JANUARY PLANT DISEASES
FROM THE AUBURN PLANT DIAGNOSTIC LAB

JANUARY INSECT REPORT

DISEASE POSSIBILITIES FOR MARCH

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The Lab received 31 samples in January, 28 for plant problem diagnosis and 3 for identification. Dr. Ed Sikora found the first 2012 U. S. incident of **Asian Soybean Rust** on kudzu in Montgomery. There were 2 diagnoses of **Citrus Tristeza Virus (CTV)** on Satsuma. This virus can cause dieback, chlorosis, wilt, leaf curl, decline, thickened bark at bud union – symptoms which may vary in severity depending on the susceptibility of the rootstock. Sour orange is rarely, if ever, used as rootstock anymore because of its susceptibility to CTV, but resistant rootstock may provide a reservoir for spread of the virus. The virus is spread most effectively by the **Brown Citrus Aphid**, but several aphid species are capable of transmitting this virus.

**Table 1.** January Plant Diseases Received at the Auburn Plant Diagnostic Lab

<table>
<thead>
<tr>
<th>Plant</th>
<th>Disease/Problem</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Azalea</td>
<td>Azalea Lace Bug</td>
<td>*</td>
</tr>
<tr>
<td>Boxwood, American</td>
<td>Armillaria Root Rot</td>
<td>Madison</td>
</tr>
<tr>
<td>Centipede</td>
<td>Brown Patch</td>
<td>Covington</td>
</tr>
<tr>
<td>Clevera</td>
<td>Aphids</td>
<td>Montgomery</td>
</tr>
<tr>
<td>Holly</td>
<td>Suspect Fertility Problem</td>
<td>Tallapoosa</td>
</tr>
<tr>
<td></td>
<td>Putnam and Greedy Scales</td>
<td>Chilton</td>
</tr>
<tr>
<td>Kudzu</td>
<td>Asian Soybean Rust</td>
<td>Baldwin, Montgomery</td>
</tr>
<tr>
<td>Oats</td>
<td>Barley Yellow Dwarf Virus, Helminthosporium</td>
<td>Pike</td>
</tr>
<tr>
<td></td>
<td>Leaf Spot, Suspect Cold Damage</td>
<td></td>
</tr>
<tr>
<td>Satsuma</td>
<td>Camphor Scale</td>
<td>Montgomery</td>
</tr>
<tr>
<td></td>
<td>Citrus Tristeza Virus</td>
<td>*(2)</td>
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<tr>
<td></td>
<td>Nutrient Disorder</td>
<td>*</td>
</tr>
<tr>
<td>Soft Rush</td>
<td>Delphacid Planthopper, Shore Fly</td>
<td>Lee</td>
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<tr>
<td></td>
<td>Mealybugs</td>
<td>Lee</td>
</tr>
<tr>
<td></td>
<td>Spiders</td>
<td>Lee (6)</td>
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<tr>
<td>St. Augustine</td>
<td>Take-All Patch</td>
<td>Houston</td>
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<tr>
<td>Turmeric</td>
<td>Rhizome Rot, Root-Knot Nematode</td>
<td>Lee</td>
</tr>
<tr>
<td>Viola</td>
<td>Nutrient Disorder</td>
<td>*(2)</td>
</tr>
<tr>
<td>Wheat</td>
<td>Cold Damage</td>
<td>Limestone</td>
</tr>
</tbody>
</table>

*Counties are not reported for greenhouse and nursery samples.*
Table 2. January Insect Report (C. Ray)

<table>
<thead>
<tr>
<th>County</th>
<th>Host/Location</th>
<th>Category</th>
<th>Common Name</th>
<th>Scientific Name</th>
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</thead>
<tbody>
<tr>
<td>Lamar</td>
<td>Home</td>
<td>Household – Miscellaneous</td>
<td>Tree Bug</td>
<td>Brochymena sp.</td>
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<tr>
<td>Elmore</td>
<td>Human Sting</td>
<td>Medical</td>
<td>Ichneumon Wasp</td>
<td>Ophion sp.</td>
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<tr>
<td>Montgomery</td>
<td>Home</td>
<td>Household – Miscellaneous</td>
<td>Box Elder Bug</td>
<td>Boisea trivittata</td>
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<tr>
<td>Hale</td>
<td>Cherrybark Oak</td>
<td>Ornamental</td>
<td>Gall Wasps</td>
<td>Cynipidae</td>
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<tr>
<td>Mobile</td>
<td>Home</td>
<td>Household - Stored Product</td>
<td>Drugstore Beetle</td>
<td>Stegobium paniceum</td>
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<tr>
<td>Covington</td>
<td>Home</td>
<td>Household – Miscellaneous</td>
<td>Blow Fly</td>
<td>Calliphoridae</td>
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<tr>
<td>Butler</td>
<td>Home</td>
<td>Household – Miscellaneous</td>
<td>Argentine Ants</td>
<td>Linepithema humile</td>
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<tr>
<td>Lee</td>
<td>Juncus in Greenhouse</td>
<td>Miscellaneous</td>
<td>Spider Egg Case and Silk</td>
<td>Salticidae</td>
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<tr>
<td>Lee</td>
<td>Juncus in Greenhouse</td>
<td>Miscellaneous</td>
<td>Planthoppers</td>
<td>Delphacidae</td>
</tr>
<tr>
<td>Lee</td>
<td>Juncus in Greenhouse</td>
<td>Miscellaneous</td>
<td>Mealybugs</td>
<td>Trionymus sp.</td>
</tr>
</tbody>
</table>

Disease Possibilities for March

Virus symptoms on wheat and other small grains may be more evident in March. **Barley Yellow Dwarf Virus** (BYDV), an aphid transmitted virus, causes oats to develop a red coloration which begins at the tips of older leaves and progresses down to the leaf base. In addition to the reddening symptom (which sometimes can be confused with cold damage or nutrient deficiency), infected plants become stunted with excessive tillering. The developing spikes may be white and sterile. BYDV infection may cause the older leaves of wheat to become bright yellow. Severe plant damage may be caused by this disease. **Soilborne Wheat Mosaic Virus** (SBWMV) may also appear. Symptoms include a yellow streaking or mosaic pattern on the otherwise green wheat leaves. Infected plants may become severely stunted and seedlings do not produce heads. This virus is transmitted and maintained in the soil by the fungus *Polymxa graminis*. Disease occurrence appears to be more prevalent in low wet areas. Symptoms of SBWMV infection become diminished as temperatures warm in the spring. Barley and rye are also susceptible.

Other diseases often reported in early spring include **Helminthosporium Leaf Spots** on bermuda and small grains, and the beginning of **powdery mildews, rusts**, and/or **Septoria Leaf Blotch** on small grains. Some **downy mildews**, **Botrytis Blight**, and **bacterial leaf spots** may appear on greenhouse crops.
The following list includes some of the disease problems with their symptoms commonly received in March and early April. Refer to the pertinent fact sheets, timely information sheets, spray guides, and the Alabama Pest Management Handbook for detailed control measures.

**Alfalfa Spring Black Stem and Leaf Spot (Phoma):** Numerous small dark brown to black spots develop on the lower leaves, petioles, and stems in early spring. Leaf spots may increase in size and coalesce; becoming light to medium brown, then leaves may turn yellow, wither, and fall. Lesions on stems and petioles may enlarge and blacken large areas, girdling the base of the plant and causing death to foliage. Phoma may also cause a crown and root rot. Seed pods may discolor and shrivel in humid conditions. CONTROL: Early cutting; proper fertility management.

**Alfalfa Stemphylium Leaf Spot:** Oval, light brown, slightly sunken lesions are often surrounded by a light yellow halo. Lesions may expand into concentric rings which may under severe conditions cause the leaf to yellow and fall prematurely. CONTROL: Frequent or early harvesting.

**Alfalfa White Mold (Sclerotinia):** This crown and stem rot causes lower stems to become yellow and limp, then dark brown and soft. During cool, wet weather a cottony web-like growth (mycelia) can be seen on stems and crowns of infected plants, and may spread over the soil. White spherical bodies up to 2 mm (sclerotia) develop on the mycelia, darkening as they grow to tan, then brown-black. CONTROL: Deep plowing buries sclerotia. Spring planting reduces the incidence; late summer and fall seedlings should be planted at the earliest possible date; 2-3 year rotation from forage legumes.

**Apple, Pear Fire Blight (Erwinia):** Affected plant parts appear scorched by fire and may have a watery ooze under humid conditions. CONTROL: Sanitation; resistant varieties; see Alabama Pest Management Handbook; see ANR-542.

**Aucuba Pestalotia Leaf Spot:** Irregular, light gray leaf spots; usually develop after cold or other injury. CONTROL: Sanitation.

**Azalea Botryosphaeria Canker:** Sunken cracked lesions on branches. This canker often follows a wound, cold injury, or other stress. CONTROL: Sanitation.

**Azalea Botrytis Petal Blight:** Blossoms with large, brown, irregular areas, these being covered with a delicate gray webbing during humid weather. CONTROL: See Alabama Pest Management Handbook.

**Azalea Cercospora Leaf Spot:** Dark brown, angular spots about 5 mm. diameter; usually associated with stressed plants. CONTROL: Remove fallen leaves; Maintain proper fertility and watering schedules; Cleary’s 3336 may be applied as a protective spray.

**Azalea Colletotrichum Leaf Spot (Anthracnose):** Olive to dark brown angular spots up to 0.5 cm. diameter, usually associated with stressed plants. CONTROL: Remove
fallen leaves; maintain proper fertility and watering schedules; Cleary’s 3336 may be applied as a protective spray.

**Azalea Exobasidium Gall**: Leaves and blossoms develop often large green-pink-white fleshy galls. **CONTROL**: See Alabama Pest Management Handbook.

**Azalea Ovulinia Petal Blight**: Leaves and blossoms develop often large green-pink-white fleshy galls. **CONTROL**: See Alabama Pest Management Handbook.

**Azalea Pestalotia Blight** (secondary): Dry gray-white blotches on leaves, often on leaf edges. **CONTROL**: Sanitation.

**Azalea Phomopsis Twig Blight**: Dry gray-white blotches on leaves, often on leaf edges. **CONTROL**: Sanitation.

**Azalea Phytophthora Crown and Root Rot**: Dry gray-white blotches on leaves, often on leaf edges. **CONTROL**: Sanitation; see Alabama Pest Management Handbook.

**Azalea Rhizoctonia Aerial Blight**: Irregular brown spots on foliage which may involve half or all of the leaf area. Dead leaves will fall. **CONTROL**: See Alabama Pest Management Handbook.

**Begonia Pythium Crown Rot, Root Rot**: Lower stem and roots become light brown, rotted, and water-soaked. The outer cortex of the root is easily separated from its core. **CONTROL**: Remove damaged plants and replace root-associated soil. Reduce water levels.

**Bentgrass Pythium Blight**: Irregular areas of turf become water-soaked, then light brown. **CONTROL**: See ANR-594.

**Bentgrass Ring Nematode Damage (Criconemoides)**: Areas thin, stunted, yellow, and/or dieback. **CONTROL**: See ANR-523.

**Bermuda Bermudagrass Decline**: Irregular patches of turf may be several feet across; stand thinning may lead to bare patches; leaves yellow and die, roots withered, dark, brittle. **CONTROL**: Turf management is key; see ANR-371.

**Bermuda Brown Patch (Rhizoctonia)**: Large circular patches of light brown turf; individual blades show brown lesions and/or crowns show brown lesions, rot. **CONTROL**: See Alabama Pest Management Handbook, ANR-492.

**Bermuda Helminthosporium Leaf Spot**: Small oval or rectangular brown spots; blight occurs when spotting heavy. **CONTROL**: See Alabama Pest Management Handbook.
**Bermuda Ring Nematode (Criconemoides)**: Stunted, yellow plants; dieback. CONTROL: See ANR-523.

**Bermuda Spring Dead Spot**: Yellow patches develop in early spring. CONTROL: See Alabama Pest Management Handbook and ANR-371.

**Blackberry Anthracnose (Elsinoe)**: Sunken cream to brown lesions on canes and foliage. CONTROL: Sanitation; Liquid Lime Sulfur just prior to bud break, or later apply Benlate.

**Blackberry Orange Rust (Gymnoconia nitens)**: Young shoots and leaves are stunted and misshapen. Bright orange, powdery blisters on leaf undersurfaces. Infected leaves wither and drop. CONTROL: Sanitation; improve air circulation.

**Blackberry Rosette (Double blossom) (Cercosporella)**: Infected blossoms abnormally large with distorted petals and enlarged sepals. Shoots appear rosetted or witches broom, initially are pale green but become bronze. CONTROL: See Alabama Pest Management Handbook.

**Blueberry Botryosphaeria canker**: Elongate, sunken, cracked, lesions. CONTROL: Prune affected stems.

**Boxwood Macrophoma Blight-Stress**: Boxwood may take on a reddish tint in winter, then develop a more serious yellowing and blight with tiny black dots scattered on yellowed leaves. Cankers may also develop. This is generally a problem of stressed plants. CONTROL: Pruning; proper maintenance.

**Boxwood Phytophthora root rot**: Roots become light brown, rotted, and water-soaked. The outer cortex of the root is easily separated from its core. CONTROL: Sanitation; maintain proper water and fertility. See Alabama Pest Management Handbook.

**Boxwood Pythium root decay**: Small feeder roots decay; dieback. CONTROL: Remove plants showing dieback. Ensure no excess water. Fungicidal drenches may be used in nursery settings. See Alabama Pest Management Handbook.

**Boxwood Volutella Blight**: Dieback beyond branch and twig cankers; blighted leaves. Masses of orange spores develop on twigs and leaves in humid conditions. CONTROL: Pruning; remove fallen leaves. See Alabama Pest Management Handbook.

**Broccoli Wirestem**: Reddish-brown stem near soil line may be constricted, twisted; plants stunted. CONTROL: Always rotate at least 3 years between cruciferous crops; fumigation, sanitation; see ANR-1189.

**Cabbage Wirestem**: Reddish-brown stem near soil line may be constricted, twisted, produce small heads. CONTROL: Always rotate at least 3 years between cruciferous crops; fumigation, sanitation; see ANR-1189.
**Camellia Algal Leaf Spot (Cephaleuros):** Velvety green, reddish, or brown slightly raised spots develop on upper leaves under wet conditions. Older spots may have white centers and or become grayish green, looking almost lichen-like. **CONTROL:** See Alabama Pest Management Handbook.

**Camellia Colletotrichum Leaf Spot (Anthracnose):** Light brown circular spots; under close inspection orange-pink-white-brown sporulation may be seen on the lesions. **CONTROL:** Sanitation; Cleary’s 3336 protective sprays.

**Camellia Pythium Root Rot:** Leaves chlorotic, scorched, wilted; roots black, rotted; plant stunted. **CONTROL:** Removed infected plants; plant in well-drained, aerated soils.

**Camellia Ringspot Virus:** Yellow or brown rings on leaves. Plants may be stunted. **CONTROL:** Maintain proper fertility and water schedules.

**Cauliflower Wirestem:** Reddish-brown stem near soil line may be constricted, twisted; plants stunted. **CONTROL:** Always rotate at least 3 years between cruciferous crops; fumigation, sanitation; see ANR-1189.

**Cedar, Red (Juniper) Cedar-Apple Rust (Gymnosporangium):** 1-3 inch round, woody galls on stems which develop orange, jelly-like horns protruding from the entire surface of the gall. **CONTROL:** Remove galls before protrusions develop. Apply protective fungicides to nearby apple, crabapple, and hawthorn. See Alabama Pest Management Handbook. See ANR-468.

**Cedar, Red (Juniper) Pestalotia Tip Blight:** Tips of twigs turn brown to gray. **CONTROL:** Maintain proper fertility and watering schedules. Selective pruning.

**Cedar, Red (Juniper) Phomopsis Dieback:** Browned twig tips. Dieback extends further down twig with time; cankers. **CONTROL:** Sanitation. See Alabama Pest Management Handbook.

**Cedar, Red (Juniper) Phytophthora Root Rot:** Dieback. Roots become brown, wet, and rotted, later drying out. **CONTROL:** Sanitation. Reduce irrigation and improve soil drainage. See Alabama Pest Management Handbook for control in nursery settings.

**Centipede Brown Patch (Rhizoctonia):** Rapidly developing large circular or irregular patches; individual blades show brown lesions, crowns show lesions and rot. **CONTROL:** See Alabama Pest Management Handbook. See ANR-492.

**Centipede Fairy Ring:** Circles or arcs of darker green grass and/or an inner band of thin or dead grass. White mycelium may be evident and there may be associated mushrooms. **CONTROL:** See ANR-372.

**Centipede Lesion or Ring Nematodes:** Yellow, declining growth, thinning, wilting, and sometimes death occurs in patches or uniformly through the turf. **CONTROL:** See ANR-523.
**Centipede Take-all Patch:** Small circular light or reddish brown patches which may coalesce into large areas of dead or declining turf. **CONTROL:** ANR-823. Bayleton; turf replacement may be necessary.

**Cherry Laurel Bacterial Leaf Spot (Xanthomonas):** Initially brown to purple spots, sometimes with a light green halo. Older spots dry and fall out leaving a “shot-hole” appearance. **CONTROL:** Sanitation; basic copper sulfate may provide protective control. See Alabama Pest Management Handbook.

**Cherry Laurel Cercospora Leaf Spot:** Irregular brown spots of variable size. **CONTROL:** Sanitation of leaves in the fall.

**Clematis, Evergreen Pythium Root Rot:** Small feeder roots are the first affected, becoming rotted and water-soaked. The outer cortex of the root is easily separated from its core. **CONTROL:** Remove damaged plants and root-associated soil. Reduce water levels in soil.

**Cleyera Anthracnose (Colletotrichum):** Reddish round or irregular spots about 5 mm. diameter scattered on leaves. **CONTROL:** Sanitation. Cleary’s 3336 or Domain protective sprays.

**Collard Black Rot (Xanthomonas):** V-shaped yellow-black spots along leaf edges; black leaf veins and lower stem. **CONTROL:** Sanitation; crop rotation.

**Cryptomeria Botryosphaeria Canker:** Sunken branch lesions, sometimes with cracking around the edges. **CONTROL:** Pruning 3-4 inches beyond lesions, dipping shears in alcohol between cuts.

**Cypress, Leyland Phomopsis Twig Canker:** Sunken round or elliptical brown twig lesions. **CONTROL:** Sanitation; Cleary’s 3336 can be used as protective spray.

**Cypress, Leyland Cercospora Blight:** Blight usually starts on lower inner leaves. **CONTROL:** Pruning, sanitation. Cleary’s 3336 can be used as protective spray.

**Cypress, Leyland Macrophoma, Pestalotia Needle Blight:** Brown needles with tiny black specks. Usually a secondary problem on stressed or weakened plants. **CONTROL:** Sanitation.

**Cypress, Leyland or Mexican Macrophoma, Phomopsis Cankers:** Small sunken brown lesions on twigs and small stems; black specks may be present on lesion surfaces. **CONTROL:** Sanitation; Cleary’s 3336 protective sprays.

**Daffodil Fusarium Bulb Rot:** A brown discoloration at the base of the bulb. Leaves of bulb develop a dry rot; occasionally a pink mold can be seen beneath the scales. **CONTROL:** Remove damaged bulbs and replace soil in the area. Rotate crops for several years.
**Daylily**  **Pythium Root Rot:** Roots become light brown, rotted, and water-soaked. The outer cortex of the root is easily separated from its core. **CONTROL:** Remove damaged plants and root-associated soil. Reduce soil moisture.

**Euonymus**  **Anthracnose (Elsinoe):** Round or angular brown lesions on foliage. **CONTROL:** Sanitation. See Alabama Pest Management Handbook.

**Fescue, Tall**  **Net Blotch (Helminthosporium):** Small (1-2 mm), elongated medium-to reddish-brown spots scattered over leaf blades. **CONTROL:** See Alabama Pest Management Handbook or ANR-621.

**Fescue, Tall**  **Striped Smut:** Thin stripes of black spores along the leaves. Plants may be stunted and have leaves with yellow streaking.

**Gardenia**  **Pestalotia Leaf Spot:** Gray or brown leaf spots, often secondary after cold damage. **CONTROL:** Remove damaged leaves and debris.

**Geranium**  **Bacterial Blight (Xanthomonas campestris pv. pelargonii):** Small water-soaked spots may first appear on underside of leaves, then darken, are slightly sunken, and become angular. Spots followed by wilt and dieback. **CONTROL:** Sanitation. See Alabama Pest Management Handbook.

**Geranium**  **Botrytis Blight:** Brown leaf spots, blight of blossoms and leaves. Stem blight. **CONTROL:** See Alabama Pest Management Handbook.

**Geranium**  **Pythium Stem and Root Rot:** Lower stems and/or roots become brown to black and decayed. **CONTROL:** See Alabama Pest Management Handbook.

**Gomphrena**  **Tomato Spotted Wilt Virus:** New growth is stunted, brown to black leaf spots. Upper leaf surface appears bronze. **CONTROL:** Remove damaged plants. Control thrips.

**Greenhouse Crops**  **Bacterial Leaf Spot:** Dark irregular water-soaked spots which often dry in the center and may have yellow zones or borders. **CONTROL:** Strict sanitation; eliminate overhead irrigation if possible; copper sprays. See Alabama Pest Management Handbook.

**Greenhouse Crops**  **Botrytis blight:** Blossoms with large, brown, irregular areas, these being covered with a delicate gray webbing during humid weather. **CONTROL:** See Alabama Pest Management Handbook. Decrease humidity.

**Greenhouse Crops**  **Downy Mildew:** Diffuse yellow spots on upper leaf surfaces with lower surface showing darker color, often with tan or gray fungal growth. **CONTROL:** See Alabama Pest Management Handbook.

**Greenhouse Crops**  **Phytophthora Root Rot:** Roots brown, decayed, water-soaked; the outer cortex of the root is easily separated from its core. Sanitation. Check soil water and fertilizer. **CONTROL:** Chemical control varies among plant types.
**Holly Botryosphaeria Leaf Spot:** Round black leaf spots; cankers may develop. 
**CONTROL:** Remove damaged and fallen leaves. Cleary’s 3336 may be used as protectant.

**Holly Colletotrichum Leaf Spot:** Small brown circular leaf spots. **CONTROL:** Cleary’s 3336 may be used as protectant.

**Holly Pestalotia Leaf Spot:** Irregular gray or brown blotches. **CONTROL:** Sanitation.

**Hollyhock Rust:** Orange pustules on leaves, stems, and flowers; dieback. **CONTROL:** Cut stems back to ground level in fall; remove all plant debris. Remove all weed mallow in area.

**Hosta Pythium Crown Rot:** Brown water-soaked decay on stem near soil line. **CONTROL:** Sanitation; improve soil drainage; rotate from Hosta; Subdue 2E after a test treatment.

**Indian Hawthorn Entomosporium Leaf Spot:** Reddish leaf spots with black centers. **CONTROL:** Sanitation. Protective fungicide sprays.

**Iris, Bearded Heterosporium Leaf Spot:** Brown elliptical spots may be up to 2 cm. **CONTROL:** Sanitation. Cleary’s 3336 protective sprays.

**Jerusalem Artichoke Crown Gall:** Hard, woody spherical gall at base of stem. **CONTROL:** Remove and destroy infected plants. Rotate to resistant plant. See Disease Note ANR-944.

**Juniper:** See Cedar, Red.

**Kudzu Asian Soybean Rust:** Small yellow spots may become white or brown. **CONTROL:** Sanitation.

**Kumquat Anthracnose:** Brown leaf spots, sometimes zonate. **CONTROL:** Remove fallen leaves. Water at soil level.

**Lavender Botrytis Blight:** Brown leaf spots and foliage blight. Blossoms may also have these symptoms. **CONTROL:** Remove symptomatic plant parts. Reduce humidity and water levels.

**Ligustrum Cercospora Leaf Spot:** Round or irregular brown leaf spots. **CONTROL:** Sanitation. Improve air circulation. Cleary’s 3336 protective sprays. See Alabama Pest Management Handbook.

**Lilac Bacterial Leaf Spot:** Black, angular, water-soaked leaf spots. **CONTROL:** Sanitation. See Alabama Pest Management Handbook.

**Lilac Pythium Root Rot:** Decayed, water-soaked roots. **CONTROL:** Sanitation. Improve soil drainage. Crop rotation.

**Magnolia Phyllosticta Leaf Spot:** Round circular spots up to 1 cm. See Alabama Pest Management Handbook under “Leaf Spot.”
**Maple Anthracnose**: Brown to black blotchy spots may occur along leaf veins or edges; may develop into large areas of leaf. **CONTROL**: Sanitation; See Alabama Pest Management Handbook for small trees.

**Maple, Red Botryosphaeria Canker**: Dry, cracked, dark branch lesions. **CONTROL**: Prune out cankers.

**Mondograss Anthracnose (Colletotrichum)**: Brown to reddish-brown blotches, often along leaf edge or tip. **CONTROL**: See Alabama Pest Management Handbook.


**Oak Botryosphaeria Canker**: Sunken lesions with cracked margins. **CONTROL**: Pruning.

**Oak Hypoxylon Canker**: Thick, hard, black fungus layer under the bark. **CONTROL**: Prune out cankers.

**Oats Barley Yellow Dwarf Virus**: Older foliage becomes yellow to red in color; plants become stunted with excess tillering. **CONTROL**: Control difficult and not necessarily cost effective. Control aphids. Eliminate grassy weeds near field.

**Pachysandra Volutella Blight**: Sunken brown stem lesions. Orange dots may be seen on surface of lesions. **CONTROL**: Prune out damaged areas.

**Peach Armillaria Trunk/Root Rot**: Trees do not leaf out in spring, or if they do they dieback a few weeks later. Black thread-like structures and/or white mycelial mats may be present under the bark near the soil line. **CONTROL**: Sanitation of infected plants including roots.

**Peach Black Knot**: Green or black elongated swellings along branches. **CONTROL**: Sanitation. See Alabama Pest Management Handbook.

**Peach Crown Gall**: Brown irregular swellings at lower trunk or upper roots. **CONTROL**: Sanitation; crop rotation. Contact Ed Sikora.

**Peach Botryosphaeria Canker, Gummosis**: Oval sunken lesions on bark with cracked edges and resin exudate. **CONTROL**: Sanitation.

**Peach Leaf Curl (Taphrina)**: Thickened, puckered leaves which may turn reddish-green. **CONTROL**: Sanitation. See Alabama Pest Management Handbook.

**Peach Phomopsis Twig Blight**: Oval, sunken cankers; branch cankers may result in dieback and wilting; discoloration evident when out bark is removed. **CONTROL**: Sanitation. Contact Ed Sikora.

**Pear Entomosporium Leaf Spot**: Small black leaf spots. **CONTROL**: Sanitation.
**Pear, Bradford Fireblight** (*Erwinia*): Black dieback, blossom blight; twigs may have a shepherd’s crook appearance. **CONTROL:** See Alabama Pest Management Handbook.

**Periwinkle Pythium Root Rot**: Roots brown and water-soaked. **CONTROL:** Sanitation. See Alabama Pest Management Handbook.

**Petunia Crown Rot** (*Phytophthora parasitica*): Cankers and blight develop on foliage. **CONTROL:** Sanitation. Daconil, Echo, Thalonil, and Aliette are labeled.

**Phlox (and other Ornamentals) Powdery Mildew**: Light-colored powdery patches on leaves and stems; some distortion of new growth. **CONTROL:** Cleary’s 3336.

**Phlox (and other Ornamentals) Rhizoctonia Blight**: Brown blotches on lower leaves; whole leaves and stems may be affected. **CONTROL:** Sanitation. Cleary’s 3336.

**Photinia Armillaria Root Rot**: Plant decline. A thin, white mycelial layer may be found under the bark or on roots, as well as black thread-like rhizomorphs on roots. Honey-colored mushrooms may be present. **CONTROL:** Sanitation of plants and roots. Crop rotation. See ANR-907.

**Photinia Entomosporium Leaf Spot**: Dark red spots or blotches on both leaf surfaces. **CONTROL:** Pruning; fungicide treatment. See ANR-392. See Alabama Pest Management Handbook.

**Pine, Loblolly Fusiform Rust** (*Cronartium quercuum f. sp. fusiforme*): Elliptical swellings on branches and trunks with a rusty, powdery coating. **CONTROL:** Sanitation. Protective sprays in nursery settings. See Alabama Pest Management Handbook.

**Pine, Loblolly Needle Rust** (*Coleosporium*): Cream-colored, 2-3 mm pustules along needle edges. **CONTROL:** none.

**Pine, Longleaf seedlings Rhizoctonia Root Rot**: Brown lesions, often shriveled, on roots. **CONTROL:** Sanitation.

**Pine, Virginia Fusarium Pitch Canker**: Pine resin covers sunken oval lesions on branches and trunks. **CONTROL:** Sanitation.

**Pine, Virginia Needle Rust** (*Coleosporium*): Cream-colored, 2-3 mm pustules along needle edges. **CONTROL:** none.

**Plum Black Knot**: Green, swollen, elongated galls in spring become black in summer. **CONTROL:** Pruning; see ANR-1055. Apply Captan at green tip stage.

**Poa trivialis Pythium Blight**: Yellow to brown irregular or circular areas in turf; dieback. **CONTROL:** See Alabama Pest Management Handbook and ANR-594.
**Privet  Cercospora Leaf Spot:**  Round or irregular leaf spots up to 1 cm.  CONTROL:  See Alabama Pest Management Handbook.

**Quince  Fireblight (Erwinia amylovora):**  Blossom blight followed by rapid dieback.  CONTROL:  Severe pruning.

**Rhododendron, Azalea  Botryosphaeria Canker:**  Elongate sunken brown cankers, often with cracked margins.  CONTROL:  Sanitation.

**Rhododendron  Cercospora Leaf Spot:**  Usually round, brown spots up to 1 cm.  CONTROL:  Sanitation; Cleary’s 3336 or Domain protective sprays.

**Rhododendron  Pestalotia Leaf Spot:**  Gray-brown leaf blotches.  Often occurs on cold-stressed or injured leaves.  CONTROL:  Sanitation.

**Rose  Black Spot (Diplocarpon rosa):**  Round black spots with feathery edges.  CONTROL:  See ANR-505 and Alabama Pest Management Handbook.

**Rose  Coniothyrium Canker:**  Brown oval sunken lesion on stems.  A microscopic exam may be required to distinguish this from other canker diseases.  CONTROL:  Sanitation.  Protective fungicides labeled for black spot.

**Rose  Phytophthora Root Rot:**  Poor growth; lower foliage may yellow, wilt; plant death.  CONTROL:  Sanitation.  See Alabama Pest Management Handbook and ANR-505.

**Rose  Powdery Mildew (Sphaerotheca spp.):**  White powdery coating on leaves and stems.  CONTROL:  See Alabama Pest Management Handbook and ANR-407.

**Rose, Hybrid Tea  Nectria Canker:**  Sunken lesions on cane have some callus production around edges.  CONTROL:  Sanitation.  Protective fungicides labeled for black spot.

**Rosemary Botrytis Blight:**  Brown to gray leaf spots and blight areas.  CONTROL:  Sanitation; reduce humidity.

**Ryegrass  Pythium Blight:**  Large brown water-soaked leaf spots or lesions.  CONTROL:  See Alabama Pest Management Handbook and ANR-594.

**Satsuma  Anthracnose (Colletotrichum sp.):**  Round, brown leaf spots may be zonate.  CONTROL:  Sanitation; improve air circulation.

**Snapdragon Anthracnose:**  Small brown circular leaf spots.  CONTROL:  Sanitation.  See Alabama Pest Management Handbook.

**Snapdragon  Pythium Irregular Crown and Root Rot:**  Light brown, water-soaked roots.  Leaves, especially lower foliage, may wilt and dieback.  CONTROL:  Remove damaged plants.  Reduce soil moisture and improve drainage.  Replacement of some soil may be helpful.
**St. Augustinegrass Brown Patch**: Brown blotches on individual blades; whole blade may become brown. CONTROL: See Alabama Pest Management Handbook.

**St. Augustinegrass Take-All Patch** (*Gaeumannomyces*): Circular light to reddish-brown patches of turf. CONTROL: Maintain soil pH between 5.5-6.0; use ammonium forms of nitrogen.

**Strawberry Anthracnose Fruit Rot** (*Colletotrichum*): Dark rotting develops on fruit. Older spots may produce orange spores. CONTROL: See Alabama Pest Management Handbook or Spray Guide Bulletin for Small Fruit.


**Strawberry Mycosphaerella Leaf Spot**: Symptoms vary by variety and temperature. 2-3 mm round leaf spots may have light centers and purple margins. Spots may coalesce causing leaf death. CONTROL: See Alabama Pest Management Handbook.

**Strawberry Phytophthora Crown and Petiole Rot**: Inner crown may be reddish. Petioles become brown and decayed. CONTROL: Sanitation. Reduce irrigation and/or improve drainage. See Alabama Pest Management Handbook.

**Strawberry Rhizoctonia Root and Crown Rot**: Internal crown tissue is brown; brown lesions on young roots. CONTROL: Topsin or Rovral as transplant dip in commercial settings.

**Sweet Potato Black Rot** (*Ceratocystic fimbriata*): Initially small dark spots appear on roots. The rot tends to remain firm and shallow. CONTROL: Sanitation. See Alabama Pest Management Handbook for a commercial crop.

**Thrift** (*Phlox subulatins*) **Anthracnose** (*Colletotrichum*): Small brown or reddish-brown spots develop and may coalesce. CONTROL: Sanitation. Cleary’s 3336 or Domain protective sprays may be used.


**Tomato Rhizoctonia Crown Rot**: The crown becomes brown, dried, and rotted. CONTROL: Crop rotation; possibly soil solarization.

**Tulip Fusarium and Penicillium Bulb Rots**: Dry, sunken, brown-gray lesions develop on bulbs. *Penicillium* sporulation may occur as blue-gray mold on lesion surface. CONTROL: Sanitation; bulb dips. See Alabama Pest Management Handbook.
**Turnip** Cercospora Leaf Spot: Irregular cream to brown leaf spots, up to 1 cm diameter.  

**Vinca, Annual** Rhizoctonia Stem Rot: Dried, dark brown, sunken stem lesions; dieback of affected stems.  
CONTROL: Sanitation; remove damaged plants. Protective sprays of Domain, Chipco 26019, or Cleary’s 3336. See Alabama Pest Management Handbook.

**Wax Myrtle** Botryosphaeria Canker: Dark, cracked, slightly sunken branch lesions, often following cold injury.  
CONTROL: Pruning.

**Wheat** Bacterial Blight (Black Chaff) (*Xanthomonas*): Elongated blackish lesions may develop on foliage early in the season. Glumes later become spotted with brown to black lesions; these may be confused with Septoria glume blotch.  
CONTROL: None, except deep plow or crop rotation.

**Wheat** Barley Yellow Dwarf Virus: Yellowing and reddening of older leaves; excessive tillerering, stunting.  
CONTROL: None except aphid control.

**Wheat** Leaf Rust(*Puccinia*): Orange to dark red pustules on leaf blades and sheaths. See Alabama Spray Guide.

**Wheat** Powdery Mildew (*Erysiphe*): White to gray fluffy mycelium on upper surface of leaf blades. See Alabama Spray Guide.

**Wheat** Septoria Blotch: Yellow flecks on lower leaves become irregular, brownish lesions up to 5 by 15 mm, sometimes developing gray centers.  
CONTROL: Generally no control is necessary.

**Wheat** Take-All (*Gaeumannomyces*): Stem and root at soil line become decayed and blackened.  
CONTROL: Crop rotation for 1 year to oats, corn, or legumes.

**Wheat** Wheat Soilborne Mosaic Virus: Stunted plants; leaf streaks or yellowish mosaic lesions.  
CONTROL: Crop rotation.

**Zoysia** Brown Patch (*Rhizoctonia*): Rapidly developing large circular or irregular patches; individual blades show brown lesions, crowns show lesions and rot.  
CONTROL: See ANR-492.