

# TIMELY INFORMATION

## Agriculture & Natural Resources

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

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

### **MAY INSECT SAMPLES AT THE AUBURN PLANT DIAGNOSTIC LAB**

### **DISEASE POSSIBILITIES FOR JUNE**

#### **COMMENTS**

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

We received 122 plant samples during May. Conditions around the state have been dry, especially in the central section of the state. Consequently, our numbers of plant diseases were lower than is normal for May.

We received 25 turf samples in May. Very few showed disease problems. We suspect some of the damage related to winter stress following abiotic problems involving drought stresses last summer-fall. Brown patch has been seen in some locations.

Some diseases seen in May included problems that relate to environmental stress. Botryosphaeria canker was diagnosed on apple and blueberry. Botryosphaeria canker is

usually a problem on trees or woody plants that have been previously stressed. We may see more Botryosphaeria canker problems as a result of drought stresses last summer and thus far this summer. *Lasiodiplodia theobromae* canker is a type of Botryosphaeria canker (*B. rhodina*) and was found on Chinese chestnut trees that had experienced drought stress from last year. Boxwood was diagnosed with Volutella canker and Macrophoma blight. Both of these fungal diseases are often stress-related.

Other diseases common in May were powdery mildew on crape myrtle, wheat, and a variety of other plants; oak leaf blister (*Taphrina*) on oak; *Phyllosticta* sp. leaf spot on maples; and algal leaf spot (*Cephaleuros virescens*) on southern magnolia. The telial stage of fusiform rust (alternate host is commonly loblolly and slash pines) was commonly seen on oak as very small yellow spots on upper leaf surfaces with just visible, very small, thread-like structures on lower leaf surface corresponding spot areas. Bacterial leaf spot on zinnia was seen in isolated areas. Fireblight has been observed on apples and pears. *Phytophthora nicotiana* blight has been seen on annual periwinkle.

Take-all (*Gaeumannomyces graminis* var. *tritici*) on wheat was diagnosed in Limestone County in May. This crown rot disease of wheat was seen in North Alabama in the 1980's but has not been a problem in recent times. It is a soil borne fungal disease problem so it will be a problem again next year if small grains are planted in the same area.

Table 1. 2008 May Plant Diseases Seen In The Plant Diagnostic Lab At Auburn.

<u>Plant</u>	<u>Disease</u>	<u>County</u>
Apple	Botryosphaeria Canker	Montgomery
Bahia	Dollar Spot ( <i>Sclerotinia homeocarpa</i> )	Covington
Bermuda	Bipolaris Crown Rot	St. Clair
Blueberry	Botryosphaeria Canker	Barbour
Boxwood	Macrophoma Leaf Blight	Lawrence
	Volutella Cankers	Lawrence
Camellia	Colletotrichum Leaf Spot	Baldwin, *
	Phomopsis Leaf Spot	*
Chestnut, Chinese	<i>Lasiodiplodia theobromae</i> Canker	Lee
Corn	Bacterial Leaf Spot	Limestone

<u>Plant</u>	<u>Disease</u>	<u>County</u>
Cotton	Fusarium Root Rot	Henry
Crape Myrtle	Powdery Mildew ( <i>Oidium</i> )	Escambia
Cryptomeria	Phytophthora Crown & Root Rot	*
Daylily	Suspect Daylily Rust	Lee
Dogwood	Cercospora Leaf Spot	Henry
	Powdery Mildew ( <i>Oidium</i> )	Escambia
	Rhizoctonia Stem Canker	Henry
Grape	Black Rot ( <i>Phyllosticta</i> )	Etowah
Iris	Cladosporium Leaf Spot	Lee
Lemon	Phytophthora Root Rot	Chambers
Magnolia, Southern	Algal Leaf Spot ( <i>Cephaleuros</i> )	Montgomery
Maple, Red	Phyllosticta Leaf Spot	Chambers
Oak	Oak Leaf Blister ( <i>Taphrina</i> )	Lee
Oak, Water	Fusiform Rust ( <i>Cronartium</i> )	Baldwin
Onion	Bacterial Soft Rot of Bulb	Covington
Periwinkle	<i>Phytophthora nicotiana</i> Stem Canker	Lee
Plum	Brown Rot ( <i>Monilinia fructicola</i> )	Lee
St. Augustine	Gray Leaf Spot ( <i>Pyricularia grisea</i> )	Montgomery
	Take-All Patch ( <i>Gaeumannomyces graminis</i> var. <i>graminis</i> )	Montgomery, Talladega
Strawberry	Phytophthora Crown & Root Rot	Butler
Tomato	Fusarium Wilt ( <i>F. oxysporum</i> )	Chilton
	White Mold ( <i>Sclerotium rolfsii</i> )	Geneva

<u>Plant</u>	<u>Disease</u>	<u>County</u>
True Unicorn	Fusarium Root Decay	Lee
Wheat	Take-All ( <i>Gaeumannomyces graminis</i> var. tritici)	Limestone
Willow	Melampsora Rust	Montgomery
Zinnia	Bacterial Leaf Spot	Escambia
	Rhizoctonia Crown Rot	*

\*Locations are not reported for nursery, greenhouse, and golf course samples.

### Birmingham Plant Disease Report-May (J. Jacobi)

We received 113 samples for the month of May. The normal rainfall has brought a return to disease and insect problems. Fire blight (apple and pear) and oak leaf blister were two of the more common problems last month.

Table 2. 2008 May Plant Problems Seen In The Birmingham Plant Diagnostic Lab.

<u>Plant</u>	<u>Problem</u>	<u>County</u>
Amaryllis	Gladiolus Thrips	Jefferson
Apple	Fire Blight	Jefferson, Shelby
Azalea	Phomopsis Dieback	Jefferson
Bermudagrass	Bermudagrass Scale	Jefferson
	Black Layer	Shelby
Birch, River	Anthracnose ( <i>Cryptocline</i> )	Tuscaloosa
Blackberry	Anthracnose	Chilton
	Twospotted Spider Mites	Chilton
Boxwood	Boxwood Mites	Jefferson
Cherrylaurel	Shothole	Jefferson

<u>Plant</u>	<u>Problem</u>	<u>County</u>
	Southern Red Mites	Jefferson
Cherry, Yoshino	Cherry Leaf Spot	Jefferson
Clematis	Clematis Wilt	Jefferson
Collards	Harlequin Bug	Jefferson
Coral Bells	Black Root Rot ( <i>Thielaviopsis</i> )	Jefferson
Cypress, Leyland	Botryosphaeria Canker	Limestone
Dogwood, Flowering	Black Twig Borer	Tuscaloosa
	Dogwood Club Gall	Tuscaloosa
	Redheaded Ash Borer	Jefferson
Eggplant	Pythium Damping Off	Cullman
Hibiscus	Aphids	Jefferson
Hickory	Downy Leafspot	Tuscaloosa
	Leaf Gall Midge	Tuscaloosa
	Leafstem Gall Adeligid	Jefferson(2)
	Pecan Shoot Curculio	Jefferson
Hosta	Anthracnose	Jefferson
Hydrangea, Oakleaf	Bacterial Leaf Spot ( <i>Xanthomonas</i> )	Jefferson
Indian Hawthorn	Entomosporium Leaf Spot	Jefferson
Lily, Spider	Red Blotch ( <i>Stagnospora</i> )	Jefferson
Liriope	Liriope Scale	Morgan
Magnolia, Southern	Algal Leaf Spot	Jefferson
	Black Mildew	Jefferson

<u>Plant</u>	<u>Problem</u>	<u>County</u>
	Seasonal Leaf Drop	Jefferson
Maple, Japanese	Phyllosticta Leaf Spot	Jefferson
Milkweed, Purple	Anthracnose	Jefferson
Oak, Post	Oak Leaf Blister	Jefferson
Oak, Southern Red	Oak Leaf Blister	Jefferson (2), Tuscaloosa
Pea, Southern	Thrips Damage	Jefferson
Pear	Fire Blight	Jefferson (2)
Peony	Peony Ringspot Virus	Jefferson
Persimmon, Common	Leaf Gall Mite (Eriophyid Mite)	Jefferson
Pine, Loblolly	Fusiform Rust	Jefferson
Pittosporium, Japanese	Cottony Cushion Scale	Shelby
Plum	Black Knot	Jefferson
Privet, Japanese	Cercospora Leaf Spot	Jefferson
Rose	Armillaria Root Rot	Jefferson
	Downy Mildew	Madison
	Powdery Mildew	Jefferson
	Roseslug	Jefferson
Schefflera, Dwarf	Anthracnose Leaf Spot	Jefferson
Smilax, Greenbrier	Cercospora Leaf Spot	Jefferson
Squash, Yellow	Potyvirus	Autauga
St. Augustinegrass	Slime Mold	Jefferson
Tomato	Aphids	Jefferson (2)

<u>Plant</u>	<u>Problem</u>	<u>County</u>
	Chemical Injury	Jefferson
	Ethylene Injury	Etowah
	Tomato Spotted Wilt Virus	Jefferson (2)
	Vegetable Weevil	Jefferson
Verbena	Verbena Leafminer	Jefferson
Zoysiagrass	Large Patch ( <i>Rhizoctonia</i> )	Winston
	Rhodesgrass Mealybug	Shelby
	Suspect Herbicide Injury	Jefferson
	Take-All Root Rot	Shelby

\*Locations are reported for nursery, greenhouse, and golf course samples.

Auburn Entomology Report-May (C. Ray)

<b>County</b>	<b>Host</b>	<b>Category</b>	<b>Identification</b>	<b>Scientific Name</b>
Hale	Home	Household-Structural	Eastern Subterranean Termite	<i>Reticulitermes flavipes</i>
Pickens	Oak	Forest Products	A Redhumped Oakworm Caterpillar	<i>Symmerista</i> sp.
Mobile	Sod	Household-Miscellaneous	Scentless Plant Bug	<i>Jadera haematoloma</i>
Limestone	Azalea	Ornamental	Granulate Ambrosia Beetle	<i>Xylosandrus crassiusculus</i>
Randolph	Barn	Household-Miscellaneous	Clown or Hister Beetle	<i>Dendrophilus</i> sp.
Autauga	Home	Medical	Kissing Bug Nymphs	<i>Triatoma</i> sp.
Clarke		Miscellaneous	Clay-Colored Leaf Beetle	<i>Anomoea laticlavata</i>
Russell		Miscellaneous	A Sac Spider	<i>Castianeira descripta</i>

County	Host	Category	Identification	Scientific Name
Mobile	St. Augustine Sod	Turfgrass	Sugarcane Scale	<i>Aspidiella sacchari</i>
Lawrence	Cotton	Row Crops	Vegetable Weevil	<i>Listroderes</i> sp.
Lee	Royal Lotus	Ornamental	Spider Mites	<i>Tetranychus urticae</i> & <i>Tetranychus</i> sp. possibly <i>T. tumidus</i>
Perry	Home	Household-Structural	Dark Southern Subterranean Termite	<i>Reticulitermes virginicus</i>
Covington	Home	Household-Structural	Dark Southern Subterranean Termite	<i>Reticulitermes virginicus</i>
Lee	Plum	Fruits and Nuts	Plum Curculio Larvae	<i>Conotrachelus nenuphar</i>
DeKalb	Apple	Fruits and Nuts	Rose Chafer	<i>Macroductylus</i> sp.
Cherokee	Hemerocallis	Ornamental	Spider Mites	Tetranychidae
Macon	American Skullcap	Row Crops	Multicolored Asian Lady Beetle, a Choreutid Moth, Shining Flea Beetle, Skeletonizing Leaf Beetle	<i>Harmonia axyridis</i> , <i>Prochoreutes inflatella</i> , <i>Asphaera lustrans</i> , <i>Phyllobrotica limbata</i>
Jefferson	Dogwood	Ornamental	Dogwood Agrilus	<i>Agrilus cephalicus</i>
Barbour	Dogwood	Ornamental	Long Horned Wood Boring Beetle Pupa	Prioninae
Pike	Home	Household-Miscellaneous	Phorid Flies	Phoridae
Dallas	Home	Household-Miscellaneous	Wolf Spiders and Ground Spider	Lycosidae & Gnaphosidae or Clubionidae
Mobile	Home	Household-Structural	Probable Formosan Termite	<i>Coptotermes formosanus</i>
Baldwin	Live Oak	Ornamental	Gouty Oak Galls	<i>Callirhytis</i> possibly <i>quercusbatatoides</i>

## 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 2008 spray guides. Also, remember the importance of sanitation.

As with May, the first half of June has been dry (especially dry in central Alabama), and disease incidence has been reduced. Tomato spotted wilt virus was diagnosed recently on pepper in Escambia County. The only find of soybean rust so far this year has been the rust found on kudzu in Mobile County in April (E. Sikora).

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>
Alfalfa	Spring Black Stem & Leaf Spot ( <i>Phoma medicaginis</i> )	Black spots on stems and leaves.	---
Amaryllis	Stagnospora Leaf Spot ( <i>Stagnospora</i> )	Dark red, elliptical leaf spots.	Sanitation.
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 AL Pest Management (P.M.) Handbook. Sanitation.
	Cedar-Apple Rust ( <i>Gymnosporangium juniperæ-virginianæ</i> )	Large (3-6mm diameter), 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 AL P.M. Handbook for protective spray treatments; collect and destroy all fallen leaves this fall; remove nearby red cedars and other junipers if possible.
	Fire Blight ( <i>Erwinia amylovora</i> )	Dieback of branches until canker forms at base of dieback.	Pruning 10-16 or more inches from edge of dieback. Streptomycin

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
			sprays in commercial situation.
	Frogeye Leaf Spot ( <i>Botryosphaeria</i> )	Brown, circular spots with purple margins and brown centers.	Sanitation; protective fungicide sprays.
Arbor-vitae	Phomopsis Dieback	Tip browning and dieback.	Sanitation. See AL P. M. Handbook.
Aucuba	Botryosphaeria Canker	Sunken, cracked branch lesions.	Pruning 4-5 inches from edge of damage.
	Phytophthora Root Rot	Lower foliage becomes yellowed; dieback of select branches; roots become water-soaked and brown rotted.	Remove damaged plants; improve soil drainage & reduce irrigation.
Azalea	Phomopsis Dieback	Branches dieback; at the base of dieback, small cankers are present.	Prune out damage making cut 3-4 inches beyond the damage edge.
	Phytophthora Crown & Root Rot	Lower trunk and roots become brown and water soaked; foliage dieback.	Sanitation. See the AL Pest Management Handbook.
Bahia	Dollar Spot ( <i>Sclerotinia</i> )	Individual grass blades show white spots/ brown or black 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.
	Anthrachnose ( <i>Colletotrichum</i> )	Reddish, irregular spots of varying sizes on all parts of foliage.	See AL 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.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Mosaic Virus	Yellow and green alternating patches on leaves.	Remove damaged plants. Control insects.
	Pythium Crown Rot, Root Rot	Tissues become light brown and wet rotted.	Improve soil drainage; see the AL Pest Management Handbook.
	Rhizoctonia Aerial Blight	Leaves develop brown spots and blotches. Damaged tissues may dry and fall apart.	Sanitation. See the AL 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.
Begonia	Pythium Crown Rot	Lower stem tissues brown and soft.	See AL P.M. Handbook.
Begonia, Angel Wing	Bacterial Leaf Spot ( <i>Xanthomonas</i> )	Dark brown, angular spots with water soaked edges.	Sanitation. Do not water over-head.
Bentgrass	Brown Patch ( <i>Rhizoctonia</i> )	Foliage develops brown blotches and circular-irregular brown patches of turf.	See AL P.M. Handbook.
	Pythium Blight	Turf grass develops greasy black spots, blotches on leaves. Foliage dies.	See AL 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 AL P.M. Handbook.
Bermuda	Brown Patch ( <i>Rhizoctonia</i> )	Foliage develops brown blotches. Circular-irregular brown patches of turf.	See AL P.M. Handbook.
	Dollar Spot ( <i>Sclerotinia</i> )	White, bleached spots about the size of a silver	See AL P.M. Handbook; see Circular ANR-493;

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
		dollar appear in lawn; individual grass blades show white spots with dark borders.	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 AL P.M. Handbook.
	Leaf Rust ( <i>Puccinia</i> )	Leaves are off-color, rusty colored and later brown.	See the AL P.M. Handbook.
	Ring Nematode ( <i>Criconemella</i> )	Roots poorly developed; plants yellowed, stunted.	See ANR-523.
	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-523.
Birch, River	Phyllosticta Leaf Spot	Brown, circular leaf spots.	Sanitation. Protective sprays of Cleary's 3336 may be used.
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 bunched 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.
	Septoria Leaf Spot	Round and irregular round, brown leaf spots.	Sanitation. See the AL Pest Management Handbook under 'Leaf Spot'.
Blueberry	Anthracnose Fruit Rot ( <i>Colletotrichum</i> )	Sunken, light blue-brown spots, sometimes	Sanitation. See the AL Pest Management

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
		with circular, black specks (fruiting bodies).	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.
	Mummy Berry ( <i>Monilinia</i> )	Fruit becomes small & shriveled; twig cankers and blossom blight may also develop.	Remove all plant debris in the fall. Prune protective sprays of fungicide such as Captan.
	Phytophthora Root Rot	Brown, water-soaked lesions that become dried.	Ridomil; See AL Pest Management Handbook.
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 AL Pest Management Handbook.
	Phytophthora Root Rot	Foliage dieback; roots become brown and water-soaked, decayed.	Sanitation. See the AL Pest Management Handbook.
	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 AL 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.
Camellia	Anthracoise ( <i>Colletotrichum</i> )	Large, brown, roughly circular leaf spots; orange spores in a zonate pattern on leaf spot surface.	Sanitation of fallen leaves. See the AL Pest Management Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Leaf Gall ( <i>Exobasidium</i> )	Soft flesh swellings (galls) on twigs, flowers, and leaves. Green galls turn white.	Sanitation before galls become white.
Campanula	Phytophthora Crown Rot	Lower stem becomes brown and water soaked.	Sanitation. Reduce irrigation. Crop rotate to ageratum, perennial salvia, verbena, lantana, marigold, or basil.
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 Virus	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.
Cedar, Deodara	Rhizoctonia Root Rot	Roots become dry rotted and brown.	----
Centipede	Brown Patch ( <i>Rhizoctonia</i> )	Foliage develops brown blotches. Circular-irregular patches of turf will turn brown.	See the AL P. M. Handbook.
	Dollar Spot ( <i>Sclerotinia</i> )	See Bermuda.	See AL P.M. Handbook.
	Slime Mold ( <i>Physarum</i> )	Black powdery sporangia on grass blades.	---
	Take-All Patch ( <i>Gaeumannomyces</i> )	Dieback and yellowing; black stolon lesions; stress associated.	See the AL Pest Management Handbook and ANR-823.
Cherry, Flowering	Phyllosticta Leaf Spot	Pale brown leaf spots with dark edges.	Sanitation of fallen leaves.
	Septoria Leaf Spot	Reddish-brown circular-angular leaf spots ( $\frac{1}{8}$ - $\frac{1}{4}$ inch diameter).	Sanitation.
Cherry Laurel	Shot Hole ( <i>Xanthomonas</i> )	Reddish spots with dark red or black edges;	Sanitation; See AL Pest Management Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
		centers of angular spots may fall out.	
Chrysanthemum	Pythium Crown/Root Rot	Lower stem/crown area becomes water-soaked, brown, rotted.	See AL 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	Anthrachnose	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, Pseudomonas</i> spp.)	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.
	Common Rust ( <i>Puccinia sorghi</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 cochlíobolus</i> )	Tan lesions (.25-1.5 inches long) are elongate with parallel sides and brown	Resistant varieties.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
		borders; yellow halos may be present.	
Cotton	Alternaria Leaf Spot	Gray-brown irregular leaf spots.	See Bill Gazaway.
	Ascochyta Leaf Spot	Light brown circular spots with dark brown margins; spots will coalesce to involve large areas of the leaf surface.	See Bill Gazaway.
	Black Root Rot ( <i>Thielaviopsis</i> )	Poor growth; yellowing of lower leaves; black lesions on roots.	See Bill Gazaway.
	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 the soil line.	See treatment.
	Rhizoctonia Lower Stem/Root Rot	Brown lesions/cankers near soil line.	---
Crabapple	Cedar-Apple Rust ( <i>Gymnosporangium</i> )	See Apple - Cedar-Apple Rust.	---
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 AL P.M. Handbook.
Cryptomeria	Cytospora Canker	Sunken, elliptical shaped cankers.	Pruning out cankers, making cuts 3-4 inches beyond canker margin.
Cucumber	Anthrachnose	Small (about ¼ inch), cream-colored leaf spots. When spores are produced, a zonate pattern of orange acervuli may develop.	Sanitation of damaged plant parts. For a protective fungicide, see the AL Pest Management Handbook.
	Powdery Mildew	White powdery dusting on leaves; blight.	See the AL Pest Management Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Rhizoctonia Stem Rot	Brown elongated lesions on lower stems.	---
Cypress, Arizona	Kabatina Blight	Blight of older, inner foliage.	Sanitation.
Daisy, Gerbera	Powdery Mildew ( <i>Erysiphe</i> )	Leaves show a white dusting; yellowing followed by browning.	See AL P. M. Handbook.
Daylily	Kabatiella Leaf Spot	Brown leaf spots with a yellow halo sometimes; when there are several leaf spots, the leaf may develop a yellow streak.	Sanitation. Cleary's 3336 protective sprays may help.
	Pythium Crown & Root Rot	Lower stems & roots become brown & water-soaked; foliage dieback occurs.	Sanitation; reduce irrigation.
	Root Knot Nematode ( <i>Meloidogyne</i> )	Round-irregular galls on roots.	Crop rotation to grasses or other suppressive plants. See ANR-856.
	Rust ( <i>Puccinia hemerocallidis</i> )	Leaves develop small yellow spots which eventually produce orange spots masses that are visible as orange, powdery spots.	Sanitation; Protective sprays of Banner Maxx, Heritage, Eagle, Immunox or Fertiloam System Fungicides.
Delphineum	Bacterial Stalk Rot ( <i>Rectobacterium</i> [formerly <i>Erwinia</i> ] <i>carotavorum</i> )	Dark brown-black, water-soaked stem decay.	Strict sanitation.
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 AL P. M. Handbook.
	Phyllosticta Leaf Spot	Light brown circular leaf spots with dark borders.	Sanitation of fallen leaves.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	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 AL P. M. Handbook.
	Powdery Mildew ( <i>Microsphaeria</i> )	White dusting on upper leaf surfaces.	Cleary's 3336 or Domain.
	Spot Anthracnose ( <i>Elsinoe</i> )	Small reddish circular spots develop on blossoms and leaves. Defoliation may result when spotting is severe.	See the AL P. M. Handbook.
Elm	Dutch Elm Disease	Wilt; dieback; interveinal yellowing of leaves; vascular browning.	Sanitation of dying branches of trees.
Elm, Winged	Botryodiplodia Canker	Elliptical sunken lesion with cracked edges.	Sanitation. Make pruning cuts 4-5 inches from edge of damage.
	Dutch Elm Disease	Wilt; dieback; interveinal yellowing of leaves; vascular browning.	Sanitation of dying branches or trees.
Fern, Boston	Rhizoctonia Blight	Sections of fronds develop spots and blight. Cut out damaged areas, remove all clippings from the area. Apply a protective fungicide according to the AL Pest Management Handbook.	Sanitation. Cleary's 3336 or Halt will provide protective disease control.
Fescue	Brown Patch ( <i>Rhizoctonia</i> )	See Centipede.	See the AL 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 AL P. M. Handbook.
Fescue, Tall	Pythium Blight	See Bentgrass.	---

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Fig	<i>Corticium salmonicolor</i> Blight	Pink mycelial mat develops on stem cankers.	Pruning.
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 AL P. M. Handbook.
	Botrytis Blight	Blossoms and leaves develop brown blotches.	See AL P. M. Handbook.
	Pythium Stem Rot	Dark brown, water-soaked lesions (cankers) develop on stems.	Sanitation.
Grape	Anthrachnose ( <i>Colletotrichum</i> )	Brown round-irregular spots (about 1/8 inch or larger) on foliage/stem.	Sanitation; See the AL P. M. Handbook.
	Black Rot ( <i>Guignardia</i> )	Dark brown circular spots on leaves and fruit.	Protective fungicide sprays; Sanitation.
	Botrytis Blight	Leaves/fruit develop a gray brown blotches/rot.	See AL P. M. Handbook.
Hawthorn, Indian	Cedar Quince Rust ( <i>Gymnosporangium claviceps</i> )	Bright yellow leaf spots; small orange, finger-like aecial cups on fruit.	Sanitation. Remove junipers in the area. See the AL Pest Management Handbook.
	Entomosporium Leaf Spot	Black spots develop on the foliage. Spot coalescence may occur.	See the AL P. M. Handbook.
Holly	Phytophthora Root Rot	Roots are black or brown and water-soaked.	See the AL P. M. Handbook.
Hosta	Alternaria Leaf Spot	Gray, brown circular leaf spots.	Sanitation.
Hydrangea	Bacterial Leaf Spot ( <i>Pseudomonas</i> )	Dark brown, angular leaf spots with dark, water-soaked edges.	Sanitation. Do not water over-head. See the AL Pest Management Handbook.
	Cercospora Leaf Spot	Circular-irregular, light brown spots about 1/4 inch diameter or larger.	Sanitation of all damaged leaves. See the AL Pest Management Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	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 AL Pest Management Handbook.
	Pythium Root Rot	Poor growth of foliage; root decay.	Remove & destroy all damaged plants. Reduce watering; improve drainage. Subdue drenches may be used following label directions.
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 AL P. M. Handbook.
	Rhizoctonia Stem Rot	Sunken, brown, dry, lesions.	Sanitation. See the AL Pest Management Handbook.
Iris	Heterosporium Leaf Spot	Small-large brown, oval spots.	Sanitation. See AL Pest Management Handbook.
Ivy, English	Anthracoise ( <i>Colletotrichum</i> )	Brown circular-irregular spots on the foliage. Spot coalescence may occur.	See the AL P. M. Handbook.
	Bacterial Leaf Spot ( <i>Xanthomonas</i> )	Black, angular, water-soaked spots on foliage.	See AL P. M. Handbook.
	Rhizoctonia Leaf & Stem Rot	Brown, dry lesions on leaves/stems.	Sanitation; Cleary's protective sprays.
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 AL P. M. Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Phytophthora Root Rot	Roots become browned, water-soaked.	See the AL P. M. Handbook.
Juniper, Shore	Phytophthora Root Rot	Roots become brown and water soaked.	See the AL Pest Management Handbook.
Kudzu	Bacterial Leaf Spots (Suspect <i>Pseudomonas</i> )	Circular yellow spots with dark centers.	----
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.
Leyland Cypress	Pestalotia Tip Blight	Foliage tips become brown.	Eliminate stress.
	Sphaeropsis Dieback	Twigs dieback. Cankers develop.	Pruning.
Liriope	Anthrachnose	Brown spots, blotches on leaves and leaf tips.	Sanitation; See AL P. M. Handbook.
Lilac	Powdery Mildew	A white dusting appears on upper leaf surface. Eventually, leaf tissue becomes necrotic where the mildew was.	Sanitation of fallen leaves. See the AL Pest Management Handbook for protective fungicide use.
Magnolia, Saucer	Powdery Mildew	White dusting on leaf surface; leaf surface become brown.	See the AL Pest Management Handbook.
Magnolia, Southern	Algal Leaf Spot ( <i>Cephaleuros</i> )	Green-red, slightly elevated, circular spots with wavy leaf spot edges.	Sanitation of fallen leaves.
Maple	Anthrachnose ( <i>Kabatiella</i> )	Brown circular-irregular spots/blotches occur on leaves; large leaf areas may be involved. Defoliation may result.	Sanitation. See the AL P. M. Handbook.
	Phyllosticta Leaf Spot	Circular (sometimes) irregular leaf spots. Leaf spots borders are often distinctive. Severe spotting will result in defoliation.	Sanitation. See the AL P. M. Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Mondo Grass	Anthrachnose ( <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 labeled for ornamentals.
Nectarine	Bacterial Spot	See Peach.	See Peach.
	Brown Rot	See Peach.	See Peach.
Oak	Algal Leaf Spot ( <i>Cephaleuros</i> )	Red-green circular spots.	Sanitation.
	Anthrachnose ( <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 AL P. M. Handbook.
	Oak Leaf Blister ( <i>Taphrina</i> )	Brown, puckered spots (1/8-1/2 inch diameter) develop. Spots may merge. Leaf drop will occur when disease is severe.	Sanitation. See AL 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.
Palm	Graphiola Leaf Spot	Yellow leaf spots that develop small black, raised bodies.	Remove and destroy spotted leaves.
Paspalum	Brown Patch ( <i>Rhizoctonia</i> )	Foliage blight in patches.	See AL P. M. Handbook in the Turfgrass Section.
Pea, Field	Anthrachnose	Reddish circular-irregular spots.	See AL 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	Sanitation; crop rotation or fumigation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
		with fine charcoal powder.	
	Fusarium Crown/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.
	Rhizoctonia Stem Rot	The stem area just above the soil-line becomes browned with a large lesions that often develops on one side of the stem. Eventually the whole stem may become affected.	See the AL 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 leaves 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 AL 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.	---
	Scab ( <i>Cladosporium</i> )	On the fruit, small (1/16" diameter) olive, velvety spots may develop into large blotches. Spots/blotches are superficial. On	Protective fungicide sprays; sanitation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
		twigs small (1/8-1/4 inch diameter), slightly raised, green-brown spots develop on lower leaf surfaces.	
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 AL 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 AL P. M. Handbook.
	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 AL P. M. Handbook.
Peony	Tomato Spotted Wilt Virus	Yellow ring spots & line patterns.	Sanitation; control thrips.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Pepper	Anthrachnose Fruit Rot	Black blotches (sometimes with orange spore pustules).	See AL P. M. Handbook.
	Bacterial Spot ( <i>Xanthomonas</i> )	Dark brown, circular to irregular spots; shot holes; leaf yellowing & drop.	Protective fungicide sprays; sanitation.
	Bacterial Stem Rot ( <i>Pectobacterium carotovorum</i> pv. <i>carotovorum</i> )	Black, wet decay.	Sanitation. Avoid wounds.
	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 AL P. M. Handbook.
	Tomato Spotted Wilt Virus	Plants stunted. New growth distorted. (Sometimes ring spots and bronzing are present.)	Sanitation. Control thrips.
Persimmon, Asiatic	Botryosphaeria Canker	Elliptical, sunken lesions with cracked edges.	Pruning.
Petunia	<i>Phytophthora</i> Foliage Blight/Root Rot	Brown, sometimes wet-looking lesions; dieback.	Sanitation; See AL 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.
Phlox	Pythium Root Rot	Small roots become stunted, water-soaked, and a light brown. Plants yellow, wilt and dieback.	Remove damaged plants. Reduce watering schedules; improve drainage.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Pittosporum	Cercospora 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 AL 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 diameter) 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.
	White Mold ( <i>Sclerotium rolfsii</i> )	Plants wilted; a white mold often present at the soil line.	See AL P. M. Handbook (commercial).
Privet	Cercospora Leaf Spot	Medium brown circular spots.	See AL P. M. Handbook.
Quince, Flowering	Cedar Quince Rust ( <i>Gymnosporangium claviceps</i> )	Orange finger-like aecial cups on fruit; fruit rot; yellow leaf spots.	Sanitation. Remove near-by junipers. See the AL Pest Management Handbook.
Quince	Phytophthora Foliage Blight	Dark, brown, wet looking blotches.	Sanitation. Reduce overhead irrigation.
	Phytophthora Root Rot	Foliage dieback; roots become brown and water-soaked.	Sanitation. Reduce irrigation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Rhododendron	Cercospora Leaf Spot	Circular, oval, or irregularly shaped brown leaf spots.	Sanitation. See the AL Pest Management Handbook.
	<i>Phytophthora nicotiana</i> Blight	Brown, water-soaked spots.	Sanitation. Reduce irrigation. See the AL Pest Management Handbook.
	Phytophthora Root Rot	Roots become brown and water-soaked.	See the AL 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 AL P. M. Handbook.
	Botrytis Blossom Blight	Brown spots and blotches on petals; when conditions are cool and humid, a gray mold is seen.	Sanitation. See the AL Pest Management Handbook.
	Mosaic Virus	Yellow line patterns, mosaics.	Plant removal.
	Powdery Mildew	White dusting on leaf surfaces; new growth distortion.	See AL P. M. Handbook.
	Rhizoctonia Crown Rot	Brown lesions at soil line.	Sanitation; Cleary's protective drenches.
Rudbeckia	Bacterial Leaf Spot	Dark brown, angular leaf spots with darker, water-soaked edges.	Sanitation. Do not water over-head.
Salvia	Phytophthora Root Rot	Roots brown, water-soaked.	Sanitation. See AL P. M. Handbook.
Shamrock, Purple (Oxalis)	Rust ( <i>Puccinia sorghi</i> )	Small yellow spots on upper leaf surfaces; orange powdery spots on corresponding lower leaf surfaces.	---
Snapdragon	<i>Phytophthora parasitica</i> Crown Rot	Crowns become water-soaked, brown, rotted.	Sanitation. Avoid excessive irrigation. See AL P. M. Handbook.
Sorghum	Anthrachnose ( <i>Colletotrichum</i> )	Leaves/stems develop black lesions.	---

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Rhizoctonia Root Rot	Dry brown rot on roots.	---
Soybean	Bacterial Leaf Spot	Dark, brown, angular spots with darker, water-soaked edges.	See Ed Sikora.
	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.
	Pythium Seedling Disease	Usually lower stem tissues and/or roots become translucent, brown and watery.	Used treated seed.
	Rhizoctonia Seedling Disease	Red-brown, dry decay of lower stems and roots.	Used treated seed.
	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 AL P. M. Handbook.
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.
	Phytophthora Crown Rot	Lower stem tissues become brown and wet.	Sanitation. Correct wet soil situations. Crop rotate.
	Tobacco Ringspot Virus	Leaves show mosaic, stunting.	Sanitation; crop rotation for 2-4 years.
	Watermelon Mosaic Virus (WMV) II	See comments for CMV.	---

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
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 AL 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.
	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 diameter with white or brown centers and purple borders. Spots may coalesce.	See AL P. M. Handbook.
	Phytophthora Crown & Root Rot	The crowns and roots become brown and wet.	Sanitation. See the AL Pest Management Handbook.
Sunflower	<i>Xanthomonas axonopodis</i> pv. <i>zinniae</i>	Dark, water-soaked lesions (cankers) on stems; dieback.	Remove damaged plant; do not water by overhead sprinklers.
Sweet Potato	Fusarium Root Rot	Surface of root becomes browned and shriveled.	See AL 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	Leaves develop brown spots and blotches.	Cleary's 3336 or a benomyl labeled for ornamentals will give protective control; sanitation.
Tomato	<i>Alternaria alternate</i> Leaf Spot	Small, circular, brown leaf spots.	Sanitation. See control comments for early blight.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	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. See the AL Pest Management Handbook under bacterial speck/spot.
	Bacterial Speck ( <i>Pseudomonas syringae</i> pv. tomato)	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 ( <i>Xanthomonas axonopodis</i> pv. vesicatoria)	Small, dark, greasy irregular spots on leaves and stems. Fruit spots are raised, brown and scabby.	See AL P. M. Handbook. Strict sanitation.
	Bacterial Wilt ( <i>Ralstonia solanacearum</i> )	Rapid wilting of green plants.	Rotation. Fumigation or solarization.
	Blossom End Rot	Hard, black lesions at blossom end of fruit.	See the AL 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.
	Colletotrichum Fruit Rot	Water-soaked, colorless rot.	Sanitation. See the AL Pest Management Handbook.
	Cucumber Mosaic Virus	Leaves become thin and narrow (strap-shaped). Plants have reduced growth.	Remove damaged plants; control insects, weeds.
	Early Blight ( <i>Alternaria solani</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 AL P. M. Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Leaf Mold ( <i>Fulvia fulva</i> )	Gray fungal growth in blotches on leaves.	See AL P. M. Handbook.
	Pith Necrosis ( <i>Pseudomonas</i> )	Dieback, wilt above necrotic stem area. Internally, the stem is hollow with characteristic plant tissue threads across the hollow stem internal areas.	Sanitation. See the AL Pest Management Handbook under bacterial canker.
	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; plant die due to death of lower stem.	Terraclor; crop rotation.
	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 labeled for ornamentals or Cleary's 3336 or Domain.
Vinca, Catharanthus (Annual Periwinkle)	Anthracnose ( <i>Colletotrichum</i> )	Brown cankers on lower stems.	See AL 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 AL P. M. Handbook.
	Phytophthora Foliage Blight	Dark brown lesions on stems and leaves; dieback.	Sanitation. Avoid wet situations. See the AL P. M. Handbook.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
	Pythium/Phytophthora Crown/Root Rot	Roots become brown, water-soaked.	Sanitation. Avoid wet situations. See the AL P. M. Handbook.
	Rhizoctonia Aerial Blight	Leaves become dull green and then brown. Large areas of leaves become browned.	See AL P. M. Handbook.
	Tomato Spotted Wilt Virus	New growth is stunted. Older leaves may show black blotches.	Sanitation. Insecticides to control thrips.
Vinca Minor	Anthrachnose ( <i>Colletotrichum</i> )	Small-large brown blotches on leaves.	See the AL P. M. Handbook under perennial vinca.
Watermelon	Anthrachnose ( <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 AL P. M. Handbook.
	Bacterial Fruit Blotch ( <i>Acidovorax</i> )	Dark brown blotches on fruit.	Sanitation. See Ed Sikora.
	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.
	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.
Wax Myrtle	Botryosphaeria Canker	Elliptical, sunken lesions with cracked edges.	Pruning.
Weeping Willow	Sphaeropsis Canker	Dieback to sunken lesions on branches.	Pruning.
Wheat	Scab ( <i>Fusarium</i> )	Heads covered with pink spores.	Sanitation.
Yaupon, Dwarf	Phytophthora Root Rot	Roots become brown, water-soaked.	Sanitation.

<u>PLANT</u>	<u>DISEASE</u>	<u>DESCRIPTION</u>	<u>CONTROL</u>
Zinnia	Bacterial Leaf Spot ( <i>Xanthomonas</i> )	Dark, water-soaked, angular spots, sometimes with a yellow halo around the spot edges.	Strict sanitation. Do not water over-head.
Zoysia	Bipolaris Blight, Leaf Spot/Crown Rot (also <i>Exserohilum rostratum</i> )	Small, brown, elongated spots on leaves and crowns.	See AL P. M. Handbook; Collect grass clippings.
	Brown Patch ( <i>Rhizoctonia</i> )	See Centipede.	See Centipede.
	Dollar Spot ( <i>Sclerotinia</i> )	See Bermuda	See Bermuda.
	Ring Nematode Damage ( <i>Criconeoides</i> )	Dieback, yellowing thinning areas in lawn.	Eliminate stresses. See ANR-523.
	Rust ( <i>Puccinia</i> )	Red-orange powdery dusting on leaf blades.	Collect grass clippings; Usually fungicides are not needed.
	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 AL P. M. Handbook.

### Comments

Please fill out the diagnostic 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!