

The plant disease diagnostic clinic received over 700 samples in 2009. While the sample load was average, the weather produced an increase in the variety of problems and pathogens. The list below illustrates the types of pathogens/problems found on each plant host submitted. The general format of the list shows the common name for the disease, followed by the scientific name of the pathogen, followed by a number in parentheses that indicates the number of times this problem was diagnosed in the lab.

Almost 100 of our samples were in the form of digital photos and I am pleased to say that we were able to come up with a reasonably confident diagnosis for 75% of those digital samples without requiring a physical sample. That success rate is primarily due to the excellent quality of the photographs and the detailed descriptions that accompanied them. So you submitters, pat yourselves on the back for a job well done. As a diagnostician, I am never completely confident until I can test the actual specimen, so you will often see the word “suspected” in the list below and that usually refers to a digital sample. In the case of insects or nutritional problems, I have tried to be specific for cases where I followed up with Dr. Layton or the soil testing lab and if circumstances did not allow follow up, then I have tried to record my best educated guess.

Abelia(*Abelia x grandiflora*)

- Sclerotinia Disease (*Sclerotinia sclerotiorum*) - (1)

Aloe(*Aloe sp.*)

- Phomopsis Leaf Blight (*Phomopsis sp.*) - (1)

Amaryllis (*Hippeastrum sp.*)

No Disease – (1)

American Beautyberry (*Callicarpa americana*)

No Disease (Possibly leaf hopper injury) – (1)

Anemone, Japanese (*Anemone x hybrid*)

- Impatiens Necrotic Spot Virus - (1)

Apple(*Malus x domestica*)

- Cedar-apple Rust (*Gymnosporangium juniper-virginianae*) - (1)
- Physiological Problem Suspected – (1)
- Thread Blight Suspected (*Corticium stevensii*) - (1)

Arborvitae(*Thuja sp.*)

- Needle Blight (*Pestalotiopsis sp.*) - (1)

Arborvitae, 'Green Giant' (*Thuja plicata*)

- No Disease - (1)

Aucuba(*Aucuba japonica*)

- Anthracnose (*Colletotrichum* sp.) - (1)

Azalea(*Rhododendron* sp.)

- Armillaria Root Rot (*Armillaria* sp.) - (1)
- Exobasidium Leaf Gall (*Exobasidium* sp.) - (1)
- Rhizoctonia Root Rot (*Rhizoctonia* sp.) - (1)
- Azalea Lace Bug - (1)
- Southern Red Mites - (1)
- Cultural/Environmental Problem (Cold Injury) - (1)
- Cultural/Environmental Problem (Water Injury) - (1)
- No Disease (Lichens) - (1)
- Root Dysfunction Suspected - (2)

Bamboo (Family: Gramineae)

- Insect Injury (scale) - (1)

Bay, Red(*Persea borbonia*)

- Suspect Laurel Wilt (*Raffaelea lauricola* and its insect vector *Xyleborus glabratus*) - (2)

The 2 samples received by the MSU lab had classic symptoms of laurel wilt, but tested negative at USDA labs. Subsequent sampling resulted in USDA confirmation of this new and devastating fungal disease and the insect that vectors it in Jackson County, MS. The fungus is vectored by a non-native beetle and affects red bay, sassafras and avocado. The avocado industry in Florida and California is very concerned about this disease and USDA is closely monitoring its spread. To learn more visit <http://www.fs.fed.us/r8/foresthealth/laurelwilt/index.shtml>

Bean, Butter (*Phaseolus lunatus*)

- Anthracnose (*Colletotrichum truncatum*) - (1)

Bean, Green(*Phaseolus vulgaris*)

- Virus, Undetermined - (1)
- No Disease (Abiotic Problem) - (1)

Beech, American(*Fagus grandifolia*)

- Insect Injury Suspected - (1)

Bentgrass(*Agrostis* sp.)

- Nematodes, Ring (*Mesocriconema* sp.) - (2)
- Nematodes, Stunt (*Tylenchorhynchus* sp.) - (1)
- Anthracnose Basal Rot (*Colletotrichum graminicola*) - (3)
- No Disease, Cultural problem (poor roots + 100°F temps + high humidity) (9)

Bermudagrass(*Cynodon dactylon*)

- Bermudagrass Decline (*Gaeumannomyces graminis*) – (3)
- Bipolaris Leaf Spot (*Bipolaris* sp.) - (17)
- Bipolaris Leaf Spot (*Bipolaris cynodontis*) - (1)
- Bipolaris Leaf Spot (*Bipolaris australiensis*) - (1)
- Dollar Spot (*Sclerotinia homoeocarpa*) – (3)
- Exserohilum Leaf Spot (*Exserohilum rostratum*) (1)
- Large Patch (*Rhizoctonia solani*) – (1)
- Microdochium Patch (*Microdochium nivale*) - (5)
- Nematodes, Ring (*Mesocriconema* sp.) – (4)
- Nematodes, Sting (*Belonolaimus* sp.) – (2)
- Pythium Blight (*Pythium aphanidermatum*) – (3)
- Pythium Blight (*Pythium* sp.) – (1)
- Pythium Root Rot (*Pythium* sp.) – (1)
- Slime Mold (*Physarum cinereum*) – (1)

Birch, River(*Betula nigra*)

- Root Dysfunction Suspected - (1)

Black Olive (*Bucida buceras*)

- Cold Injury Suspected - (1)

Black-eyed Susan (*Rudbeckia hirta*)

- Undetermined - (1)

Blueberry(*Vaccinium* sp.)

- Anthracnose (*Colletotrichum gloeosporioides*) - (1)
- Leaf Rust (*Pucciniastrum vaccinii*) - (1)
- No Disease (Lichens) - (1)
- No Disease (Possible combination of old age and over-fertilization) - (2)

Boxwood(*Buxus* sp.)

- Cold Injury (Winter Burn) – (2)

Burford Holly(*Ilex cornuta*)

- Physiological Problem (High pH 8.4 – 8.7) - (1)

Cabbage(*Brassica oleracea*)

- Downy Mildew (*Hyaloperonospora parasitica*) - (1)

Camellia(*Camellia japonica*)

- Inadequate Sample and Information – (1)

Camellia(*Camellia* sp.)

- Anthracnose (*Colletotrichum* sp.) - (1)
- Virus, Undetermined – (1)

Camellia(*Camellia sasanqua*)

- Cultural/Environmental Problem (Cold Injury Suspected) - (1)
- Edema – (1)
- Root Dysfunction Suspected – (1)

Cantaloupe(*Cucumis melo*)

- No Disease (Burn, possibly from sunscald, chemical phytotoxicity or manganese toxicity) - (1)

Catalpa(*Catalpa* sp.)

- Nematodes, Root-knot (*Meloidogyne* sp.) - (1)

Cedar(*Cedrus* sp.)

- No Disease - (1)

Centipedegrass(*Eremochloa ophiuroides*)

- Anthracnose (*Colletotrichum graminicola*) - (16)
- Centipedegrass Decline (Abiotic Problem) - (2)
- Chemical Injury Suspected – (1)
- Cladosporium Mold (*Cladosporium* sp.) – (1)
- Large Patch (*Rhizoctonia solani*) - (15)
- Take-all (*Gaeumannomyces graminis*) - (6)

- Pythium Root/Crown Rot (*Pythium* sp.) – (1)
- No Disease – (10)

Cherry(*Prunus* sp.)

- No Disease (Excessive Water) - (1)

Cherry, Japanese Flowering (*Prunus serrulata*)

- Cultural/Environmental Problem - (1)

Cherrylaurel (*Prunus laurocerasus*)

- Shot-hole Disease (*Wilsonomyces carpophilus*) - (1)
- No Disease – (1)

Citrus(*Citrus* sp.)

- Insect Injury (Russet mites and leaf miner) – (1)
- Physical Injury (Scarring from bird damage) - (1)
- Root Dysfunction Suspected – (1)

Cole Crop(*Brassica* sp.)

- Anthracnose (*Colletotrichum higginsianum*) - (1)

Coleus (*Coleus x hybridus*)

- Downy Mildew (*Peronospora* sp.) - (1)
- Undetermined (No pathogens observed) – (1)

Corn(*Zea mays*)

- Anthracnose (*Colletotrichum graminicola*) - (1)
- Common Maize Rust (*Puccinia sorghi*) - (2)
- Diplodia Leaf Streak (*Stenocarpella macrospora*) – (3)
- Diplodia Stalk Rot (*Stenocarpella maydis*) – (1)
- Ear Rot (*Cladosporium* sp.) – (1)
- Genetic Problem (Suspect Hypersensitive Response) – (1)
- Gibberella Stalk Rot (*Gibberella zeae*) – (1)
- Gray Leaf Spot (*Cercospora zeae-maydis*) – (12)
- Northern Corn Leaf Blight (*Exserohilum turcicum*) – (1)
- Southern Corn Leaf Blight (*Bipolaris maydis*) – (6)
- Southern Rust (*Puccinia polypora*) – (2)

- Insect Injury (stalk borers) – (2)
- No Disease – (7)

Corn, Sweet(*Zea mays*)

- Phoma Leaf Spot (*Phoma* sp.) - (1)
- Pyricularia Leaf Spot (*Pyricularia* sp.) - (1)

Cotton(*Gossypium* sp.)

- Cotton Stem Canker (*Phoma exigua*) - (1)
- Leaf Spot (*Alternaria alternata*) - (1)
- No Disease – (5)
- Chemical Injury Suspected – (2)

Cowpea(*Vigna unguiculata*)

- Undetermined - (1)

Cowpea, Hairypod (*Vigna luteola*)

- Negative for Asian Soybean Rust - (1)

Crabgrass (*Digitaria* sp.)

- Rust (*Puccinia* sp.) - (1)

Crape Myrtle(*Lagerstroemia indica*)

- Cercospora Leaf Spot (*Cercospora* sp.) – (1)
- Glyphosate Herbicide Injury (Abiotic Problem) - (1)
- Inadequate Sample – (1)

Cucumber(*Cucumis sativus*)

- Nutritional Problem (possible Magnesium deficiency - (1)
- Undetermined Injury (suspect *Pythium* root rot when a seedling, environmental conditions dried out and the plant recovered, but the reduced root system could not support the plant)

Cucurbit (Gen. sp.)

- *Pythium* Root Rot (*Pythium* sp.) - (1)
- Downy Mildew (*Pseudoperonospora cubensis*) – (1)

Cypress(*Cupressus* sp.)

- Root Dysfunction Suspected - (1)
- Cold Injury (Winter Burn) - (1)

Cypress, Italian (*Cupressus sempervirens*)

- Problem lower down (possible root dysfunction or stem canker) - (1)

Cypress, Sawara (*Cupressus pisifera*)

- No Disease (Cultural problem suspected) - (1)

Cypress, Leyland(X *Cupressocyparis leylandii*)

- Needle Blight (*Pestalotiopsis* sp.) - (4)
- Needle Blight (*Passalora sequoiae*) - (1)
- Normal Plant Part (normal cones) - (1)
- Root Dysfunction - (2)

Dogwood, Undetermined(*Cornus* sp.)

- Spot Anthracnose (*Elsinoe corni*) - (1)

Dogwood, Yellow-twig (*Cornus sericea: flaviramea*)

- Canker (*Fusicoccum* sp.) - (1)

Elaeagnus(*Elaeagnus* sp.)

- Root Dysfunction - (1)
- Herbicide Injury (Glyphosate) - (1)

Elm, Winged(*Ulmus alata*)

- Bacterial Scorch (*Xylella fastidiosa*) - (2)

Fern, Indian Holly(*Arachnoides* sp.)

- Tip Blight (*Phyllosticta* sp.) - (1)

Fig, Common(*Ficus carica*)

- Pink Limb Blight (*Erythricium salmonicolor*) - (1)

Fig, Creeping (*Ficus pumila*)

- Diplodia Dieback (*Diplodia* sp. - (1)

Forsythia(*Forsythia* sp.)

- Problem Lower Down - (1)

Fungus Identification

- Bolete (*Boletus* sp.) - (1) eaten by dog, no apparent toxic effects
- Russula (*Russula* sp.) - (1) eaten by dog, no apparent toxic effects
- Blushing Amanita (*Amanita rubescens*) - (1) eaten by dog, no apparent toxic effects
- Stinkhorn

Gardenia(*Gardenia jasminoides*)

- Algal Leaf Spot (*Cephaleuros* sp.) - (1)

Geranium (*Pelargonium* sp.)

- Heat Stress - (1)
- Root Dysfunction – (1)

Grape (*Vitis* sp.)

- Insect - (1)

Grape, Muscadine(*Vitis rotundifolia*)

- Cold Injury Suspected (Abiotic Problem) - (2)

Hawthorn, Indian(*Raphiolepis indica*)

- Entomosporium Leaf Spot (*Entomosporium mespili*) - (1)
- Botryosphaeria Canker (*Botryosphaeria dothidea*) - (1)
- Fire Blight (*Erwinia amylovora*) - (1)
- Cercospora Leaf Spot (*Cercospora* sp.) - (1)
- Root bound (Abiotic Problem) - (2)

Hay, Mixed Grasses(Gen. sp.)

- No Disease (1)

Hibiscus(*Hibiscus* sp.)

- No Disease (Unknown Abiotic Problem) - (1)

Hickory (*Carya* sp.)

- Insect Injury (two types of gall-forming insects and foliar feeding injury by another insect) - (1)

Holly(*Ilex* sp.)

- Algal Leaf Spot (*Cephaleuros* sp.) - (1)
- Nitrogen Deficiency Suspected - (1)
- Insufficient Sample and Information (possibly chemical injury)

Holly, Foster(*Ilex* x *attenuata*)

- Cladosporium Mold (*Cladosporium* sp.) - (1)

Holly, Japanese(*Ilex* *crenata*)

- Phytophthora Blight (*Phytophthora* sp.) - (1)

Holly, ‘Nellie Stevens’ (*Ilex* x *Nellie R. Stevens*)

- Inadequate Sample - (1)

Holly, Yaupon (*Ilex* *vomitorea*)

- Phoma Leaf Spot (*Phoma* sp.) - (2)
- Glyphosate Herbicide Injury – (1)
- Undetermined Problem – (1)

Hollyhock(*Alcea* *rosea*)

- Leaf Rust (*Puccinia* *malvacearum*) - (3)
- Insect Injury (Mites) – (1)

Household()

- Polypore Fungus - (1)

Hydrangea(*Hydrangea* sp.)

- Fusarium Rot/Crown Rot (*Fusarium* spp.) - (1)
- Anthracnose (*Collectrichum* *gloeosporioides*) - (1)

Hydrangea, Oak Leaf(*Hydrangea* *quercifolia*)

- Cercospora Leaf Spot (*Cercospora* sp.) - (1)
- Water Injury (Root Suffocation) (1)

Ivy, English(*Hedera helix*)

- Rhizoctonia Root/Stem Rot (*Rhizoctonia solani*) - (1)
- Fusarium Root Rot (*Fusarium* sp.) – (1)
- Anthracnose (*Colletotrichum* sp.) – (1)

Japanese Cleyera(*Cleyera japonica*)

- Cercospora leaf spot (*Cercospora* sp.) - (1)

Jasmine, Asiatic(*Trachelospermum asiaticum*)

- Inadequate Sample (Abiotic Problem) - (1)

Jasmine, Carolina (*Gelsemium sempervirens*)

- Cold Injury - (1)

Juniper(*Juniperus* sp.)

- Needle Blight (*Passalora sequoiae*) - (1)
- Quince Rust (*Gymnosporangium clavipes*) – (1)
- Sphaeropsis Dieback (*Sphaeropsis* sp.) – (1)
- Macrophoma Blight (*Macrophoma* sp.) – (1)
- Physiological Problem (Cold Response) - (1)

Lantana(*Lantana* sp.)

- Slime Mold (Not a pathogen) - (1)

Lawn(*Gen. sp.*)

- Anthracnose (*Colletotrichum graminicola*) - (3)
- Algae - (2)
- Large Patch (*Rhizoctonia solani*) - (2)
- Inadequate Sample (Abiotic Problem) - (1)

Leafy Mistletoe (*Phoradendron* sp.)

- Cold Injury Suspected - (1)

Lemon(*Citrus limon*)

- Nutritional Problem Suspected - (1)

Lemon, Meyer (*Citrus x meyeri*)

- Nutritional Problem Suspected - (1)

Leucothoe (*Leucothoe* sp.)

- Cercospora Leaf Spot (*Cercospora* sp.) - (1)
- Powdery Mildew (*Erysiphe* sp.) - (1)

Liriope (*Liriope* sp.)

- Fusarium Crown Rot (*Fusarium* sp.) - (1)

Magnolia (*Magnolia* sp.)

- Leaf Spot (*Passalora* sp.) - (1)
- Sooty Mold (*Septobasidium* sp.) - (1)
- Insect Injury (scale, mites) - (2)

Magnolia, Saucer (*Magnolia x soulangiana*)

- Inadequate Sample - (1)

Magnolia, Southern (*Magnolia grandiflora*)

- Algal Leaf Spot (*Cephaleuros* sp.) - (1)
- Lichens - (1)
- Fungal Epiphyte (*Cladosporium herbarum*) - (1)
- Slime Flux (Various Bacteria) - (1)
- Coniothyrium Leaf Spot (*Coniothyrium* sp.) - (1)
- Bacterial Leaf Scorch (*Xylella fastidiosa*) - (1)
- Root Dysfunction Suspected - (1)

Mandevilla (*Mandevilla* sp.)

- Pythium Root Rot (*Pythium* sp.) - (1)
- Anthracnose (*Colletotrichum gloeosporioides*) - (1)
- Abiotic Problem (undetermined) - (1)

Maple (*Acer* sp.)

- Anthracnose (*Discula* sp.) - (1)
- Cercospora Leaf Spot (*Cercospora* sp.) - (1)

- Botryosphaeria Canker (*Botryosphaeria dothidea*) - (1)

Maple, Japanese(*Acer palmatum*)

- Anthracnose (*Colletotrichum* sp.) - (1)
- Phomopsis Canker (*Phomopsis* sp.) - (1)
- Cultural Problem – (1)
- Normal Plant Part - (1)

Maple, Silver(*Acer saccharinum*)

- Physical Sample Required - (1)

Maple, Sugar (*Acer saccharum*)

- Anthracnose (*Discula* sp.) - (1)

Mayhaw(*Crataegus opaca*)

- Quince Rust (*Gymnosporangium clavipes*) - (1)

Mulch()

- Slime Mold (*Fuligo septica*) - (1)

Narrow Burgundy Leaf(*Alternanthera ficoidea*)

- Boron Toxicity Suspected - (1)

Oak(*Quercus* sp.)

- Oak Leaf Blister (*Taphrina caerulescens*) - (3)
- Bacterial Scorch (*Xylella fastidiosa*) - (1)
- Anthracnose (*Colletotrichum* sp.) - (1)
- Insect (Scale (possibly Obscure Scale)) - (1)
- Herbicide Injury (Phenoxy) - (1)

Oak, Live(*Quercus virginiana*)

- Smooth Patch (Various fungi) - (1)
- Leaf Blister (*Taphrina caerulescens*) – (1)
- Bark Rot (*Perenniporia* sp.) – (1)
- Wood Decay (White Rot, fungus undetermined) – (1)

Oak, Water(*Quercus nigra*)

- Leaf Blister (*Taphrina caerulescens*) – (2)
- Biscogniauxia (Hypoxylon) Canker (*Biscogniauxia atropunctata*) - (1)
- Mechanical Injury

Oak, Willow (*Quercus phellos*)

- Root Dysfunction + Iron Chlorosis – (1)
- Root Dysfunction – (1)

Okra(*Abelmoschus esculentus*)

- Fusarium Root Rot (*Fusarium* sp.) - (1)
- Environmental Problem (Poor weather during flowering, and/or too hot or too cold at pod set) - (1)

Oleander(*Nerium oleander*)

- Bacterial Scorch (*Xylella fastidiosa*) - (2)
- Cercospora Leaf Spot (*Cercospora* sp.) – (1)

Ornamental, Bedding Plants(Gen. sp.)

- Slime Mold (*Fuligo septica*) - (1)

Ornamental, Woody(Gen. sp.)

- Insects + Sooty Mold (*Septobasidium* sp.) - (2)
- Leaf Spot (*Pestalotiopsis* sp.) - (1)
- Chemical Injury Suspected

Palm, Sago (*Cycas revoluta*)

- Physiological Problem (cold injury and/or nutritional deficiency) – (1)

Pea(*Pisum sativum*)

- Fusarium Root Rot (*Fusarium* sp.) - (1)

Peach(*Prunus persica*)

- Brown Rot (*Monilinia fructicola*) - (1)
- Animal Injury (Deer Rub) – (1)
- Insect Injury (burrowed into fruit) – (1)

Peanut(*Arachis hypogaea*)

- Rhizoctonia Blight (*Rhizoctonia solani*) - (1)
- Cylindrocladium Black Rot (*Cylindrocladium scoparium*) - (1)
- Limb Rot (*Rhizoctonia solani*) - (1)
- No Disease (Abiotic Problem) - (1)

Pear(*Pyrus* sp.)

- Physical Sample Required - (1)

Pear(*Pyrus communis*)

- Rust (*Gymnosporangium* sp.) - (1)

Pear, Ornamental(*Pyrus calleryana*)

- Herbicide Injury Suspected (phenoxy or dicamba) - (1)
- Root Dysfunction Suspected (Root Bound) - (4)

Pecan(*Carya illinoensis*)

- Pecan Scab (*Fusicladosporium effusum*) - (1)
- Animal Injury (Sap sucker) - (1)

Peperomia (*Peperomia* sp.)

- No Disease – (1)

Pepper(*Capsicum* sp.)

- Southern Blight (*Sclerotium rolfsii*) - (2)
- Pythium Root/ Crown Rot (*Pythium* sp.) - (1)
- Nematodes, Root Knot (*Meloidogyne* sp.) - (2)

Periwinkle, Common (*Vinca minor*)

- No Disease – (1)

Periwinkle, Madagascar(*Catharanthus roseus*)

- Anthracnose (*Colletotrichum* sp.) - (1)
- Botrytis Blight (*Botrytis cinerea*) - (1)
- Phytophthora Blight (*Phytophthora nicotianae* [=parasitica]) - (1)
- Fusarium Crown Rot (*Fusarium* sp.) – (1)
- Rhizoctonia Root/Stem Rot (*Rhizoctonia* sp.) – (2)

Persimmon, Common (*Diospyrus virginiana*)

- Cercospora Leaf Spot (*Pseudocercospora* sp.) – (2)

Persimmon, Japanese (*Diospyros kaki*)

- Pestalotiopsis Leaf Spot (*Pestalotiopsis* sp.) – (1)
- Leaf Spot (*Monochaetia* sp.) – (1)
- Physiological Problem (Tannin Spots) – (1)

Petunia(*Petunia x hybrida*)

- Rhizoctonia Crown and Stem Rot (*Rhizoctonia solani*) - (1)
- Undetermined - (1)

Photinia (*Photinia x fraseri*)

- Armillaria Root Rot (*Armillaria* sp.) – (1)
- Water Injury – (1)

Pine(*Pinus* sp.)

- Needle Rust (*Coleosporium* sp.) - (1)

Pine, Loblolly(*Pinus taeda*)

- Nematodes, Pine Wood (*Bursaphelenchus xylophilus*) - (1)
- Diplodia Blight (*Sphaeropsis sapinea*) – (1)
- Chemical Injury Suspected – (1)
- Insect Injury Suspected – (1)

Pine, Longleaf (*Pinus palustris*)

- Needle Blight (*Pestalotiopsis* sp.) - (1)

Plum(*Prunus* sp.)

- Shot hole (*Wilsonomyces carpophilus*) – (1)
- Black Knot (*Apiosporina morbosa*) – (1)
- Bacterial Canker (*Pseudomonas syringae*) – (1)
- Insect Injury (scale) – (1)
- Physical Sample Required (Abiotic Problem) - (2)

Podocarpus (*Podocarpus* sp.)

- Leaf Necrosis (*Macrophoma* sp.) - (1)

Poinsettia(*Euphorbia pulcherrima*)

- Corynespora Leaf Spot (*Corynespora cassiicola*) - (1)

Pomegranate (*Punica granatum*)

- Fungal leaf spot and fruit blotch suspected (diagnosis based on digital image) - (1)

Potato(*Solanum tuberosum*)

- Rhizoctonia Stem Rot (*Rhizoctonia solani*) - (1)

Privet(*Ligustrum sp.*)

- Cercospora Leaf Spot (*Cercospora sp.*) - (1)
- Environmental/nutritional problem – (1)

Pumpkin (*Cucurbita sp.*)

- Slime mold and powdery mildew suspected (diagnosis based on digital image) - (1)
- No Disease (possible chemical phytotoxicity) – (1)

Quince, Common (*Cydonia sp.*)

- Quince Rust (*Gymnosporangium clavipes*) - (1)

Redbud (*Cercis Canadensis*)

- Insect injury (Eriophyid Mites) - (1)
- Cultural/Environmental Problem – (1)
- Undetermined (Root dysfunction or Botryosphaeria canker suspected)

Rhododendron(*Rhododendron sp.*)

- Pestalotiopsis Leaf Spot (*Pestalotiopsis sp.*) - (1)

Rose(*Rosa sp.*)

- Brand Canker (*Coniothyrium wernsdorffiae*) - (1)
- Common Canker (*Microsphaeropsis fuckelii*) – (3)
- Canker (*Phomopsis mali*) – (2)
- Crown Gall (*Agrobacterium tumefaciens*) – (1)
- Black Spot (*Diplocarpon rosae*) - (1)
- Leaf Spot (*Pseudocercospora puderi*) - (1)
- Cold Injury (Abiotic Problem) - (2)
- Nutritional Problem Suspected (Abiotic Problem) - (1)

- Root Bound (Abiotic Problem) - (1)
- Glyphosate Herbicide Injury Suspected (Abiotic Problem) - (1)

Rosemary (*Rosmarinus officinalis*)

- Fusicoccum Dieback (*Fusicoccum* sp.) - (1)

Ryegrass(*Lolium* sp.)

- Pythium Blight (*Pythium* sp.) - (1)
- Drechslera Leaf Spot (*Drechslera siccans*) – (1)
- No Disease (Abiotic Problem) – (1)

Satsuma (*Citrus reticulata*)

- Sooty Mold (*Capnodium* sp.) - (1)
- Insect Injury (white flies, scale) – (3)
- No Disease (cold injury suspected and severe alternate bearing) – (1)

Soil ()

- Undetermined - (1)

Soybean(*Glycine max*)

- Bacterial Blight (*Pseudomonas savastanoi* pv. *glycinea*) - (1)
- Cercospora Blight (*Cercospora kikuchii*) - (1)
- Fusarium Root Rot (*Fusarium* sp.) - (1)
- Phomopsis Canker (*Phomopsis* sp.) - (3)
- Sudden Death Syndrome Suspected (*Fusarium solani* f.sp. *glycines*) - (1)
- Frogeye Leaf Spot (*Cercospora sojina*) - (1)
- Anthracnose (*Colletotrichum gloeosporioides*) - (2)
- Pod and Stem Blight (*Phomopsis sojae*) - (1)
- Phomopsis Seed Decay (*Phomopsis longicolla*) - (1)
- Nutritional Problem Suspected (Abiotic Problem) - (2)
- Herbicide Injury Suspected (Valor) - (1)
- No Disease – (5)

Spirea (*Spiraea* sp.)

- Genetic Variegation (Abiotic Problem) - (1)

Spreading Euonymus(*Euonymus kiautschovicus*)

- Powdery Mildew (*Oidium* sp.) - (1)

Squash (*Cucurbita* sp.)

- Slime Mold (*Fuligo septica*) - (1)

Strobilanthes (*Strobilanthes* sp.)

- Nutritional Problem (Boron toxicity) - (1)

St. Augustinegrass(*Stenotaphrum secundatum*)

- Take-all (*Gaeumannomyces graminis*) - (46)
- Large Patch (*Rhizoctonia solani*) - (19)
- Pythium Root/Crown Rot (*Pythium* sp.) - (1)
- Gray Leaf Spot (*Pyricularia grisea*) - (2)
- Brown Patch (*Rhizoctonia solani*) - (1)
- No Disease (Abiotic Problem) - (3)
- Chinch Bugs (Abiotic Problem) - (1)

Sunflower(*Helianthus* sp.)

- Insect Injury Suspected - (1)

Sweet Bay(*Magnolia virginiana*)

- No Disease (Water Injury) - (1)

Sweet Orange(*Citrus sinensis*)

- Insect Injury - (1)

Sweetpotato(*Ipomoea batatas*)

- Fusarium Surface Rot (*Fusarium* sp.) - (1)
- Rhizoctonia Stem Canker (*Rhizoctonia solani*) - (2)
- Fusarium Root Rot (*Fusarium* sp.) - (1)
- Charcoal Rot (*Macrophomina phaseolina*) - (1)
- Rhizopus Soft Rot (*Rhizopus stolonifer*) - (1)

Switch Grass (*Panicum virgatum*)

- Leaf Spot (*Bipolaris oryzae*) - (1)

Tomato(*Lycopersicon esculentum*)

- Tomato Spotted Wilt (Tomato Spotted Wilt virus) - (1)
- Tobacco Mosaic (Tobacco Mosaic Virus) - (1)

- Pythium Root/Crown Rot (*Pythium* sp.) - (2)
- Fusarium Wilt (*Fusarium oxysporum*) - (1)
- Southern Blight (*Sclerotium rolfsii*) - (2)
- Fusarium Wilt (*Fusarium oxysporum (lycopersici)*) - (1)
- Buckeye Rot (*Phytophthora nicotianae [=parasitica]*) - (1)
- Bacterial Canker (*Clavibacter michiganensis* subsp. *michiganensis*) - (1)
- Pith Necrosis (*Pseudomonas corrugata*) - (3)
- Glyphosate Herbicide Injury - (1)
- Phenoxy Herbicide Injury (source: horse manure) – (1)
- Insect Injury (Russett mites (greenhouse tomato)) - (1)
- Catface (Abiotic Problem) – (1)
- Nutritional Problem (N, P, K and B deficiencies) – (1)
- Internal White Tissue (Abiotic: Slight K deficiency with high temperatures at ripening (field grown plants) – (1)
- Phosphorus Deficiency (Abiotic Problem) - (1+)
- Magnesium and Boron Deficiencies (greenhouse tomato) - (1)

Tree(Gen. sp.)

- Shot hole (*Wilsonomyces carpophilus*) - (1)
- Herbicide Injury (Paraquat) - (1)

Vegetable Garden (Multiple hosts)

- Pythium Damping-off (*Pythium* sp.) - (1)
- Damping-off (*Rhizoctonia* sp.) – (1)

Viburnum(*Viburnum* sp.)

- Insect Injury Suspected (Abiotic Problem) - (1)

Violet (*Viola* sp.)

- Cercospora Leaf Spot (*Cercospora* sp.) - (1)

Watermelon(*Citrullus lanatus*)

- Rhizoctonia Damping-off (*Rhizoctonia solani*) - (1)
- Fusarium Wilt (*Fusarium oxysporum (melonis)*) - (1)
- Fusarium Wilt (*Fusarium* sp.) - (2)
- Fusarium Wilt (*Fusarium oxysporum (niveum)*) - (1)
- No Disease (Abiotic Problem) - (2)

Wax Myrtle (*Myrica cerifera*)

- Septoria Leaf Spot (*Septoria* sp.) - (1)

- Cold Injury – (1)

Wheat(*Triticum aestivum*)

- Powdery Mildew (*Erysiphe graminis*) - (1)

White Willow(*Salix alba*)

- Canker (*Fusicoccum* sp) - (1)

Zinnia (*Zinnia* sp.)

- Botrytis Stem Rot (*Botrytis cinerea*) - (1)
- Cercospora or Alternaria Leaf Spot Suspected (Digital image) - (1)

Zoysiagrass(*Zoysia japonica*)

- Large Patch (*Rhizoctonia solani*) - (1)
- Rust (*Puccinia zoysiae*) - (2)
- Bipolaris Leaf Spot (*Bipolaris* sp.) - (3)
- Dollar Spot (*Sclerotinia homoeocarpa*) - (3)
- Drechslera Leaf Spot (*Drechslera* sp.) – (2)
- Take-all Root Rot (*Gaeumannomyces graminis*) – (2)
- No Disease (Abiotic Problem) - (3)
- Insect Injury (Billbugs, Army Worms) - (2)