

TIMELY INFORMATION

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NOVEMBER PLANT DISEASES FROM THE AUBURN PLANT DIAGNOSTIC LAB

NOVEMBER PLANT DISEASES FROM THE BIRMINGHAM PLANT DIAGNOSTIC LAB

NOVEMBER INSECT REPORT FROM THE AUBURN PLANT DIAGNOSTIC LAB

DISEASE POSSIBILITIES FOR DECEMBER

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Auburn Plant Disease Report-November (J. Mullen)

The Auburn lab received only 30 plant samples in November. Phytophthora root and/or crown rot was seen on ajuga, hydrangea, and strawberries. Pythium was seen in association with the Phytophthora on the ajuga; it was also diagnosed along with Fusarium on pepper root decay. Also, we saw downy mildew on greenhouse rose; brown patch on Bermuda; rust on Bermuda; Botryosphaeria canker on Eleagnus and pecan; gray leaf spot on St. Augustine; and *Penicillium* sp. with *Aspergillus niger* bulb rot on tulip.

The Phytophthora problems may have been a consequence of excess irrigation during droughty periods this past summer and fall. Plants showed dieback and roots were initially brown and wet –rotted. Later, roots become dried. Damaged plants should be removed. Irrigation should be reduced. See the AL Pest Management Handbook for protective fungicides.

Botryosphaeria cankers are often seen on previously stressed or otherwise weakened trees or shrubs. Cankers are usually elongated, sunken, and cracked at the edges. Branch dieback results. The only control method is canker pruning to prevent disease spread. Make cuts 3-4 inches beyond the edge of the damage. Dip shears into alcohol or a 10% solution of bleach between cuts.

Table 1. November 2007 Plant Diseases Seen In The Auburn Plant Diagnostic Lab.

<u>Plant</u>	<u>Disease</u>	<u>County</u>
Ajuga	Colletotrichum Crown Decay	*
	Phytophthora Crown & Root Rot	*
	Pythium Crown & Root Rot	*
Bermuda	Rust (<i>Puccinia zoysia</i>)	Jefferson
Centipede	Brown Patch (<i>Rhizoctonia solani</i>)	Elmore
Eleagnus	Botryosphaeria Canker	Elmore
Hydrangea	Phytophthora Crown & Root Rot	Chilton
	Possible Armillaria Root Rot	Chilton
Pecan	Botryosphaeria Canker	Lee
Pepper	Fusarium Root Rot	Autauga
	Pythium Root Rot	Autauga
Rose	Downy Mildew (<i>Peronospora sp.</i>)	*
St. Augustine	Gray Leaf Spot (<i>Piricularia grisea</i>)	Mobile
	Take-All Patch (<i>Gaeumannomyces graminis var. graminis</i>)	Autauga, Jefferson(2), Mobile, Montgomery
Strawberries	Phytophthora Root Rot	Covington
Tulip	<i>Aspergillus niger</i> Bulb Rot	Etowah
	<i>Penicillium sp.</i> Bulb Rot	Etowah

*Counties are not reported for greenhouse, nursery, or golf course samples.

Birmingham Plant Disease Report-November (J. Jacobi)

November samples were down, with only 32 samples received for the month. Some of the problems seen last month included Phytophthora diseases on cherrylaurel, pansy and sage; wax scale and Volutella blight on boxwood; and a severe case of alfalfa rust on a young stand of alfalfa.

Phytophthora crown rot of pansy is most active in warm, wet weather and thus occurs on pansy in the fall and late spring. The fungus infects the plant at or just above the soil line and causes a greenish-brown, soft, watery rot. Often plants wilt and break off easily at the ground line. Unfortunately, there is more than one cause of crown rot on pansy. Another pathogen that causes a similar disease of pansy is Myrothecium. However, Myrothecium produces small black or dark green fruiting bodies on damaged plant tissues, which helps distinguish it from Phytophthora crown rot in the field. Phytophthora also attacks other bedding plants, including petunia, snapdragon, and vinca. So far this fall we have seen a few cases of Phytophthora, but no cases of Myrothecium, yet. See the following publications for pictures of pansy and how to distinguish between the various causes of crown rot.

<http://plantpathology.tamu.edu/barnes/pansy.pdf>

<http://www.aces.edu/pubs/docs/A/ANR-1214/ANR-1214.pdf>

Table 2. 2007 November Plant Problems Seen In The Birmingham Plant Diagnostic Lab.

<u>Plant</u>	<u>Problems</u>	<u>County</u>
Alfalfa	Alfalfa Rust	DeKalb
Arborvitae	Pestalotiopsis Tip Blight	Jefferson
	Spruce Spider Mite	Jefferson
Boxwood, Common	Boxwood Leafminer	Jefferson
	Indian Wax Scale	Jefferson
	Volutella Blight	Jefferson
Boxwood, Littleleaf	Volutella Blight	Jefferson
Cherrylaurel ('Otto Luyken')	Botryosphaeria Canker	Jefferson
	Phytophthora Root Rot	Jefferson
Fern	Fern Scale (<i>Pinnaspis</i>)	Cullman

<u>Plant</u>	<u>Problems</u>	<u>County</u>
Hydrangea, Bigleaf	Cercospora Leaf Spot	Jefferson
Oak, Water	Dryadeus Root Rot (<i>Inonotus</i>)	Jefferson
Pansy	Black Root Rot (<i>Thielaviopsis</i>)	Jefferson
	Phytophthora Crown Rot	Jefferson
Rose	Vole Injury	Jefferson
Rose, Confederate	Madeira Mealybug	Cullman
Sage	Phytophthora Root Rot	Jefferson
Zoysia	Large Patch (<i>Rhizoctonia</i>)	Jefferson

*Counties are not reported for greenhouse, nursery, or golf course samples.

November Insect Report (C. Ray)

County	Host	Category	Identification	Scientific Name
Clay	Red Bay	Miscellaneous	Palamedes Swallowtail Caterpillar	<i>Papilio palamedes</i>
DeKalb	Home	Household- Stored Products	Indian Meal Moth	<i>Plodia interpunctella</i>
DeKalb	Not Provided	Unknown	False Chinch Bug	<i>Nysius raphanus</i>
Chilton	Storage Area	Household- Miscellaneous	Spitting Spider	<i>Scytodes</i> sp.
Chilton	RV	Household- Miscellaneous	Black Soldier Fly	<i>Hermetia illucens</i>
Lee	Home	Household- Miscellaneous	Green Lynx Spider	<i>Peucetia viridans</i>
Montgomery	Home	Household- Stored Products	Case Making Clothes Moth Larva	<i>Tineola pellionella</i>
Tuscaloosa	Home	Household-	Cellar Spider	<i>Pholcus</i> sp.

County	Host	Category	Identification	Scientific Name
		Miscellaneous		
Tuscaloosa	Driveway	Household-Miscellaneous	False Chinch Bugs	<i>Nysius raphanus</i>
Elmore	Home	Medical	Bed Bug	<i>Cimex</i> sp.
Mobile	Turnips	Row Crops	Yellowmargined Leaf Beetle	<i>Microtheca ochroloma</i>
Jefferson	Home	Household-Stored Product	Varied Carpet Beetle Larval Exuviae	<i>Anthrenus verbasci</i>
Cullman	Sun Fern	Ornamental	Fern Scale	<i>Pinnaaspis aspidistrae</i>
Cullman	Confederate Rose	Ornamental	Madeira Mealybug	<i>Phenacoccus madeirensis</i>

Disease Possibilities For December

Our usual December diseases include black rot (*Xanthomonas campestris*) and Cercospora or Cercospora leaf spots on crucifers in the southern sections of the state. Also, Drechslera and/or Bipolaris leaf spots are seen on small grains and forages including oats, wheat, fescue, rye and also ryegrass. Of course, greenhouse plant diseases develop every month of the year. Pansy diseases are commonly seen, especially anthracnose, Pythium crown and root rot, and Phytophthora crown and root rot.

The list below includes some common disease problems received in the lab during December of the past few years. Comments on control practices are brief. Refer to the Alabama Pest Management Handbook for details. Also, remember that sanitation is important in most control situations.

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

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
Apple	Botryosphaeria Canker	Sunken, elongated lesions develop on branches and/or trunks. The lesion edges may be cracked at lesions margins. Lesion tissues are brown beneath the branch/trunk bark.	Cankered areas should be pruned out, making cuts 3-5 inches beyond the lesion edge. Disinfest shears between cuts.
Azalea	Cercospora Leaf Spot	Brown, circular-	Remove stress factors;

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	(Stress Related)	irregular spots (1/4-1/2 inch, 0.6-1.2 cm diameter) on yellowed or otherwise weakened/stressed plants.	sanitation.
	Phomopsis Canker	Sunken, necrotic lesions on branches; dieback.	Pruning. Protective sprays of Cleary's 3336. See the AL Pest Management Handbook.
	Powdery Mildew (<i>Microsphaeria</i>) [Greenhouse Location]	White, buff-colored dusty coating on leaves.	Apply a protective fungicide (See the AL Pest Management Handbook); Sanitation.
Basil	Rhizoctonia Stem Rot	Stems become brown and dry rotted.	Sanitation. Pruning is recommended to lower humidity; water in morning.
Bedding Plants	Bacterial Leaf Spot (Greenhouse Location)	Wet, water-soaked/black spots become dried and cracked in the centers with water-soaked margins.	Sanitation; reduce humidity; increase spacing between plants; See AL Pest Management Handbook.
	Pythium Root Rot (Greenhouse Location)	Roots become brown and water-soaked.	Sanitation; See AL Pest Management Handbook; reduce irrigation schedule.
Bentgrass	Brown Patch (<i>Rhizoctonia</i>)	Brown blotches on foliage; blight	See AL Pest Management Handbook.
	Pythium Blight/Root Rot	Plants yellow and die from root rot phase of the disease.	See AL Pest Management Handbook.
Bermuda, Coastal	Bipolaris Leaf Spot	Small, brown, elliptical spots become irregularly-shaped brown blotches.	----
Bermudagrass 'Tifeagle'	Fairy Ring (<i>Lycoperdon</i>)	Usually grass dieback on a semi-circle pattern with mushrooms forming at the outer edge of the circle.	See ANR-372.
Bermuda, Tifgreen	<i>Bipolaris sorokiniana</i> Blight	Seedling disease & seed rot.	See A. Hagan.
Boxwood	Macrophoma Blight	Foliage turns reddish,	Remove stress situation;

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
		yellow or brown with small black dots (about 1 mm diameter) scattered across leaf surfaces.	sanitation.
	Phytophthora Root Rot	Roots become brown, water-soaked and later dried. Plants show wilt and dieback, yellowing.	Sanitation. See the AL Pest Management Handbook.
Broccoli	Black Rot (<i>Xanthomonas</i>)	Yellow, V-shaped lesions on leaf edges become darkened and slowly spread down the leaf causing veins to darken. Eventually, tissue rot and decay spreads into the vascular system with the lower center stalk becoming rotted.	Crop rotation; seed treatment; see AL Pest Management.
Cedar, Deodar	Phytophthora Root Rot	Foliage dieback beginning with inner and lower foliage. Roots become brown and show a wet rot that later dries out.	Remove damaged trees. See the AL Pest Management Handbook. Reduce irrigation.
Centipede	Brown Patch (<i>Rhizoctonia</i>)	Foliage develops gray-brown spots, blotches; patches of turn brown and die.	Sanitation; apply protective fungicide treatment if grass is not dormant. See AL Pest Management Handbook.
Collards	Black Rot (<i>Xanthomonas</i>)	See Broccoli.	See Broccoli.
Citrus	Sooty Blotch	Small or large spots appear as a black sooty fungi print.	Check with Ed Sikora.
Cucumber	Anthrachnose (<i>Colletotrichum</i>)	Light brown angular leaf spots.	Sanitation and protective fungicide sprays. See Handbook.
Cypress, Leyland	Botryosphaeria Canker	Dieback of branches with sunken elongated branch lesions that may have cracked edges.	Prune out damage. Make cuts 3-4 inches beyond the edge of damage.
	Pestalotiopsis Tip Blight	Branches dieback at	Prune out damage.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
		tips. Tiny black specks may be visible on dieback areas.	Make cuts 3-4 inches beyond the edge of damage.
Dianthus	Alternaria Leaf Spot	Typically gray, irregular leaf spots.	Sanitation. Cleary's 3336 or Halt may help.
	Anthrachnose (<i>Colletotrichum</i>)	Reddish brown irregular spots on foliage.	Sanitation. Cleary's 3336 may help.
	Oedema	Small, corky, slightly raised spots on lower leaf surfaces sometimes accompanied by yellowish spots on corresponding upper leaf surfaces.	Reduce watering on cloudy days.
	Rhizoctonia Shoot Blight	Brown elongated lesions.	Sanitation. See AL Pest Management Handbook.
Elm, American	Powdery Mildew (<i>Oidium</i>)	White, powdery dusted blotch areas on leaves and young twigs. Powdery areas eventually become necrotic. New growth may be distorted.	Sanitation of fallen leaves. See the AL Pest Management Handbook.
Fern	Colletotrichum Leaf Spot/Blight	Circular to irregular brown, water-soaked spots on foliage.	Sanitation; Cleary's 3336 or Halt will provide protective disease control.
	Fusarium Leaf Spot	Circular to irregular brown, dried spots on foliage.	Sanitation. Protective sprays of Cleary's 3336 may be used.
	Phytophthora Root & Crown Rot	Plants develop brown-yellow foliage near the crown area. Roots become brown and water-soaked.	Sanitation. See the AL Pest Management Handbook.
	Phomopsis Leaf Spot	Circular to irregular brown, dried spots on foliage.	Sanitation. Protective sprays of Cleary's 3336 could be used.
Fern, Boston	Rhizoctonia Aerial Blight	Blight areas on fronds.	See AL Pest Management Handbook.
Fescue (Lawn)	Helminthosporium Crown Rot	Leaf blades were yellowed and shriveled. Tissues at the soil-line	See ANR-621.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
		were brown and decayed.	
Fescue, Red	Cool-Season Pythium Blight (Root Rot)	Turf areas become thinned, yellowish, and slow-growing.	See the AL Pest Management Handbook.
Fescue, Tall (Forage Crop)	Drechslera Leaf Spot (Net Blotch)	Small, brown, elliptical spots become irregularly-shaped brown blotches with uneven internal pigmentation that appears to be in a transverse and longitudinal net-like pattern.	---
Geranium	Botrytis Blight	Spots and blight may develop on leaves, flowers, & stems. When humidity is high, a gray mold will develop.	Sanitation; increase temperatures; increase air circulation to decrease humidity; protective fungicides.
	Phytophthora Stem Rot	Lower stem areas become black and water-soaked.	Sanitation; See Alabama Pest Management Handbook.
Holly	Phytophthora Root Rot	Roots, especially feeder roots, show a wet, water-soaked, rotted condition where the outer layer easily slips off the central cylinder.	Sanitation; See the AL Pest Management Handbook.
Holly, Chinese	Armillaria Root Rot	Lower trunk may show a thin, white mycelial mat beneath the bark; black thread-like fungal structures may be present on the surface of the bark or beneath; honey-brown-colored mushrooms may develop around the holly.	Removal of the plant is necessary.
Indian Hawthorn	Cercospora Leaf Spot	Circular-irregular, brown spots on leaves.	Sanitation. Cleary's 3336 will give some protective disease control.
Ivy, English	Anthracoze	Circular or irregularly	Sanitation. See the AL

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	<i>Colletotrichum</i>	shaped brown spots develop. Some orange or black specks are sometimes seen on surface of spots.	Pest Management Handbook.
Jerusalem Artichoke	Fusarium Root Rot	Roots become decayed with a brown, dry rot.	Remove infected plants from the area and do not replant artichokes for 10-15 years.
Juniper	Pestalotia Blight	Inner foliage turns brown.	Investigate stress conditions.
	Phytophthora Root Rot	Roots, especially feeder roots, show a wet, water-soaked, rotted condition where the outer layer slips off the central cylinder.	Sanitation; See the AL Pest Management Handbook.
Kiwi	Phytophthora Crown Rot	Dark brown decay.	Sanitation. Crop rotation. Avoid wet locations.
Kudzu	Cercospora Leaf Spot	Large, circular or irregular brown spots.	--
Lavender	Anthrachnose Leaf & Stem Spots	Circular-irregular brown spots and stem lesions.	Sanitation. Protective sprays of Cleary's 3336 or Halt.
Leyland Cypress	Botryosphaeria Canker	Sunken, cracked lesions on branches.	Pruning.
	Seiridium Canker	Slightly sunken, elongated lesions develop on branches and/or trunk. Resin often oozes out onto bark at points along lesion edge. Tissues beneath bark are brown.	Cankered areas should be pruned out, making cuts 3-5 inches beyond the lesion edge. Disinfest shears.
Ligustrum	Cercospora Leaf Spot	Large, brown circular, oval or sometimes angular leaf spots. Sometimes spots have dark brown borders.	Sanitation; protective sprays of Cleary's 3336 or Domain.
Lily, Easter	Pythium Root Rot	Roots become light brown and water-soaked, decayed. Lower foliage turns yellow.	Sanitation. Reduce irrigation.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
		Plants wilt & dieback follows.	
Liriope	Possible Fusarium Crown Rot; Suspect Secondary	Brown, dry, decay on lower stems. Isolated Fusarium produced negative results for pathogenicity tests.	---
	Phytophthora Crown Rot	Lower stem areas become brown and water-soaked. Areas later dry out.	Sanitation. Reduce irrigation.
	Rhizoctonia Crown Rot	Lower stems become brown and dried.	Sanitation.
Mondograss	Anthrachnose (<i>Colletotrichum</i>)	Brown blotches on leaf blades; blotches may begin at leaf tips or they may be centrally located on the leaf blade.	Cleary's 3336 or Domain; Protective sprays; Sanitation.
Mustard	Cercospora Leaf Spot	Brown, irregular leaf spots. Small gray patchy areas (spores) may develop on spots.	Sanitation. Kocide or Cuprofix Disperss may be used.
Oak	Botryosphaeria Canker	Sunken, elongated lesions develop on branches and/or trunks. The lesion edges may be cracked at lesions margins. Lesion tissues are brown beneath the branch/trunk bark.	Cankered areas should be pruned out, making cuts 3-5 inches beyond the lesion edge. Disinfest shears between cuts.
Oats	Bipolaris Spot Blotch	Brown-black, elongated spots (1 cm) on leaf blades.	See AL Pest Management Handbook.
	Drechslera Leaf Spot (Net Blotch)	Small brown flecks become longitudinal strips of dead tissue. Often the uneven blotchy discoloration of the dead tissue gives spots a net-like appearance. Outer edges of the diffuse areas of yellow or red which may involve the entire leaf blade. Diseased leaves often	Rotation; deep plowing; resistant cultivars. See AL Pest Management Handbook.

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
		die.	
	Possible Barley Yellow Dwarf Virus	Plants develop yellowing or reddish discoloration that begins at leaf tips and progresses downward. Plants are stunted. Diagnosis is often difficult when plants are small due to low virus concentrations in plants.	Insecticides practical in a few situations.
	Rust (<i>Puccinia coronata</i>)	Foliage develops yellow spots and rusty-orange powdery spore masses; foliage dies.	See Austin Hagan.
Oleander	Cercospora Leaf Spot	Brown, circular or oval leaf spots.	Sanitation.
Onion	Sclerotinia Blight	Water-soaked lesions at soil line/crown area.	---
Pansy	Botrytis Bud Rot	Buds become brown, sometimes with gray over-tones.	Sanitation. See 1998 recommendations.
	Myrothecium Crown Rot	Plants wilt and yellow and dieback. Crowns become brown and limp; sometimes tiny white & black cushions are visible on crowns.	Sanitation. Daconil treatments may give some protective control.
	Phytophthora Crown Rot	Lower stems become brown and wet-rotted. Areas later become dried.	Remove damaged plants. Reduce irrigation. See the AL Pest Management Handbook.
	Pythium Crown Root Rot	Dark brown, water-soaked decay at crown area.	Sanitation. See Handbook.
	Thielaviopsis Root Rot	Black lesions on stunted roots. Plants stunted.	Sanitation. See Handbook.
Pine, Loblolly	Sooty Mold	Black, sooty layer develops on needles. Black layer may be powdery or as thin dry sheets on needle	Physically remove superficial coatings. Identify and control insects (may be aphids, scales, or other sucking-

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
		surfaces.	mouth parts insects).
Plum	Black Knot (<i>Plowrightia</i> -formerly <i>Dibotryon</i>)	Green swellings on branches become black, hard, elongated swellings; dieback develops.	See ANR-1055 or Ed Sikora.
Poinsettia	Botrytis Blight (Greenhouse Location)	Gray-brown blotches on foliage; during humid conditions a delicate fungal wet may be present over blotch areas.	Increase temperatures; decrease humidity; sanitation; see AL Pest Management Handbook.
	Pythium Root Rot (Greenhouse Location)	Roots are brown and water-soaked; outer root tissues slide easily away from inner root core.	Sanitation; See AL Pest Management Handbook.
Pothos	Bacterial Leaf Spot (<i>Erwinia</i>)	Angular, dark, water-soaked spots on foliage.	Sanitation; Do not irrigate over-head.
Rose	Crown Gall (<i>Agrobacterium</i>)	Hard, rough-surfaced galls on the lower cane near the soil-line and on the roots.	Remove infected plants. Keep area free of susceptible plants for 2-3 years. Avoid wounds.
	Powdery Mildew (<i>Oidium</i>)	White, powdery dusting on blotch areas. Eventually the mildew areas become necrotic. Some distorted new growth may develop.	See the AL Pest Management Handbook.
Rye	Bipolaris Spot Blotch	Brown, elongated spots on leaf blades.	---
Ryegrass	Bipolaris Leaf Spot	Small, brown elliptical leaf spots.	See AL Pest Management Handbook.
	Piricularia Gray Leaf Spot	Gray-brown, irregularly shaped leaf spots.	See A. Hagan for comments.
	Pythium Blight	Leaf blades yellow and die; roots become discolored brown with a soft, wet rot.	See AL Pest Management Handbook.
	Rhizoctonia Crown Rot	Crown areas develop a brown, dry rot. Plants yellow and dieback.	Sanitation. Protective fungicides. See the AL Pest Management Handbook.
Spruce	Rhizosphaera Needle	Needles become yellow	See the AL Pest

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
	Blight	and then brown. Tiny black specks (fungus reproductive bodies) may be seen in rows on the dying needles. Needles may fall.	Management Handbook.
Southern Magnolia	Algal Leaf Spot (<i>Cephaleuros</i>)	Slightly raised green-reddish brown leaf spots.	Sanitation. See the AL Pest Management Handbook.
Snapdragon	Rhizoctonia Stem Canker	Brown sunken cankers on lower stems.	Sanitation; Cleary's 3336 or Domain.
St. Augustine	Brown Patch (<i>Rhizoctonia</i>)	See Centipede.	See Centipede.
	Take-All Patch (<i>Gaeumannomyces graminis</i> var <i>graminis</i>)	Black lesions develop on roots; foliage dieback.	See the AL Pest Management Handbook and ANR-823.
Strawberry	Anthracnose Crown Rot (<i>Colletotrichum</i>)	Plant wilt. Crowns develop red-brown firm rot.	Sanitation. Use resistant cultivars. Use healthy transplants. See Ed Sikora.
	Bacterial Leaf Spot (<i>Xanthomonas</i>)	Black, water-soaked (when in early stages), angular-shaped leaf spots.	Strict sanitation. Avoid overhead irrigation. See ANR-500A for protective bactericide recommendations.
	Phomopsis Leaf Blight	Red small spots develop into brown v-shaped lesions.	See the AL Pest Management Handbook.
	Phytophthora Crown/Root Rot	Stunted, wilted plants. Roots with reddened core or center. Roots and crowns decay with brown rot.	Avoid wet areas. Use disease free and resistant cultivars. Use protective fungicides when disease has been diagnosed in the area.
Sweet Potato	Fusarium Surface Root Rot	Light to dark brown surface decay that is firm and dry. Infected roots eventually become hard & mummified.	Avoid wounds. Remove infected plants.
	Fusarium Root Rot	Similar symptoms to Fusarium surface rot except rot extends below vascular ring.	Avoid wounds. Remove infected plants.
Tomato	Anthracnose Fruit Rot	Round, colorless,	Sanitation. See AL Pest

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
		sunken fruit spot areas become large and wet, watery, rotted.	Management Handbook.
	Sour Rot (<i>Geotrichum candidum</i> and related species)	Greasy, water-soaked lesions develop at wounds or at the edge of the stem scar in green and ripe fruit (See APS Compendium.) Cracks may occur with ripe fruit and a crusty, off-white, yeast-like growth may develop on the surface of cracked areas.	This fungus usually enters the fruit through wounds or natural skin breaks. This is usually a post-harvest problem. Control involves careful handling during harvest. Also storage areas should be thoroughly cleaned prior to storage.
	Target Spot (<i>Corynespora casseicola</i>)	Brown, gray, somewhat zonate-patterned oval or irregular spots. Spots are sometimes confused with early blight.	Sanitation. See Ed Sikora for further comments.
Tulip	Penicillium Bulb Rot	Brown blotches on bulb, sometimes with green/gray spore masses.	See AL Pest Management Handbook for dip recommendations.
Turnips	Cercospora Leaf Spot	Small to large, circular-irregular, off-white to pale brown leaf spots.	See AL Pest Management Handbook.
	Colletotrichum Leaf Spot	Cream-colored, round or oval spots.	Sanitation. See AL Pest Management Handbook.
	White Leaf Spot (<i>Cercospora brassicae</i>)	Small-large irregularly shaped, white spots.	See the AL Pest Management Handbook.
Vinca	Phytophthora Root Rot	Roots are brown, water-soaked and the surface tissues will slip easily off the central root cylinder with a small amount of pressure.	Sanitation. See AL Pest Management Handbook.
	Pythium Root Rot	Roots are brown, water-soaked and the surface tissues will slip easily off the central root cylinder with a small amount of pressure.	Sanitation. See AL Pest Management Handbook.
	Thielaviopsis Root Rot	Roots show black	Keep potting mix or soil

<u>Plant</u>	<u>Disease</u>	<u>Description</u>	<u>Control</u>
		lesions and blotches. Tops grow poorly.	pH on the low side of normal, about 5.5-6.0. Cleary's or Domain drenches may help.
Wax Myrtle	Botryosphaeria Canker	Sunken, cracked lesions on branches.	Sanitation. Pruning.
Wheat	Bipolaris Leaf Spot	Brown-black, elongated spots (1 cm) on leaf blades.	See AL Pest Management Handbook.
Zoysia	Rhizoctonia Brown Patch	Small-large patches of turf with leaf spots and blight.	See the AL Pest Management Handbook.

WE ALFA BUILDING PATHOLOGY-ENTOMOLOGY AND DIAGNOSTIC FOLKS WISH YOU ALL A HAPPY AND RESTFUL H