer to the Extension publication ANR-621 Leaf Spot and Rust Diseases of Turfgrasses ([http://www.aces.edu/department/extcomm/publications/anr/anr-621/anr-621.html](http://www.aces.edu/department/extcomm/publications/anr/anr-621/anr-621.html)).

Table 2. 2003 May Diseases Seen In The Birmingham Plant Diagnostic Lab.

<table>
<thead>
<tr>
<th>PLANT</th>
<th>DISEASE</th>
<th>COUNTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>Frog-eye Leaf Spot</td>
<td>Jefferson(2)</td>
</tr>
<tr>
<td>Apricot Scab (Cladosporium)</td>
<td></td>
<td>Jefferson</td>
</tr>
<tr>
<td>Azalea</td>
<td>Lacebugs</td>
<td>Jefferson, Shelby</td>
</tr>
<tr>
<td></td>
<td>Leaf Gall (Exobasidium)</td>
<td>Jefferson(2)</td>
</tr>
<tr>
<td></td>
<td>Phytophthora Root Rot</td>
<td>Tuscaloosa</td>
</tr>
<tr>
<td>Basil</td>
<td>Leafhoppers</td>
<td>Jefferson</td>
</tr>
<tr>
<td></td>
<td>Pseudomonas Leaf Spot</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Bentgrass</td>
<td>Anthracnose (Colletotrichum)</td>
<td><em>(2)</em></td>
</tr>
<tr>
<td></td>
<td>Anthracnose</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Dollar Spot</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Pythium Root Rot</td>
<td><em>(2)</em></td>
</tr>
<tr>
<td></td>
<td>Pythium Root Rot</td>
<td>*</td>
</tr>
<tr>
<td>Bermudagrass</td>
<td>Helminthosporium Leaf Spot</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>Rust (Puccinia cynodontis)</td>
<td>Jefferson</td>
</tr>
<tr>
<td></td>
<td>Spring Dead Spot (Gaeumannomyces)</td>
<td>Shelby</td>
</tr>
<tr>
<td>Plant</td>
<td>Disease</td>
<td>County</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Blueberry</td>
<td>Phytophthora Root Rot</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Boxwood, American</td>
<td>Volutella B light</td>
<td>Jefferson(2)</td>
</tr>
<tr>
<td>Camellia, Japanese</td>
<td>Leaf Gall (Exobasidium)</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Camellia, Sasanqua</td>
<td>Leaf Gall (Exobasidium)</td>
<td>Jefferson(2)</td>
</tr>
<tr>
<td>Centipedegrass</td>
<td>Brown Patch</td>
<td>Jefferson(4)</td>
</tr>
<tr>
<td>Cherry Laurel</td>
<td>Southern Red Mites</td>
<td>Shelby</td>
</tr>
<tr>
<td>Cypress, Leyland</td>
<td>Botryosphaeria Canker</td>
<td>Jefferson</td>
</tr>
<tr>
<td></td>
<td>Seiridium Canker</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Dahlia</td>
<td>Botrytis B light</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Dogwood, Flowering</td>
<td>Powdery Mildew</td>
<td>Jefferson(3)</td>
</tr>
<tr>
<td></td>
<td>Spot Anthracnose</td>
<td>Shelby, Jefferson</td>
</tr>
<tr>
<td>Euonymus, Japanese</td>
<td>Euonymus Scale</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Hickory</td>
<td>Downy Leaf Spot (Microstroma)</td>
<td>Jefferson</td>
</tr>
<tr>
<td></td>
<td>Leaf Stem Gall Aphid (Phylloxera)</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Holly, Chinese</td>
<td>Cottony Camellia Scale</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Holly, Lusterleaf</td>
<td>Cottony Camellia Scale</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Hydrangea, Oakleaf</td>
<td>Phytophthora Root Rot</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Iris</td>
<td>Cladosporium Leaf Spot (formerly Heterosporium)</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Juniper, Shore</td>
<td>Phytophthora Root Rot</td>
<td>Jefferson(2)</td>
</tr>
<tr>
<td>Magnolia, Southern</td>
<td>Hail Damage</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Plant</td>
<td>Disease</td>
<td>County</td>
</tr>
<tr>
<td>------------------------------</td>
<td>----------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Maple, Red</td>
<td>Phyllosticta Leaf Spot</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Oak, Southern Red</td>
<td>Leaf Spot (Monochaetia)</td>
<td>Jefferson(2)</td>
</tr>
<tr>
<td>Oak, Water</td>
<td>Oak Leaf Blister</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Peach</td>
<td>Bacterial Spot (Xanthomonas)</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Plum Curculio</td>
<td></td>
<td>Jefferson</td>
</tr>
<tr>
<td>Pear</td>
<td>Fire B light</td>
<td>Jefferson(2)</td>
</tr>
<tr>
<td>Photinia</td>
<td>Entomosporium Leaf Spot</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Pothos Mealybugs</td>
<td></td>
<td>Jefferson</td>
</tr>
<tr>
<td>Rose</td>
<td>Black Spot</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Botrytis B light</td>
<td></td>
<td>Jefferson</td>
</tr>
<tr>
<td>Downy Mildew (Peronospora)</td>
<td></td>
<td>Jefferson</td>
</tr>
<tr>
<td>Nectria Canker</td>
<td></td>
<td>Jefferson</td>
</tr>
<tr>
<td>Obliquebanded Leafroller</td>
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<td>Jefferson</td>
</tr>
<tr>
<td>Rosemary</td>
<td>Powdery Mildew</td>
<td>Jefferson</td>
</tr>
<tr>
<td>St. Augustine</td>
<td>Brown Patch</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Strawberry</td>
<td>Phytophthora Crown Rot</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Tomato</td>
<td>Bacterial Spot (Xanthomonas)</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Yellow Poplar</td>
<td>Yellow Poplar Weevil</td>
<td>Jefferson</td>
</tr>
<tr>
<td>Zoysiagrass</td>
<td>Bipolaris Leaf Spot</td>
<td>Jefferson</td>
</tr>
<tr>
<td></td>
<td>Brown Patch</td>
<td>Jefferson(4)</td>
</tr>
<tr>
<td></td>
<td>Leaf Rust (Puccinia)</td>
<td>Jefferson</td>
</tr>
</tbody>
</table>
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 2003 spray guides. Also, remember the importance of sanitation. The following are some of the disease samples we have seen thus far in June: Fusarium stem rot of pepper; Phytophthora blight on vinca (Catharanthus); Cladosporium leaf mold on tomato; Bipolaris leaf spot on bermuda grass; suspect bacterial spot and bacterial canker on tomato.

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

<table>
<thead>
<tr>
<th>PLANT</th>
<th>DISEASE</th>
<th>DESCRIPTION</th>
<th>CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple</td>
<td>Bitter Rot (Colletotrichum)</td>
<td>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.</td>
<td>Follow the regular spray schedule as described in the Ala. Pest Management (P.M.) Handbook. Sanitation.</td>
</tr>
<tr>
<td>C Cedar-Apple Rust (Gymnosporangium juniperae-virginianae)</td>
<td>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.</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Frogeye Leaf Spot (Botryosphaeria)</td>
<td>Brown, circular spots with purple margins and brown centers.</td>
<td>Sanitation; protective fungicide sprays.</td>
<td></td>
</tr>
<tr>
<td>PLANT</td>
<td>DISEASE</td>
<td>DESCRIPTION</td>
<td>CONTROL</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Bahia</td>
<td>Dollar Spot (Sclerotinia)</td>
<td>Individual grass blades show white spots/blotches with dark borders. Small areas of the field are initially affected.</td>
<td>Maintain proper fertility.</td>
</tr>
<tr>
<td>Bean, Garden</td>
<td>Alternaria Leaf Spot</td>
<td>Brown circular-irregular reddish brown spots become circular with concentrate rings.</td>
<td>Protective fungicide sprays; Sanitation at end of growing season.</td>
</tr>
<tr>
<td></td>
<td>Anthracnose (Colletotrichum)</td>
<td>Reddish, irregular spots of varying sizes on all parts of foliage.</td>
<td>See Ala. Pest Management Handbook.</td>
</tr>
<tr>
<td></td>
<td>Bacterial Blight (Xanthomonas)</td>
<td>Irregular spots (small and large) become dried and light brown in the center and dark, water-soaked on the edge.</td>
<td>Protective spray treatments.</td>
</tr>
<tr>
<td></td>
<td>Fusarium Stem/Root Rot</td>
<td>Lower stems/roots become dried and reddish-brown.</td>
<td>Rotation for 7 or more years.</td>
</tr>
<tr>
<td></td>
<td>Mosaic Virus</td>
<td>Yellow and green alternating patches on leaves.</td>
<td>Remove damaged plants. Control insects.</td>
</tr>
<tr>
<td></td>
<td>Pythium Crown Rot, Root Rot</td>
<td>Tissues become light brown and wet rotted.</td>
<td>Improve soil drainage; see the AL Pest Management Handbook.</td>
</tr>
<tr>
<td></td>
<td>Rhizoctonia Aerial Blight</td>
<td>Leaves develop brown spots and blotches. Damaged tissues may dry and fall apart.</td>
<td>Sanitation. See the Ala. Pest Management Handbook for anthracnose control.</td>
</tr>
<tr>
<td></td>
<td>Rhizoctonia Stem Rot</td>
<td>Lower stems develop brown sunken lesions.</td>
<td></td>
</tr>
<tr>
<td>PLANT</td>
<td>DISEASE</td>
<td>DESCRIPTION</td>
<td>CONTROL</td>
</tr>
<tr>
<td>------------</td>
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<td>---------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Root-Knot</td>
<td>Nematode (Meloidogyne)</td>
<td>Galls on roots.</td>
<td>Rotation, solarization or fumigation.</td>
</tr>
<tr>
<td>Southern</td>
<td>Bight (Sclerotium rolfsii)</td>
<td>White fungal mat on lower stems near soil line; crowns decay.</td>
<td>Terraclor; Sanitation.</td>
</tr>
<tr>
<td>Begonia</td>
<td>Pythium Crown Rot</td>
<td>Lower stem tissues brown and soft.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>Ring Nematode</td>
<td></td>
<td>Roots poorly developed; plant yellowed, stunted.</td>
<td>See ANR-523.</td>
</tr>
<tr>
<td></td>
<td>Rust (Puccinia)</td>
<td>Foliage develops a red-orange powdery coating on leaf blades.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>Sting Nematode</td>
<td>Damage (Belonolaimus)</td>
<td>Roots poorly developed; plants yellowed and stunted.</td>
<td>See ANR-523.</td>
</tr>
<tr>
<td></td>
<td>Dollar Spot (Sclerotinia)</td>
<td>White, bleached spots about the size of a silver dollar appear in lawn; individual grass blades show white spots with dark borders.</td>
<td></td>
</tr>
</tbody>
</table>
See Ala. P. M. Handbook; see Circular ANR-493; collect grass clippings.
<table>
<thead>
<tr>
<th>PLANT</th>
<th>DISEASE</th>
<th>DESCRIPTION</th>
<th>CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Helminthosporium</td>
<td>Circular-elongate spots with brown centers and purple-black borders.</td>
<td>Sanitation; protective fungicide sprays. See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>&quot;Melting Out&quot;</td>
<td>(Bipolaris cynodontis; Exserohilum rostratum)</td>
<td>Leaves, sheaths, stems, crowns and roots may be attacked.</td>
<td></td>
</tr>
<tr>
<td>Leaf Rust (Puccinia)</td>
<td>Leaves are off-color, rusty colored and later brown.</td>
<td></td>
<td>See the Ala. P. M. Handbook.</td>
</tr>
<tr>
<td></td>
<td>Ring Nematode (Criconemella)</td>
<td>Roots poorly developed; plants yellowed, stunted.</td>
<td>See ANR-523.</td>
</tr>
<tr>
<td>Sting Nematode (Belonolaimus)</td>
<td>Roots poorly developed; plants yellowed, stunted.</td>
<td></td>
<td>See ANR-523.</td>
</tr>
<tr>
<td></td>
<td>Take-All Patch (Gaeumannomyces)</td>
<td>Grass yellows and thins with black lesions on roots.</td>
<td>See ANR-823.</td>
</tr>
<tr>
<td></td>
<td>Birch, River Phyllosticta Leaf Spot</td>
<td>Small, circular spots with dark brown margins.</td>
<td>Sanitation of fallen leaves in fall.</td>
</tr>
<tr>
<td></td>
<td>Blackberry Anthracnose (Colletotrichum)</td>
<td>Black irregular-circular spots, blotches on leaves, canes; dieback.</td>
<td>See ANR-50.</td>
</tr>
<tr>
<td>Cercospora Rosette</td>
<td>Blossoms are abnormally thickened with pointed petals. Canes develop bumpy growth habit. Fruit does not set.</td>
<td>Sanitation and protective fungicide sprays.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Crown Gall (Agrobacterium)</td>
<td>Irregular swollen area (gall) develops on lower branches and crown and roots.</td>
<td>Sanitation; crop rotation; Galltrol.</td>
</tr>
<tr>
<td>PLANT</td>
<td>DISEASE</td>
<td>DESCRIPTION</td>
<td>CONTROL</td>
</tr>
<tr>
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<td>-----------------------------------------------------------------------------</td>
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</tr>
<tr>
<td></td>
<td>Septoria Leaf Spot</td>
<td>Round and irregular round, brown leaf spots.</td>
<td>Sanitation. See the AL Pest Management Handbook under ‘Leaf Spot’.</td>
</tr>
<tr>
<td></td>
<td>Blueberry</td>
<td>Anthracnose Fruit Rot (Colletotrichum) Sunken, light blue-brown spots, sometimes with circular, black specks (fruiting bodies).</td>
<td>Sanitation. See the AL Pest Management Handbook.</td>
</tr>
<tr>
<td></td>
<td>Botryosphaeria Blight</td>
<td>New shoots develop brown sunken cankers; growth beyond the canker dies.</td>
<td>Sanitation; Benlate protective sprays.</td>
</tr>
<tr>
<td></td>
<td>Botrytis</td>
<td>Gray-brown blotches on leaves and fruit; gray fruit rot.</td>
<td>Sanitation; Benlate protective sprays.</td>
</tr>
<tr>
<td>Boxwood</td>
<td>Macrophoma Blight</td>
<td>Leaves and some twigs become yellowed/brown; affected tissues may contain tiny black specks, the fruiting bodies of the fungus.</td>
<td>Eliminate stress problems; pruning. See Ala. Pest Management Handbook.</td>
</tr>
<tr>
<td>Buddlea</td>
<td>Phyllosticta Leaf Spot</td>
<td>Numerous small brown circular spots.</td>
<td>Sanitation. Cleary's 3336 or Domain.</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>Butterbeans</td>
<td>Pythium Root Rot</td>
<td>Roots are brown and water-soaked.</td>
<td>See Vegetable Spray Guide.</td>
</tr>
<tr>
<td>Caladium</td>
<td>Anthracnose (Colletotrichum)</td>
<td>Circular, light brown spots on leaves.</td>
<td>Sanitation. Cleary's 3336 or Halt may be applied.</td>
</tr>
<tr>
<td>Cantaloupe</td>
<td>Bacterial Wilt (Erwinia)</td>
<td>Leaves wilt; this is quickly followed by leaf/stem collapse.</td>
<td>Control cucumber beetles.</td>
</tr>
<tr>
<td></td>
<td>Gummy Stem (Mycosphaerella)</td>
<td>Elongated, brown, wet lesions on stems; cracking of stem lesions.</td>
<td>Protective fungicide sprays; sanitation in the fall.</td>
</tr>
<tr>
<td></td>
<td>Watermelon Mosaic Virus</td>
<td>Foliage and fruits develop alternating patches of yellow and green tissues. Growth and crop productivity is reduced.</td>
<td>Rogue out infected plants; control insects; control weeds.</td>
</tr>
<tr>
<td></td>
<td>Dollar Spot (Sclerotinia)</td>
<td>See Bermuda.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td></td>
<td>Slime Mold (Physarum)</td>
<td>Black powdery sporangia on grass blades.</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Take-All Patch (Gaemannomyces)</td>
<td>Dieback and yellowing; black stolon lesions; stress associated.</td>
<td>See the AL Pest Management Handbook and ANR-823.</td>
</tr>
<tr>
<td>Cherry</td>
<td>Septoria Leaf Spot</td>
<td>Reddish-brown circular-angular leaf spots</td>
<td>--</td>
</tr>
<tr>
<td>PLANT</td>
<td>DISEASE</td>
<td>DESCRIPTION</td>
<td>CONTROL</td>
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</tr>
<tr>
<td>Cherry Laurel</td>
<td>Shot Hole (Xanthomonas)</td>
<td>Reddish spots with dark red or black edges; centers of angular spots may fall out.</td>
<td>Sanitation; See Ala. Pest Management Handbook.</td>
</tr>
<tr>
<td>Chrysanthemum</td>
<td>Pythium Crown/Root Rot</td>
<td>Lower stem/crown area becomes water-soaked, brown, rotted.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>Collards</td>
<td>Alternaria Leaf Spot</td>
<td>Gray circular-irregular spots.</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>Black Rot (Xanthomonas)</td>
<td>Leaf edges have V-shaped black lesions; veins become black; inner core of lower stem becomes black.</td>
<td>Rotation for 2-3 years; Fumigation.</td>
</tr>
<tr>
<td>Columbine</td>
<td>Powdery Mildew</td>
<td>White powdery dusting on upper leaf surfaces; necrosis.</td>
<td>Reduce humidity if possible. Cleary's 3336 or Halt may be used for protective control.</td>
</tr>
<tr>
<td>Coneflower</td>
<td>Southern Blight</td>
<td>Soft rot of lower stem; white mold develops at soil line.</td>
<td>Sanitation; deep turn soil; solarization may help.</td>
</tr>
<tr>
<td>Coreopsis</td>
<td>Anthracnose</td>
<td>Red, brown circular spots, sometimes with white centers.</td>
<td>Sanitation; keep foliage as dry as possible. Protective sprays of Cleary's 3336 may help.</td>
</tr>
<tr>
<td>Corn</td>
<td>Bacterial Stalk Rot (Erwinia, Pseudomonas spp.)</td>
<td>Stalks disintegrated into a soft mass, often with an unpleasant odor.</td>
<td>Maintain balanced fertility, good soil drainage and good air circulation between plants.</td>
</tr>
<tr>
<td>Crazy Top (Sclerophthora)</td>
<td></td>
<td>Symptoms vary; generally excessive tillering with rolling and twisting of upper leaves;</td>
<td>abnormal leafy development of the tassel.</td>
</tr>
</tbody>
</table>
Avoid wet soils; sanitation.

<table>
<thead>
<tr>
<th>Common Rust (Puccinia)</th>
<th>Circular-elongate, brown pustules are scattered over upper &amp; lower leaf surfaces. Yellowing &amp; death of leaves and leaf sheaths may occur.</th>
<th>Resistant varieties.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Corn Leaf Blight (Helminthosporium turcicum)</td>
<td>Long, elliptical, gray-green or tan lesions, 2.5-15 cm in length develop first on lower leaves. Disease progresses upward.</td>
<td>Resistant varieties.</td>
</tr>
<tr>
<td>Southern Corn Leaf Blight (Helminthosporium-cochliobolus)</td>
<td>Tan lesions (.25-1.5 inches long) are elongate with parallel sides and brown borders; yellow halos may be present.</td>
<td>Resistant varieties.</td>
</tr>
<tr>
<td>Southern Rust (Puccinia polysora)</td>
<td>Small yellow leaf spots that may become coalesced with eventual leaf blights. Brown-orange uredospore masses develop in uredia on upper leaf surfaces.</td>
<td>---</td>
</tr>
<tr>
<td>Cotton</td>
<td>Alternaria Leaf Spot</td>
<td>Gray-brown irregular leaf spots.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PLANT</th>
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<tbody>
<tr>
<td>Ascochyta Leaf Spot</td>
<td>Light brown circular spots with dark brown margins; spots will coalesce to involve large areas of the leaf surface.</td>
<td></td>
<td></td>
</tr>
<tr>
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<tr>
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</tr>
<tr>
<td>Black Root Rot</td>
<td>Poor growth; yellowing of lower leaves; black lesions on roots.</td>
<td>See Ed Sikora.</td>
<td></td>
</tr>
<tr>
<td>(Thielaviopsis)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fusarium Lower Stem</td>
<td>Lower stems develop red-brown sunken lesions.</td>
<td>Seed treatment.</td>
<td></td>
</tr>
<tr>
<td>Rot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pythium Root Rot</td>
<td>Roots become brown, soft, water-soaked. Seedlings may fall over at soil line.</td>
<td>Seed Treatment.</td>
<td></td>
</tr>
<tr>
<td>Seedling Disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhizoctonia Lower</td>
<td>Brown lesions/cankers near soil line.</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Stem/Root Rot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crabapple</td>
<td>C. A. A. Rust</td>
<td>See Apple - Cedar-apple rust.</td>
<td>--</td>
</tr>
<tr>
<td>(Gymnosporangium)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crepe Myrtle</td>
<td>Cercospora Leaf Spot</td>
<td>Brown leaf spots (circular-irregular) of approximately ½ inch diameter.</td>
<td>--</td>
</tr>
<tr>
<td>Po t d e r y Mildew</td>
<td>Leaves show white dusting; yellowing; new growth distorted.</td>
<td>See Ala. P. M. Handbook.</td>
<td></td>
</tr>
<tr>
<td>(Erysiphe)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cryptomeria</td>
<td>Cytospora Canker</td>
<td>Sunken, elliptical shaped cankers.</td>
<td>Pruning out cankers, making cuts 3-4 inches beyond canker margins.</td>
</tr>
<tr>
<td>Cucumber</td>
<td>Powdery Mildew</td>
<td>White powdery dusting on leaves; blight.</td>
<td>See the Ala. Pest Management Handbook.</td>
</tr>
</tbody>
</table>
| PLANT DISEASE DESCRIPTION CONTROL
<p>| Rhizoctonia Stem Rot  | Brown elongated lesions on lower stems. | --                                              |
| Daisy, Gerbera        | Leaves show a white dusting; yellowing followed by browning. | See Ala. P. M. Handbook.                |</p>
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<tr>
<th>PLANT</th>
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</tr>
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<tbody>
<tr>
<td>Daylily</td>
<td>Kabatiella Leaf Blight</td>
<td>Yellow, becoming necrotic, leaf spots and streaks.</td>
<td>Sanitation; Cleary's 3336 or Halt may help.</td>
</tr>
<tr>
<td>Pythium Crown &amp; Root Rot</td>
<td>Crowns and roots become brown and wet rotted; dieback.</td>
<td>Sanitation; reduce water levels in the area.</td>
<td></td>
</tr>
<tr>
<td>Root Knot Nematode (Meloidogyne)</td>
<td>Round-irregular galls on roots.</td>
<td>Crop rotation to grasses or other suppressive plants. See ANR-856.</td>
<td></td>
</tr>
<tr>
<td>Rust (Puccinia hemerocallidis)</td>
<td>Yellow spots becoming brown; blight; orange specks on leaves.</td>
<td>Sanitation; See PP- . For homeowners, Immunox or Fertiloam System Fungicide may be used.</td>
<td></td>
</tr>
<tr>
<td>Dianthus</td>
<td>Pythium Root Rot</td>
<td>Foliage wilts, yellows; collapses.</td>
<td>Sanitation; Reduce irrigation; improve soil drainage. Plant a different type of bedding plant.</td>
</tr>
<tr>
<td>Dogwood</td>
<td>Anthracnose (Discula)</td>
<td>Small-large irregular brown spots/blotches often with purple margins. Dieback usually follows.</td>
<td>See the Ala. P. M. Handbook.</td>
</tr>
<tr>
<td></td>
<td>Phytophthora Root Rot</td>
<td>Roots become brown and water-soaked. With slight pressure, the outer cortex of the root will slip away from the central root core.</td>
<td>See the Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>Powderly Mildew (Microsphaera)</td>
<td>White dusting on upper leaf surfaces.</td>
<td></td>
<td>Cleary's 3336 or Domain.</td>
</tr>
<tr>
<td>Septoria Leaf Spot</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLANT</td>
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</tr>
<tr>
<td>Genseng</td>
<td>Fusarium Root Rot</td>
<td>Roots become decayed and dark brown-black. Decay is a dry rot.</td>
<td>Crop rotation for 10 or more years.</td>
</tr>
<tr>
<td>Geranium</td>
<td>Alternaria Leaf Spot</td>
<td>Black, small, angular leaf spots.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td></td>
<td>Botrytis Blight</td>
<td>Blossoms and leaves develop brown blotches.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td></td>
<td>Pythium Stem Rot</td>
<td>Dark brown, water-soaked lesions.</td>
<td></td>
</tr>
</tbody>
</table>
### PLANT DISEASE DESCRIPTION CONTROL

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<thead>
<tr>
<th>PLANT</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Hosta</td>
<td>Alternaria Leaf Spot</td>
<td>Brown, slightly zonate, oval to irregularly shaped leaf spots.</td>
<td>Sanitation.</td>
</tr>
<tr>
<td>Hydrangea</td>
<td>Bacterial Leaf Spot</td>
<td>Dark brown angular leaf spots with water soaked edges.</td>
<td>Sanitation; water at pot level if possible.</td>
</tr>
<tr>
<td></td>
<td>Cercospora Leaf Spot</td>
<td>Dark brown, irregular shaped spots.</td>
<td>Sanitation; Cleary's 3336 or Halt will help.</td>
</tr>
<tr>
<td></td>
<td>Colletotrichum Petal Blight</td>
<td>Orange-brown circular spots, blotches.</td>
<td>Cleary's 3336 or Domain.</td>
</tr>
</tbody>
</table>

(cankers) develop on stems.

Grape Anthracnose (Colletotrichum) Brown round-irregular spots (about C inch or larger) on foliage/stem. Sanitation; See the Ala. P. M. Handbook.

Black Rot (Guignardia) Dark brown circular spots on leaves and fruit. Protective fungicide sprays; Sanitation.

Botrytis Blight Leaves/fruit develop a gray brown blotches/rot. See Ala. P. M. Handbook.

Hawthorn Quince Rust (Gymnosporangium clavipes) Deterioration of fruit with white-bordered orange short spore projections from fruit. Sanitation; see AL Pest Management Handbook under cedar apple rust.

Hawthorn, Indian 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.

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<tr>
<td>Hosta</td>
<td>Alternaria Leaf Spot</td>
<td>Brown, slightly zonate, oval to irregularly shaped leaf spots.</td>
<td>Sanitation.</td>
</tr>
<tr>
<td>Hydrangea</td>
<td>Bacterial Leaf Spot</td>
<td>Dark brown angular leaf spots with water soaked edges.</td>
<td>Sanitation; water at pot level if possible.</td>
</tr>
<tr>
<td></td>
<td>Cercospora Leaf Spot</td>
<td>Dark brown, irregular shaped spots.</td>
<td>Sanitation; Cleary's 3336 or Halt will help.</td>
</tr>
<tr>
<td></td>
<td>Colletotrichum Petal Blight</td>
<td>Orange-brown circular spots, blotches.</td>
<td>Cleary's 3336 or Domain.</td>
</tr>
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</tr>
<tr>
<td>Pythium Root Rot</td>
<td>Roots become soft, brown and water-soaked.</td>
<td>See the Ala. P. M. Handbook.</td>
<td></td>
</tr>
<tr>
<td>Ivy, English</td>
<td>Anthracnose (Colletotrichum)</td>
<td>Brown circular-irregular spots on the foliage. Spot coalescence may occur.</td>
<td>See the Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>Bacterial Leaf Spot (Xanthomonas)</td>
<td>Black, angular, water-soaked spots on foliage.</td>
<td>See Ala. P. M. Handbook.</td>
<td></td>
</tr>
<tr>
<td>Rhizoctonia Leaf &amp; Stem Rot</td>
<td>Brown, dry lesions on leaves/stems.</td>
<td>Sanitation; Cleary's protective sprays.</td>
<td></td>
</tr>
<tr>
<td>Juniper</td>
<td>Cercospora Blight</td>
<td>Inner sections of branches turn brown and needles drop.</td>
<td>Benlate protective sprays. Sanitation.</td>
</tr>
<tr>
<td>Phoma Needle Blight</td>
<td>Needle Browning.</td>
<td>Sanitation. Fungicides labeled to control Phomopsis should help.</td>
<td></td>
</tr>
<tr>
<td>Phomopsis Blight</td>
<td>Branches dieback beginning at twig tips.</td>
<td>Sanitation; see the Ala. P. M. Handbook.</td>
<td></td>
</tr>
<tr>
<td>Phytophthora Root Rot</td>
<td>Roots become browned, water-soaked.</td>
<td>See the Ala. P. M. Handbook.</td>
<td></td>
</tr>
<tr>
<td>Lantana</td>
<td>Pythium Root Rot</td>
<td>Roots become light brown and wet rotted.</td>
<td></td>
</tr>
</tbody>
</table>
Sanitation; reduce water in the area.

<table>
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<tr>
<th>PLANT</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Leucothoe</td>
<td>Pythium Root Rot; may be secondary</td>
<td>Roots become water-soaked, slightly brown, rotted; foliage yellows; dieback; wilt.</td>
<td>Sanitation; reduce irrigation; improve soil drainage; remove some soil in root zone area of damaged plant before replanting.</td>
</tr>
<tr>
<td>Leyland Cypress</td>
<td>Seiridium Canker</td>
<td>Sunken lesions on trunk and branches produce a gummy sap that runs down the bark of affected area.</td>
<td>Pruning. See AL Pest Management Handbook.</td>
</tr>
<tr>
<td>Liriope</td>
<td>Anthracnose</td>
<td>Brown spots, blotches on leaves and leaf tips.</td>
<td>Sanitation; See AL P. M. Handbook.</td>
</tr>
<tr>
<td>Maple</td>
<td>Anthracnose (Kabatiella)</td>
<td>Brown circular-irregular spots/ blotches occur on leaves; large leaf areas may be involved. Defoliation may result.</td>
<td>Sanitation. See the AL P. M. Handbook.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLANT</td>
<td>DISEASE</td>
<td>DESCRIPTION</td>
<td>CONTROL</td>
</tr>
<tr>
<td>Phyllosticta Leaf Spot</td>
<td>Circular (sometimes) irregular leaf spots. Leaf spot borders are often distinctive. Severe spotting will result in defoliation.</td>
<td>Sanitation. See the Ala. P. M. Handbook.</td>
<td></td>
</tr>
<tr>
<td>Mondo Grass</td>
<td>Anthracnose (Colletotrichum)</td>
<td>Brown spots blotches develop on leaves, often at/near leaf tips.</td>
<td>Sanitation. Cleary's or Domain protective sprays or a benomyl product labelled for ornamentals.</td>
</tr>
<tr>
<td>Muscadine</td>
<td>Black Rot (Guignardia bidwellii)</td>
<td>Brown, irregular spots develop on leaves, stems; black rot develops on fruit.</td>
<td>Sanitation; See the AL Pest Management Handbook or ANR-50 for homeowners.</td>
</tr>
<tr>
<td>Nectarine</td>
<td>Bacterial Spot</td>
<td>See Peach.</td>
<td>--</td>
</tr>
</tbody>
</table>

22
<table>
<thead>
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<th>PLANT</th>
<th>DISEASE</th>
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<tbody>
<tr>
<td>Oak</td>
<td>Brown Rot</td>
<td>See Peach.</td>
<td>-</td>
</tr>
<tr>
<td>Oak</td>
<td>Algal Leaf Spot (Cephalereus)</td>
<td>Red-green circular spots.</td>
<td>Sanitation.</td>
</tr>
<tr>
<td></td>
<td>Anthracnose (Apiognomonia)</td>
<td>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.</td>
<td>Sanitation of leaves in the fall. See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>Monochaetia Leaf Spot</td>
<td>Monochaetia Leaf Blotch</td>
<td>Light brown, circular-irregular leaf spots; may sometimes be confused with oak leaf blister.</td>
<td>Sanitation of leaves in the fall.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Oak, Chestnut</td>
<td>Xylella Scorch</td>
<td>Oaks develop brown leaf edges; dieback.</td>
<td>Tree removal.</td>
</tr>
<tr>
<td>Oak, Southern Red</td>
<td>Alternaria Leaf Spot</td>
<td>Oval to irregular brown spots; may be zonated spots.</td>
<td>Sanitation of fallen leaves.</td>
</tr>
<tr>
<td></td>
<td>Monochaetia Leaf Blotch</td>
<td>Light brown, circular-irregular leaf spots; may sometimes be confused with oak leaf blister.</td>
<td>Sanitation of leaves in the fall.</td>
</tr>
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<tr>
<td>--------------</td>
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</tr>
<tr>
<td>Oak, Willow</td>
<td>Botryosphaeria Canker</td>
<td>Sunken area; cracked bark along edges; dieback.</td>
<td>Pruning.</td>
</tr>
<tr>
<td>Slime Flux</td>
<td>A thick sap runs down trunk areas; where sap has dried, the gray-white, crusty layer of dried sap remains.</td>
<td>There is no cure. Drain holes may be inserted. Avoid wound.</td>
<td>Sanitation where possible.</td>
</tr>
<tr>
<td>Okra</td>
<td>Rhizoctonia Crown Rot</td>
<td>Brown, dry lesions on lower stems.</td>
<td>Sanitation; crop rotation for 1-2 years.</td>
</tr>
<tr>
<td>Paspalum</td>
<td>Brown Patch (Rhizoctonia)</td>
<td>Foliage blight in patches.</td>
<td>See Ala. P. M. Handbook in Turfgrass Section.</td>
</tr>
<tr>
<td></td>
<td>Black Eye Cowpea Mosaic Virus/Other Mosaic Virus</td>
<td>Yellow and green mosaic pattern on leaves; reduced growth.</td>
<td>Plant resistant varieties - 'Mississippi Cream' or 'Pink Eye Purple Hull BVR'.</td>
</tr>
</tbody>
</table>

<p>| Charcoal Rot (Macrophomina) | 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. |
| Fusarium Crown Rot/ Root Rot | Brown or reddish-brown lesions at soil line and on roots. | 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. |</p>
<table>
<thead>
<tr>
<th>PLANT</th>
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</tr>
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<tbody>
<tr>
<td></td>
<td>Rhizoctonia Stem Rot</td>
<td>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.</td>
<td>See the Ala. P. M. Handbook.</td>
</tr>
<tr>
<td></td>
<td>Root-Knot Nematode</td>
<td>Galls, irregular, on roots.</td>
<td>Rotate to grasses.</td>
</tr>
<tr>
<td>Peach</td>
<td>Bacterial Leaf Spot</td>
<td>Brown or reddish-brown, irregular-circular spots which fall out leaving shot holes; may be yellowing around spots.</td>
<td>Sanitation; spray for commercial growers.</td>
</tr>
<tr>
<td></td>
<td>Brown Rot</td>
<td>Twigs may die; fruit develops a gray-brown rot. Gray mycelium &amp; spores of fungus will develop during humid weather.</td>
<td>See Ala. P. M. Handbook; Sanitation.</td>
</tr>
<tr>
<td></td>
<td>Gummosis</td>
<td>Bark becomes sunken and cracked; oozing of sap.</td>
<td>Sanitation.</td>
</tr>
<tr>
<td></td>
<td>Rhizopus Soft Rot</td>
<td>Fruit becomes brown, rotted, and watery.</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Scab</td>
<td>On the fruit, small (1/16&quot; diam.) olive, velvety spots may develop into large blotches. Spots/blotches are superficial. On twigs small (C -¼ inch diam.), slightly raised, green-brown spots develop on lower leaf surfaces.</td>
<td>Protective fungicide sprays; sanitation.</td>
</tr>
<tr>
<td>Peanut</td>
<td>Crown Rot</td>
<td>Lower stem becomes dry rotted.</td>
<td>See A. Hagan.</td>
</tr>
<tr>
<td>PLANT</td>
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</tr>
<tr>
<td>Pear</td>
<td>Cedar-Hawthorne Rust</td>
<td>Cedar cankers with orange urediospores and witches brooms. Pears with yellow leaf spots and orange aecial 'cups' on lower leaf surface and fruit.</td>
<td>See control for cedar apple rust.</td>
</tr>
<tr>
<td></td>
<td>Fabraea Leaf Spot</td>
<td>Black circular leaf spots (2-4 mm) develop on the foliage. Severe spotting may cause early defoliation.</td>
<td>Sanitation. The regular spray schedule for apples/pears may give some protective control. For flowering pear, see the Ala. P. M. Handbook.</td>
</tr>
<tr>
<td></td>
<td>Fireblight (Erwinia)</td>
<td>Dieback develops on branches. Dead branches become black. Black spots/blotches may develop along the leaf margins.</td>
<td>Prune out damage 10-14 inches beyond the margin of the damaged tissue.</td>
</tr>
<tr>
<td></td>
<td>Peas, Southern</td>
<td>Lower stems develop a dry, shredded rot.</td>
<td>Sanitation. See AL Pest Management</td>
</tr>
</tbody>
</table>

Early Leaf Spot (Cercospora) 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 (Gymnosporangium globosum) 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.
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**  
(Danthononas)  
Dark brown, circular to irregular spots; shot holes; leaf yellowing & drop.  
Protective fungicide sprays; sanitation.

**Bacterial Wilt**  
(Pseudomonas)  
Plants rapidly wilt while green.  
Crop rotation away from tomato, potato, pepper, eggplant for 3-5 years.

<table>
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<tbody>
<tr>
<td>Petunia</td>
<td><strong>Phytophthora Foliage Blight/Root Rot</strong></td>
<td>Brown, sometimes wet-looking lesions; dieback.</td>
<td>Sanitation; See Ala. P. M. Handbook.</td>
</tr>
</tbody>
</table>
| Phlox | **Southern Blight**  
(Sclerotium rolfsii) | Soft rot of lower stem; white mold may develop at lower stem. | |
| **Phytophthora capsici**  
Crown Rot | Lower stems become brown and water-soaked. | Sanitation. Solarization or fumigation. See handbook. |
| **Southern Blight**  
(Sclerotium rolfsii) | 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. |
Sanitation. Deep turn soil; solarization may help.

**Pine**

**Lophodermium Needle Cast** (Ploioderma)

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**

**Alternaria Leaf Spot**

Brown, oval-irregular spots; zonated spots may be present.


**Cercospora Leaf Spot**

Brown, circular-irregular blotches about ½ inch diameter.

Sanitation of fallen leaves; protective Daconil or Bravo sprays.

**Plum**

**Bacterial Leaf Spot** (Xanthomonas)

See Peach Bacterial Leaf Spot.

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<tbody>
<tr>
<td><strong>Black Knot</strong></td>
<td>(Dibotryon)</td>
<td>Black, elongated, irregular gall-like tissue on branches; dieback.</td>
<td>See Circular ANR-217. Only captan and ferbam are available for spray treatments.</td>
</tr>
<tr>
<td><strong>Plum Leaf Scald</strong></td>
<td>(Xylella)</td>
<td>Leaf edges become brown, often zonated-brown. Dieback.</td>
<td>Remove trees to prevent disease spread.</td>
</tr>
<tr>
<td><strong>Potato, Irish</strong></td>
<td><strong>Late Blight</strong></td>
<td>Brown blotches on leaves/stems.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td><strong>Rhizoctonia Lower Stem Rot</strong></td>
<td></td>
<td>Dry, brown decay.</td>
<td>Sanitation.</td>
</tr>
<tr>
<td><strong>Root-Knot Nematode</strong></td>
<td></td>
<td>Tubers develop knots on skin surface.</td>
<td>Rotation; solarization.</td>
</tr>
<tr>
<td><strong>Scab</strong> (Streptomyces)</td>
<td></td>
<td>Small (0.12-0.25 inch or 5-8 mm diam.) brown lesions which may be sunken or raised.</td>
<td></td>
</tr>
</tbody>
</table>
Crop rotation; Maintain soil moisture; Avoid over-liming; Maintain soil pH at 5.3-5.5; Use scab tolerant varieties.

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<tbody>
<tr>
<td>Rose</td>
<td>Black Spot</td>
<td>Black spots with fringed borders develop on leaves. Defoliation will result from severe spotting.</td>
<td>Sanitation. See the Ala. P. M. Handbook.</td>
</tr>
<tr>
<td></td>
<td>Botrytis Blossom Blight</td>
<td>Brown spots and blotches on petals; when conditions are cool and humid, a gray mold is seen.</td>
<td>Sanitation. See the AL Pest Management Handbook.</td>
</tr>
<tr>
<td></td>
<td>Mosaic Virus</td>
<td>Yellow line patterns, mosaics.</td>
<td>Plant removal.</td>
</tr>
<tr>
<td></td>
<td>Powdery Mildew</td>
<td>White dusting on leaf surfaces; new growth</td>
<td></td>
</tr>
<tr>
<td>White Mold</td>
<td>(Sclerotium rolfsii)</td>
<td>Plants wilted; a white mold often present at the soil line.</td>
<td>See Ala. P. M. Handbook (commercial).</td>
</tr>
<tr>
<td>Privet</td>
<td>Cercospora Leaf Spot</td>
<td>Medium brown circular spots.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>Rhododendron</td>
<td>Cercospora Leaf Spot</td>
<td>Brown, irregularly shaped leaf spots.</td>
<td>Sanitation; Cleary's 3336 or Halt will provide protective control.</td>
</tr>
<tr>
<td></td>
<td>Phytophthora Root Rot</td>
<td>Roots become brown and water-soaked.</td>
<td>See the Ala. P. M. Handbook.</td>
</tr>
<tr>
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<tr>
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</tr>
<tr>
<td>Soybean</td>
<td>Bacterial Leaf Spot</td>
<td>Small, brown, angular leaf spots with water-soaked edges.</td>
<td>See Ed Sikora.</td>
</tr>
<tr>
<td></td>
<td>Cyst Nematode (Heterodera)</td>
<td>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.</td>
<td>Rotation; resistant cultivars; See Soybean Pest Management, Circular ANR-413.</td>
</tr>
<tr>
<td></td>
<td>Pythium Seedling Disease</td>
<td>Usually lower stem</td>
<td></td>
</tr>
<tr>
<td>PLANT</td>
<td>DISEASE</td>
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<td>CONTROL</td>
</tr>
<tr>
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<td>----------------------------------------------</td>
</tr>
<tr>
<td>Squash</td>
<td>Bacterial Wilt (Erwinia)</td>
<td>Individual leaves wilt and turn brown. A sticky ooze will stream out of petiole when it is placed in warm water.</td>
<td>Control cucumber beetles; sanitation.</td>
</tr>
<tr>
<td></td>
<td>Cucumber Mosaic Virus (CMV)</td>
<td>Leaves develop a mottled green-yellow or dark green-light green coloration; new growth is stunted.</td>
<td>Remove affected plants; Control insects and weeds.</td>
</tr>
<tr>
<td></td>
<td>Tobacco Ringspot Virus</td>
<td>Leaves show mosaic, stunting.</td>
<td>Sanitation; crop rotation for 2-4 years.</td>
</tr>
<tr>
<td></td>
<td>Watermelon Mosaic Virus (WMV) II</td>
<td>See comments for CMV.</td>
<td>--</td>
</tr>
<tr>
<td>Squash, Zucchini</td>
<td>Mosaic Virus</td>
<td>A somewhat regular pattern of green and</td>
<td></td>
</tr>
<tr>
<td>PLANT</td>
<td>DISEASE</td>
<td>DESCRIPTION</td>
<td>CONTROL</td>
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</tr>
<tr>
<td>Sycamore</td>
<td>Powdery Mildew (Microsphaera)</td>
<td>White coating develops on leaves; new leaves are deformed.</td>
<td>Sanitation of leaves in the fall.</td>
</tr>
<tr>
<td></td>
<td>Xylella Scorch Disease</td>
<td>Leaf edges become browned; dieback.</td>
<td>Tree removal.</td>
</tr>
<tr>
<td>Thrift</td>
<td>Rhizoctonia Blight</td>
<td>Leaves develop brown spots and blotches.</td>
<td>Cleary's 3336 or a benomyl labelled for ornamentals will give protective control; sanitation.</td>
</tr>
<tr>
<td>Tomato</td>
<td>Alternaria Alternata Leaf Spot</td>
<td>Small, circular, brown leaf spots.</td>
<td>Sanitation. See control comments for early blight.</td>
</tr>
<tr>
<td>PLANT DISEASE</td>
<td>DESCRIPTION</td>
<td>CONTROL</td>
<td></td>
</tr>
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</tr>
</tbody>
</table>
| **Bacterial Canker**  
* (Corynebacterium clavibacter) | Elongate brown, wet-looking lesions or cankers on stems; centers of cankers dry and look white. | Protective sprays; Sanitation. |
| **Bacterial Speck** | Small, dark, greasy irregular spots on leaves and stems. A yellow halo may surround spots. Spots may merge together. | See AL Pest Management Handbook. Strict sanitation. |
| **Bacterial Spot**  
* (Xanthomonas) | Small, dark, greasy irregular spots on leaves and stems. Fruit spots are raised, brown and scabby. | See Ala. P. M. Handbook. Strict sanitation. |
| **Bacterial Wilt**  
| **Blossom End Rot** | Hard, black lesions at blossom end of fruit. | See the Ala. P. M. Handbook. |
| **Buckeye Rot**  
* (Phytophthora) | 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**  
* (Alternaria solani) | Brown circular-irregular spots with target-like ring pattern. | Fungicide sprays; Sanitation in the fall. |
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<tr>
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</thead>
<tbody>
<tr>
<td>Fusarium Wilt</td>
<td>Lower leaves become yellow and yellowing/wilting progresses up the plant.  One sided effects may occur.</td>
<td>Rotation; Plant varieties resistant to Fusarium wilt.</td>
</tr>
<tr>
<td>Late Blight (Phytophthora infestans)</td>
<td>Brown lesions (blotches) on leaves/stems.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>Leaf Mold (Fulvia falva)</td>
<td>Gray fungal growth in blotches on leaves.</td>
<td>See Ala. P. M. Handbook.</td>
</tr>
<tr>
<td>Pith Necrosis (Pseudomonas)</td>
<td>Dieback, wilt above necrotic stem area. Internally, the stem is hollow with characteristic plant tissue threads across the hollow stem internal areas.</td>
<td>Sanitation. See the AL Pest Management Handbook under bacterial canker.</td>
</tr>
<tr>
<td>Southern Blight (Sclerotium rolfsii)</td>
<td>White fungal mat occurs at soil line where stem becomes decayed; plants die due to death of lower stem.</td>
<td>Terraclor; crop rotation.</td>
</tr>
<tr>
<td>Tomato Spotted Wilt Virus</td>
<td>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 &amp; die.</td>
<td>Sanitation; Control thrips.</td>
</tr>
<tr>
<td>White Mold (Sclerotinia)</td>
<td>See Tomato Southern Blight.</td>
<td>--</td>
</tr>
<tr>
<td>PLANT</td>
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</tr>
<tr>
<td>Verbena</td>
<td>Powdery Mildew</td>
<td>White dusty coating on leaves; leaves yellow and later turn brown.</td>
</tr>
<tr>
<td></td>
<td>Fusarium Crown Rot</td>
<td>Brown, dry rotting on stem at soil line.</td>
</tr>
<tr>
<td></td>
<td>Phytophthora Foliage Blight</td>
<td>Dark brown lesions on stems and leaves; dieback.</td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td>Rhizoctonia Aerial Blight</td>
<td>Leaves become dull green and then brown. Large areas of leaves become browned.</td>
<td>See Ala. P. M. Handbook.</td>
<td></td>
</tr>
<tr>
<td>Tomato Spotted Wilt Virus</td>
<td>New growth is stunted. Older leaves may show black blotches.</td>
<td>Sanitation. Insecticides to control thrips.</td>
<td></td>
</tr>
<tr>
<td>Vinca Minor</td>
<td>Anthracnose (Colletotrichum)</td>
<td>Small-large brown blotches on leaves.</td>
<td>See the Ala. P. M. Handbook under perennial vinca.</td>
</tr>
<tr>
<td>Watermelon</td>
<td>Anthracnose (Colletotrichum)</td>
<td>Roughly circular, black-brown lesions with irregular margins on leaves; black spots occur on fruit; lesions on stems and petioles are tan and elongated.</td>
<td>See the Ala. P. M. Handbook.</td>
</tr>
</tbody>
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<tr>
<td>Watermelon Mosaic</td>
<td>Virus</td>
<td>Yellow/green mosaic; leaves may become somewhat strap-shaped.</td>
<td>Sanitation. Control aphids.</td>
</tr>
<tr>
<td>Wheat</td>
<td>Scab (Fusarium)</td>
<td>Heads covered with pink spores.</td>
<td>Sanitation.</td>
</tr>
<tr>
<td>Yaupon, Dwarf</td>
<td>Phytophthora Root Rot</td>
<td>Roots become brown, water-soaked.</td>
<td>Sanitation.</td>
</tr>
<tr>
<td>Yew</td>
<td>Pestalotia Blight</td>
<td>Dieback or needle blight; cankers on small twigs; weak pathogen on stressed plants, usually.</td>
<td>Sanitation; remove stress factors.</td>
</tr>
<tr>
<td>Zinnia</td>
<td>Bacterial Leaf Spot (Xanthomonas)</td>
<td>Dark, water-soaked, angular spots, sometimes with a yellow halo around the spot edges.</td>
<td>Strict sanitation. Do not water over-head.</td>
</tr>
<tr>
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</tr>
<tr>
<td>Zoysia</td>
<td>Bipolaris Blight, Leaf Spot/Crown Rot (also Exserohilum rostratum)</td>
<td>Small, brown, elongated spots on leaves and crowns.</td>
<td>See Ala. P. M. Handbook; Collect grass clippings.</td>
</tr>
<tr>
<td></td>
<td>Dollar Spot (Sclerotinia)</td>
<td>See Bermuda.</td>
<td>See Bermuda.</td>
</tr>
<tr>
<td></td>
<td>Rust (Puccinia)</td>
<td>Red-orange powdery dusting on leaf blades.</td>
<td>Collect grass clippings; Usually fungicides are not needed.</td>
</tr>
<tr>
<td></td>
<td>Take-All Patch (Gaeumannomyces)</td>
<td>Scattered, individual plants yellow &amp; die in an area; sections/areas of turf thin and yellow.</td>
<td>Keep soil pH near 6.0 (or slightly below); use only ammonia-based fertilizers.</td>
</tr>
</tbody>
</table>

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!