

Index of Plant Problems in Mississippi

Preface

The following index documents plant hosts that have been submitted to the Mississippi State University Plant Diagnostic Lab since 2004 and the frequency with which specific diseases and disorders have been associated with those hosts. This index is compiled from information in plant disease reports for samples submitted for diagnosis from within Mississippi. This index is not a comprehensive list of plant diseases or disorders in Mississippi.

The Host–Problem Index (pages 1–40) is alphabetized by the common name of the host with the corresponding scientific name provided in parentheses, as well as the number of times that problem has been diagnosed by the Plant Diagnostic Lab since 2004. The Pathogen–Host

Index (pages 41–60) is alphabetized by the scientific name of the pathogen.

Most pathogen identifications are based on morphological parameters and/or serological techniques and have not been confirmed with molecular methods. Taxonomic nomenclature is in constant flux, and the scientific names (Latin binomials) listed in the index may not reflect current nomenclature.

The goal is to update this publication annually so that it remains a valuable reference for individuals interested in plant problems affecting Mississippi.

Host–Problem Index

Abelia (*Abelia* sp.)

Fungi

Dieback (*Sclerotinia sclerotiorum*) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 1

Animal

Animal injury (vole) – 1

Abiotic

Root bound – 1

African Lily (*Agapanthus africanus*)

Fungi

Leaf blight (*Colletotrichum* sp.) – 1

African Violet (*Saintpaulia* sp.)

Fungi

Leaf spot (*Corynespora* sp.) – 1

Bacteria

Bacterial blight (*Erwinia* sp.) – 1

Oomycete (water mold)

Root and crown rot (*Pythium* sp.) – 1

Virus

Impatiens necrotic spot virus (INSV) (*Orthotospovirus impatiensnecromaculae*) – 3

Ajuga (*Ajuga reptans*)

Fungi

Root rot (*Rhizoctonia* sp.) – 2

Alfalfa (*Medicago sativa*)

Fungi

Anthracnose (*Colletotrichum* sp.) – 1

Crown rot (*Rhizoctonia* sp.) – 1

Crown and stem rot (*Colletotrichum* sp.) – 1

Aloe (*Aloe* sp.)

Fungi

Crown rot (*Fusarium* sp.) – 1

Leaf blight (*Phomopsis* sp.) – 1

American Yellowwood (*Cladastris lutea*)

Fungi

Twig canker (*Botryosphaeria dothidea*) – 1

Anemone, Japanese (*Anemone* × *hybrida*)**Virus**

Impatiens necrotic spot virus (INSV) (*Orthotospovirus impatiensnecromaculae*) – 1

Angel Trumpet (*Brugmansia suaveolens*)**Fungi**

Leaf spot (*Cercospora* sp.) – 2

Virus

Potyvirus (*Potyvirus* sp.) – 1

Tobacco mosaic virus (TMV) (*Tobamovirus tabaci*) – 1

Anise Tree (*Illicium* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Abiotic

Cold injury – 2

Apple (*Malus* × *domestica*)**Fungi**

Alternaria blotch (*Alternaria alternata*) – 1

Apple scab suspected (*Venturia inaequalis*) – 1

Bitter rot (*Colletotrichum gloeosporioides*) – 4

Black rot (*Diplodia seriata*) – 3

Cedar apple rust (*Gymnosporangium juniperi-virginianae*) – 15

Cedar apple rust resistance reaction (*Gymnosporangium juniperi-virginianae*) – 3

Diplodia canker (*Diplodia mutila*) – 2

Canker (*Fusarium* sp.) – 1

Canker (*Phomopsis* sp.) – 1

Fly speck and sooty blotch complex (various fungi) – 4

Leaf spot (*Gloeosporium* sp.) – 1

Leaf spot (*Phoma* sp.) – 1

Leaf spot (*Pseudocercospora* sp.) – 1

Powdery mildew (*Podosphaera leucotricha*) – 1

Saprophyte (false turkey tail) (*Stereum hirsutum*) – 1

Sooty mold (*Capnodium* sp.) – 1

White rot (*Botryosphaeria dothidea*) – 2

Oomycete (water mold)

Phytophthora root/crown rot (*Phytophthora* sp.) – 2

Bacteria

Crown gall (*Agrobacterium tumefaciens*) – 4

Fire blight (*Erwinia amylovora*) – 11

Hairy root (*Agrobacterium rhizogenes*) – 1

Abiotic

Burrknot (genetic; inherited) – 4

Captan fruit injury – 2

Arborvitae (*Thuja* sp.)**Fungi**

Arborvitae needle blight (*Phyllosticta thujae*) – 10

Canker (*Diplodia* sp.) – 2

Needle blight (*Passalora sequoiae*) – 8

Needle blight (*Pestalotiopsis* sp.) – 7

Cypress canker (*Seiridium* sp.) – 4

Sooty mold (various fungi) – 1

Twig blight (*Botryosphaeria* sp.) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 4

Root rot (*Pythium* sp.) – 1

Animal

Animal injury (vole) – 1

Abiotic

Excessive soil moisture – 1

Fertilizer burn – 1

Winter desiccation – 2

Argyranthemum (*Argyranthemum frutescens*)**Abiotic**

Cold injury – 1

Arugula (*Eruca vesicaria*)**Abiotic**

Chemical burn – 1

Iron deficiency – 1

Ash (*Fraxinus* sp.)**Fungi**

Anthraxnose (*Plagiostoma fraxini*) – 2

Sooty mold (various fungi) – 1

Abiotic

Growth regulator herbicide injury – 1

Ash, Arizona (*Fraxinus velutina*)**Fungi**

Anthraxnose (*Plagiostoma fraxini*) – 2

Ash, Carolina (*Fraxinus caroliniana*)**Fungi**

Anthraxnose (*Plagiostoma fraxini*) – 1

Ash, Green (*Fraxinus pennsylvanica*)**Abiotic**

Planted too deep – 1
 Root suffocation/poor drainage suspected – 1
 Root bound – 1

Ash, White (*Fraxinus americana*)**Fungi**

Anthrancose (*Plagiostoma fraxini*) – 1

Asparagus (*Asparagus officinalis*)**Fungi**

Wilt (*Fusarium* sp.) – 1

Aucuba (*Aucuba japonica*)**Fungi**

Anthrancose (*Colletotrichum* sp.) – 5
 Canker (*Diaporthe* sp.) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 2

Austree Hybrid Willow (*Salix matsudana* × *alba*)**Fungi**

Black canker (*Colletotrichum salicis*) – 1

Azalea (*Rhododendron* sp.)**Fungi**

Aerial web blight (*Rhizoctonia solani*) – 1
 Anthracnose (*Colletotrichum* sp.) – 2
 Basal canker (*Botryosphaeria* sp.) – 2
 Canker (*Botryosphaeria* sp.) – 1
 Canker (*Fusarium* sp.) – 1
 Leaf gall (*Exobasidium* sp.) – 15
 Leaf spot (*Cercospora handellii*) – 9
 Leaf spot (*Mycosphaerella* sp.) – 1
 Leaf spot (*Pestalotiopsis* sp.) – 3
 Leaf spot (*Pseudocercospora* sp.) – 1
 Leaf spot (*Septoria* sp.) – 3
 Phomopsis dieback (*Phomopsis* sp.) – 2
 Powdery mildew (fungus) – 1
 Root rot (*Armillaria* sp.) – 4
 Root rot (*Rhizoctonia solani*) – 2
 Rust (*Chrysomyxa* sp.) – 1
 Sooty mold (various fungi) – 3

Oomycete (water mold)

Leaf spot (*Phytophthora* sp.) – 34
 Root rot (*Phytophthora* sp.) – 10
 Root rot (*Pythium* sp.) – 1

Myxomycete

Slime mold (*Fuligo septica*) – 2
 Slime mold (*Stemonitis* sp.) – 1

Virus

Azalea ringspot disease (virus) – 2

Abiotic

Phytotoxicity (house wash) – 1
 Drought – 1
 High soil pH – 1
 Iron deficiency – 1
 Too wet – 1

Bacopa (*Sutera cordata*)**Oomycete (water mold)**

Root rot (*Phytophthora* sp.) – 1

Bahiagrass (*Paspalum notatum*)**Fungi**

Dollar spot (*Sclerotinia homoeocarpa*) – 13
 Large patch (*Rhizoctonia* sp.) – 3
 Leaf spot and/or melting out (*Bipolaris* sp.) – 5
 Take-all (*Gaeumannomyces* sp.) – 2

Oomycete (water mold)

Pythium blight (*Pythium* sp.) – 1

Bamboo (Gramineae family)**Fungi**

Fusarium blight suspected (*Fusarium* sp.) – 1
 Leaf spot (*Colletotrichum* sp.) – 1

Oomycete (water mold)

Pythium root and crown rot (*Globisporangium middletonii*) – 1

Bamboo, Moso (*Phyllostachys edulis*)**Fungi**

Leaf spot (*Bipolaris* sp.) – 1
 Leaf spot (*Pyricularia* sp.) – 1

Banana, Japanese (*Musa basjoo*)**Fungi**

Cordana leaf spot (*Neocordana* sp.) – 1

Oomycete (water mold)

Root rot (*Pythium* sp.) – 2

Banana Shrub (*Michelia figo*)**Abiotic**

Cold damage – 1

Barberry (*Berberis* sp.)**Abiotic**

Drought – 1

Basil, Common (*Ocimum basilicum*)**Fungi**Wilt (*Fusarium* sp.) – 1**Oomycete (water mold)**Basil downy mildew (*Peronospora belbahrii*) – 3**Bacteria**Bacterial leaf spot (*Pseudomonas cichorii*) – 1**Bay, Red (*Persea borbonia*)****Fungi**Laurel wilt (*Raffaelea lauricola*) – 2**Bay-laurel (*Laurus nobilis*)****Fungi**Anthracnose (*Colletotrichum* sp.) – 1Stem canker (*Botryodiplodia* sp.) – 1**Bean (*Phaseolus* sp.)****Fungi**Ashy stem blight (*Macrophomina phaseolina*) – 2Leaf spot (*Leptosphaerulina* sp.) – 1Root and stem rot (*Rhizoctonia* sp.) – 3Wilt (*Fusarium* sp.) – 1**Bacteria**Halo blight (*Pseudomonas syringae* pv. *phaseolicola*) – 1**Abiotic**

Fertilizer burn – 1

Low pH/calcium deficiency – 1

Bean, Butter/Lima (*Phaseolus lunatus*)**Fungi**Aerial web blight (*Rhizoctonia solani*) – 1Anthracnose (*Colletotrichum* sp.) – 5Southern blight (*Athelia rolfsii*) – 1**Bacteria**Bacterial brown spot (*Pseudomonas syringae* pv. *syringae*) – 1Halo blight (*Pseudomonas syringae* pv. *phaseolicola*) – 1**Nematode**Root-knot (*Meloidogyne* sp.) – 3**Abiotic**

Swelling caused by wind rocking young stem back and forth – 1

Bean, Fava (*Vicia faba*)**Fungi**Rhizoctonia root rot (*Rhizoctonia solani*) – 1**Bean, Green (*Phaseolus vulgaris*)****Fungi**Aschocyta leaf spot (*Boeremia exigua* var. *exigua*) – 1Ashy stem blight (*Macrophomina phaseolina*) – 5Root and crown rot (*Fusarium* sp.) – 2Root/stem rot (*Rhizoctonia solani*) – 4Southern blight (*Athelia rolfsii*) – 3Stem rot (*Scelrotinia sclerotiorum*) – 1Web blight (*Rhizoctonia solani*) – 5Wilt (*Fusarium* sp.) – 1**Oomycete (water mold)**Hypocotyl rot (*Aphanomyces euteiches*) – 1Root/crown rot (*Pythium* sp.) – 1**Bacteria**Bacterial blight (*Xanthomonas campestris*) – 1**Virus**Cucumber mosaic virus (CMV) (*Cucumovirus CMV*) – 1**Abiotic**

Anoxia – 1

Growth regulator herbicide exposure suspected – 1

Sunscald – 2

Nutrient deficiency – 3

Beech, American (*Fagus grandifolia*)**Fungi**Sooty mold (*Scorias spongiosa*) – 4**Beet (*Beta vulgaris*)****Nematode**Root-knot (*Meloidogyne* sp.) – 2**Begonia (*Begonia* sp.)****Fungi**Anthracnose (*Colletotrichum* sp.) – 1Botrytis blight (*Botrytis* sp.) – 1Root rot (*Fusarium* sp.) – 1**Oomycete (water mold)**Root rot (*Pythium* sp.) – 1

Myxomycete

Slime mold (Class: Myxogastria) – 1

Bacteria

Bacterial leaf spot (*Xanthomonas campestris* pv. *begoniae*) – 1

Bentgrass (*Agrostis* sp.)**Fungi**

Anthraxnose basal rot (*Colletotrichum graminicola*) – 7

Anthraxnose foliar blight (*Colletotrichum* sp.) – 3

Dollar spot (*Clarireedia* sp.) – 1

Fairy ring (basidiomycete fungi) – 1

Leaf blight (*Leptosphaerulina* sp.) – 3

Leaf spot (*Bipolaris* sp.) – 1

Oomycete (water mold)

Pythium leaf blight (*Pythium* sp.) – 3

Root rot (*Pythium* sp.) – 2

Abiotic

Black layer (hydrogen sulfide toxicity) – 1

Heat stress – 2

Bermudagrass, Lawn/Golf/Athletic Hybrids (*Cynodon dactylon*)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Dollar spot (*Clarireedia* sp.) – 61

Fairy ring (basidiomycete fungi) – 11

Flower smut (*Ustilago cynodontis*) – 2

Large patch (*Rhizoctonia solani*) – 8

Leaf spot/melting out (*Bipolaris* sp.) – 182

Leaf spot (*Drechslera* sp.) – 6

Microdochium patch (*Monographella nivalis*) – 14

Mini-ring suspected (*Rhizoctonia zeae*) – 5

Pink patch (*Limonomyces roseipellis*) – 2

Rust (*Puccinia cynodontis*) – 5

Secondary leaf blight (*Exserohilum rostratum*) – 6

Secondary leaf blight (*Leptosphaerulina* sp.) – 1

Spring dead spot (*Ophiosphaerella* sp.) – 9

Take-all root rot complex (*Gaeumannomyces* sp.) – 58

Take-all root rot complex (*Magnaportheiopsis cynodontis*) – 6

Oomycete (water mold)

Pythium blight (*Pythium* sp.) – 46

Root rot (*Pythium* sp.) – 114

Myxomycete

Chocolate tube slime mold (*Stemonitis* sp.) – 1

Slime mold (*Physarum cinereum*) – 1

Slime mold (Myxogastria) – 2

Nematode

Lance (*Hoplolaimus* sp.) – 4

Ring (*Criconeematidae*) – 1

Root-knot (*Meloidogyne* sp.) – 14

Abiotic

Black layer (hydrogen sulfide toxicity) – 9

Clubbed root tips (dinitroaniline [DNA] herbicide damage) – 1

DMI fungicide phytotoxicity – 1

Frost damage – 2

Growth regulator damage (Primo) – 2

Localized dry spot – 4

Phytotoxicity (Strike) – 1

Soil compaction – 1

Bermudagrass, Forage (*Cynodon dactylon*)**Fungi**

Dollar spot (*Clarireedia* sp.) – 3

Leaf spot (*Bipolaris* sp.) – 1

Leaf spot (*Drechslera gigantea*) – 1

Leaf spot (*Exserohilum rostratum*) – 2

Nematode

Sting (*Belonolaimus* sp.) – 15

Birch (*Betula* sp.)**Fungi**

Cryptocline leaf spot (*Cryptocline betularum*) – 1

Birch, River (*Betula nigra*)**Fungi**

Leaf spot (*Cryptocline betularum*) – 5

Leaf spot (*Monostichella robergei*) – 1

Orange slime flux (*Cryptococcus macerans*) – 2

Blackberry (*Rubus* sp.)**Fungi**

Blackberry rust (*Phragmidium violaceum*) – 1

Cane blight (*Coniothyrium fuckelii*) – 2

Cane canker (*Botryosphaeria* sp.) – 3

Cane canker (*Coniothyrium* sp.) – 1

Double blossom (*Cercospora rubi*) – 3

Fruit rot (*Botrytis cinerea*) – 2

Leaf spot (*Sphaerulina westendorpii*) – 2

Orange rust (*Gymnocconia nitens*) – 2

Oomycete (water mold)

Leaf spot (*Phytophthora* sp.) – 2

Myxomycete

Chocolate tube slime mold (*Stemonitis* sp.) – 1

Bacteria

Crown gall (*Agrobacterium tumefaciens*) – 2

Algae

Orange felt disease (*Cephaleuros virescens*) – 4

Virus

Yellow vein virus disease complex – 1

Abiotic

Freeze damage – 3

Group #9 herbicide (glyphosate) – 1

Blazing Star (*Liatris ligulistylis*)**Fungi**

Leaf spot (*Cercospora* sp.) – 1

Blueberry (*Vaccinium* sp.)**Fungi**

Leaf and fruit spot (*Exobasidium maculosum*) – 4

Leaf rust (*Naohidemyces* sp.) – 7

Leaf spot (*Septoria* sp.) – 2

Leaf spot and stem canker (*Gloeosporium minus*) – 3

Leaf spot (*Gloeocercospora inconspicua*) – 1

Mummy berry (*Monilinia vaccinii-corymbosi*) – 1

Powdery mildew (*Microsphaera vaccinii*) – 1

Root rot (*Armillaria* sp.) – 1

Saprophytic fungus (*Pestalotiopsis* sp.) – 1

Sooty mold (various fungi) – 1

Stem blight (*Fusicoccum* sp.) – 4

Stem blight (*Lasiodiplodia theobromae*) – 1

Stem canker (*Phomopsis* sp.) – 1

Stem canker (*Phyllosticta* sp.) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 2

Bacteria

Bacterial leaf scorch (*Xylella fastidiosa*) – 4

Virus

Blueberry necrotic ring blotch virus (*Blunervirus vaccinii*) – 1

Abiotic

Cold injury – 2

Chlorothalonil injury – 1

Excessive water – 1

Group #9 herbicide (glyphosate) – 2

Hail injury – 1

High soil pH – 1

Iron deficiency – 3

Root bound – 2

Boston Fern (*Nephrolepis exaltata*)**Oomycete (water mold)**

Root rot (*Phytophthora* sp.) – 1

Root rot (*Pythium* sp.) – 1

Abiotic

Low pH (nutritional disorder suspected) – 1

Bougainvillea (*Bougainvillea* sp.)**Fungi**

Root rot (*Fusarium* sp.) – 1

Boxwood (*Buxus* sp.)**Fungi**

Boxwood blight (*Calonectria pseudonaviculata*) – 1

Boxwood decline (*Clonostachys buxi*) – 3

Dieback (*Colletotrichum theobromicola*) – 5

Saprophytic fungus (*Parasymphodiella laxa*) – 1

Twig blight (*Dothiorella candollei*) – 12

Volutella blight (*Pseudonectria buxi*) – 20

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 12

Root rot (*Pythium* sp.) – 8

Nematode

Root-knot nematode (*Meloidoyne* sp./spp.) – 8

Abiotic

Cold injury – 10

Drought stress – 4

Excessive water – 1

Group #9 herbicide (glyphosate) – 1

Phosphorus deficiency – 1

Root bound – 2

Transplant stress – 1

Winter desiccation – 8

Animal

Rodent damage – 1

Boxwood, Japanese (*Buxus microphylla*)**Oomycete (water mold)**

Root rot (*Phytophthora* sp.) – 3

Boxwood, Korean (*Buxus sinica*)**Fungi**

Twig blight (*Dothiorella candollei*) – 1

Boysenberry (*Rubus ursinus* × *idaeus*)**Fungi**

Leaf blotch (*Cercospora* sp.)

Broadleaf Signal Grass (*Brachiaria platyphylla*)**Fungi**

Leaf spot (*Pyricularia* sp.) – 1

Broccoli (*Brassica oleracea* var. *botrytis*)**Fungi**

Leaf spot (*Cercospora* sp.) – 1

Bacteria

Bacterial head rot (*Pseudomonas* sp.) – 1

Abiotic

Boron deficiency – 1

Hollow heart – 1

Cabbage (*Brassica oleracea* var. *capitata*)**Fungi**

Leaf spot (*Cercospora brassicicola*) – 1

Bacteria

Black rot (*Xanthomonas campestris* pv. *campestris*) – 1

Oomycete (water mold)

Downy mildew (*Hyaloperonospora parasitica*) – 1

Root rot (*Phytophthora* sp.) – 1

Abiotic

Freeze damage – 1

Pepper spot (physiological disorder) – 1

Phosphorus deficiency – 1

Cabbage, Chinese (Bok Choy) (*Brassica chinensis*)**Fungi**

Leaf spot (*Cercospora* sp.) – 1

Bacteria

Bacterial leaf spot (*Pseudomonas syringae*) – 1

Cactus (Cactaceae)**Abiotic**

Sunscauld – 1

Cactus, Christmas (*Schlumbergera bridgesii*)**Fungi**

Canker (*Fusarium* sp.) – 1

Abiotic

Oedema – 1

Cactus, Prickly Pear (*Opuntia stricta*)**Fungi**

Pad spot (*Cladosporium* sp.) – 1

Abiotic

Sunscauld – 1

Caneberry (*Rubus* sp.)**Fungi**

Leaf spot (*Pseudocercospora rubi*) – 1

Camellia (*Camellia* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 8

Canker (*Glomerella* sp./spp.) – 1

Crown and root rot (*Desarmillaria* sp./spp.) – 1

Leaf gall (*Exobasidium* sp.) – 8

Leaf spot (*Mycosphaerella* sp.) – 1

Leaf spot (*Pestalotiopsis* sp.) – 6

Macrophoma leaf spot (*Macrophoma* sp.) – 1

Twig cankers (*Colletotrichum gloeosporioides*) – 2

Oomycete (water mold)

Root rot (*Phytophthora* sp./spp.) – 1

Root rot (*Pythium* sp.) – 1

Algae

Algal leaf spot (*Cephaleuros* sp.) – 4

Virus

Ringspot virus – 1

Animal

Sapsucker (*Sphyrapicus* sp.) – 1

Abiotic

Cold injury – 8

Oedema – 6

Physiological bud drop – 1

Camellia (*Camellia japonica*)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Canker (*Colletotrichum gloeosporioides*) – 1

Oomycete (water mold)

Pythium root rot (*Pythium* sp.) – 1

Algae

Algal leaf spot (*Cephaleuros* sp.) – 1

Camellia (*Camellia sasanqua*)**Fungi**Anthracnose (*Colletotrichum* sp.) – 3Canker and dieback (*Botryosphaeria* sp.) – 1**Oomycete (water mold)**Leaf spot (*Phytophthora* sp.) – 1Root rot (*Pythium* sp.) – 2**Algae**Algal leaf spot (*Cephaleuros* sp.) – 3**Abiotic**

Drought – 2

Oedema – 3

Planted too deep – 1

Transplant stress – 1

Winter burn – 1

Camellia, Tea (*Camellia sinensis*)**Fungi**Anthracnose (*Colletotrichum* sp.) – 1**Abiotic**

Oedema – 1

Canola (*Brassica napus*)**Fungi**Powdery mildew (*Erysiphe cruciferarum*) – 1**Cantaloupe (*Cucumis melo*)****Fungi**Crown rot (*Fusarium* sp.) – 1Gummy stem blight (*Stagonosporopsis cucurbitacearum*) – 4Leaf spot (*Alternaria* sp.) – 6Leaf spot (*Cercospora* sp.) – 3

Powdery mildew (fungus) – 3

Oomycete (water mold)Cucurbit downy mildew (*Pseudoperonospora cubensis*) – 7**Nematode**Root-knot (*Meloidogyne* sp.) – 1**Abiotic**

Boron and potassium codeficiency – 1

Magnesium deficiency suspected – 2

Potassium deficiency – 1

Camden White Gum (*Eucalyptus benthamii*)**Fungi**Leaf spot (*Calonectria* sp.) – 1**Carpetgrass (*Axonopus affinis*)****Fungi**Anthracnose (*Colletotrichum graminicola*) – 1Large patch (*Rhizoctonia solani*) – 1**Carrot (*Daucus carota*)****Oomycete (water mold)**Cavity spot (*Pythium* sp.) – 1**Catalpa (*Catalpa bignonioides*)****Fungi**Anthracnose (*Colletotrichum* sp.) – 1Anthracnose (*Phyllosticta catalpae*) – 1**Oomycete (water mold)**Root rot (*Pythium* sp.) – 1**Abiotic**

Planted too deep – 1

Cauliflower (*Brassica oleraceae*)**Bacteria**Bacterial head rot (*Pectobacterium carotovorum*) – 1**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1**Cedar (*Cedrus* sp.)****Fungi**Cedar apple rust (*Gymnosporangium juniper-virginianae*) – 1Needle blight (*Passalora* sp.) – 2Needle blight (*Pestalotiopsis* sp.) – 1Quince rust (*Gymnosporangium clavipes*) – 2Rust (*Gymnosporangium effusum*) – 1**Cedar, Eastern Red (*Juniperus virginiana*)****Fungi**Cedar apple rust (*Gymnosporangium juniperi-virginianae*) – 3Quince rust (*Gymnosporangium clavipes*) – 4Root rot (*Heterobasidion* sp.) – 1Rust (*Gymnosporangium* sp.) – 1Cypress canker (*Seiridium* sp.) – 1**Abiotic**

Winter burn – 1

Cedar, Japanese (*Cryptomeria japonica*)**Fungi**

- Botryosphaeria canker (*Botryosphaeria* sp.) – 1
- Needle blight (*Passalora sequoiae*) – 1
- Needle blight (*Pestalotiopsis* sp.) – 5
- Needle blight (*Phyllosticta* sp.) – 4
- Web blight (*Rhizoctonia solani*) – 1

Abiotic

- Drought stress – 1

Celosia (*Celosia* sp.)**Fungi**

- Leaf spot (*Alternaria* sp.) – 1
- Root/crown rot (*Fusarium* sp.) – 1

Centipedegrass (*Eremochloa ophiuroides*)**Fungi**

- Anthraxnose (*Colletotrichum* sp.) – 84
- Anthraxnose (*Colletotrichum caudatum*) – 1
- Anthraxnose (*Colletotrichum eremochloae*) – 7
- Dollar spot (*Clarireedia* sp.) – 15
- Fairy ring (basidiomycete fungi) – 2
- Large patch (*Rhizoctonia solani*) – 136
- Leaf spot (*Bipolaris* sp.) – 3
- Take-all root rot (*Gaeumannomyces* sp.) – 63

Oomycete (water mold)

- Pythium blight (*Pythium* sp.) – 4
- Root rot (*Pythium* sp.) – 4

Abiotic

- Centipedegrass decline – 7
- Clubbed roots [preemergent dinitroaniline (DNA) herbicide] – 6
- Winter injury – 2

Cherry (*Prunus* sp.)**Fungi**

- Anthraxnose (*Colletotrichum* sp.) – 1
- Leaf spot (*Pruniphilomyces circumscissa*) – 5
- Shot-hole disease (*Blumeriella jaapii*) – 1
- Shot-hole disease (*Wilsonomyces carpophilus*) – 1

Bacteria

- Bacterial leaf spot (*Xanthomonas* sp.) – 1
- Bacterial wetwood (various bacteria) – 1

Abiotic

- Injury from Captan plus dormant oil – 1

Cherry, Black (*Prunus serotina*)**Fungi**

- Cherry leaf spot (*Blumeriella jaapii*) – 2
- Leaf spot (*Cercospora* sp.) – 1
- Leaf spot (*Pruniphilomyces circumscissus*) – 2

Cherry, Flowering (*Prunus* sp.)**Fungi**

- Leaf spot (*Pruniphilomyces circumscissa*) – 1
- Shothole leaf spot (*Blumeriella jaapii*) – 1
- Twig canker (*Sphaeropsis* sp.) – 1

Bacteria

- Crown gall (*Agrobacterium tumefaciens*) – 1

Cherry, 'Yoshino' (*Prunus* × *yedoensis*)**Fungi**

- Dieback (*Phomopsis* sp.) – 1

Abiotic

- Cold injury – 1
- Root bound – 1

Cherry Laurel (*Prunus caroliniana*)**Fungi**

- Canker (*Botryosphaeria* sp.) – 1

Cherry Laurel, Common (*Prunus laurocerasus*)**Fungi**

- Leaf spot (*Cercospora* sp.) – 1
- Leaf spot (*Diplocarpon* sp.) – 1
- Shot-hole disease (*Wilsonomyces carpophilus*) – 1

Oomycete (water mold)

- Root rot (*Phytophthora* sp.) – 1

Chestnut, Chinese (*Castanea mollissima*)**Fungi**

- Leaf spot (*Pestalotiopsis* sp.) – 1

Bacteria

- Bacterial leaf scorch (*Xylella fastidiosa*) – 1

Abiotic

- High pH – 1
- Internal kernel breakdown (IKB) – 1

China Fir (*Cunninghamia lanceolata*)**Abiotic**

- Normal leaf senescence (no disease) – 2

Chinese Rice Flower (*Aglaia odorata*)**Abiotic**

Oedema – 1

Chrysanthemum (*Chrysanthemum* sp.)**Fungi**Fusarium wilt (*Fusarium* sp.) – 4Leaf spot (*Phomopsis* sp.) – 1Leaf spot (*Botrytis* sp.) – 1**Oomycete (water mold)**Crown and root rot (*Pythium* sp.) – 4**Bacteria**Bacterial leaf spot (*Pseudomonas cichorii*) – 6**Abiotic**

High soluble salts – 1

Citrus (*Citrus* sp.)**Fungi**Anthracnose (*Glomerella cingulata*) – 1

Sooty mold (various fungi) – 1

Animal

Bird damage – 1

Clematis (*Clematis* sp.)**Fungi**Leaf spot (*Passalora* sp.) – 2**Clethra (*Clethra* sp.)****Fungi**Leaf spot (*Cercospora* sp.) – 1**Cleyera, Japanese (*Ternstroemia gymnanthera*)****Fungi**Canker (*Botryosphaeria* sp.) – 1Entomosporium leaf spot (*Diplocarpon mespili*) – 4Leaf spot (*Cercospora* sp.) – 6Thread blight (*Rhizoctonia* sp.) – 1**Abiotic**

Herbicide damage – 1

Oedema – 2

Clover (*Trifolium* sp.)**Fungi**Rust (*Uromyces* sp.) – 2**Clover, Berseem (*Trifolium alexandrinum*)****Fungi**Fusarium wilt (*Fusarium* sp.) – 1**Cole Crop (*Brassica* sp.)****Fungi**White leaf spot (*Neopseudocercospora* sp.) – 2**Abiotic**

Sunscald – 1

Coleus (*Solenostemon scutellariodes*)**Oomycete (water mold)**Downy mildew (*Peronospora* sp.) – 1**Abiotic**

Cold injury – 1

Collards (*Brassica oleracea* var. *acephala*)**Fungi**Peppery leaf spot (*Pseudomonas* sp.) – 1**Myxomycete**Slime mold (*Fuligo septica*) – 1**Bacteria**Bacterial soft rot (*Erwinia caratovora*) – 1**Abiotic**

High soil pH – 1

Oedema – 2

Coneflower (*Rudbeckia* sp.)**Fungi**Botrytis blight (*Botrytis* sp.) – 1Crown rot (*Fusarium* sp.) – 1Southern blight (*Athelia rolfsii*) – 2**Oomycete (water mold)**Root rot (*Pythium* sp.) – 1**Coneflower (*Echinacea* sp.)****Fungi**Root rot (*Fusarium* sp.) – 1**Cordyline (*Cordyline* sp.)****Fungi**Leaf spot (*Phyllosticta* sp.) – 1

Corn (*Zea mays*)

Fungi

Anthraxnose leaf blight (*Colletotrichum graminicola*) – 1
 Charcoal stalk rot (*Macrophomina phaseolina*) – 1
 Common maize rust (*Puccinia sorghi*) – 4
 Common smut (*Mycosarcoma maydis*) – 2
 Crown and brace rot (*Rhizoctonia solani*) – 2
 Crown rot (*Fusarium* sp.) – 2
 Diplodia leaf streak (*Stenocarpella macrospora*) – 3
 Diplodia stalk rot (*Stenocarpella maydis*) – 2
 Ear rot (*Cladosporium* sp.) – 1
 Ear rot (*Fusarium* sp.) – 5
 Ear rot (*Penicillium* sp.) – 2
 Ear rot (*Stenocarpella maydis*) – 1
 Gibberella stalk rot (*Fusarium graminearum*) – 1
 Gray leaf spot (*Cercospora zeae-maydis*) – 16
 Leaf spot (*Curvularia* sp.) – 1
 Leaf spot (*Epicoccum nigrum*) – 1
 Northern corn leaf blight (*Exserohilum turcicum*) – 7
 Purple leaf sheath (saprophytic fungi and bacteria) – 1
 Pyricularia leaf spot (*Pyricularia* sp.) – 1
 Red root rot (*Setophoma terrestris*) – 2
 Southern corn leaf blight (*Bipolaris maydis*) – 13
 Southern rust (*Puccinia polysora*) – 7
 Stalk rot (*Colletotrichum* sp.) – 1

Oomycete (water mold)

Crazy top (*Sclerophthora macrospora*) – 1
 Crown rot (*Pythium* sp.) – 2

Bacteria

Bacterial stalk rot (*Erwinia* sp.) – 3
 Holcus spot (*Pseudomonas syringae*) – 2
 Purple leaf sheath (saprophytic fungi and bacteria) – 1

Virus

Potyvirus (*Potyvirus*) – 1

Abiotic

Group #2 ALS herbicide – 1
 Drought stress – 1
 Hail injury – 2
 Hypersensitive response – 1
 Nitrogen burn – 1
 Phosphorus deficiency – 1

Cotton (*Gossypium* sp.)

Fungi

Ascochyta blight (*Nothophoma gossypiicola*) – 1
 Ashy stem blight (*Macrophomina phaseolina*) – 1
 Black root rot (*Berkeleyomyces basicola*) – 1
 Boll rot (*Fusarium* sp.) – 1
 Charcoal rot (*Macrophomina phaseolina*) – 2
 Cotton stem canker (*Boeremia exigua*) – 1

Fusarium wilt (*Fusarium oxysporum*) – 2
 Fusarium wilt (*Fusarium oxysporum* Race MDS-12) – 1
 Fusarium wilt (*Fusarium oxysporum* Race 1) – 1
 Fusarium wilt–root-knot nematode complex [*Fusarium oxysporum* (*vasinfectum*)] – 1
 Gray leaf spot (*Stemphylium solani*) – 18
 Leaf spot (*Alternaria* sp.) – 6
 Leaf spot (*Alternaria alternata*) – 2
 Leaf spot (*Boeremia exigua* var. *exigua*) – 2
 Leaf spot (*Cercospora gossypina*) – 2
 Leaf spot (*Corynespora cassicola*) – 4
 Sore shin (*Rhizoctonia solani*) – 7
 Stem canker (*Lasiodiplodia theobromae*) – 1
 Verticillium wilt (*Verticillium* sp.) – 2

Oomycete (water mold)

Root rot (*Pythium* sp.) – 1

Bacteria

Bacterial blight (*Xanthomonas campestris* pv. *malvacearum*) – 7

Nematode

Reniform (*Rotylenchus reniformis*) – 1
 Root-knot (*Meloidogyne* sp.) – 1

Abiotic

Potassium deficiency – 1

Cotoneaster (*Cotoneaster* sp.)

Fungi

Leaf spot (*Myrellina cydoniae*) – 1

Cottonwood, Eastern (*Populus deltoides*)

Bacteria

Bacterial leaf scorch (*Xylella fastidiosa*) – 1

Cowpea (*Vigna unguiculata*)

Fungi

Ashy stem blight (*Macrophomina phaseolina*) – 2
 Anthracnose (*Colletotrichum lindemuthianum*) – 1
 Anthracnose (*Colletotrichum* sp.) – 3
 Ascochyta blight (*Boeremia exigua* var. *exigua*) – 1
 Charcoal root rot (*Macrophomina phaseolina*) – 1
 Crown rot (*Fusarium* sp.) – 1
 Leaf spot and blotch (*Cercospora* sp.) – 2
 Pod rot (*Choanephora* sp.) – 2
 Powdery mildew (fungus) – 1
 Root rot (*Rhizoctonia* sp.) – 4
 Stem canker (*Colletotrichum* sp.) – 1

Oomycete (water mold)

Crown and root rot (*Phytophthora* sp.) – 1
 Root rot (*Pythium* sp.) – 1

Virus

Cucumber mosaic virus (*Cucumovirus CMV*) – 1

Abiotic

Growth regulator herbicide – 1

Group #22 PS1 electron diverter herbicide – 1

Crabapple (*Malus* sp.)**Fungi**

Canker (*Fusicoccum* sp.) – 1

Cedar apple rust (*Gymnosporangium juniperi-virginianae*) – 4

Leaf spot (*Phoma* sp.) – 1

Quince rust (*Gymnosporangium clavipes*) – 1

Bacteria

Crown gall (*Agrobacterium tumefaciens*) – 1

Fire blight (*Erwinia amylovora*) – 3

Abiotic

Cold injury – 2

Crabgrass (*Digitaria* sp.)**Fungi**

Bipolaris leaf spot (*Bipolaris* sp.) – 1

Gray leaf spot (*Pyricularia grisea*) – 2

Rust (*Puccinia* sp.) – 1

Crape Myrtle (*Lagerstroemia indica*)**Fungi**

Anthrachnose (*Colletotrichum* sp.) – 1

Canker (*Botryosphaeria* sp.) – 1

Leaf spot (*Pseudocercospora* sp.) – 20

Powdery mildew (fungus) – 7

Root rot (*Armillaria* sp.) – 1

Sooty mold (various fungi) – 3

Parasitic Plant

Dodder (*Cuscuta* sp.) – 1

Abiotic

Group #9 herbicide (glyphosate) – 6

Group #2 ALS inhibitor herbicide – 3

Growth regulator herbicide suspected – 2

Oedema – 1

Fasciation (genetic) – 1

Creeping phlox (*Phlox stolonifera*)**Fungi**

Stem rot (*Fusarium* sp.) – 1

Cucumber (*Cucumis sativus*)**Fungi**

Anthrachnose (*Colletotrichum orbiculare*) – 3

Fusarium wilt (*Fusarium* sp.) – 1

Gummy stem blight (*Stagonosporopsis* sp.) – 1

Leaf spot (*Cercospora* sp.) – 3

Powdery mildew (fungus) – 4

Powdery mildew (*Leveillula* sp./spp.) – 1

Target leaf spot (*Corynespora cassiicola*) – 3

Oomycete (water mold)

Cottony leak (*Pythium* sp.) – 1

Cucurbit downy mildew (*Pseudoperonospora cubensis*) – 12

Bacteria

Angular leaf spot (*Pseudomonas syringae* pv. *Lachrymans*) – 1

Virus

Cucumber mosaic virus (*Cucumovirus CMV*) – 1

Abiotic

Fertilizer burn – 1

Magnesium deficiency suspected – 1

Nitrogen deficiency suspected – 1

Cucurbits (*Cucurbitaceae*)**Fungi**

Plectosporium blight (*Plectosphaerella cucumerina*) – 1

Oomycete (water mold)

Downy mildew (*Pseudoperonospora cubensis*) – 3

Root rot (*Pythium* sp.) – 1

Cyclamen (*Cyclamen persicum*)**Bacteria**

Bacterial soft rot (*Erwinia* sp.) – 2

Cypress (*Cupressus* sp.)**Fungi**

Needle blight (*Passalora sequoiae*) – 1

Abiotic

Winter burn – 1

Cypress, Arizona (*Cupressus arizonica*)**Fungi**

Canker (*Botryosphaeria* sp.) – 1

Cypress canker (*Seiridium* sp.) – 1

Needle blight (*Passalora sequoiae*) – 2

Needle blight (*Phyllosticta* sp.) – 1

Cypress, Italian (*Cupressus sempervirens*)**Fungi**

Cypress canker (*Seiridium* sp.) – 4
 Needle blight (*Macrophoma* sp.) – 1
 Needle blight (*Passalora sequoiae*) – 2
 Needle blight (*Pestalotiopsis* sp.) – 3
 Needle blight (*Phyllosticta* sp.) – 2
 Twig blight (*Diplodia* sp.) – 2

Oomycete (water mold)

Root rot (*Phytophthora* sp./spp.) – 1

Cypress, Leyland (× *Hesperotropis leylandii*)**Fungi**

Canker (*Botryodiplodia* sp.) – 1
 Canker (*Botryosphaeria* sp.) – 4
 Canker (*Fusicoccum* sp.) – 1
 Cypress canker (*Seiridium* sp.) – 8
 Macrophoma blight (*Macrophoma* sp.) – 1
 Needle blight (*Cercospora* sp.) – 1
 Needle blight (*Diplodia* sp.) – 1
 Needle blight (*Passalora sequoiae*) – 39
 Needle blight (*Pestalotiopsis* sp.) – 31
 Needle blight (*Phyllosticta* sp.) – 8

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 4
 Root rot (*Pythium* sp.) – 2

Abiotic

Freeze, frost, cold damage – 1
 J-rooted – 1
 Mechanical injury – 1
 Planted too deep – 3
 Root bound – 1
 Trunk strangulation – 1
 Winter desiccation – 4

Cypress, Oven's (× *Cupressocyparis ovensii*)**Fungi**

Stem canker (*Diaporthe* sp.) – 1
 Stem canker (*Fusicoccum* sp.) – 1

Dahlia (*Dahlia* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Daikon Radish (*Raphanus sativus*)**Abiotic**

Boron deficiency – 1

Daisy (unknown)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Daisy, Gerber (*Gerbera jamesonii*)**Fungi**

Leaf spot (*Botrytis* sp.) – 1
 Leaf spot (*Cercospora* sp.) – 1

Abiotic

High soluble salts – 1

Daisy, Shasta (*Chrysanthemum* × *superbum*)**Fungi**

Powdery mildew (fungus) – 1
 Southern blight (*Athelia rolfsii*) – 1

Daylily (*Hemerocallis* spp. hybrids)**Fungi**

Crown rot (*Fusarium* sp.) – 1
 Crown rot (*Rhizoctonia* sp.) – 3
 Daylily rust (*Puccinia hemerocallidis*) – 12
 Leaf spot (*Cercospora* sp.) – 1
 Leaf spot/scorch (*Colletotrichum* sp.) – 3
 Leaf streak (*Aureobasidium microstictum*) – 7
 Leaf streak (*Collecephalus hemerocallidis*) – 2

Dianthus (*Dianthus* sp.)**Fungi**

Crown rot (*Fusarium* sp.) – 1
 Leaf spot (*Alternaria dianthicola*) – 1

Dill (*Anethum graveolens*)**Fungi**

Stem anthracnose (*Colletotrichum* sp.) – 1

Dogwood, Flowering (*Cornus florida*)**Fungi**

Canker (*Fusicoccum* sp.) – 1
 Canker (*Phomopsis* sp.) – 1
 Leaf spot (*Pseudocercospora* sp.) – 1
 Powdery mildew (fungus) – 8
 Spot anthracnose (*Elsinoe corni*) – 10

Bacteria

Bacterial leaf scorch (*Xylella fastidiosa*) – 1

Abiotic

Drought stress – 7
 Leaf spot (Gramoxone) – 1
 Root bound – 2

Dogwood, Kousa (*Cornus kousa*)**Fungi**Armillaria crown and root rot (*Desarmillaria* sp./spp.) – 1**Abiotic**

Drought stress – 1

Dogwood, Yellow-twig (*Cornus sericea flaviramea*)**Fungi**Canker (*Fusicoccum* sp.) – 1**Dracaena (*Dracaena* sp.)****Fungi**Stem canker (*Colletotrichum* sp.) – 1**Dusty miller (*Senecio cineraria*)****Fungi**Stem canker (*Fusarium* sp.) – 1**Easter lily (*Lilium longiflorum* var. *exi*)****Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1**Eggplant (*Solanum melongena*)****Bacteria**Southern bacterial wilt (*Ralstonia solanacearum*) – 3**Abiotic**

Growth regulator herbicide – 1

Elaeagnus (*Elaeagnus* sp.)**Fungi**Canker (*Fusarium* sp.) – 1Leaf spot (*Cercospora* sp.) – 1**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 4**Animal**

Vole – 1

Abiotic

Root bound – 2

Elm (*Ulmus* sp.)**Fungi**Black leaf spot (*Stegophora ulmea*) – 5Canker (*Fusarium* sp.) – 1**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 1**Abiotic**

Planted too deep/soil too wet – 1

Elm, American (*Ulmus americana*)**Fungi**Dutch elm disease (*Ophiostoma* sp.) – 1**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 1**Elm, American ‘Princeton’ (*Ulmus americana*)****Fungi**Dutch elm disease (*Ophiostoma* sp.) – 1Verticillium wilt (*Verticillium* sp.) – 1**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1**Bacteria**

Alcoholic flux (various microorganisms) – 1

Elm, Chinese (*Ulmus parvifolia* ‘Drake’)**Fungi**Leaf spot (*Seiridium* sp.) – 1**Bacteria**

Bacterial wetwood (various bacteria) – 1

Elm, Slippery (*Ulmus rubra*)**Fungi**Verticillium wilt (*Verticillium* sp.) – 1**Elm, Winged (*Ulmus alata*)****Fungi**Leaf spot (*Ramularia endophylla*) – 1**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 3**Eucalyptus (*Eucalyptus* sp.)****Fungi**Leaf spot (*Pseudocercospora* sp.) – 1**Abiotic**

Cold injury – 1

Euonymus (*Euonymus* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Powdery mildew (fungus) – 3

Abiotic

Iron deficiency – 1

Falsecypress, Japanese (*Chamaecyparis pisifera*)**Fungi**

Needle blight (*Phyllosticta* sp.) – 1

Twig canker (*Botryosphaeria* sp.) – 1

Fern (undetermined sp.)**Myxomycete**

Slime mold (Class: Myxogastria) – 1

Fern, Boston (*Nephrolepis exaltata*)**Oomycete (water mold)**

Root rot (*Pythium* sp.) – 1

Abiotic

Low pH (nutritional disorder suspected) – 1

Fern, Indian Holly (*Arachnoides* sp.)**Fungi**

Tip blight (*Phyllosticta* sp.) – 1

Fern, Staghorn (*Platycerium* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Fern, Turkey Tail ‘Petticoat’ (*Nephrolepis cordifolia*)**Oomycete (water mold)**

Root rot (*Pythium* sp.) – 1

Fescue (*Festuca* sp.)**Fungi**

Brown patch (*Rhizoctonia* sp.) – 1

Endophyte (*Neotyphodium* sp./spp.) – 2

Rust (*Puccinia* sp.) – 1

Fescue, Tall (*Schedonorus arundinaceus*)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Brown patch (*Rhizoctonia* sp.) – 1

Dollar spot (*Clarireedia* sp.) – 2

Fig, Common (*Ficus carica*)**Fungi**

Aerial blight (*Rhizoctonia* sp.) – 11

Anthraxnose (leaf and fruit) (*Colletotrichum* sp.) – 4

Canker (*Diplodia* sp.) – 1

Canker (*Phomopsis* sp.) – 1

Fig rust (*Cerotelium fici*) – 6

Lasioidiplodia canker (*Lasioidiplodia theobromae*) – 1

Leaf spot (*Cercospora* sp.) – 1

Leaf spot (*Pseudocercospora* sp.) – 1

Leaf spot (*Septoria* sp.) – 1

Pink disease (*Erythricium salmonicolor*) – 5

Thread blight (*Ceratobasidium ochroleucum*) – 4

Virus

Fig mosaic virus (*Emaravirus fici*) – 1

Nematode

Root-knot (*Meloidogyne* sp.) – 1

Abiotic

Cold damage – 1

Fig, Creeping (*Ficus pumila*)**Fungi**

Diplodia dieback (*Diplodia* sp.) – 1

Firecracker Flower (*Crossandra* sp.)**Fungi**

Botrytis blight (*Botrytis cinerea*) – 1

Firethorn (*Pyracantha* sp./spp.)**Myxomycete**

Slime mold (*Fuligo septica*) – 1

Foamflower (*Tiarella* sp.)**Fungi**

Black root rot (*Berkeleyomyces basicola*) – 1

Fountain Grass, Dwarf (*Pennisetum alopecuroides*)**Fungi**

Take-all root rot (*Gaeumannomyces* sp.) – 1

Abiotic

Barricade injury – 1

Fringetree, White (*Chionanthus virginicus*)**Fungi**

Leaf spot (*Phoma* sp.) – 1

Fungus/Mushroom/Slime Mold Identifications

Fungi

Artillary fungus (*Sphaerobolus* sp.) – 3
 Bird's nest fungus saprophyte (*Cyathus* sp.) – 3
 Black mold (*Stachybotrys chartarum*) – 1
 Blushing amanita (*Amanita rubescens*) – 1
 Bolete (*Boletus* sp.) – 3
 Purple-spored puffball (*Calvatia cyanthiformis*) – 1
 Chanterelle (*Cantharellus* sp.) – 6
Cortinarius sp. – 1
 Earthball (*Scleroderma* sp.) – 1
 Earthstar (*Astraeus* sp. suspected) – 3
 False turkey tail (*Stereum hirsutum*) – 1
 Flowerpot parasol (*Leucocoprinus birnbaumii*) – 2
Ganoderma zonatum (root and butt rot of palms) – 2
 Green-spored parasol (*Chlorophyllum molybdites*) – 1
 Hen of the woods (*Grifola frondosa*) – 3
 Honey mushroom (*Desrmillaria* sp.) – 2
 Inky cap (*Coprinus atramentaria*) – 1
 Lackluster laccaria (*Laccaria laccata*) – 2
 Lion's mane (*Hericeum erinaceus*) – 4
 Oyster mushroom (*Pleurotus* sp.) – 8
Phellinus sp./spp. – 1
 Rough-stemmed bolete (*Leccinum roseoscabrum*) – 1
 Russula (*Russula* sp.) – 1
 Shaggy bracket (*Inonotus hispidus*) – 1
 Smooth earthball (*Scleroderma cepa*) – 3
 Stinkhorn fungus (*Clathrus* sp.) – 2
 Stinkhorn (Order: Phallales) – 4
 Violet-toothed polypore (*Trichaptum biforme*) – 1
 Warty oak polypore (*Pseudoinonotus dryadeus*) – 7
 Wood rot fungus (*Fuscoporia gilva*) – 2
 Wood rot fungus (*Ganoderma* sp.) – 3
 Wood rot fungus (*Laetiporus sulphureus*) – 2
 Wood rot fungus (*Trametes* sp.) – 4

Myxomycetes (slime molds)

Chocolate tube slime mold (*Stemonitis* sp.) – 5
 Slime mold (*Fuligo septica*) – 6
 Slime mold (Class: Myxogastria) – 5
 White-footed slime (*Diachea leucopodia*) – 1

Gardenia (*Gardenia* sp.)

Fungi

Anthraxnose (*Colletotrichum* sp.) – 2
 Leaf spot (*Macrophoma* sp.) – 1
 Root/stem rot (*Rhizoctonia* sp.) – 2

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 2
 Root rot (*Pythium* sp.) – 3

Myxomycete

Chocolate tube slime mold (*Stemonitis* sp.) – 1

Bacteria

Crown gall (*Agrobacterium tumefaciens*) – 1

Algae

Algal leaf spot (*Cephaleuros* sp.) – 1

Abiotic

Cold or freeze injury – 4
 Oedema (excessive water) – 1
 Iron chlorosis – 1
 Pot bound – 1

Garlic (*Allium sativum*)

Fungi

Black mold (*Aspergillus niger*) – 1
 Blue mold (*Penicillium* sp.) – 1
 Leaf blotch (*Cladosporium allii-cepae*) – 1

Gaura (*Gaura* sp.)

Fungi

Canker (*Botrytis* sp.) – 1

Geranium (*Pelargonium* × *hortorum*)

Fungi

Leaf spot (*Botrytis* sp.) – 3

Oomycete (water mold)

Root rot (*Pythium* sp.) – 1

Abiotic

Cycocel toxicity – 1
 Heat stress – 1
 High soluble salts – 1
 Iron toxicity; low soil pH – 1
 Oedema (excessive water) – 1

Ginkgo (*Ginkgo biloba*)

Abiotic

Drought stress – 1
 Leaf spot (Gramoxone) – 1
 Growth regulator herbicide injury – 1
 Root bound – 1

Gladiolus hybrids

Virus

Bean yellow mosaic virus (BYMV) (*Potyvirus phaseoliteum*) – 1

Golden Rain Tree (*Koelreuteria paniculata*)

Bacteria

Bacterial wetwood (various bacteria) – 1

Gourd (*Cucurbita* sp.)**Fungi**Fusarium wilt (*Fusarium* sp.) – 1Leaf spot (*Cercospora* sp.) – 1

Powdery mildew (fungus) – 1

Oomycete (water mold)Cucurbit downy mildew (*Pseudoperonospora cubensis*) – 1**Grape (*Vitis vinifera*)****Fungi**Anthracnose (*Elsinoe ampelina*) – 5Black rot (*Phyllosticta ampellicida*) – 9Botryosphaeria dieback (*Botryosphaeria* sp.) – 1Leaf spot (*Pestalotiopsis* sp.) – 1Stem canker (*Colletotrichum* sp.) – 1**Abiotic**

Freeze injury – 2

Herbicide injury suspected – 1

Magnesium deficiency – 1

Gum, Tupelo (*Nyssa* sp.)**Abiotic**

Dicamba suspected – 1

Hairy Vetch (*Vicia villosa*)**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1**Hawthorn (*Crataegus* sp.)****Fungi**Leaf spot (*Sphaeropsis* sp.) – 1Quince rust (*Gymnosporangium clavipes*) – 3**Bacteria**Fire blight (*Erwinia amylovora*) – 1**Heliotrope (*Heliotropium arborescens*)****Abiotic**

Cold injury – 2

Hemp (*Cannabis sativa*)**Oomycete (water mold)**Root rot (*Pythium* sp.) – 1**Abiotic**

High soluble salts – 1

Hibiscus (*Hibiscus* sp.)**Fungi**Crown and root rot (*Fusarium* sp.) – 1Leaf blotch (*Cladosporium* sp.) – 1Leaf rust (*Kuehneola malvicola*) – 1Leaf rust (*Puccinia* sp.) – 1Leaf spot (*Alternaria* sp.) – 2

Powdery mildew (fungus) – 1

MyxomyceteSlime mold (*Fuligo septica*) – 1**Abiotic**

Growth regulator herbicide injury – 1

Hickory (*Carya* sp.)**Fungi**Gnomonia leaf spot (*Gnomonia caryae*) – 1**Hickory, Shagbark (*Carya ovata*)****Fungi**Wood rot fungus (*Perenniporia* sp.) – 1**Holly (*Ilex* sp.)****Fungi**Anthracnose (*Colletotrichum* sp.) – 4Canker (*Botryosphaeria* sp.) – 2Canker (*Lasidiplodia theobromae*) – 2Canker (*Sphaeropsis* sp.) – 1Charcoal rot (*Macrophomina phaseolina*) – 1Leaf spot (*Botryosphaeria* sp.) – 1Leaf spot (*Cercospora* sp.) – 1Leaf spot (*Phyllosticta* sp.) – 1Lichenized algal leaf spot (*Strigula* sp.) – 1Sphaeropsis knot (*Sphaeropsis tumefaciens*) – 1Tar spot (*Rhytisma* sp.) – 1**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1Root rot (*Pythium* sp.) – 2**Myxomycete**

Slime mold (Class: Myxogastria) – 1

BacteriaBacterial leaf scorch (*Xylella fastidiosa*) – 1**Algae**

Alga, nonparasitic – 1

Algal leaf spot (*Cephaleuros* sp.) – 1

Abiotic

Animal burrowing – 1
 Cold/freeze damage – 5
 Group #9 herbicide (glyphosate) – 1
 Group #2 ALS inhibitor herbicide – 1
 Oedema (too much water) – 1
 Root bound – 3
 Winter burn – 1

Holly, Burford (*Ilex cornuta*)**Fungi**

Leaf spot (*Discosia* sp.) – 1

Abiotic

High pH – 1

Holly, Chinese (*Ilex cornuta*)**Abiotic**

Cold damage – 1

Holly, Foster (*Ilex* × *attenuata* ‘Fosteri’)**Fungi**

Leaf spot (*Colletotrichum* sp.) – 1
 Sphaeropsis gall (*Sphaeropsis tumefaciens*) – 1

Holly, Japanese (*Ilex crenata*)**Fungi**

Black root rot (*Berkeleyomyces basicola*) – 2
 Canker (*Botryosphaeria* sp.) – 1
 Fusarium blight (*Fusarium* sp.) – 1
 Leaf spot (*Pestalotiopsis* sp.) – 1
 Web blight (*Rhizoctonia solani*) – 4

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 4
 Root rot (*Pythium* sp.) – 2

Abiotic

Cold/freeze damage – 1
 Root bound – 1

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

Leaf spot (*Colletotrichum* sp.) – 1
 Twig canker (*Fusicoccum* sp.) – 1

Abiotic

Cold injury – 2
 Oedema (too much water) – 1

Holly, Oak Leaf (*Ilex* × ‘Conaf’)**Fungi**

Dieback (*Sphaeropsis* sp.) – 1

Holly, Yaupon (*Ilex vomitoria*)**Fungi**

Leaf spot (*Phoma* sp.) – 2
 Root/crown rot (*Fusarium* sp.) – 1

Oomycete (water mold)

Root rot (*Pythium* sp.) – 1

Hollyhock (*Alcea rosea*)**Fungi**

Hollyhock rust (*Puccinia malvacearum*) – 9

Honeysuckle (*Lonicera* sp.)**Fungi**

Root rot (*Fusarium* sp.) – 1

Hornbeam (*Carpinus* sp.)**Fungi**

Anthraxnose (*Apiosporiopsis carpineae*)

Hornbeam, Korean (*Carpinus coreana*)**Fungi**

Powdery mildew (fungus) – 1

Hosta (*Hosta* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 2
 Leaf spot (*Cercospora* sp.) – 2
 Southern blight (*Athelia rolfsii*) – 2

Oomycete (water mold)

Foliar blight (*Phytophthora* sp.) – 1

Myxomycete

Slime mold (*Fuligo* sp.) – 1

Hydrangea (*Hydrangea* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 5
 Cutting rot (*Fusarium* sp.) – 1
 Leaf spot (*Cercospora* sp.) – 26
 Leaf spot (*Corynespora* sp.) – 1
 Powdery mildew (fungus) – 3
 Root/crown rot (*Fusarium* sp.) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 2

Bacteria

Leaf spot (*Xanthomonas* sp.) – 1

Abiotic

Herbicide injury – 1

Group #2 ALS herbicide – 1

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

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

Bacteria

Bacterial leaf spot (*Xanthomonas* sp.) – 2

Abiotic

Growth regulator herbicide – 1

Root bound – 1

Hydrangea, Panicle (*Hydrangea paniculata*)**Abiotic**

Root bound – 1

Impatiens (*Impatiens* sp.)**Oomycete (water mold)**

Crown rot (*Phytophthora* sp.) – 1

Virus

Impatiens necrotic spot virus (INSV) (*Orthotospovirus impatiensnecromaculae*) – 1

Impatiens, Double (*Impatiens walleriana*)**Virus**

Impatiens necrotic spot virus (INSV) (*Orthotospovirus impatiensnecromaculae*) – 1

Impatiens (*Impatiens* × *hybrida* ‘SunPatiens’)**Fungi**

Stem canker (*Macrophomina phaseolina*) – 2

Stem canker (*Phyllosticta* sp.) – 1

Oomycete (water mold)

Root rot (*Pythium* sp.) – 1

Myxomycete

Slime mold (Class: Myxogastria) – 1

Abiotic

Genetic disorder – 1

Impatiens, New Guinea (*Impatiens* sp.)**Fungi**

Botrytis leaf spot (*Botrytis cinerea*) – 1

Nematode

Root-knot (*Meloidogyne* sp.) – 1

Indian Hawthorn (*Raphiolepis indica*)**Fungi**

Botryosphaeria canker (*Botryosphaeria dothidea*) – 1

Entomosporium leaf spot (*Diplocarpon mespili*) – 31

Leaf spot (*Cercospora* sp.) – 2

Root rot (*Armillaria* sp.) – 1

Stem and twig cankers (*Colletotrichum* sp.) – 1

Web blight (*Rhizoctonia solani*) – 1

Oomycete (water mold)

Root/crown rot (*Phytophthora* sp.) – 1

Bacteria

Fire blight (*Erwinia amylovora*) – 1

Abiotic

Root bound – 4

Indigo, Chinese (*Indigofera decora*)**Fungi**

Leaf spot (*Cercospora* sp.) – 1

Inkberry (*Ilex glabra*)**Fungi**

Canker (*Botryosphaeria* sp.) – 1

Iris (*Iris* sp.)**Fungi**

Iris rust (*Puccinia iridis*) – 3

Iris leaf spot (*Cladosporium iridis*) – 3

Rhizoctonia root/stem rot (*Rhizoctonia* sp.) – 1

Bacteria

Bacterial leaf blight (*Xanthomonas campestris*) – 1

Bacterial soft rot (*Erwinia* sp.) – 1

Virus

Potyvirus (*Potyvirus* sp.) – 1

Abiotic

Phytotoxicity (wasp spray) – 1

Ivy (*Hedera* sp.)**Fungi**Anthracnose (*Colletotrichum* sp.) – 3Root rot (*Fusarium* sp.) – 2Root rot (*Rhizoctonia* sp.) – 2**Oomycete (water mold)**Root rot (*Phytophthora nicotianae*) – 1**Ivy, Algerian (*Hedera canariensis*)****Fungi**Anthracnose (*Colletotrichum* sp.) – 1**Oomycete (water mold)**Pythium root rot (*Pythium* sp.) – 1**Ivy, English (*Hedera helix*)****Fungi**Anthracnose (*Colletotrichum* sp.) – 9Leaf spot (*Macrophoma* sp.) – 2Root rot (*Fusarium* sp.) – 1Root/stem rot (*Rhizoctonia solani*) – 2**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 5Root/stem rot (*Pythium* sp.) – 1**Bacteria**Bacterial leaf spot (*Xanthomonas campestris* pv. *hederae*) – 7**Ivy, Fig (*Ficus pumila*)****Abiotic**

Cold injury – 1

Japanese Blueberry Tree (*Elaeocarpus decipens*)**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1**Abiotic**

Excess water (hydrogen sulfide toxicity) – 1

Planted too deep – 1

Jasmine (*Jasminum* sp.)**Fungi**Rhizoctonia blight (*Rhizoctonia* sp.) – 1**Abiotic**

Cold injury – 1

Jasmine, Asiatic (*Trachelospermum asiaticum*)**Fungi**Aerial blight (*Rhizoctonia solani*) – 7Leaf spot (*Corynespora* sp.) – 1Leaf spot (*Pestalotiopsis* sp.) – 1Root rot (*Rhizoctonia* sp.) – 4**Abiotic**

Cold injury – 1

Jasmine, Confederate (*Trachelospermum jasminoides*)**Fungi**Root rot (*Armillaria* sp.) – 1**Jimson Weed (*Datura stramonium*)****Fungi**Leaf spot (*Septoria* sp.) – 1**Virus**Impatiens necrotic spot virus (INSV) (*Orthotospovirus impatiensnecromaculae*) – 1Tomato spotted wilt virus (TSWV) (*Orthotospovirus tomatomaculae*) – 1**Johnson Grass (*Sorghum halepense*)****Fungi**Anthracnose (*Colletotrichum* sp.) – 1Leaf spot (*Cercospora* sp.) – 1**Joseph's-coat (*Alternanthera ficoidea*)****Fungi**Cercospora leaf spot (*Cercospora* sp.) – 1Crown rot (*Fusarium* sp./spp.) – 1**Jujube (*Ziziphus jujube*)****Fungi**Leaf spot (*Cercospora* sp.) – 2**Juniper (*Juniperus* sp.)****Fungi**Canker (*Botryosphaeria/Fusicoccum* sp.) – 2Cedar apple rust (*Gymnosporangium juniperi-virginianae*) – 2Charcoal rot (*Macrophomina phaseolina*) – 1Cypress canker (*Seiridium* sp.) – 1Needle blight (*Alternaria* sp.) – 1Needle blight (*Passalora sequoiae*) – 4Needle blight (*Pestalotiopsis* sp.) – 8Quince rust (*Gymnosporangium clavipes*) – 2Saprophytic fungus (*Beltrania* sp.) – 1Twig blight (*Sphaeropsis* sp.) – 2Web blight (*Rhizoctonia* sp.) – 1

Oomycete (water mold)Root rot (*Phytophthora* sp.) – 1Root rot (*Pythium* sp.) – 1**Abiotic**

Mechanical injury – 1

Root bound – 1

Juniper, Blue Point (*Juniperus chinensis*)**Fungi**Needle blight (*Passalora sequoiae*) – 1Needle blight (*Phomopsis* sp.) – 1**Juniper, Parson's (*Juniperus chinensis* 'Parsonii')****Fungi**Needle blight (*Pestalotiopsis* sp.) – 1**Juniper, Pfitzer (*Juniperus chinensis* 'Pfitzeriana')****Fungi**Twig blight (*Phomopsis* sp.) – 1**Juniper, Spartan (*Juniperus chinensis* 'Spartan')****Fungi**Canker (*Sphaeropsis* sp.) – 1**Kale (*Brassica oleracea* Acephala group)****Fungi**Leaf spot (*Cercospora brassicicola*) – 2**Bacteria**Bacterial leaf spot (*Pseudomonas syringae*) – 1**Abiotic**

Boron deficiency suspected – 1

Kohlrabi (*Brassica oleracea* var. *gongylodes*)**Fungi**Leaf spot (*Cercospora* sp.) – 1**Kudzu (*Pueraria lobata*)****Fungi**Angular leaf spot (*Pseudocercospora puerariicola*) – 1Anthracnose (*Colletotrichum* sp.) – 1Asian soybean rust (*Phakopsora pachyrhizi*) – 2*Cercospora* leaf spot (*Cercospora* sp.) – 6**Bacteria**Halo blight (*Pseudomonas syringae* pv. *phaseolicola*) – 7**Lamb's Ear (*Stachys byzantina*)****Oomycete (water mold)**Root rot (*Pythium* sp.) – 1**Lantana (*Lantana camara*)****Fungi***Cercospora* leaf spot (*Cercospora* sp.) – 1**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1**Myxomycete**

Slime mold (Class: Myxogastria) – 1

Abiotic

Herbicide damage – 1

Lavender (*Lavandula* sp.)**Oomycete (water mold)**Root rot (*Pythium* sp.) – 2**Larkspur (*Delphinium* sp.)****Fungi**Black root rot (*Berkeleyomyces basicola*) – 1**Oomycete (water mold)**Root rot (*Pythium*) – 1**Leafy Mistletoe (*Phoradendron* sp.)****Abiotic**

Cold injury suspected – 1

Lemon (*Citrus limon*)**Fungi**Alternaria leaf spot of rough lemon suspected (*Alternaria* sp.) – 1**Abiotic**

Magnesium deficiency – 2

Lettuce (*Lactuca sativa*)**Fungi**Lettuce drop (*Sclerotinia* sp.) – 3Leaf spot (*Cercospora* sp.) – 2**Abiotic**

High soluble salts – 1

Fungicide burn – 1

Leucothoe (*Leucothoe* sp.)**Fungi**Cercospora leaf spot (*Cercospora* sp.) – 1Powdery mildew (*Erysiphe* sp.) – 1Root rot (*Rhizoctonia* sp.) – 1**Lime (*Citrus limetta*)****Fungi**

Magnesium deficiency – 1

Liriope (*Liriope* sp.)**Fungi**Anthracnose (*Colletotrichum* sp.) – 9Crown rot (*Fusarium* sp.) – 7Crown rot (*Rhizoctonia solani*) – 9**Oomycete (water mold)**Crown rot (*Phytophthora* sp.) – 1**Loquat (*Eriobotrya japonica*)****Fungi**Anthracnose (*Colletotrichum* sp.) – 1Leaf spot (*Diplocarpon* sp.) – 1Leaf spot (*Sphaeropsis* sp.) – 1Phomopsis leaf blight (*Phomopsis* sp.) – 1**Animal**Sapsucker (*Sphyrapicus* sp.) – 1**Loropetalum (*Loropetalum chinense*)****Fungi**Armillaria root rot (*Armillaria* sp.) – 1Leaf spot (*Cercospora* sp.) – 2**Oomycete (water mold)**Pythium root rot (*Pythium* sp.) – 1**Bacteria**Bacterial gall (*Pseudomonas savastanoi*) – 11**Abiotic**

Cold injury – 1

Herbicide injury – 1

Excessive water – 1

Root bound – 2

Magnolia (*Magnolia* sp.)**Fungi**Fusarium root/stem rot (*Fusarium solani*) – 1

Powdery mildew (fungus) – 1

AlgaeAlgal leaf spot (*Cephaleuros virescens*) – 1**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 1**Abiotic**

Group #2 ALS herbicide – 1

Magnolia, Fraser (*Magnolia fraseri*)**Algae**Algal leaf spot (*Cephaleuros virescens*) – 1**Magnolia, Saucer (*Magnolia* × *soulangiana*)****Fungi**Leaf spot (*Passalora* sp.) – 1

Powdery mildew (fungus) – 4

Sooty mold (various fungi) – 1

Abiotic

Cold damage – 1

Growth regulator herbicide suspected – 1

Magnolia, Southern (*Magnolia grandiflora*)**Fungi**Anthracnose (*Colletotrichum* sp.) – 4Fungal epiphyte (bottom of leaf) (*Parastenella magnolia*) – 6Leaf spot (*Coniothyrium* sp.) – 4Lichenized algal leaf spot (*Strigula* sp.) – 12Phomopsis leaf blight (*Phomopsis* sp.) – 1Twig blight (*Diplodia* sp.) – 1**Algae**Algal leaf spot (*Cephaleuros virescens*) – 29**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 1Bacterial leaf spot suspected (*Pseudomonas cichorii*) – 1**Abiotic**

Cold injury – 3

Root bound – 3

Growth regulator herbicide suspected – 1

Winter burn – 5

Magnolia, Star (*Magnolia stellata*)**Abiotic**

Drought stress – 1

Magnolia, Sweetbay (*Magnolia virginiana*)**Fungi**Anthracnose (*Colletotrichum* sp.) – 2

Bacteria

Bacterial blight suspected (*Pseudomonas syringae* pv. *syringae*) – 1

Mahonia (*Mahonia* sp.)**Bacteria**

Bacterial leaf scorch (*Xylella fastidiosa*) – 1

Mallow (*Malva* sp.)**Fungi**

Hollyhock rust (*Puccinia malvacearum*) – 1

Mallow, High (Zebra) (*Malva sylvestris* 'Zebrina')**Fungi**

Hollyhock rust (*Puccinia malvacearum*) – 1

Mandevilla (*Mandevilla* sp.)**Fungi**

Anthraxnose (*Colletotrichum gloeosporioides*) – 1

Crown and root rot (*Fusarium* sp.) – 1

Oomycete (water mold)

Pythium root rot (*Pythium* sp.) – 1

Maple (*Acer* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 2

Anthraxnose (*Discula* sp.) – 1

Anthraxnose (*Kabatiella apocrypta*) – 1

Anthraxnose (various fungi) – 9

Basal canker (*Phytophthora* sp.) – 2

Botryosphaeria canker (*Botryosphaeria dothidea*) – 2

Leaf spot (*Cercospora* sp.) – 1

Leaf spot (*Cylindrosporium* sp.) – 1

Leaf spot (*Phyllosticta* sp.) – 1

Leaf spot (*Septoria* sp.) – 1

Leaf spot (*Sphaeropsis* sp.) – 1

Sooty mold (various fungi) – 1

Tar spot (*Rhytisma acerinum*) – 2

Verticillium wilt (*Verticillium* sp.) – 2

Bacteria

Alcoholic flux (various microorganisms) – 2

Abiotic

Drought – 2

Group #9 herbicide (glyphosate) – 1

Leaf spot (gramoxone) – 1

Animal

Deer browse – 1

Sapsucker (*Sphyrapicus* sp.) – 2

Squirrel damage – 2

Maple, Japanese (*Acer palmatum*)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 4

Anthraxnose (*Discula* sp.) – 3

Anthraxnose (*Aureobasidium apocryptum*) – 5

Anthraxnose (various fungi) – 7

Canker (*Botryosphaeria* sp.) – 3

Canker (*Fusicoccum* sp.) – 1

Canker (*Lasiodiplodia theobromae*) – 1

Canker (*Phomopsis* sp.) – 2

Leaf spot (*Ascochyta* sp.) – 1

Phyllosticta leaf spot (*Phyllosticta minima*) – 2

Root rot (*Fusarium* sp.) – 1

Twig blight (*Mycosphaerella* sp. suspected) – 1

Oomycete (water mold)

Basal canker (*Phytophthora* sp.) – 3

Root rot (*Phytophthora* sp.) – 3

Abiotic

Drought stress – 2

Group #2 ALS inhibitor herbicide – 1

Root bound – 1

Transplant stress – 1

Animal

Sapsucker (*Sphyrapicus* sp.) – 1

Maple, Red (*Acer rubrum*)**Fungi**

Anthraxnose (*Discula* sp.) – 1

Anthraxnose (*Colletotrichum* sp.) – 2

Canker (*Botryosphaeria* sp.) – 1

Canker (*Fusicoccum* sp.) – 1

Canker (*Phomopsis* sp.) – 1

Leaf blister (*Taphrina* sp.) – 1

Leaf spot (*Cristulariella* sp.) – 1

Verticillium wilt (*Verticillium* sp.) – 2

Parasitic Plant

Leafy mistletoe (*Phoradendron* sp.) – 1

Abiotic

Drought – 1

Growth regulator herbicide – 1

Root bound – 2

Sunscald – 1

Maple, Silver (*Acer saccharinum*)**Animal**Sapsucker (*Sphyrapicus* sp.) – 2**Maple, Sugar (*Acer saccharum*)****Fungi**Leaf spot (*Phyllosticta* sp.) – 1Root and crown rot (*Phytophthora* sp.) – 1Root rot (*Armillaria* sp.) – 1**Animal**

Squirrel damage – 1

Mayapple (*Podophyllum peltatum*)**Fungi**Rust (*Allodus podophylli*) – 1**Mayhaw (*Crataegus aestivalis*)****Fungi**Quince rust (*Gymnosporangium clavipes*) – 11

Sooty mold – 1

Mexican False Heather (*Cuphea hyssopifolia*)**Virus**Impatiens necrotic spot virus (INSV) (*Orthotospovirus impatiensnecromaculae*) – 1Tomato spotted wilt virus (TSWV) (*Orthotospovirus tomatomaculae*) – 1**Milkweed (*Asclepias* sp.)****Fungi**Rust (*Puccinia* sp.) – 1**Million Bells (*Calibrachoa* sp.)****Oomycete (water mold)**Pythium root rot (*Pythium* sp.) – 1**Mimosa (*Albizia julibrissin*)****Fungi**Wood rot fungus (*Ganoderma* sp.) – 1**Mint (*Mentha* sp.)****Fungi**Aerial blight (*Rhizoctonia solani*) – 1Fusarium stem rot (*Fusarium* sp.) – 1

Powdery mildew (fungus) – 1

Mondo Grass (*Ophiopogon japonicus*)**Fungi**Anthracnose (*Colletotrichum* sp.) – 11Crown rot (*Fusarium* sp.) – 2Crown rot (*Rhizoctonia* sp.) – 2**Monkey-flower (*Mimulus* sp.)****Fungi**Stem canker (*Botrytis* sp.) – 1**Mulberry (*Morus* sp.)****Fungi**Cercospora leaf spot (*Cercospora* sp.) – 1False mildew (*Phloeospora maculans*) – 9Leaf spot (*Colletotrichum* sp.) – 1Popcorn disease (*Ciboria carunculoides*) – 1**Muscadine (*Vitis rotundifolia*)****Fungi**Angular leaf spot (*Pseudocercospora brachypus*) – 3Anthracnose (*Colletotrichum* sp.) – 1Bitter rot (*Greeneria uvicola*) – 4Black rot (*Phyllosticta ampellicida*) – 3Leaf spot (*Phomopsis* sp.) – 1Macrophoma rot (*Botryosphaeria dothidea*) – 2Jelly fungus (*Tremallales*) – 1**Abiotic**

Chlorothalonil burn – 1

Freeze damage – 2

Magnesium deficiency – 1

Muskmelon (*Cucumis melo reticulatus*)**Fungi**Southern blight (*Athelia rolfsii*) – 1**Mustard (*Brassica juncea*)****Fungi**Anthracnose (*Colletotrichum higginsianum*) – 1Powdery mildew (*Erysiphe cruciferarum*) – 1White leaf spot (*Neopseudocercospora capsellae*) – 2**Oomycete (water mold)**Downy mildew (*Hyaloperonospora parasitica*) – 3**Mustard, Ethiopian (*Brassica carinata*)****Oomycete (water mold)**Damping-off (*Pythium* sp.) – 1

Nandina (*Nandina domestica*)**Fungi**

Leaf spot (*Cercospora* sp.) – 1

Abiotic

Herbicide injury – 1

Oak (*Quercus* sp.)**Fungi**

Anthraxnose (*Apiognomonia errabunda*) – 7

Armillaria root and butt rot (*Desarmillaria* sp.) – 4

Canker rot (*Inonotus hispidus*) – 2

Hypoxylon canker (*Biscogniauxia atropunctata*) – 7

Leaf blister (*Taphrina caerulescens*) – 19

Leaf spot (*Phyllosticta* sp.) – 1

Leaf spot (*Sphaerulina quercicola*) – 1

Leaf spot (*Tubakia* sp.) – 11

Mycorrhizal fungus (rough-stemmed bolete) (*Leccinum roseoscabrum*) – 1

Pine-oak gall rust (*Cronartium quercuum*) – 4

Powdery mildew (fungus) – 3

Root and butt rot (*Ganoderma* sp.) – 4

Root and butt rot (*Pseudoinonotus dryadeus*) – 2

Smooth patch (various fungi) – 2

Sphaeropsis canker (*Sphaeropsis* sp.) – 2

Wood rot fungus (*Climacodon pulcherrimus*) – 1

Wood rot fungus (*Fuscoporia* sp.) – 1

Wood rot fungus (lion's mane) (*Hericeum erinaceus*) – 1

Wood rot fungus (oyster mushroom) (*Pleurotus* sp.) – 1

Wood rot fungus (*Stereum* sp.) – 1

Wood rot fungus (violet-toothed polypore)

(*Trichaptum biforme*) – 2

Oomycete (water mold)

Leaf spot (*Phytophthora* sp.) – 4

Root rot (*Phytophthora* sp.) – 1

Bacteria

Alcoholic flux (various microorganisms) – 7

Bacterial leaf scorch (*Xylella fastidiosa*) – 21

Bacterial wetwood (nonpathogenic bacteria) – 8

Decline complex

Oak decline (decline complex) – 3

Plant

Ball moss (*Tillandsia recurvata*) – 1

Animal

Sap sucker (*Sphyrpicus* sp.) – 1

Squirrel damage – 1

Abiotic

Growth regulator herbicide suspected – 3

Included bark – 1

Transplant stress – 1

Oak, Bur (*Quercus macrocarpa*)**Fungi**

Leaf spot (*Tubakia* sp.) – 1

Oak, Chestnut (*Quercus prinus*)**Fungi**

Powdery mildew (*Phyllactinia* sp.) – 1

Oak, Laurel (*Quercus laurifolia*)**Bacteria**

Bacterial leaf scorch (*Xylella fastidiosa*) – 1

Oak, Live (*Quercus virginiana*)**Fungi**

Anthraxnose (*Apiognomonia errabunda*) – 3

Christmas lichen (*Cryptothecia rubrocincta*) – 4

Irpex canker (*Irpiciporus pachyodon*) – 1

Leaf blister (*Taphrina caerulescens*) – 8

Powdery mildew (fungus) – 1

Root and butt rot (*Ganoderma* sp.) – 1

Sap rot (*Podofomes mollis*) – 1

Smooth patch (various fungi) – 3

Sooty mold – 2

Oomycete (water mold)

Phytophthora root rot (*Phytophthora* sp.) – 2

Bacteria

Bacterial leaf scorch (*Xylella fastidiosa*) – 1

Slime flux (various bacteria) – 3

Animal

Sap sucker injury (*Sphyrpicus* sp.) – 2

Abiotic

Freeze/frost/cold damage – 1

Overwatering – 1

Root bound, girdling, or J-roots – 5

Transplant stress – 1

Miscellaneous

Burl wood (unknown cause) – 1

Oak, Northern Pin (*Quercus ellipsoidalis*)**Bacteria**

Bacterial leaf scorch (*Xylella fastidiosa*) – 1

Oak, Nuttall (*Quercus nuttallii*)**Bacteria**

Alcoholic flux (various microorganisms) – 1

Abiotic

Transplant stress – 1

Animal

Squirrel damage – 1

Oak, Pin (*Quercus palustris*)**Fungi**Anthracnose (*Apiognomonia errabunda*) – 1Armillaria root rot (*Armillaria* sp.) – 2Hypoxylon canker (*Biscogniauxia* sp.) – 1Leaf spot (*Tubakia* sp.) – 3Root and butt rot (*Ganoderma curtisii*) – 1Root and butt rot (*Ganoderma* sp.) – 1**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 1**Oak, Red Group (*Quercus* sp.)****Fungi**Anthracnose (*Apiognomonia errabunda*) – 2Leaf blister (*Taphrina caerulescens*) – 4Leaf spot (*Tubakia* sp.) – 1

Powdery mildew (fungus) – 1

Root and butt rot (*Ganoderma* sp.) – 2**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 3**Abiotic**

Chemical injury – 1

Herbicide damage – 2

Oak, Ring-cupped (*Quercus glauca*)**Decline complex**

Oak decline (decline complex) – 1

Oak, Sawtooth (*Quercus acutissima*)**Fungi**Canker (*Amphilogia gyrosa*) – 1**Bacteria**

Slime flux (various bacteria) – 1

Oak, Scarlet (*Quercus coccinea*)**Fungi**Sooty mold (*Cladosporium* sp.) – 1**Oak, Shumard (*Quercus shumardii*)****Fungi**Leaf spot (*Colletotrichum* sp.) – 1Leaf spot (*Tubakia* sp.) – 2Powdery mildew (*Phyllactinia guttata*) – 1**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 3

Bacterial wetwood (various bacteria) – 1

Animal

Squirrel damage – 1

Abiotic

Root bound – 2

Oak, Swamp Chestnut (*Quercus michauxii*)**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 1**Oak, Swamp White (*Quercus bicolor*)****Fungi**Anthracnose (*Apiognomonia errabunda*) – 1Leaf spot (*Tubakia* sp.) – 1**Oak, Water (*Quercus nigra*)****Fungi**Anthracnose (*Apiognomonia errabunda*) – 1Endothia canker (*Amphilogia gyrosa*) – 1Hypoxylon canker (*Biscogniauxia atropunctata*) – 1Leaf blister (*Taphrina caerulescens*) – 7Pine-oak gall rust (*Cronartium quercuum*) – 2Powdery mildew (*Phyllactinia guttata*) – 1Root rot (*Armillaria* sp.) – 1Root and butt rot (*Ganoderma* sp.) – 1Saprophytic bark fungus (*Peniophora* sp.) – 1Twig canker (*Sphaeropsis* sp.) – 1**Animal**

Squirrel damage – 1

Abiotic

Growth regulator herbicide injury – 2

Oak, White (*Quercus alba*)**Fungi**Leaf spot (*Cercospora* sp.) – 1Pine-oak gall rust (*Cronartium quercuum*) – 1Powdery mildew (*Phyllactinia guttata*) – 1Root and butt rot (*Ganoderma curtisii*) – 1**Bacteria**

Alcoholic flux (various microorganisms) – 2

Oak, White Group (*Quercus* spp.)**Fungi**

Leaf spot (*Tubakia* sp.) – 1

Oak, Willow (*Quercus phellos*)**Fungi**

Anthraxnose (*Apiognomonina errabunda*) – 1

Leaf blister (*Taphrina caerulescens*) – 1

Leaf spot (*Tubakia* sp.) – 2

Powdery mildew (*Phyllactinia guttata*) – 1

Root and butt rot (*Ganoderma sessile*) – 1

Root and butt rot (*Pseudoinonotus dryadeus*) – 1

Sooty mold (fungus) – 1

Bacteria

Bacterial leaf scorch (*Xylella fastidiosa*) – 3

Animal

Squirrel damage – 1

Abiotic

Glyphosate injury – 1

Herbicide injury – 3

Iron deficiency; high soil pH – 4

Lightning injury – 1

Transplant stress – 1

Oats (*Avena sativa*)**Fungi**

Leaf spot (*Bipolaris gigantea*) – 3

Oat leaf spot/seedling blight (*Pyrenophora avenae*) – 1

Abiotic

Paraquat injury – 1

Obedient Plant (*Physostegia virginiana*)**Fungi**

Leaf spot (*Pseudocercospora* sp.) – 1

Okra (*Abelmoschus esculentus*)**Fungi**

Alternaria leaf spot (*Alternaria* sp.) – 1

Damping-off (*Fusarium* sp.) – 1

Damping-off (*Rhizoctonia* sp.) – 1

Leaf spot (*Pseudocercospora abelmoschi* suspected) – 5

Powdery mildew (fungus) – 1

Root rot (*Fusarium* sp.) – 1

Wet rot (*Choanephora* sp.) – 2

Nematode

Root-knot (*Meloidogyne* sp.) – 5

Oleander (*Nerium oleander*)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Canker (*Phomopsis* sp.) – 1

Leaf spot (*Botryodiplodia* sp.) – 1

Leaf spot (*Cercospora* sp.) – 1

Leaf spot (*Pseudocercospora* sp.) – 1

Bacteria

Bacterial leaf scorch (*Xylella fastidiosa*) – 4

Abiotic

Herbicide injury – 2

Onion (*Allium cepa*)**Fungi**

Basal plate rot (*Fusarium oxysporum* f. sp. *cepae*) – 1

Cladosporium leaf blotch (*Cladosporium allii-cepae*) – 1

Pink rot (*Setophoma terrestris*) – 1

Orange (*Citrus* sp.)**Fungi**

Saprophytic fungus (*Colletotrichum gloeosporioides*) – 1

Abiotic

Fruit split (potassium deficiency and wet weather) – 1

Magnesium deficiency – 1

Orange, Blood (*Citrus sinensis*)**Fungi**

Sooty mold (various fungi) – 1

Osmanthus (*Osmanthus* sp.)**Fungi**

Anthraxnose (*Colletotrichum gloeosporioides*) – 3

Osteospermum (*Osteospermum* sp.)**Oomycete (water mold)**

Root rot (*Phytophthora* sp.) – 1

Oxalis (*Oxalis* sp.)**Fungi**

Rust (*Puccinia oxalidis*) – 1

Palmae (Palm Family)**Fungi**False smut (*Graphiola* sp.) – 1Leaf spot (*Phyllosticta* sp.) – 1**Abiotic**

Boron deficiency – 2

Potassium deficiency – 2

Palm, Cabbage (*Sabal palmetto*)**Fungi**Graphiola leaf spot (*Graphiola phoenicis*) – 1**Palm, Canary Date (*Phoenix canariensis*)****Fungi**Graphiola leaf spot (*Graphiola phoenicis*) – 1Stigmina leaf spot (*Stigmina palmivora*) – 1**Abiotic**

Potassium deficiency – 1

Palm, Needle (*Rhapidophyllum hystrix*)**Fungi**Cercospora leaf spot (*Cercospora* sp.) – 1**Palm, Pindo/Jelly (*Butia capitata*)****Fungi**Leaf spot (*Pestalotiopsis* sp.) – 1**Palm, Sago (*Cycas revoluta*)****Fungi**Rachis blight (*Fusicoccum* sp.) – 2Sooty mold (*Septobasidium* sp.) – 1**Abiotic**

Magnesium deficiency – 1

Palm, Washington (*Washingtonia* sp.)**Abiotic**

Magnesium deficiency – 1

Palm, Windmill (*Trachycarpus fortunei*)**Fungi**Fusarium root/crown rot (*Fusarium* sp.) – 1**Abiotic**

Wind injury – 1

Palmetto, Dwarf (*Sabal minor*)**Fungi**Leaf spot (*Ascochyta* sp.) – 1**Pansy (*Viola* sp.)****Fungi**Aerial web blight (*Rhizoctonia solani*) – 1Anthracnose (*Colletotrichum* sp.) – 1Black root rot (*Berkeleyomyces basicola*) – 3Cercospora leaf spot (*Cercospora violae*) – 3Crown rot/damping-off (*Fusarium* sp.) – 5Root rot (*Rhizoctonia* sp.) – 1**Oomycete (water mold)**Pythium root rot (*Pythium* sp.) – 2**Papaya (*Carica papaya*)****Oomycete (water mold)**Root rot (*Pythium* sp.) – 1**Abiotic**

Growth regulator herbicide – 1

Pea (*Pisum sativum*)**Fungi**Pod rot (*Choanephora* sp.) – 1Powdery mildew (*Erysiphe pisi* var. *pisi*) – 1Root rot (*Fusarium* sp.) – 1Root rot (*Rhizoctonia* sp.) – 3Wilt (*Fusarium* sp.) – 2**Oomycete (water mold)**Damping off (*Pythium* sp./spp.) – 1Root rot (*Pythium* sp.) – 1**Peach (*Prunus persica*)****Fungi**Armillaria root rot (*Armillaria* sp.) – 4Brown rot (*Monilinia fructicola*) – 11Canker (*Botryosphaeria* sp.) – 1Crown gall (*Agrobacterium tumefaciens*) – 1Peach leaf curl (*Taphrina deformans*) – 1Scab (*Venturia carpophila*) – 1Shot-hole disease (*Wilsonomyces carpophilus*) – 4**Bacteria**Bacterial canker (*Pseudomonas syringae*) – 1Bacterial spot (shot-hole) (*Xanthomonas arboricola* pv. *pruni*) – 11

Nematode

- Ring (*Criconeematidae*) – 1
- Root-knot (*Meloidogyne* sp.) – 1

Animal

- Deer rub – 1

Abiotic

- Chlorothalonil injury to fruit – 1

Peanut (*Arachis hypogaea*)**Fungi**

- Anthrachnose (*Colletotrichum* sp.) – 3
- Cylindrocladium black rot (*Calonectria cylindrospora*) – 2
- Diplodia collar rot (*Lasiodiplodia theobromae*) – 1
- Early leaf spot (*Passalora arachidicola*) – 5
- Fusarium damping-off (*Fusarium* sp.) – 1
- Fusarium pod rot (*Fusarium* sp.) – 2
- Fusarium root/stem rot (*Fusarium solani*) – 2
- Late leaf spot (*Nothopassalora personata*) – 2
- Limb rot (*Rhizoctonia solani*) – 4
- Phyllosticta leaf spot (*Phyllosticta* sp.) – 2
- Pod rot (*Athelia rolfsii*) – 2
- Rhizoctonia blight (*Rhizoctonia solani*) – 1
- Root rot (*Neocosmospora* sp.) – 1
- Rust (*Puccinia arachidis*) – 1
- Sclerotinia blight (*Sclerotinia minor*) – 1
- Unspecified pathology (*Fusarium neocosmosporiellum*) – 3

Oomycete (water mold)

- Pod rot (*Pythium myriotylum*) – 1

Virus

- Tomato spotted wilt virus (TSWV) (*Orthotospovirus tomatomaculae*) – 6

Nematode

- Lesion (*Pratylenchus* sp.) – 1
- Root-knot (*Meloidogyne* sp.) – 1

Abiotic

- Poor nodulation causing N deficiency – 1

Pear, Japanese (*Pyrus pyrifolia*)**Fungi**

- Quince rust (*Gymnosporangium* sp.) – 1

Bacteria

- Fire blight (*Erwinia amylovora*) – 1

Pear (*Pyrus communis*)**Fungi**

- Bitter rot (*Colletotrichum* sp.) – 4
- Cercospora leaf spot (*Cercospora* sp.) – 2

- Fabrae leaf spot (*Diplocarpon mespili*) – 9

- Leaf spot (*Phoma* sp.) – 1

- Leaf spot (*Mycosphaerella* sp.) – 1

- Pear scab (*Venturia pyrina*) – 1

- Quince rust (*Gymnosporangium clavipes*) – 17

- Twig blight (*Phomopsis* sp.) – 1

- Twig dieback (*Fusarium lateritium*) – 1

- White rot (*Botryosphaeria dothidea*) – 1

- Spot anthracnose (*Elsinoe piri*) – 1

Bacteria

- Blossom blast (*Pseudomonas syringae* pv. *syringae*) – 3
- Fire blight (*Erwinia amylovora*) – 17

Abiotic

- Captan fruit injury – 1
- Cork spot (physiological disorder) – 2
- Fruit cracking (too much water) – 1
- Growth regulator herbicide injury – 2
- Magnesium deficiency suspected – 1

Pear, Ornamental (*Pyrus calleryana*)**Fungi**

- Black rot (*Diplodia seriata*) – 1
- Fabrae leaf spot (*Diplocarpon mespili*) – 1
- Leaf spot (*Colletotrichum* sp.) – 4
- Phoma leaf spot (*Phoma* sp.) – 2
- Quince rust (*Gymnosporangium clavipes*) – 5
- Root and butt rot (*Ganoderma* sp.) – 1

Bacteria

- Fire blight (*Erwinia amylovora*) – 14

Myxomycete

- Slime mold (*Fuligo septica*) – 1

Abiotic

- Cold damage – 1
- Root bound – 1
- Growth regulator herbicide injury – 3

Pearl Millet (*Pennisetum glaucum*)**Fungi**

- Millet leaf blast (*Pyricularia* sp.) – 2

Pecan (*Carya illinoensis*)**Fungi**

- Anthrachnose (*Glomerella* sp.) – 1
- Brown leaf spot (*Sirosporium diffusum*) – 1
- Leaf spot (*Discosia* sp.) – 1
- Liver spot (*Gnomonia caryae*) – 1
- Pecan scab (*Venturia effusa*) – 18
- Phomopsis canker (*Phomopsis* sp.) – 1
- Powdery mildew (*Phyllactinia* sp.) – 1

Sooty mold (various fungi) – 2
Tinder conk (*Fomes fomentarius*) – 1

Bacteria

Bacterial leaf scorch (*Xylella fastidiosa*) – 3
Bunch disease (*Phytoplasma*) – 2
Slime flux (various bacteria) – 1

Animal

Sapsucker (*Sphyrapicus* sp.) – 2

Abiotic

Kernel fuzz – 3
Planted too deep (graft below soil line and graft constricted) – 1
Shuck decline (physiological disorder) – 1
Zinc deficiency – 1

Miscellaneous

Burl (undetermined cause) – 1

Pentas (*Pentas lanceolata*)

Fungi

Black root rot (*Berkeleyomyces basicola*) – 1

Peony (*Paeonia* sp.)

Virus

Tobacco rattle virus (TRV) suspected (*Tobravirus tabaci*) – 1

Pepper (*Capsicum* sp.)

Fungi

Southern blight (*Athelia rolfsii*) – 5

Bacteria

Bacterial canker (*Clavibacter michiganensis* subsp. *michiganensis*) – 1
Bacterial leaf spot (*Xanthomonas campestris*) – 7
Bacterial leaf spot (*Xanthomonas* sp./spp.) – 1
Southern bacterial wilt (*Ralstonia solanacearum*) – 6

Oomycete (water mold)

Pythium root/crown rot (*Pythium* sp.) – 3

Virus

Tomato spotted wilt virus (TSWV) (*Orthotospovirus tomatomaculae*) – 7

Abiotic

Blossom end rot (calcium deficiency) – 2
Growth regulator herbicide injury – 2
Sunburn – 2

Pepper, Greenhouse (*Capsicum* sp.)

Fungi

Damping-off (*Fusarium* sp.) – 1

Abiotic

Nitrogen deficiency – 1

Pepper, Banana (*Capsicum annuum*)

Abiotic

Blossom end rot (calcium deficiency) – 1

Pepper, Bell (*Capsicum annuum grossum*)

Fungi

Southern blight (*Athelia rolfsii*) – 1

Oomycete (water mold)

Root rot (*Pythium* sp.) – 1

Bacteria

Bacterial canker (*Clavibacter michiganensis* subsp. *michiganensis*) – 2
Bacterial speck (*Pseudomonas syringae*) – 1
Bacterial spot (*Xanthomonas campestris*) – 2
Bacterial wilt (*Ralstonia solanacearum*) – 6

Virus

Tobacco mosaic virus (TMV) (*Tobamovirus tabaci*) – 1
Tomato spotted wilt virus (TSWV) (*Orthotospovirus tomatomaculae*) – 1

Abiotic

Blossom end rot (calcium deficiency) – 4

Pepper, Chili (*Capsicum frutescens*)

Nematode

Root-knot (*Meloidogyne* sp.) – 1

Periwinkle (*Vinca* sp.)

Fungi

Stem blight (*Boeremia exigua*) – 1

Periwinkle (*Vinca minor*)

Fungi

Root rot (*Rhizoctonia* sp.) – 1
Stem blight (*Phoma exigua*) – 2

Periwinkle, Madagascar (*Catharanthus roseus*)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 6
 Black root rot (*Berkeleyomyces basicola*) – 1
 Botrytis blight (*Botrytis cinerea*) – 2
 Crown rot (*Rhizoctonia solani*) – 3
 Crown/root rot (*Fusarium* sp.) – 5

Oomycete (water mold)

Aerial stem blight (*Phytophthora nicotianae*) – 3
 Aerial stem blight (*Phytophthora* sp.) – 2
 Root rot (*Phytophthora* sp.) – 2
 Root and crown rot (*Pythium* sp.) – 4
 Sclerotinia canker (*Sclerotinia* sp.) – 1
 Sooty mold (various fungi) – 1

Bacteria

Phytoplasma disease (*Phytoplasma*) – 1

Persimmon, Common (*Diospyros virginiana*)**Fungi**

Leaf spot (*Pseudocercospora* sp.) – 3

Persimmon, Japanese (*Diospyros kaki*)**Fungi**

Canker (*Phomopsis* sp.) – 1
 Fly speck (fungus) – 1
 Leaf spot (*Monochaetia* sp.) – 1
 Sooty blotch (fungus) – 1
 Undetermined pathogenicity (*Eutypella* sp.) – 2

Abiotic

Boron toxicity – 1
 Tannin spots – 1

Petunia (*Petunia* × *hybrida*)**Fungi**

Alternaria leaf spot (*Alternaria* sp.) – 2
 Black root rot (*Berkeleyomyces basicola*) – 2
 Fusarium crown rot (*Fusarium* sp.) – 4
 Root/crown rot (*Rhizoctonia solani*) – 4
 Sclerotinia stem rot (*Sclerotinia* sp.) – 1

Oomycete (water mold)

Root/crown rot (*Phytophthora* sp.) – 2
 Pythium root rot (*Pythium* sp.) – 3

Abiotic

Iron chlorosis – 1

Petunia, Mexican (*Ruellia brittoniana*)**Abiotic**

Oedema – 1

Phlox (*Phlox* sp.)**Fungi**

Powdery mildew (fungus) – 1
 Southern stem rot (*Athelia rolfsii*) – 1
 Stem canker (*Fusarium* sp.) – 1

Photinia (*Photinia* × *fraseri*)**Fungi**

Armillaria root rot (*Armillaria* sp.) – 3
 Entomosporium leaf spot (*Diplocarpon mespili*) – 10
 Leaf spot (*Pestalotiopsis* sp.) – 1
 Root rot (*Ganoderma sessile*) – 1

Bacteria

Fire blight (*Erwinia amylovora*) – 1

Pine (*Pinus* sp.)**Fungi**

Brown spot needle blight (*Lecanosticta acicola*) – 1
 Cubical brown rot (*Phaeolus schweinitzii*) – 1
 Fusiform rust (*Cronartium quercuum* f. sp. *fusiforme*) – 3
 Needle cast (*Lophodermium* sp.) – 1
 Needle rust (*Coleosporium* sp.) – 3

Pine, Loblolly (*Pinus taeda*)**Fungi**

Annosus root rot suspected (*Heterobasidion annosum*) – 3
 Brown spot needle blight (*Lecanosticta acicola*) – 7
 Fusiform rust (*Cronartium quercuum* f. sp. *fusiforme*) – 2
 Needle cast (*Lophodermium* sp.) – 4
 Needle rust (*Coleosporium* sp.) – 6
 Pitch canker (*Fusarium moniliforme*) – 6
 Tip blight (*Diplodia sapinea*) – 1

Nematode

Pinewood (*Bursaphelenchus xylophilus*) – 1

Pine, Longleaf (*Pinus palustris*)**Fungi**

Armillaria root rot (*Armillaria* sp.) – 1
 Brown spot needle blight (*Lecanosticta acicola*) – 1
 Damping-off (*Pythium* sp.) – 1
 Fusiform rust (*Cronartium quercuum* f. sp. *fusiforme*) – 1
 Needle blight (*Pestalotiopsis* sp.) – 1

Pine, White (*Pinus strobus*)**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1**Pineapple Guava (*Feijoa sellowiana*)****Fungi**Web blight (*Rhizoctonia solani*) – 1**Pineapple Lily (*Eucomis* sp.)****Fungi**Anthracnose (*Colletotrichum* sp.) – 1**Pistache, Chinese (*Pistacia chinensis*)****Abiotic**

Root bound – 1

Root suffocation (anaerobic soil) – 1

Pittosporum (*Pittosporum* sp.)**Fungi**Angular leaf spot (*Pseudocercospora pittospori*) – 5Canker (*Botryosphaeria* sp./spp.) – 1**Oomycete (water mold)**Root/crown rot (*Pythium* sp.) – 1**Pittosporum, Japanese (*Pittosporum tobira*)****Fungi**Angular leaf spot (*Pseudocercospora pittospori*) – 1**Plum (*Prunus* sp.)****Fungi**Black knot (*Apiosporina morbosa*) – 14Brown rot (*Monilinia* sp.) – 2Diplodia dieback (*Diplodia* sp.) – 1Gummosis (*Botryosphaeria dothidea*) – 2

Lichens – 2

Rust (*Tranzschelia pruni-spinosae* var. *discolor*) – 1Shot-hole disease (*Wilsonomyces carpophilus*) – 1**Bacteria**Bacterial canker (*Pseudomonas syringae*) – 2Bacterial leaf scorch (*Xylella fastidiosa*) – 1**Abiotic**

Malathion plus chlorothalonil chemical burn suspected – 1

Sunscauld suspected – 1

Plum, Ornamental (*Prunus* sp.)**Fungi**Shot-hole disease (*Blumeriella jaapii*) – 1**Plum, Japanese 'Shiro' (*Prunus salicina*)****Fungi**Brown rot (*Monilinia fructicola*) – 1**Bacteria**Bacterial spot (*Xanthomonas campestris* pv. *pruni*) – 2**Podocarpus (*Podocarpus* sp.)****Fungi**Leaf blight (*Botryosphaeria* sp.) – 2Leaf necrosis (*Macrophoma* sp.) – 1**Oomycete (water mold)**Root rot (*Phytophthora* sp.) – 1**Abiotic**

Cold damage – 1

Out of range – 1

Winter desiccation suspected – 2

Poinsettia (*Euphorbia pulcherrima*)**Fungi**Anthracnose (*Colletotrichum gloeosporioides*) – 2Corynespora leaf spot (*Corynespora cassicola*) – 1Fusarium root/crown rot (*Fusarium* sp.) – 1**Oomycete (water mold)**Root rot (*Pythium* sp.) – 2**Abiotic**

Chemical injury suspected – 1

Pomegranate (*Punica granatum*)**Fungi**Fruit spot (*Pseudocercospora* sp.) – 1Leaf spot (*Pseudocercospora* sp.) – 1**Bacteria**Bacterial leaf scorch (*Xylella fastidiosa*) – 1**Abiotic**

Cold injury – 1

Poplar, Yellow (*Liriodendron tulipifera*)**Fungi**Lasiodiplodia canker (*Lasiodiplodia theobromae*) – 1Sooty mold (*Septobasidium* sp.) – 1

Abiotic

Drought stress – 1
 Herbicide injury – 1
 Physiological leaf spot – 1
 Root trenching damage – 1

Potato (*Solanum tuberosum*)**Fungi**

Black scurf (*Rhizoctonia solani*) – 2
 Cercospora leaf spot (*Pseudocercospora* sp.) – 1
 Dry rot (*Fusarium* sp.) – 1
 Rhizoctonia stem rot (*Rhizoctonia solani*) – 1
 Scab (*Streptomyces scabies*) – 3

Abiotic

Chemical injury suspected – 1
 Cold injury suspected – 1
 Enlarged lenticels (too much water) – 1
 Phenoxy herbicide – 1
 Second grown (response to alleviation of environmental stress) – 1

Princess Tree (*Paulownia tomentosa*)**Fungi**

Leaf spot (*Cercospora* sp./spp.) – 1

Privet, Japanese (*Ligustrum japonicum*)**Fungi**

Leaf spot (*Colletotrichum* sp.) – 2
 Leaf spot (*Pseudocercospora* sp.) – 30
 Sooty mold (various fungi) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 2

Virus

Ilarvirus (*Ilarvirus* sp.) – 1

Abiotic

Group #9 herbicide (glyphosate) – 1
 Planted too deep – 1
 Root bound – 1

Pumpkin (*Cucurbita pepo*)**Fungi**

Cercospora leaf spot (*Cercospora citrullina*) – 2
 Fusarium crown/foot rot (*Fusarium solani*) – 2
 Gummy stem blight (*Stagonosporopsis cucurbitacearum*) – 1
 Leaf spot (*Alternaria* sp.) – 1
 Plectosporium blight (*Plectosphaerella cucumerina*) – 6
 Powdery mildew (fungus) – 3
 Southern blight (*Athelia rolfsii*) – 2

Oomycete (water mold)

Cucurbit downy mildew (*Pseudoperonospora cubensis*) – 15
 Root rot (*Pythium aphanidermatum*) – 1

Bacteria

Angular leaf spot (*Pseudomonas syringae*) – 1
 Cucurbit bacterial wilt (*Erwinia tracheiphila*) – 1

Abiotic

Magnesium deficiency – 1

Purslane (*Portulaca* sp.)**Abiotic**

Freeze damage – 1
 Herbicide damage – 1

Quince, Common (*Cydonia* sp.)**Fungi**

Leaf spot (*Diplocarpon mespili*) – 1

Bacteria

Fire blight (*Erwinia amylovora*) – 2

Quince, Flowering (*Chaenomeles speciosa*)**Fungi**

Leaf spot (*Septoria* sp.) – 1

Raspberry (*Rubus idaeus*)**Oomycete (water mold)**

Root rot (*Pythium* sp.) – 1

Rattan vine (*Berchemia scandens*)**Fungi**

Orange slime flux (*Cryptococcus macerans*) – 1

Redbud (*Cercis canadensis*)**Fungi**

Fusarium canker (*Fusarium lateritium*) – 1
 Verticillium wilt (*Verticillium dahliae*) – 1

Abiotic

Heat/drought stress – 1

Redwood, Coast (*Sequoia sempervirens*)**Fungi**

Needle blight (*Pestalotiopsis* sp.) – 1

Rhododendron (*Rhododendron* sp.)**Fungi**

Cercospora leaf spot (*Cercospora* sp.) – 1
 Pestalotiopsis leaf spot (*Pestalotiopsis* sp.) – 1

Oomycete (water mold)

Leaf spot (*Phytophthora* sp.) – 3
 Root/stem rot (*Phytophthora* sp.) – 1

Rice (*Orzya sativa*)**Fungi**

Blast (*Pyricularia* sp.) – 1
 Brown spot (*Bipolaris oryzae*) – 1
 Crown and sheath rot (*Gaeumannomyces* sp.) – 1
 Seedling blight (*Rhizoctonia* sp.) – 1
 Stackburn (*Trichoniella padwickii*) – 1
 Glume blight (*Epicoccum sorghinum*) – 1

Abiotic

Hydrogen sulfide toxicity (greenhouse grown plants) – 2

Rose (*Rosa* sp.)**Fungi**

Armillaria root rot (*Desarmillaria* sp.) – 11
 Black spot (*Diplocarpon rosae*) – 25
 Botrytis flower blight (*Botrytis cinerea*) – 2
 Brand canker (*Coniothyrium wernsdorffiae*) – 4
 Cane blight canker of rose (*Fusicoccum* sp.) – 3
 Canker (*Diaporthe pernicioso*) – 2
 Canker (*Gloeosporium* sp.) – 1
 Common canker (*Paraconiothyrium fuckelii*) – 8
 Fusarium root/crown rot (*Fusarium* sp.) – 1
 Leaf spot (*Pseudocercospora puderii*) – 1
 Leaf spot (*Rosisphaerella rosicola*) – 8
 Leaf spot (*Septoria* sp.) – 1
 Powdery mildew (*Podosphaera pannosa*) – 6
 Spot anthracnose (*Elsinoe rosarum*) – 1

Oomycete (water mold)

Downy mildew (*Pseudoperonospora sparsa*) – 1
 Root rot (*Phytophthora* sp.) – 3
 Root rot (*Pythium* sp.) – 6

Myxomycete

Slime mold (Class: Myxogastria) – 1

Bacteria

Crown gall (*Agrobacterium tumefaciens*) – 2

Virus

Rose rosette virus (*Emaravirus rosae*) – 7

Abiotic

Cold injury – 2
 Fasciation – 1
 Group #9 herbicide (glyphosate) – 9
 Graft failure – 1
 Herbicide damage – 2
 Oedema – 1
 Planted too deep – 1
 Plastic girdling stem – 1
 Root bound – 1
 Tebuconazole burn – 1

Rose, Carpet (*Rosa* sp.)**Fungi**

Root rot (*Fusarium* sp.) – 1

Rose, Drift (*Rosa* sp.)**Fungi**

Black spot (*Diplocarpon rosae*) – 1
 Leaf spot (*Rosisphaerella rosicola*) – 1
 Powdery mildew (*Podosphaera pannosa*) – 2

Myxomycete

Slime mold (Class: Myxogastria) – 1

Virus

Rose rosette virus (*Emaravirus rosae*) – 1

Rosemary (*Rosmarinus officinalis*)**Fungi**

Powdery mildew (fungus) – 1
 Fusicoccum dieback (*Fusicoccum* sp.) – 1

Bacteria

Phytoplasma suspected – 1

Rutabaga (*Brassica napus* var. *napobrassica*)**Fungi**

White leaf spot (*Neopseudocercospora capsellae*) – 1

Nematode

Root-knot (*Meloidogyne* sp.) – 1

Ryegrass (*Lolium* sp.)**Fungi**

Blast (*Pyricularia grisea*) – 15
 Brown patch (*Rhizoctonia* sp.) – 2
 Dollar spot (*Clarireedia* sp.) – 2
 Leaf blight (*Leptosphaerulina* sp.) – 3
 Leaf spot (*Bipolaris* sp.) – 6
 Rust (*Puccinia* sp.) – 2

Oomycete (water mold)

Pythium blight (*Pythium* sp.) – 6

Myxomycete

Slime mold (Class: Myxogastria) – 1

Sage (*Salvia* sp.)**Oomycete (water mold)**

Crown and root rot (*Phytophthora* sp.) – 1

Abiotic

High soluble salts – 1

Sage, Mexican Bush (*Salvia leucantha*)**Fungi**

Leaf spot (*Cercospora* sp.) – 1

Satsuma (*Citrus unshiu*)**Fungi**

Anthraxnose (*Colletotrichum gloeosporioides*) – 1

Sooty mold (*Capnodium* sp.) – 1

Abiotic

Granulation – 1

Magnesium deficiency – 2

Sedum (*Sedum spectabile*)**Fungi**

Leaf spot (*Septoria* sp.) – 1

Snapdragon (*Antirrhinum majus*)**Fungi**

Aerial web blight (*Rhizoctonia solani*) – 1

Rust (*Puccinia antirrhini*) – 1

Oomycete (water mold)

Downy mildew (*Peronospora antirrhini*) – 1

Root rot (*Pythium* sp.) – 1

Sorghum (*Sorghum vulgare*)**Fungi**

Charcoal rot (*Macrophomina phaseolina*) – 1

Gray leaf spot (*Cercospora sorghi*) – 3

Rough leaf spot (*Ascochyta sorghi*) – 1

Target leaf spot (*Bipolaris cookei*) – 1

Soybean (*Glycine max*)**Fungi**

Aerial blight (*Rhizoctonia solani*) – 4

Anthraxnose (*Colletotrichum* sp.) – 7

Anthraxnose (stem and pod) (*Colletotrichum gloeosporioides*) – 4

Anthraxnose (*Colletotrichum truncatum*) – 1

Brown spot (*Septoria glycines*) – 12

Cercospora blight (*Cercospora kikuchii*) – 21

Charcoal root rot (*Macrophomina phaseolina*) – 23

Damping-off (*Fusarium* sp.) – 1

Frogeye leaf spot (*Cercospora sojina*) – 22

Fusarium wilt (*Fusarium* sp.) – 2

Pod blight (*Cercospora kikuchii*) – 2

Pod and seed decay (*Diaporthe eres*) – 3

Pod and stem blight (*Diaporthe sojiae*) – 4

Powdery mildew (*Erysiphe* sp.) – 1

Purple seed stain (*Cercospora kikuchii*) – 2

Red crown rot (*Calonectria ilicicola*) – 4

Root rot (*Fusarium* sp.) – 8

Root/stem rot/damping off (*Rhizoctonia solani*) – 4

Root rot (*Rhizoctonia* sp./spp.) – 1

Southern blight (*Athelia rolfsii*) – 2

Soybean rust (*Phakopsora pachyrhizi*) – 10

Stem canker (*Diaporthe eres*) – 13

Stem canker (*Diaporthe longicolla*) – 1

Stem canker (*Diaporthe phaseolorum*) – 3

Sudden death syndrome (SDS) (*Neocosmospora phaseoli*) – 4

Taproot decline (*Xylaria necrophora*) – 7

Target spot (*Corynespora cassiicola*) – 5

Unspecified pathology (*Neocosmospora vasinfecta*) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 11

Root rot (*Phytophthora sojiae*) – 1

Root rot (*Pythium* sp.) – 2

Bacteria

Bacterial blight (*Pseudomonas savastanoi* pv. *glycinea*) – 9

Bacterial pustule (*Xanthomonas axonopodis* pv. *glycines*) – 5

Downy mildew (*Peronospora manshurica*) – 4

Nematode

Root-knot (*Meloidogyne* sp.) – 4

Soybean cyst (*Heterodera glycines*) – 2

Abiotic

Glufosinate drift suspected – 1

Potassium deficiency – 1

Prothioconazole phytotoxicity – 2

Triazole injury suspected – 1

Speedwell (*Veronica* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Spider Lily, White (*Hymenocallis occidentalis*)**Fungi**

Red leaf spot (*Didymella curtisii*) – 1

Spirea (*Spiraea* sp.)**Fungi**

Root rot (*Rhizoctonia* sp.) – 1

Abiotic

Genetic variegation – 1

Spruce, Colorado Blue (*Picea pungens*)**Fungi**

Rhizosphaera needle cast (*Rhizosphaera* sp.) – 2

Squash (*Cucurbita* sp.)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Crown rot (*Fusarium* sp.) – 1

Gummy stem blight (*Stagonosporopsis cucurbitacearum*) – 1

Leaf spot (*Alternaria cucumerina*) – 1

Leaf spot (*Cercospora* sp.) – 1

Powdery mildew (fungus) – 6

Soil saprophyte (*Paecilomyces* sp.) – 1

Oomycete (water mold)

Cucurbit downy mildew (*Pseudoperonospora cubensis*) – 2

Fruit rot (*Phytophthora* sp.) – 1

Myxomycete

Slime mold (*Fuligo septica*) – 1

Bacteria

Bacterial wilt (*Erwinia tracheiphila*) – 1

Soft rot (*Erwinia caratovora*) – 1

Abiotic

Group #9 herbicide (glyphosate) – 1

Magnesium deficiency – 1

Poor pollination – 1

Squash, Acorn (*Cucurbita pepo*)**Fungi**

Leaf spot (*Alternaria* sp.) – 2

Cercospora leaf spot (*Cercospora citrullina*) – 2

Powdery mildew (fungus) – 2

Oomycete (water mold)

Cucurbit downy mildew (*Pseudoperonospora cubensis*) – 3

Squash, Butternut (*Cucurbita moschata* butternut)**Fungi**

Leaf spot (*Alternaria* sp.) – 1

Leaf spot (*Cercospora* sp.) – 2

Powdery mildew (fungus) – 3

Oomycete (water mold)

Cucurbit downy mildew (*Pseudoperonospora cubensis*) – 8

Miscellaneous

Ground stain (unknown cause) – 1

Squash, Turk's Turban (*Cucurbita maxima*)**Fungi**

Leaf spot (*Alternaria* sp.) – 1

Leaf spot (*Cercospora* sp.) – 1

Powdery mildew (fungus) – 2

Oomycete (water mold)

Cucurbit downy mildew (*Pseudoperonospora cubensis*) – 1

Bacteria

Bacterial wilt (*Erwinia tracheiphila*) – 1

Squash, Yellow (*Cucurbita pepo*)**Virus**

Potexvirus (*Potexvirus*) – 1

Abiotic

Blossom end rot (calcium deficiency) – 2

St. Augustinegrass (*Stenotaphrum secundatum*)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 3

Dollar spot (*Sclerotinia homoeocarpa*) – 3

Fairy ring (various basidiomycete fungi) – 1

Gray leaf spot (*Pyricularia grisea*) – 119

Large patch (*Rhizoctonia solani*) – 152

Leaf spot (*Bipolaris* sp.) – 7

Take-all root rot (*Gaeumannomyces* sp.) – 637

Oomycete (water mold)

Root rot (*Pythium* sp.) – 1

Myxomycete

Slime mold (*Physarum cinereum*) – 4

Virus

St. Augustine decline (SAD) panicum mosaic virus (*Panicovirus panici*) – 4

Abiotic

Dinitroaniline (DNA) herbicide injury – 3
Low pH – 1

Strawberry (*Fragaria × ananassa*)**Fungi**

Anthrachnose (*Colletotrichum* sp.) – 4
Crown rot (*Sclerotinia* sp.) – 1
Irregular leaf spot (*Colletotrichum* sp.) – 1
Leaf spot (*Neopestalotiopsis* sp./spp.) – 7
Leaf spot (*Ramularia grevilleana*) – 1
Root rot (*Rhizoctonia* sp.) – 1

Oomycete (water mold)

Crown rot (*Phytophthora* sp.) – 2

Bacteria

Angular leaf spot (*Xanthomonas fragaria*) – 2

Abiotic

Root stress (too wet) – 1
Group #9 herbicide (glyphosate) – 1

Sugarberry (*Celtis laevigata*)**Abiotic**

Growth regulator herbicide – 1

Sugarcane (*Saccharum officinarum*)**Fungi**

Brown rust (*Puccinia melanocephala*) – 1

Bacteria

Bacterial red stripe (*Acidovorax avenae*) – 1

Sunflower (*Helianthus* sp.)**Fungi**

Head rot (*Rhizopus* sp.) – 1
Leaf spot (*Alternaria helianthi*) – 2
Leaf spot (*Septoria* sp.) – 1

Sweetgum (*Liquidambar styraciflua*)**Fungi**

Canker (*Botryosphaeria* sp.) – 1
Leaf spot (*Phyllosticta* sp.) – 1

Bacteria

Bacterial wetwood/slime flux (various bacteria) – 1

Animal

Beaver – 1

Sweet Olive (*Osmanthus fragans*)**Fungi**

Anthrachnose (*Colletotrichum gloesporioides*) – 3

Sweetpotato (*Ipomoea batatas*)**Fungi**

Black rot (*Ceratocystis fimbriata*) – 3
Charcoal rot (*Macrophomina phaseolina*) – 7
Chlorotic leaf distortion (*Fusarium denticulatum*) – 1
End rot (*Fusarium* sp.) – 2
Fusarium root rot (*Fusarium* sp.) – 5
Fusarium surface rot (*Fusarium* sp.) – 1
Fusarium wilt (*Fusarium* sp.) – 1
Leaf spot (*Cercospora* sp.) – 1
Rhizoctonia stem canker (*Rhizoctonia solani*) – 3
Rhizopus soft rot (*Rhizopus* spp.) – 4
Scurf (*Monilochaetes infusans*) – 2
Stem canker phase of Fusarium root rot (*Fusarium solani*) – 2

Myxomycete

Slime mold (*Stemonitis* spp.) – 3

Bacteria

Bacterial stem and root rot (*Dickeya dadantii*) – 1
Bacterial wilt (*Ralstonia solanacearum*) – 1
Soil pox (*Streptomyces ipomoea*) – 1

Sweetspire, Virginia (*Itea virginica*)**Fungi**

Anthrachnose (*Colletotrichum* sp.) – 1

Switchgrass (*Panicum virgatum*)**Fungi**

Leaf spot (*Bipolaris oryzae*) – 1

Sycamore (*Platanus occidentalis*)**Fungi**

Anthrachnose (*Apiognomonia veneta*) – 2
Botryosphaeria canker (*Botryosphaeria* sp.) – 1
Diplodia dieback (*Diplodia* sp.) – 1
Leaf spot (*Phoma* sp.) – 1
Lion's mane fungus (*Hericius erineus*) – 1
Wood rot fungus (*Hypoxylon* sp.) – 1

Bacteria

Bacterial leaf scorch (*Xylella fastidiosa*) – 5

Taro (*Colocasia esculenta*)**Fungi**

Leaf spot (*Cladosporium* sp.) – 1

Tea Olive (*Osmanthus fragrans*)**Fungi**Anthracnose (*Colletotrichum gloeosporioides*) – 2Nectria canker (*Nectria* sp.) – 1**Tomato (*Solanum lycopersicum*)****Fungi**Anthracnose (*Colletotrichum* sp.) – 1Black shoulder (*Alternaria alternata*) – 1Crown and root rot (*Fusarium* sp.) – 8Early blight (*Alternaria* sp.) – 29Fusarium wilt (*Fusarium oxysporum* f. sp. *lycopersici*) – 11Ghost spot (*Botrytis* sp.) – 3Gray leaf spot (*Stemphylium* sp.) – 4Gray mold (*Botrytis* sp.) – 3Leaf mold (*Fulvia fulva*) – 9Leaf spot (*Septoria lycopersici* var. *lycopersici*) – 5Phoma rot (*Remotididymella destructiva*) – 7Powdery mildew (*Leveillula* sp./spp.) – 3Soil saprophyte (*Paecilomyces* sp.) – 1Southern blight (*Athelia rolfsii*) – 20Stem canker (*Myrothecium* sp.) – 1Target spot (*Corynespora cassiicola*) – 5Timber rot/white mold (*Sclerotinia sclerotiorum*) – 5**Oomycete (water mold)**Buckeye rot (*Phytophthora* spp.) – 11Damping off (*Pythium* sp.) – 2Root rot (*Phytophthora capsici*) – 1Root rot (*Phytophthora* sp.) – 6Root rot (*Pythium myriotylum*) – 1Root rot (*Pythium* sp.) – 10**Myxomycete**

Slime mold (Class: Myxogastria) – 2

BacteriaBacterial canker (*Clavibacter michiganensis* subsp. *michiganensis*) – 6

Bacterial soft rot (various bacteria) – 2

Bacterial speck (*Pseudomonas syringae* pv. *tomato*) – 9Bacterial spot (*Xanthomonas* sp.) – 9Bacterial stem rot (*Pectobacterium carotovorum*) – 7Bacterial wilt (*Ralstonia solanacearum*) – 121Pith necrosis (*Pseudomonas corrugata*) – 33**Virus**Cucumber mosaic virus (*Cucumovirus CMV*) – 2Tobacco mosaic virus (TMV) (*Tobamovirus tabaci*) – 12Tomato spotted wilt virus (TSWV) (*Orthotospovirus tomatomaculae*) – 58Tomato yellow leaf curl virus (*Begomovirus coheni*) – 3**Abiotic**

Blossom end rot (calcium deficiency) – 11

Catfacing/teated fruit – 4

Chimera – 2

Fertilizer burn – 1

Group #9 herbicide (glyphosate) – 32

Golden speck/physiological russetting – 1

Graywall/blotchy ripening (unknown physiological issue) – 1

Growth cracks – 1

Herbicide G#4 (synthetic auxin) – 49

High pH – 1

High soluble salts – 3

Internal white tissue (slight K deficiency with high temperatures at ripening) – 1

Leaf burn from chemical or water – 2

Low temperature injury – 2

Magnesium deficiency suspected – 9

Nitrogen deficiency – 5

Oedema – 1

Persistent green shoulder/yellow shoulder – 9

Phosphorus deficiency suspected – 5

Physiological leaf roll – 1

Phytotoxicity [Quadris tank mixed with a petroleum distillate (Mustang Maxx), plus high temperatures] – 1

Potassium deficiency suspected – 4

Sunscaud – 3

Too little light – 1

Wind injury – 1

Zippering/open locule (anther sticks to ovary wall) – 2

NematodeRoot-knot (*Meloidogyne* sp.) – 3**Tree Mallow (*Lavatera arborea*)**Anthracnose (*Colletotrichum* sp.) – 1**Tulip (*Tulipa* sp.)****Virus**

Carlavirus sp. – 1

Tulip, Greigii ‘Casa Grande’ (*Tulipa greigii*)**Fungi**Botrytis flower blight (*Botrytis* sp.) – 1Bulb rot (*Penicillium* sp.) – 1**Turnip (*Brassica rapa*)****Fungi**Anthracnose (*Colletotrichum higginsianum*) – 3Black spot (*Alternaria brassicae*) – 1Cercospora leaf spot (*Cercospora brassicicola*) – 4White leaf spot (*Pseudocercospora capsellae*) – 2Yellows (Fusarium wilt) (*Fusarium* sp.) – 1

Abiotic

Brown heart (boron deficiency) – 2

Twinspur (*Diascia* sp.)**Fungi**

Black root rot (*Berkeleyomyces basicola*) – 1

Stem lesion (*Cercospora* sp.) – 1

Oomycete (water mold)

Root rot (*Pythium* sp.) – 1

Abiotic

High soluble salts – 1

Verbena (*Verbena* sp.)**Fungi**

Powdery mildew (fungus) – 1

Stem rot (*Fusarium* sp.) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 1

Viburnum (*Viburnum* sp.)**Fungi**

Leaf spot (*Alternaria* sp.) – 1

Leaf spot (*Pestalotiopsis* sp.) – 1

Twig blight (*Botryosphaeria* sp.) – 2

Oomycete (water mold)

Root rot (*Pythium* sp.) – 1

Animal

Sapsucker (*Sphyrapicus* sp.) – 1

Abiotic

Cold injury – 1

Wandering Jew (*Zebrina pendula*)**Abiotic**

Cold injury – 2

Watermelon (*Citrullus lanatus*)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 8

Leaf spot (*Cercospora citrullina*) – 11

Damping-off (*Rhizoctonia solani*) – 1

Fusarium crown and foot rot (*Fusarium* sp.) – 2

Fusarium wilt (*Fusarium* sp.) – 16

Gummy stem blight (*Stagonosporopsis cucurbitacearum*) – 33

Powdery mildew (fungus) – 2

Oomycete (water mold)

Cucurbit downy mildew (*Pseudoperonospora cubensis*) – 1

Damping off (*Pythium* sp.) – 1

Phytophthora stem rot (*Phytophthora capsici*) – 1

Root rot (*Pythium* sp.) – 1

Bacteria

Bacterial fruit blotch (*Acidovorax* sp.) – 2

Virus

Cucumber mosaic virus (CMV) (*Cucumovirus CMV*) – 1

Squash mosaic virus (*Comovirus cucurbitae*) – 1

Abiotic

Blossom end rot (calcium deficiency) – 1

Boron deficiency – 1

Chlorothalonil injury – 1

Magnesium deficiency suspected – 2

Potassium deficiency – 2

Wind injury – 1

Wax Myrtle (*Myrica cerifera*)**Fungi**

Anthraxnose (*Colletotrichum* sp.) – 1

Canker (*Fusicoccum* sp.) – 2

Leaf spot (*Septoria* sp.) – 1

Abiotic

Cold injury – 1

Wheat (*Triticum aestivum*)**Fungi**

Black head molds (*Alternaria* sp., *Cladosporium* sp., *Epicoccum* sp.) – 2

Fusarium root, crown, and foot rots (*Fusarium* sp.) – 2

Fusarium head blight (scab) (*Fusarium* sp.) – 2

Leaf mold (*Cladosporium* sp.) – 1

Leaf rust (*Puccinia tritici*) – 2

Leaf spot (*Bipolaris* sp.) – 1

Loose smut (*Ustilago tritici*) – 1

Powdery mildew (*Blumeria graminis*) – 3

Septoria leaf blotch (*Zymoseptoria tritici*) – 1

Stripe rust (*Puccinia striiformis*) – 7

Take-all (*Gaeumannomyces* sp.) – 1

Oomycete (water mold)

Root rot (*Pythium* sp.) – 1

Virus

Barley yellow dwarf virus (BYDV) (*Luteovirus* sp.) – 2

Miscellaneous

Hypersensitive response to rust – 2

Abiotic

Gramoxone injury – 1
 Nitrogen deficiency – 1
 Phosphorus deficiency – 1

Willow (*Salix* sp.)**Fungi**

Black canker (*Colletotrichum salicis*) – 3
 Leaf spot (*Pseudocercospora salicina*) – 1
 Scab (*Venturia saliciperda*) – 1

Bacteria

Bacterial wetwood/slime flux (various bacteria) – 1

Willow, Corkscrew (*Salix matsudana*)**Fungi**

Leaf spot (*Pseudocercospora salicina*) – 2

Willow, Weeping (*Salix babylonica*)**Fungi**

Black canker (*Colletotrichum salicis*) – 4

Willow, White (*Salix alba*)**Fungi**

Canker (*Fusicoccum* sp.) – 1
 Scab (*Venturia saliciperda*) – 1

Winter Savory (*Satureja montana*)**Oomycete (water mold)**

Pythium root/crown rot (*Pythium* sp.) – 1

Yew, Dwarf Spreading (*Cephalotaxus harringtonia*)**Abiotic**

Herbicide damage – 1

Yew, Japanese (*Taxus cuspidata*)**Fungi**

Dieback (*Phomopsis* sp.) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp./spp.) – 1

Abiotic

Oedema – 1

Zinnia (*Zinnia* sp.)**Fungi**

Alternaria blight (*Alternaria zinniae*) – 2
 Anthracnose (*Colletotrichum* sp.) – 1
 Botrytis stem canker (*Botrytis cinerea*) – 3
 Charcoal root rot (*Macrophomina phaeseolina*) – 1
 Sclerotinia stem rot (*Sclerotinia sclerotiorum*) – 1

Oomycete (water mold)

Root rot (*Phytophthora* sp.) – 1

Zoysiagrass (*Zoysia japonica*)**Fungi**

Anthracnose (*Colletotrichum* sp.) – 5
 Dollar spot (*Sclerotinia homoeocarpa*) – 59
 Fairy ring (various basidiomycetes) – 2
 Ink spot (*Curvularia malinah*) – 2
 Large patch (*Rhizoctonia solani*) – 29
 Leaf spot (*Bipolaris* spp.) – 23
 Leaf spot (*Drechslera* sp.) – 3
 Rust (*Puccinia zoysiae*) – 34
 Take-all (*Gaeumannomyces* sp.) – 29

Oomycete (water mold)

Pythium blight (*Pythium* sp.) – 2
 Root and crown rot (*Pythium* sp.) – 1

Abiotic

DNA herbicide injury – 1

Zucchini (*Cucurbita pepo melopepo*)**Fungi**

Leaf spot (*Cercospora citrullina*) – 1
 Powdery mildew (fungus) – 2

Bacteria

Bacterial wilt (*Erwinia tracheiphila*) – 1

Abiotic

Potassium deficiency suspected – 1

Pathogen–Host Index

Algae

***Cephaleuros* sp.**

Camellia (*Camellia* sp.)
 Camellia (*Camellia japonica*)
 Camellia (*Camellia sasanqua*)
 Gardenia (*Gardenia* sp.)
 Holly (*Ilex* sp.)
 Magnolia, Fraser (*Magnolia fraseri*)

Cephaleuros virescens

Blackberry (*Rubus* sp.)
 Magnolia (*Magnolia* sp.)
 Magnolia, southern (*Magnolia grandiflora*)

Bacteria

***Acidovorax* sp.**

Watermelon (*Citrullus lanatus*)

Acidovorax avenae

Sugarcane (*Saccharum officinarum*)

Agrobacterium rhizogenes

Apple (*Malus × domestica*)

Agrobacterium tumefaciens

Apple (*Malus × domestica*)
 Blackberry (*Rubus* sp.)
 Cherry, flowering (*Prunus* sp.)
 Crabapple (*Malus* sp.)
 Gardenia (*Gardenia jasminoides*)
 Peach (*Prunus persica*)
 Rose (*Rosa* sp.)

Dickeya dadantii

Sweetpotato (*Ipomoea batatas*)

***Erwinia* sp.**

African violet (*Saintpaulia* sp.)
 Corn (*Zea mays*)
 Cyclamen (*Cyclamen persicum*)
 Iris (*Iris* sp.)

Erwinia amylovora

Apple (*Malus × domestica*)
 Crabapple (*Malus* sp.)
 Hawthorn (*Crataegus* sp.)
 Indian hawthorn (*Raphiolepis indica*)
 Pear, Japanese (*Pyrus pyrifolia*)
 Pear (*Pyrus communis*)
 Pear, ornamental (*Pyrus calleryana*)
 Photinia (*Photinia × fraseri*)
 Quince, common (*Cydonia* sp.)

Erwinia caratovora

Collards (*Brassica oleracea* var. *acephala*)

Erwinia carotovora* subsp. *carotovora

Squash (*Cucurbita* sp.)

Erwinia tracheiphila

Pumpkin (*Cucurbita pepo*)
 Squash (*Cucurbita* sp.)
 Squash, Turk's Turban (*Cucurbita maxima*)
 Zucchini (*Cucurbita pepo melopepo*)

***Pseudomonas* sp.**

Broccoli (*Brassica oleracea* var. *botrytis*)
 Collards (*Brassica oleracea* var. *acephala*)

Pseudomonas cichorii

Basil, common (*Ocimum basilicum*)
 Chrysanthemum (*Chrysanthemum* sp.)
 Magnolia, southern (*Magnolia grandiflora*)

Pseudomonas corrugata

Tomato (*Solanum lycopersicum*)

Pseudomonas savastanoi

Loropetalum (*Loropetalum chinense*)

Pseudomonas savastanoi* pv. *glycinea

Soybean (*Glycine max*)

Pseudomonas syringae

Cabbage, Chinese (*Brassica chinensis* var. *chinensis*)
 Corn (*Zea mays*)
 Cucumber (*Cucumis sativus*)
 Kale (*Brassica oleracea* Acephala group)
 Peach (*Prunus persica*)
 Pepper, bell (*Capsicum annuum grossum*)
 Plum (*Prunus* sp.)
 Pumpkin (*Cucurbita pepo*)

Pseudomonas syringae* pv. *lachrymansCucumber (*Cucumis sativus*)***Pseudomonas syringae* pv. *phaseolicola***Bean (*Phaseolus* sp.)Bean, butter (*Phaseolus lunatus*)Kudzu (*Pueraria lobata*)***Pseudomonas syringae* pv. *syringae***Bean, butter (*Phaseolus lunatus*)Pear (*Pyrus communis*)***Pseudomonas syringae* pv. *tomato***Tomato (*Solanum lycopersicum*)***Streptomyces ipomoea***Sweetpotato (*Ipomoea batatas*)***Streptomyces scabies***Potato (*Solanum tuberosum*)***Xanthomonas* sp.**Cherry (*Prunus* sp.)Hydrangea (*Hydrangea* sp.)Hydrangea, oak leaf (*Hydrangea quercifolia*)Tomato (*Solanum lycopersicum*)***Xanthomonas arboricola* pv. *pruni***Peach (*Prunus persica*)***Xanthomonas fragaria***Strawberry (*Fragaria* × *ananassa*)***Xanthomonas axonopodis* pv. *glycines***Soybean (*Glycine max*)***Xanthomonas campestris***Bean, green (*Phaseolus vulgaris*)Iris (*Iris* sp.)Pepper (*Capsicum* sp.)Pepper, bell (*Capsicum annuum grossum*)***Xanthomonas campestris* pv. *begonia***Begonia (*Begonia* sp.)***Xanthomonas campestris* pv. *campestris***Cabbage (*Brassica oleracea* var. *capitata*)***Xanthomonas campestris* pv. *hederae***Ivy, English (*Hedera helix*)***Xanthomonas campestris* pv. *malvacearum***Cotton (*Gossypium* sp.)***Xanthomonas campestris* pv. *pruni***Plum, Japanese 'Shiro' (*Prunus salicina*)**Fungi*****Allodus podophylli***May-apple (*Podophyllum peltatum*)***Alternaria* sp.**Cantaloupe (*Cucumis melo*)Celosia (*Celosia* sp.)Cotton (*Gossypium* sp.)Hibiscus (*Hibiscus* sp.)Juniper (*Juniperus* sp.)Lemon (*Citrus limon*)Okra (*Abelmoschus esculentus*)Petunia (*Petunia* × *hybrida*)Pumpkin (*Cucurbita pepo*)Squash, acorn (*Cucurbita pepo*)Squash, butternut (*Cucurbita moschata* butternut)Squash, Turk's Turban (*Cucurbita maxima*)Tomato (*Solanum lycopersicum*)Viburnum (*Viburnum* sp.)Wheat (*Triticum aestivum*)***Alternaria alternata***Apple (*Malus* × *domestica*)Cotton (*Gossypium* sp.)Tomato (*Solanum lycopersicum*)***Alternaria brassicae***Turnip (*Brassica rapa*)***Alternaria cucumerina***Squash (*Cucurbita* sp.)***Alternaria dianthicola***Dianthus (*Dianthus* sp.)***Alternaria helianthi***Sunflower (*Helianthus* sp.)***Alternaria zinnia***Zinnia (*Zinnia* sp.)***Alternariaster helianthi***Sunflower (*Helianthus* sp.)***Amphilogia gyrosa***Oak, sawtooth (*Quercus acutissima*)Oak, water (*Quercus nigra*)

Apiognomonina errabunda

Oak (*Quercus* sp.)
 Oak, live (*Quercus virginiana*)
 Oak, post (*Quercus stellata*)
 Oak, red group (*Quercus* sp.)
 Oak, swamp white (*Quercus bicolor*)
 Oak, water (*Quercus nigra*)
 Oak, white (*Quercus alba*)
 Oak, willow (*Quercus phellos*)

Aphanomyces euteiches

Bean, green (*Phaseolus vulgaris*)

Apiognomonina veneta

Sycamore (*Platanus occidentalis*)

Apiosporina morbosa

Plum (*Prunus* sp.)

Apiosporiopsis carpineae

Hornbeam (*Carpinus* sp./spp.)

***Ascochyta* sp.**

Dwarf palmetto (*Sabal minor*)
 Maple, Japanese (*Acer palmatum*)

Ascochyta sorghi

Sorghum (*Sorghum vulgare*)

Aspergillus niger

Garlic (*Allium sativum*)

Athelia rolfsii

Bean, butter (*Phaseolus lunatus*)
 Bean, green (*Phaseolus vulgaris*)
 Coneflower (*Rudbeckia* sp.)
 Daisy, Shasta (*Chrysanthemum* × *superbum*)
 Hosta (*Hosta* sp.)
 Muskmelon (*Cucumis melo reticulatus*)
 Peanut (*Arachis hypogaea*)
 Pepper (*Capsicum* sp.)
 Pepper, bell (*Capsicum annuum grossum*)
 Phlox (*Phlox* sp.)
 Pumpkin (*Cucurbita pepo*)
 Soybean (*Glycine max*)
 Tomato (*Solanum lycopersicum*)

***Beltrania* sp.**

Juniper (*Juniperus* sp.)

Berkeleyomyces basicola

Cotton (*Gossypium* sp.)
 Foamflower (*Tiarella* sp.)
 Larkspur (*Delphinium* sp.)
 Pansy (*Viola* sp.)

Pentas (*Pentas lanceolata*)
 Periwinkle, Madagascar (*Catharanthus roseus*)
 Petunia (*Petunia* × *hybrida*)
 Twinspur (*Diascia* sp.)

***Bipolaris* sp.**

Bahiagrass (*Paspalum notatum*)
 Bamboo, Moso (*Phyllostachys edulis*)
 Bentgrass (*Agrostis* sp.)
 Bermudagrass (*Cynodon dactylon*)
 Centipedegrass (*Eremochloa ophiuroides*)
 Crabgrass (*Digitaria* sp.)
 Ryegrass (*Lolium* sp.)
 St. Augustinegrass (*Stenotaphrum secundatum*)
 Wheat (*Triticum aestivum*)

Bipolaris cookei

Sorghum (*Sorghum vulgare*)

Bipolaris maydis

Corn (*Zea mays*)

Bipolaris oryzae

Rice (*Oryza sativa*)
 Switchgrass (*Panicum virgatum*)

Biscogniauxia atropunctata

Oak (*Quercus* sp.)
 Oak, post (*Quercus stellata*)
 Oak, water (*Quercus nigra*)

Blumeria graminis

Wheat (*Triticum aestivum*)

Blumeriella jaapii

Cherry (*Prunus* sp.)
 Cherry, black (*Prunus serotina*)
 Cherry, flowering (*Prunus* sp.)
 Plum, ornamental (*Prunus* sp.)

Boeremia exigua

Bean, green (*Phaseolus vulgaris*)
 Cotton (*Gossypium* sp.)
 Cowpea (*Vigna unguiculata*)
 Periwinkle (*Vinca minor*)

***Botryodiplodia* sp.**

Bay-laurel (*Laurus nobilis*)
 Cypress, Leyland (× *Hesperotropis leylandii*)
 Oleander (*Nerium oleander*)

***Botryosphaeria* sp.**

Arborvitae (*Thuja* sp.)
 Azalea (*Rhododendron* sp.)
 Blackberry (*Rubus* sp.)
 Camellia (*Camellia sasanqua*)
 Cedar, Japanese (*Cryptomeria japonica*)
 Cleyera, Japanese (*Ternstroemia gymnanthera*)
 Crape myrtle (*Lagerstroemia indica*)
 Cypress, Arizona (*Cupressus arizonica*)
 Cypress, Leyland (× *Hesperotropsis leylandii*)
 Falsecypress, Japanese (*Chamaecyparis pisifera*)
 Grape (*Vitis vinifera*)
 Holly (*Ilex* sp.)
 Holly, Japanese (*Ilex crenata*)
 Inkberry (*Ilex glabra*)
 Maple, Japanese (*Acer palmatum*)
 Maple, red (*Acer rubrum*)
 Peach (*Prunus persica*)
 Podocarpus (*Podocarpus* sp.)
 Sweetgum (*Liquidambar styraciflua*)
 Sycamore (*Platanus occidentalis*)
 Viburnum (*Viburnum* sp.)

Botryosphaeria dothidea

American Yellowwood (*Cladastris lutea*)
 Apple (*Malus* × *domestica*)
 Indian hawthorn (*Raphiolepis indica*)
 Maple (*Acer* sp.)
 Muscadine (*Vitis rotundifolia*)
 Pear (*Pyrus communis*)
 Plum (*Prunus* sp.)

***Botrytis* sp.**

Begonia (*Begonia* sp.)
 Chrysanthemum (*Chrysanthemum* sp.)
 Coneflower (*Rudbeckia* sp.)
 Daisy, Gerber (*Gerbera jamesonii*)
 Fern, Boston (*Nephrolepis exaltata*)
 Gaura (*Gaura* sp.)
 Geranium (*Pelargonium* × *hortorum*)
 Monkey-flower (*Mimulus* sp.)
 Tomato (*Solanum lycopersicum*)
 Tulip, Greigii 'Casa Grande' (*Tulipa greigii*)

Botrytis cinerea

Blackberry (*Rubus* sp.)
 Firecracker flower (*Crossandra* sp.)
 Impatiens, New Guinea (*Impatiens* sp.)
 Periwinkle, Madagascar (*Catharanthus roseus*)
 Rose (*Rosa* sp.)
 Zinnia (*Zinnia* spp.)

Calonectria cylindrospora

Peanut (*Arachis hypogaea*)

Calonectria ilicicola

Soybean (*Glycine max*)

Calonectria pseudonaviculata

Boxwood (*Buxus* sp.)

***Calonectria* sp.**

Camden white gum (*Eucalyptus benthamii*)

***Capnodium* sp.**

Apple (*Malus* × *domestica*)
 Satsuma (*Citrus unshiu*)

Ceratobasidium ochroleucum

Fig, common (*Ficus carica*)

Ceratocystis fimbriata

Sweetpotato (*Ipomoea batatas*)

***Cercospora* sp.**

Angel trumpet (*Brugmansia suaveolens*)
 Blazing star (*Liatris lingulistylis*)
 Boysenberry (*Rubus ursinus* × *idaeus*)
 Broccoli (*Brassica oleracea* var. *botrytis*)
 Cabbage, Chinese (*Brassica chinensis* var. *chinensis*)
 Cantaloupe (*Cucumis melo*)
 Cherry, black (*Prunus serotina*)
 Cherry laurel, common (*Prunus laurocerasus*)
 Clethra (*Clethra* sp.)
 Cleyera, Japanese (*Ternstroemia gymnanthera*)
 Cowpea (*Vigna unguiculata*)
 Cucumber (*Cucumis sativus*)
 Daisy, Gerber (*Gerbera jamesonii*)
 Daylily (*Hemerocallis* spp. hybrids)
 Dogwood, flowering (*Cornus florida*)
 Elaeagnus (*Elaeagnus* sp.)
 Fig, common (*Ficus carica*)
 Gourd (*Cucurbita* sp.)
 Holly (*Ilex* sp.)
 Hosta (*Hosta* sp.)
 Hydrangea (*Hydrangea* sp.)
 Hydrangea, oak leaf (*Hydrangea quercifolia*)
 Indian hawthorn (*Raphiolepis indica*)
 Indigo, Chinese (*Indigofera decora*)
 Johnson grass (*Sorghum halepense*)
 Joseph's-coat (*Alternanthera ficoidea*)
 Jujube (*Ziziphus jujube*)
 Kohlrabi (*Brassica oleracea* var. *gongylodes*)
 Kudzu (*Pueraria lobata*)
 Lantana (*Lantana camara*)
 Leyland cypress (× *Hesperotropsis leylandii*)
 Lettuce, hydroponic (*Lactuca sativa*)
 Leucothoe (*Leucothoe* sp.)
 Loropetalum (*Loropetalum chinense*)
 Maple (*Acer* sp.)

Mulberry (*Morus* sp.)
 Nandina (*Nandina domestica*)
 Oak, white (*Quercus alba*)
 Oleander (*Nerium oleander*)
 Palm, needle (*Rhapidophyllum hystrix*)
 Pear (*Pyrus communis*)
 Princess tree (*Paulownia tomentosa*)
 Rhododendron (*Rhododendron* sp.)
 Sage, Mexican bush (*Salvia leucantha*)
 Squash (*Cucurbita* sp.)
 Squash, butternut (*Cucurbita moschata* butternut)
 Squash, Turk's Turban (*Cucurbita maxima*)
 Sweetpotato (*Ipomoea batatas*)

Cercospora brassicicola

Cabbage (*Brassica oleracea* var. *capitata*)
 Kale (*Brassica oleracea* Acephala group)
 Turnip (*Brassica rapa*)

Cercospora citrullina

Pumpkin (*Cucurbita pepo*)
 Squash, acorn (*Cucurbita pepo*)
 Watermelon (*Citrullus lanatus*)
 Zucchini (*Cucurbita pepo melopepo*)

Cercospora gossypina

Cotton (*Gossypium* sp.)

Cercospora handelii

Azalea (*Rhododendron* sp.)

Cercospora kikuchii

Soybean (*Glycine max*)

Cercospora sojae

Soybean (*Glycine max*)

Cercospora sorghi

Sorghum (*Sorghum vulgare*)

Cercospora violae

Pansy (*Viola* sp.)

Cercospora zeae-maydis

Corn (*Zea mays*)

Cercospora rubi

Blackberry (*Rubus* sp.)

Cerotelium fici

Fig, common (*Ficus carica*)

***Choanephora* sp.**

Cowpea (*Vigna unguiculata*)
 Okra (*Abelmoschus esculentus*)
 Pea (*Pisum sativum*)

***Chrysomyxa* sp.**

Azalea (*Rhododendron* sp.)

Ciboria carunculoides

Mulberry (*Morus* sp.)

***Cladosporium* sp.**

Cactus, prickly pear (*Opuntia stricta*)
 Corn (*Zea mays*)
 Hibiscus (*Hibiscus* sp.)
 Oak, scarlet (*Quercus coccinea*)
 Taro (*Colocasia esculenta*)
 Wheat (*Triticum aestivum*)

Cladosporium allii-cepae

Garlic (*Allium sativum*)
 Onion (*Allium cepa*)

Cladosporium iridis

Iris (*Iris* sp.)

***Clariireedia* sp.**

Bahiagrass (*Paspalum notatum*)
 Bentgrass (*Agrostis* sp.)
 Bermudagrass (*Cynodon dactylon*)
 Centipedegrass (*Eremochloa ophiuroides*)
 Fescue, tall (*Festuca arundinacea*)
 Ryegrass (*Lolium* sp.)
 St. Augustinegrass (*Stenotaphrum secundatum*)
 Zoysiagrass (*Zoysia japonica*)

Clavibacter michiganensis* subsp. *michiganensis

Pepper (*Capsicum* sp.)
 Pepper, bell (*Capsicum annuum grossum*)
 Tomato (*Solanum lycopersicum*)

Climacodon pulcherrimus

Oak (*Quercus* sp.)

Clonostachys buxi

Boxwood (*Buxus* sp.)

***Coleosporium* sp.**

Pine (*Pinus* sp.)
 Pine, loblolly (*Pinus taeda*)

Collecephalus hemerocallidis

Daylily (*Hemerocallis* spp. hybrids)

***Colletotrichum* sp.**

African lily (*Agapanthus africanus*)
 Alfalfa (*Medicago sativa*)
 Anise tree (*Illicium* sp.)
 Aucuba (*Aucuba japonica*)
 Azalea (*Rhododendron* sp.)
 Bamboo (Gramineae family)
 Bay-laurel (*Laurus nobilis*)
 Bean, butter (*Phaseolus lunatus*)
 Begonia (*Begonia* sp.)
 Bentgrass (*Agrostis* sp.)
 Bermudagrass (*Cynodon dactylon*)
 Camellia (*Camellia* sp.)
 Camellia (*Camellia japonica*)
 Camellia (*Camellia sasanqua*)
 Camellia, tea (*Camellia sinensis*)
 Carpetgrass (*Axonopus affinis*)
 Catalpa (*Catalpa bignonioides*)
 Centipedegrass (*Eremochloa ophiuroides*)
 Cherry (*Prunus* sp.)
 Corn (*Zea mays*)
 Cowpea (*Vigna unguiculata*)
 Crape myrtle (*Lagerstroemia indica*)
 Dahlia (*Dahlia* sp.)
 Daisy (unknown)
 Daylily (*Hemerocallis* spp. hybrids)
 Dill (*Anethum graveolens*)
 Dracaena (*Dracaena* sp.)
 Euonymus (*Euonymus* sp.)
 Fern, staghorn (*Platycerium* sp.)
 Fescue, tall (*Festuca arundinacea*)
 Fig, common (*Ficus carica*)
 Gardenia (*Gardenia* sp.)
 Grape (*Vitis vinifera*)
 Holly (*Ilex* sp.)
 Holly, Foster (*Ilex x attenuata* 'Fosteri')
 Holly, Nellie Stevens (*Ilex* 'Nellie R. Stevens')
 Hosta (*Hosta* sp.)
 Hydrangea (*Hydrangea* sp.)
 Indian hawthorn (*Raphiolepis indica*)
 Ivy (*Hedera* sp.)
 Ivy, Algerian (*Hedera canariensis*)
 Ivy, English (*Hedera helix*)
 Johnson grass (*Sorghum halepense*)
 Kudzu (*Pueraria lobata*)
 Liriope (*Liriope* sp.)
 Loquat (*Eriobotrya japonica*)
 Magnolia, southern (*Magnolia grandiflora*)
 Magnolia, sweetbay (*Magnolia virginiana*)
 Maple (*Acer* sp.)
 Maple, Japanese (*Acer palmatum*)
 Maple, red (*Acer rubrum*)
 Mulberry (*Morus* sp.)
 Muscadine (*Vitis rotundifolia*)
 Oak, Shumard (*Quercus shumardii*)

Oleander (*Nerium oleander*)
 Pansy (*Viola* sp.)
 Peanut (*Arachis hypogaea*)
 Pear (*Pyrus communis*)
 Pear, ornamental (*Pyrus calleryana*)
 Periwinkle, Madagascar (*Catharanthus roseus*)
 Pineapple lily (*Eucomis* sp.)
 Privet, Japanese (*Ligustrum japonicum*)
 Soybean (*Glycine max*)
 Speedwell (*Veronica* sp.)
 Squash (*Cucurbita* sp.)
 St. Augustinegrass (*Stenotaphrum secundatum*)
 Strawberry (*Fragaria* × *ananassa*)
 Sweetspire, Virginia (*Itea virginica*)
 Tomato (*Solanum lycopersicum*)
 Tree mallow (*Lavatera arborea*)
 Watermelon (*Citrullus lanatus*)
 Wax myrtle (*Myrica cerifera*)
 Zinnia (*Zinnia* spp.)
 Zoysiagrass (*Zoysia japonica*)

Colletotrichum caudatum

Centipedegrass (*Eremochloa ophiuroides*)

Colletotrichum eremochloae

Centipedegrass (*Eremochloa ophiuroides*)

Colletotrichum gloeosporioides

Apple (*Malus* × *domestica*)
 Camellia (*Camellia* sp.)
 Camellia (*Camellia japonica*)
 Mandevilla (*Mandevilla* sp.)
 Orange (*Citrus* sp.)
 Poinsettia (*Euphorbia pulcherrima*)
 Satsuma (*Citrus unshiu*)
 Soybean (*Glycine max*)
 Tea olive (*Osmanthus fragrans*)

Colletotrichum graminicola

Bentgrass (*Agrostis* sp.)
 Carpetgrass (*Axonopus affinis*)
 Corn (*Zea mays*)

Colletotrichum higginsianum

Mustard (*Brassica juncea*)
 Turnip (*Brassica rapa*)

Colletotrichum lindemuthianum

Cowpea (*Vigna unguiculata*)

Colletotrichum orbiculare

Cucumber (*Cucumis sativus*)

Colletotrichum salicisAustree hybrid willow (*Salix matsudana* × *alba*)Willow (*Salix* sp.)Willow, weeping (*Salix babylonica*)***Colletotrichum theobromicola***Boxwood (*Buxus* sp.)***Colletotrichum truncatum***Soybean (*Glycine max*)***Coniothyrium* sp.**Blackberry (*Rubus* sp.)Magnolia, southern (*Magnolia grandiflora*)***Coniothyrium wernsdorffiae***Rose (*Rosa* sp.)***Corynespora* sp.**African violet (*Saintpaulia* sp.)Jasmine, Asiatic (*Trachelospermum asiaticum*)***Corynespora cassiicola***Cotton (*Gossypium* sp.)Cucumber (*Cucumis sativus*)Poinsettia (*Euphorbia pulcherrima*)Soybean (*Glycine max*)Tomato (*Solanum lycopersicum*)***Cristulariella* sp.**Maple, red (*Acer rubrum*)***Cronartium quercuum***Oak (*Quercus* sp.)Oak, water (*Quercus nigra*)Oak, white (*Quercus alba*)***Cronartium quercuum* f. *sp. fusiforme***Pine (*Pinus* sp.)Pine, loblolly (*Pinus taeda*)Pine, longleaf (*Pinus palustris*)***Cryptocline betularum***Birch, river (*Betula nigra*)***Cryptococcus macerans***Birch, river (*Betula nigra*)Rattan vine (*Berchemia scandens*)***Cryptothecia rubrocincta***Oak, live (*Quercus virginiana*)***Erysiphe* sp.**Leucothoe (*Leucothoe* sp.)Soybean (*Glycine max*)***Erysiphe cruciferarum***Canola (*Brassica napus*)Mustard (*Brassica juncea*)***Erysiphe laegerstroemia***Crape myrtle (*Lagerstroemia indica*)***Erysiphe pisi* var. *pisi***Pea (*Pisum sativum*)***Erythriscium salmonicolor***Fig, common (*Ficus carica*)***Eutypella* sp.**Persimmon, Japanese (*Diospyros kaki*)***Exobasidium* sp.**Azalea (*Rhododendron* sp.)Camellia (*Camellia* sp.)***Exobasidium maculosum***Blueberry (*Vaccinium* sp.)***Exserohilum rostratum***Bermudagrass (*Cynodon dactylon*)***Exserohilum turcicum***Corn (*Zea mays*)**Nematodes*****Belonolaimus* sp.**Bermudagrass (*Cynodon dactylon*)***Bursaphelenchus xylophilus***Pine, loblolly (*Pinus taeda*)***Criconeematidae***Bermudagrass (*Cynodon dactylon*)Peach (*Prunus persica*)***Curvularia* sp.**Corn (*Zea mays*)***Curvularia malinah***Zoysiagrass (*Zoysia japonica*)

***Desarmillaria* sp.**

Azalea (*Rhododendron* sp.)
 Camellia (*Camellia* sp./spp.)
 Crape myrtle (*Lagerstroemia indica*)
 Indian hawthorn (*Raphiolepis indica*)
 Japanese dogwood (*Cornus kousa*)
 Jasmine, confederate (*Trachelospermum jasminoides*)
 Loropetalum (*Loropetalum chinense*)
 Maple, sugar (*Acer saccharum*)
 Oak (*Quercus* sp.)
 Oak, post (*Quercus stellata*)
 Oak, water (*Quercus nigra*)
 Peach (*Prunus persica*)
 Photinia (*Photinia* × *fraseri*)
 Pine, longleaf (*Pinus palustris*)
 Rose (*Rosa* sp.)

***Diaporthe* sp.**

Cypress, Oven's (× *Cupressocyparis ovensii*)

Diaporthe eres

Soybean (*Glycine max*)

Diaporthe perniciososa

Rose (*Rosa* sp.)

Diaporthe longicolla

Soybean (*Glycine max*)

Diaporthe phaseolorum

Soybean (*Glycine max*)

Diaporthe sojae

Soybean (*Glycine max*)

Didymella curtisii

Spider lily, white (*Hymenocallis occidentalis*)

***Diplocarpon* sp.**

Cherry laurel, common (*Prunus laurocerasus*)
 Loquat (*Eriobotrya japonica*)

Diplocarpon mespili

Cleyera, Japanese (*Ternstroemia gymnanthera*)
 Indian hawthorn (*Raphiolepis indica*)
 Pear (*Pyrus communis*)
 Pear, ornamental (*Pyrus calleryana*)
 Photinia (*Photinia* × *fraseri*)
 Quince, common (*Cydonia* sp.)

Diplocarpon rosae

Rose (*Rosa* sp.)

Diplodia seriata

Apple (*Malus* × *domestica*)
 Pear, ornamental (*Pyrus calleryana*)

***Diplodia* sp.**

Arborvitae (*Thuja* sp.)
 Cypress, Italian (*Cupressus sempervirens*)
 Cypress, Leyland (× *Hesperotropsis leylandii*)
 Fig, common (*Ficus carica*)
 Fig, creeping (*Ficus pumila*)
 Magnolia, southern (*Magnolia grandiflora*)
 Plum (*Prunus* sp.)
 Sycamore (*Platanus occidentalis*)

Diplodia mutila

Apple (*Malus* × *domestica*)

Diplodia sapinea

Pine, loblolly (*Pinus taeda*)

***Discosia* sp.**

Burford holly (*Ilex cornuta*)
 Pecan (*Carya illinoensis*)

***Discula* sp.**

Maple (*Acer* sp.)
 Maple, Japanese (*Acer palmatum*)
 Maple, red (*Acer rubrum*)

Dothiorella candollei

Boxwood (*Buxus* sp.)

Drechslera gigantea

Bermudagrass (*Cynodon dactylon*)
 Oats (*Avena sativa*)

***Drechslera* sp.**

Bermudagrass (*Cynodon dactylon*)
 Zoysiagrass (*Zoysia japonica*)

Elsinoe ampelina

Grape (*Vitis vinifera*)

Elsinoe corni

Dogwood, flowering (*Cornus florida*)

Elsinoe piri

Pear (*Pyrus communis*)

Elsinoe rosarum

Rose (*Rosa* sp.)

Epicoccum nigrum

Corn (*Zea mays*)

Epicoccum sorghinumRice (*Orzya sativa*)***Fomes fomentarius***Pecan (*Carya illinoensis*)***Fusarium* sp.**Aloe (*Aloe* sp.)Apple (*Malus* × *domestica*)Asparagus (*Asparagus officinalis*)Azalea (*Rhododendron* sp.)

Bamboo (Gramineae family)

Basil, common (*Ocimum basilicum*)Bean (*Phaseolus* sp.)Bean, green (*Phaseolus vulgaris*)Begonia (*Begonia* sp.)Bougainvillea (*Bougainvillea* sp.)Cactus, Christmas (*Schlumbergera bridgesii*)Cantaloupe (*Cucumis melo*)Celosia (*Celosia cristata*)Chrysanthemum (*Chrysanthemum* sp.)Clover, berseem (*Trifolium alexandrinum*)Coneflower (*Rudbeckia* sp.)Coneflower (*Echinacea* sp.)Corn (*Zea mays*)Cotton (*Gossypium* sp.)Cowpea (*Vigna unguiculata*)Creeping phlox (*Phlox stolonifera*)Cucumber (*Cucumis sativus*)Daylily (*Hemerocallis* spp. hybrids)Dianthus (*Dianthus* sp.)Dusty miller (*Senecio cineraria*)Elaeagnus (*Elaeagnus* sp.)Elm (*Ulmus* sp.)Gourd (*Cucurbita* sp.)Hibiscus (*Hibiscus* sp.)Holly, Japanese (*Ilex crenata*)Holly, yaupon (*Ilex vomitoria*)Honeysuckle (*Lonicera* sp.)Hydrangea (*Hydrangea* sp.)Ivy (*Hedera* sp.)Ivy, English (*Hedera helix*)Joseph's-coat (*Alternanthera ficoidea*)Liriope (*Liriope* sp.)Mandevilla (*Mandevilla* sp.)Maple, Japanese (*Acer palmatum*)Mint (*Mentha* sp.)Mondo grass (*Ophiopogon japonicus*)Okra (*Abelmoschus esculentus*)Palm, windmill (*Trachycarpus fortunei*)Pansy (*Viola* sp.)Pea (*Pisum sativum*)Peanut (*Arachis hypogaea*)Pepper (greenhouse) (*Capsicum* sp.)Periwinkle, Madagascar (*Catharanthus roseus*)Petunia (*Petunia* × *hybrida*)Phlox (*Phlox* sp.)Poinsettia (*Euphorbia pulcherrima*)Potato (*Solanum tuberosum*)Rose (*Rosa* sp.)Rose, carpet (*Rosa* sp.)Soybean (*Glycine max*)Squash (*Cucurbita* sp.)Sweetpotato (*Ipomoea batatas*)Tomato (*Solanum lycopersicum*)Turnip (*Brassica rapa*)Verbena (*Verbena* sp.)Watermelon (*Citrullus lanatus*)Wheat (*Triticum aestivum*)***Fusarium denticulatum***Sweetpotato (*Ipomoea batatas*)***Fusarium graminearum***Corn (*Zea mays*)***Fusarium lateritium***Pear (*Pyrus communis*)Redbud (*Cercis canadensis*)***Fusarium moniliforme***Pine, loblolly (*Pinus taeda*)***Fusarium neocosmoporiellum***Peanut (*Arachis hypogaea*)***Fusarium oxysporum***Cotton (*Gossypium* sp.)***Fusarium oxysporum* f. sp. *cepa***Onion (*Allium cepa*)***Fusarium oxysporum* f. sp. *lycopersici***Tomato (*Solanum lycopersicum*)***Fusarium oxysporum* (Race 1)**Cotton (*Gossypium* sp.)***Fusarium oxysporum* (Race MDS-12)**Cotton (*Gossypium* sp.)***Fusarium oxysporum* (vasinfectum)**Cotton (*Gossypium* sp.)***Fusarium solani***Magnolia (*Magnolia* sp.)Peanut (*Arachis hypogaea*)Pumpkin (*Cucurbita pepo*)Sweetpotato (*Ipomoea batatas*)

Fuscoporia* sp.**Oak (*Quercus* sp.)Fusicoccum* sp.**Blueberry (*Vaccinium* sp.)Crabapple (*Malus* sp.)Cypress, Leyland ($\times$ *Hesperotropsis leylandii*)Cypress, Oven's ($\times$ *Cupressocyparis ovensii*)Dogwood, flowering (*Cornus florida*)Dogwood, yellow-twig (*Cornus sericea flaviramea*)Holly, Nellie Stevens (*Ilex* 'Nellie R. Stevens')Juniper (*Juniperus* sp.)Maple, Japanese (*Acer palmatum*)Maple, red (*Acer rubrum*)Palm, sago (*Cycas revoluta*)Rose (*Rosa* sp.)Rosemary (*Rosmarinus officinalis*)Wax myrtle (*Myrica cerifera*)Willow, white (*Salix alba*)***Gaeumannomyces* sp.**Bahagrass (*Paspalum notatum*)Bermudagrass (*Cynodon dactylon*)Centipedegrass (*Eremochloa ophiuroides*)Fountain grass, dwarf (*Pennisetum alopecuroides*)Rice (*Orzya sativa*)St. Augustinegrass (*Stenotaphrum secundatum*)Wheat (*Triticum aestivum*)Zoysiagrass (*Zoysia japonica*)***Ganoderma* sp.**Mimosa (*Albizia julibrissin*)Oak (*Quercus* sp.)Oak, live (*Quercus virginiana*)Oak, post (*Quercus stellata*)Oak, red group (*Quercus* sp.)Oak, water (*Quercus nigra*)Pear (*Pyrus communis*)***Ganoderma curtisii***Oak, post (*Quercus stellata*)Oak, white (*Quercus alba*)***Ganoderma sessile***Oak, willow (*Quercus phellos*)Photinia (*Photinia* $\times$ *fraseri*)***Ganoderma zonatum***

Palmae (Palm family)

Globisporangium middletonii

Bamboo (Gramineae family)

Gloeocercospora inconspicuaBlueberry (*Vaccinium* sp.)***Gloeosporium* sp.**Apple (*Malus* $\times$ *domestica*)Rose (*Rosa* sp.)***Gloeosporium minus***Blueberry (*Vaccinium* sp.)***Glomerella* sp.**Camellia (*Camellia* sp.)Pecan (*Carya illinoensis*)***Glomerella cingulata***Citrus (*Citrus* sp.)***Gnomonia caryae***Hickory (*Carya* sp.)Pecan (*Carya illinoensis*)***Graphiola* sp.**

Palmae (Palm family)

Graphiola phoenicisPalm, canary date (*Phoenix canariensis*)Palm, cabbage (*Sabal palmetto*)***Greeneria uvicola***Muscadine (*Vitis rotundifolia*)***Gymnoconia nitens***Blackberry (*Rubus* sp.)***Gymnosporangium* sp.**Cedar, eastern red (*Juniperus virginiana*)Pear, Japanese (*Pyrus pyrifolia*)***Gymnosporangium clavipes***Cedar (*Cedrus* sp.)Cedar, eastern red (*Juniperus virginiana*)Crabapple (*Malus* sp.)Hawthorn (*Crataegus* sp.)Juniper (*Juniperus* sp.)Mayhaw (*Crataegus aestivalis*)Pear (*Pyrus communis*)Pear, ornamental (*Pyrus calleryana*)***Gymnosporangium effusum***Cedar, eastern red (*Juniperus virginiana*)***Gymnosporangium juniperi-virginianae***Apple (*Malus* $\times$ *domestica*)Cedar, eastern red (*Juniperus virginiana*)Crabapple (*Malus* sp.)Juniper (*Juniperus* sp.)

Hericium erinaceusOak (*Quercus* sp.)***Heterobasidion annosum***Cedar, eastern red (*Juniperus virginiana*)Pine, loblolly (*Pinus taeda*)***Hypoxylon* sp.**Sycamore (*Platanus occidentalis*)***Inonotus hispidus***Oak (*Quercus* sp.)***Irpiciporus pachydon***Oak, live (*Quercus virginiana*)***Kabatiella apocrypta***Maple (*Acer* sp.)***Kuehneola malvicola***Hibiscus (*Hibiscus* sp.)***Lasiodiplodia theobromae***Blueberry (*Vaccinium* sp.)Cotton (*Gossypium* sp.)Fig, common (*Ficus carica*)Maple, Japanese (*Acer palmatum*)Peanut (*Arachis hypogaea*)Poplar, yellow (*Liriodendron tulipifera*)***Lecanosticta acicula***Pine (*Pinus* sp.)Pine, loblolly (*Pinus taeda*)Pine, longleaf (*Pinus palustris*)***Leccinum roseoscabrum***Oak (*Quercus* sp.)***Leptosphaerulina* sp.**Bean (*Phaseolus* sp.)Bentgrass (*Agrostis* sp.)Bermudagrass (*Cynodon dactylon*)Ryegrass (*Lolium* sp.)***Leveillula* sp./spp.**Cucumber (*Cucumis sativus*)Tomato (*Solanum lycopersicum*)***Limonomyces roseipellis***Bermudagrass (*Cynodon dactylon*)***Lophodermium* sp.**Pine (*Pinus* sp.)Pine, loblolly (*Pinus taeda*)***Macrophoma* sp.**Camellia (*Camellia* sp.)Cypress, Italian (*Cupressus sempervirens*)Cypress, Leyland ($\times$ *Hesperotropis leylandii*)Gardenia (*Gardenia* sp.)Ivy, English (*Hedera helix*)Podocarpus (*Podocarpus* sp.)***Macrophomina phaseolina***Bean (*Phaseolus* sp.)Bean, green (*Phaseolus vulgaris*)Corn (*Zea mays*)Cotton (*Gossypium* sp.)Cowpea (*Vigna unguiculata*)Holly (*Ilex* sp.)Impatiens (*Impatiens* $\times$ *hybrida* 'SunPatiens')Juniper (*Juniperus* sp.)Sorghum (*Sorghum vulgare*)Soybean (*Glycine max*)Sweetpotato (*Ipomoea batatas*)***Magnaporthiopsis cynodontis***Bermudagrass (*Cynodon dactylon*)***Microsphaera vaccinii***Blueberry (*Vaccinium* sp.)***Monilinia* sp.**Plum (*Prunus* sp.)***Monilinia fruticola***Peach (*Prunus persica*)Plum, Japanese 'Shiro' (*Prunus salicina*)***Monilinia vaccinii-corymbosi***Blueberry (*Vaccinium* sp.)***Monilochaetes infuscans***Sweetpotato (*Ipomoea batatas*)***Monochaetia* sp.**Persimmon, Japanese (*Diospyros kaki*)***Monographella nivalis***Bermudagrass (*Cynodon dactylon*)***Monostichella robergei***Birch, river (*Betula nigra*)***Mycosarcoma maydis***Corn (*Zea mays*)

***Mycosphaerella* sp.**

Azalea (*Rhododendron* sp.)
 Camellia (*Camellia* sp./spp.)
 Maple, Japanese (*Acer palmatum*)
 Pear (*Pyrus communis*)

Myrellina cydoniae

Cotoneaster (*Cotoneaster* sp.)

***Myrothecium* sp.**

Tomato (*Solanum lycopersicum*)

Naohidemyces vaccinii

Blueberry (*Vaccinium* sp.)

***Nectria* sp.**

Tea olive (*Osmanthus fragrans*)

***Neocordana* sp.**

Banana, Japanese (*Musa basjoo*)

***Neocosmospora* sp.**

Peanut (*Arachis hypogaea*)

Neocosmospora phaseoli

Soybean (*Glycine max*)

Neocosmospora vasinfecta

Soybean (*Glycine max*)

***Neopestalotiopsis* sp./spp.**

Strawberry (*Fragaria* × *ananassa*)

***Neopseudocercospora* sp.**

Cole crop (*Brassica* sp.)

Neopseudocercospora capsellae

Mustard (*Brassica juncea*)
 Rutabaga (*Brassica napus* var. *napobrassica*)

***Neotyphodium* sp./spp.**

Fescue (*Festuca* sp.)

Nothopassalora personata

Peanut (*Arachis hypogaea*)

Nothophoma gossypiicola

Cotton (*Gossypium* sp.)

***Ophiosphaerella* sp.**

Bermudagrass (*Cynodon dactylon*)

***Ophiostoma* sp.**

Elm, American (*Ulmus americana*)
 Elm, American 'Princeton' (*Ulmus americana*)

***Paecilomyces* sp.**

Squash (*Cucurbita* sp.)
 Tomato (*Solanum lycopersicum*)

Paraconiothyrium fuckelii

Blackberry (*Rubus* sp.)
 Rose (*Rosa* sp.)

Parastenella magnolia

Magnolia, southern (*Magnolia grandiflora*)

Parasymphodiella laxa

Boxwood (*Buxus* sp.)

***Passalora* sp.**

Cedar (*Cedrus* sp.)
 Clematis (*Clematis* sp.)
 Magnolia, saucer (*Magnolia* × *soulangiana*)

Passalora arachidicola

Peanut (*Arachis hypogaea*)

Passalora sequoia

Arborvitae (*Thuja* sp.)
 Cedar, Japanese (*Cryptomeria japonica*)
 Cypress, Arizona (*Cupressus arizonica*)
 Cypress (*Cupressus* sp.)
 Cypress, Italian (*Cupressus sempervirens*)
 Cypress, Leyland (× *Hesperotropis leylandii*)
 Juniper (*Juniperus* sp.)
 Juniper, blue point (*Juniperus chinensis*)

Pectobacterium carotovorum

Cauliflower (*Brassica oleraceae*)
 Tomato (greenhouse) (*Solanum lycopersicum*)

***Penicillium* sp.**

Corn (*Zea mays*)
 Garlic (*Allium sativum*)
 Tulip, Greigii 'Casa Grande' (*Tulipa greigii*)

***Peniophora* sp.**

Oak, water (*Quercus nigra*)

***Perenniporia* sp.**

Hickory, shagbark (*Carya ovata*)

***Pestalotiopsis* sp.**

Arborvitae (*Thuja* sp.)
 Azalea (*Rhododendron* sp.)
 Blueberry (*Vaccinium* sp.)
 Camellia (*Camellia* sp.)
 Camellia (*Camellia japonica*)
 Chestnut, Chinese (*Castanea mollissima*)
 Cypress, Italian (*Cupressus sempervirens*)

Cypress, Leyland (*× Hesperotropsis leylandii*)
 Grape (*Vitis vinifera*)
 Holly, Japanese (*Ilex crenata*)
 Jasmine, Asiatic (*Trachelospermum asiaticum*)
 Juniper (*Juniperus* sp.)
 Juniper, Parson's (*Juniperus chinensis* 'Parsonii')
 Palm, pindo/jelly (*Butia capitata*)
 Photinia (*Photinia × fraseri*)
 Pine, longleaf (*Pinus palustris*)
 Redwood, coast (*Sequoia sempervirens*)
 Rhododendron (*Rhododendron* sp.)
 Viburnum (*Viburnum* sp.)

Phaeolus schweinitzii

Pine (*Pinus* sp.)

Phakopsora pachyrhizi

Kudzu (*Pueraria lobata*)
 Soybean (*Glycine max*)

Phloeospora maculans

Mulberry (*Morus* sp.)

***Phoma* sp.**

Apple (*Malus × domestica*)
 Crabapple (*Malus* sp.)
 Fringetree, white (*Chionanthus virginicus*)
 Holly, yaupon (*Ilex vomitoria*)
 Pear (*Pyrus communis*)
 Pear, ornamental (*Pyrus calleryana*)
 Sycamore (*Platanus occidentalis*)

***Phomopsis* sp.**

Aloe (*Aloe* sp.)
 Apple (*Malus × domestica*)
 Azalea (*Rhododendron* sp.)
 Cherry, 'Yoshino' (*Prunus × yedoensis*)
 Chrysanthemum (*Chrysanthemum* sp.)
 Dogwood, flowering (*Cornus florida*)
 Fig, common (*Ficus carica*)
 Juniper, blue point (*Juniperus chinensis*)
 Juniper, Pfitzer (*Juniperus chinensis* 'Pfitzeraiana')
 Loquat (*Eriobotrya japonica*)
 Magnolia, southern (*Magnolia grandiflora*)
 Maple, Japanese (*Acer palmatum*)
 Maple, red (*Acer rubrum*)
 Muscadine (*Vitis rotundifolia*)
 Oleander (*Nerium oleander*)
 Pear (*Pyrus communis*)
 Pecan (*Carya illinoensis*)
 Persimmon, Japanese (*Diospyros kaki*)
 Yew, Japanese (*Taxus cuspidata*)

Phragmidium violaceum

Blackberry (*Rubus* sp.)

***Phyllactinia* sp.**

Oak, chestnut (*Quercus prinus*)
 Pecan (*Carya illinoensis*)

Phyllactinia guttata

Oak, Shumard (*Quercus shumardii*)
 Oak, water (*Quercus nigra*)
 Oak, white (*Quercus alba*)
 Oak, willow (*Quercus phellos*)

***Phyllosticta* sp.**

Blueberry (*Vaccinium* sp.)
 Cedar, Japanese (*Cryptomeria japonica*)
 Cordyline (*Cordyline* sp.)
 Cypress, Arizona (*Cupressus arizonica*)
 Cypress, Italian (*Cupressus sempervirens*)
 Cypress, Leyland (*× Hesperotropsis leylandii*)
 Falsecypress, Japanese (*Chamaecyparis pisifera*)
 Fern, Indian holly (*Arachnoides* sp.)
 Holly (*Ilex* sp.)
 Impatiens (*Impatiens × hybrida* 'SunPatiens')
 Maple (*Acer* sp.)
 Maple, sugar (*Acer saccharum*)
 Oak (*Quercus* sp.)
 Palmae (Palm family)
 Peanut (*Arachis hypogaea*)
 Sweetgum (*Liquidambar styraciflua*)

Phyllosticta ampellicida

Grape (*Vitis vinifera*)
 Muscadine (*Vitis rotundifolia*)

Phyllosticta catalpa

Catalpa (*Catalpa bignonioides*)

Phyllosticta minima

Maple, Japanese (*Acer palmatum*)

Phyllosticta thujae

Arborvitae (*Thuja* sp.)

Physarum cinereum

Bermudagrass (*Cynodon dactylon*)
 St. Augustinegrass (*Stenotaphrum secundatum*)

Plagiostoma fraxini

Ash (*Fraxinus* sp.)
 Ash, Arizona (*Fraxinus velutina*)
 Ash, Carolina (*Fraxinus caroliniana*)
 Ash, white (*Fraxinus americana*)

Plectosphaerella cucumerina

Pumpkin (*Cucurbita pepo*)

Pleurotus* sp.**Oak (*Quercus* sp.)Podofomes mollis***Oak, live (*Quercus virginiana*)***Podosphaera leucotricha***Apple (*Malus* × *domestica*)***Podosphaera pannosa***Rose (*Rosa* sp.)***Pruniphilomyces circumscissus***Cherry, black (*Prunus serotina*)Cherry, flowering (*Prunus* sp.)***Pseudocercospora* sp.**Apple (*Malus* × *domestica*)Azalea (*Rhododendron* sp.)Crape myrtle (*Lagerstroemia indica*)Dogwood (*Cornus florida*)Eucalyptus (*Eucalyptus* sp.)Fig, common (*Ficus carica*)Obedient plant (*Physostegia virginiana*)Oleander (*Nerium oleander*)Persimmon, common (*Diospyros virginiana*)Pomegranate (*Punica granatum*)Potato (*Solanum tuberosum*)Privet, Japanese (*Ligustrum japonicum*)***Pseudocercospora abelomoschi***Okra (*Abelmoschus esculentus*)***Pseudocercospora brachypus***Muscadine (*Vitis rotundifolia*)***Pseudocercospora pittospori***Pittosporum (*Pittosporum* sp.)Pittosporum, Japanese (*Pittosporum tobira*)***Pseudocercospora puderi***Rose (*Rosa* sp.)***Pseudocercospora puerariicola***Kudzu (*Pueraria lobata*)***Pseudocercospora rubi***Caneberry (*Rubus* sp.)***Pseudoinonotus dryadeus***Oak (*Quercus* sp.)Oak, pin (*Quercus palustris*)Oak, willow (*Quercus phellos*)***Pseudonectria buxi***Boxwood (*Buxus* sp.)***Puccinia* sp.**Crabgrass (*Digitaria* sp.)Fescue (*Festuca* sp.)Hibiscus (*Hibiscus* sp.)Milkweed (*Asclepias* sp.)Ryegrass (*Lolium* sp.)***Puccinia arachidis***Peanut (*Arachis hypogaea*)***Puccinia antirrhini***Snapdragon (*Antirrhinum majus*)***Puccinia cynodontis***Bermudagrass (*Cynodon dactylon*)***Puccinia hemerocallidis***Daylily (*Hemerocallis* spp. hybrids)***Puccinia iridis***Iris (*Iris* sp.)***Puccinia malvacearum***Hollyhock (*Alcea rosea*)Mallow (*Malva* sp.)Mallow, high (Zebra) (*Malva sylvestris* 'Zebrina')***Puccinia melanocephala***Sugarcane (*Saccharum officinarum*)***Puccinia oxalidis***Oxalis (*Oxalis* sp.)***Puccinia polysora***Corn (*Zea mays*)***Puccinia sorghi***Corn (*Zea mays*)***Puccinia striiformis***Wheat (*Triticum aestivum*)***Puccinia triticina***Wheat (*Triticum aestivum*)***Puccinia zoysiae***Zoysiagrass (*Zoysia japonica*)***Pyrenophora avenae***Oats (*Avena sativa*)

***Pyricularia* sp.**

Bamboo, Moso (*Phyllostachys edulis*)
 Broadleaf signal grass (*Brachiaria platyphylla*)
 Corn (*Zea mays*)
 Pearl millet (*Pennisetum glaucum*)
 Rice (*Orzya sativa*)

Pyricularia grisea

Crabgrass (*Digitaria* sp.)
 Ryegrass (*Lolium* sp.)
 St. Augustinegrass (*Stenotaphrum secundatum*)

Raffaelea lauricola

Red bay (*Persea borbonia*)

Ralstonia solanacearum

Eggplant (*Solanum melongena*)
 Pepper (*Capsicum* sp.)
 Pepper, bell (*Capsicum annuum grossum*)
 Sweetpotato (*Ipomoea batatas*)
 Tomato (*Solanum lycopersicum*)

Ramularia endophylla

Elm, winged (*Ulmus alata*)

Ramularia grevilleana

Strawberry (*Fragaria* × *ananassa*)

Remotididymella destructive

Tomato (*Solanum lycopersicum*)

***Rhizoctonia* sp.**

Ajuga (*Ajuga reptans*)
 Alfalfa (*Medicago sativa*)
 Bahiagrass (*Paspalum notatum*)
 Bean (*Phaseolus* sp.)
 Cleyera, Japanese (*Ternstroemia gymnanthera*)
 Cowpea (*Vigna unguiculata*)
 Daylily (*Hemerocallis* spp. hybrids)
 Fern, Boston (*Nephrolepis exaltata*)
 Fescue (*Festuca* sp.)
 Fescue, tall (*Festuca arundinacea*)
 Fig, common (*Ficus carica*)
 Gardenia (*Gardenia jasminoides*)
 Iris (*Iris* sp.)
 Ivy (*Hedera* sp.)
 Jasmine (*Jasminum* sp.)
 Jasmine, Asiatic (*Trachelospermum asiaticum*)
 Juniper (*Juniperus* sp.)
 Leucothoe (*Leucothoe* sp.)
 Mondo grass (*Ophiopogon japonicus*)
 Okra (*Abelmoschus esculentus*)
 Pansy (*Viola* sp.)
 Pea (*Pisum sativum*)
 Periwinkle, common (*Vinca minor*)

Rice (*Orzya sativa*)
 Ryegrass (*Lolium* sp.)
 Soybean (*Glycine max*)
 Spirea (*Spiraea* sp.)
 Strawberry (*Fragaria* × *ananassa*)

Rhizoctonia solani

Azalea (*Rhododendron* sp.)
 Bean, butter (*Phaseolus lunatus*)
 Bean, fava (*Vicia faba*)
 Bean, green (*Phaseolus vulgaris*)
 Bermudagrass, lawn/golf/athletic hybrids (*Cynodon dactylon*)
 Carpetgrass (*Axonopus affinis*)
 Cedar, Japanese (*Cryptomeria japonica*)
 Centipedegrass (*Eremochloa ophiuroides*)
 Corn (*Zea mays*)
 Cotton (*Gossypium* sp.)
 Holly, Japanese (*Ilex crenata*)
 Indian hawthorn (*Raphiolepis indica*)
 Ivy, English (*Hedera helix*)
 Jasmine, Asiatic (*Trachelospermum asiaticum*)
 Liriope (*Liriope* sp.)
 Mint (*Mentha* sp.)
 Pansy (*Viola* sp.)
 Peanut (*Arachis hypogaea*)
 Periwinkle, Madagascar (*Catharanthus roseus*)
 Petunia (*Petunia* × *hybrida*)
 Pineapple guava (*Feijoa sellowiana*)
 Potato (*Solanum tuberosum*)
 Snapdragon (*Antirrhinum majus*)
 Soybean (*Glycine max*)
 St. Augustinegrass (*Stenotaphrum secundatum*)
 Sweetpotato (*Ipomoea batatas*)
 Watermelon (*Citrullus lanatus*)
 Zoysiagrass (*Zoysia japonica*)

Rhizoctonia zeae

Bermudagrass (*Cynodon dactylon*)

***Rhizopus* sp.**

Sunflower (*Helianthus* sp.)
 Sweetpotato (*Ipomoea batatas*)

***Rhizosphaera* sp.**

Spruce, Colorado blue (*Picea pungens*)

***Rhytisma* sp.**

Holly (*Ilex* sp.)

Rhytisma acerinum

Maple (*Acer* sp.)

Rosisphaerella rosicola

Rose (*Rosa* sp.)

Sclerophthora macrosporaCorn (*Zea mays*)***Sclerotinia* sp.**Lettuce (*Lactuca sativa*)Periwinkle, Madagascar (*Catharanthus roseus*)Petunia (*Petunia* × *hybrida*)Strawberry (*Fragaria* × *ananassa*)***Sclerotinia minor***Peanut (*Arachis hypogaea*)***Sclerotinia sclerotiorum***Abelia (*Abelia* sp.)Tomato (*Solanum lycopersicum*)Zinnia (*Zinnia* spp.)***Scorias spongiosa***Beech, American (*Fagus grandifolia*)***Seiridium* sp.**Arborvitae (*Thuja* sp.)Cedar, eastern red (*Juniperus virginiana*)Cypress, Italian (*Cupressus sempervirens*)Cypress, Leyland (× *Hesperotropis leylandii*)Elm, Chinese (*Ulmus parvifolia* 'Drake')Juniper (*Juniperus* sp.)***Septobasidium* sp.**Fern, Boston (*Nephrolepis exaltata*)Palm, sago (*Cycas revoluta*)Poplar, yellow (*Liriodendron tulipifera*)***Septoria* sp.**Azalea (*Rhododendron* sp.)Blueberry (*Vaccinium* sp.)Fig, common (*Ficus carica*)Jimson weed (*Datura stramonium*)Maple (*Acer* sp.)Quince, flowering (*Chaenomeles speciosa*)Rose (*Rosa* sp.)Sedum (*Sedum spectabile*)Sunflower (*Helianthus* sp.)Wax myrtle (*Myrica cerifera*)***Septoria glycines***Soybean (*Glycine max*)***Septoria lycopersici lycopersici***Tomato (*Solanum lycopersicum*)***Setophoma terrestris***Corn (*Zea mays*)Onion (*Allium cepa*)***Sirosporium diffusum***Pecan (*Carya illinoensis*)***Sphaeropsis* sp.**Cherry, flowering (*Prunus* sp.)Hawthorn (*Crataegus* sp.)Holly (*Ilex* sp.)Holly, oak leaf (*Ilex* × 'Conaf')Juniper (*Juniperus* sp.)Juniper, Spartan (*Juniperus chinensis* 'Spartan')Loquat (*Eriobotrya japonica*)Maple (*Acer* sp.)Oak (*Quercus* sp.)Oak, water (*Quercus nigra*)***Sphaeropsis tumefaciens***Holly (*Ilex* sp.)Holly, Foster (*Ilex* × *attenuata* 'Fosteri')***Sphaerulina quercicola***Oak (*Quercus* sp.)***Sphaerulina westendorpii***Blackberry (*Rubus* sp.)***Stagonosporopsis cucurbitacearum***Cantaloupe (*Cucumis melo*)Cucumber (*Cucumis sativus*)Pumpkin (*Cucurbita pepo*)Squash (*Cucurbita* sp.)Watermelon (*Citrullus lanatus*)***Stegophora ulmea***Elm (*Ulmus* sp.)***Strigula* sp.**Holly (*Ilex* sp.)Magnolia, southern (*Magnolia grandiflora*)***Taphrina* sp.**Maple, red (*Acer rubrum*)***Taphrina caerulescens***Oak (*Quercus* sp.)Oak, live (*Quercus virginiana*)Oak, red group (*Quercus* sp.)Oak, water (*Quercus nigra*)Oak, willow (*Quercus phellos*)***Taphrina deformans***Peach (*Prunus persica*)***Tillandsia recurvata***Oak (*Quercus* sp.)

Xylaria necrophoraSoybean (*Glycine max*)***Xylella fastidiosa***

Blueberry (*Vaccinium* sp.)
 Chestnut, Chinese (*Castanea mollissima*)
 Cottonwood, eastern (*Populus deltoides*)
 Dogwood, flowering (*Cornus florida*)
 Elm (*Ulmus* sp.)
 Elm, American (*Ulmus americana*)
 Elm, winged (*Ulmus alata*)
 Holly (*Ilex* sp.)
 Magnolia (*Magnolia* sp.)
 Magnolia, southern (*Magnolia grandiflora*)
 Mahonia (*Mahonia* sp.)
 Oak (*Quercus* sp.)
 Oak, laurel (*Quercus laurifolia*)
 Oak, live (*Quercus virginiana*)
 Oak, northern pin (*Quercus ellipsoidalis*)
 Oak, pin (*Quercus palustris*)
 Oak, post (*Quercus stellata*)
 Oak, red group (*Quercus* sp.)
 Oak, Shumard (*Quercus shumardii*)
 Oak, swamp chestnut (*Quercus michauxii*)
 Oak, willow (*Quercus phellos*)
 Oleander (*Nerium oleander*)
 Pecan (*Carya illinoensis*)
 Plum (*Prunus* sp.)
 Pomegranate (*Punica granatum*)
 Sycamore (*Platanus occidentalis*)

Myxomycete (slime mold)***Fuligo* sp.**

Firethorn (*Pyracantha* sp.)
 Hosta (*Hosta* sp.)

Fuligo septica

Azalea (*Rhododendron* sp.)
 Hibiscus (*Hibiscus* sp.)
 Pear, ornamental (*Pyrus calleryana*)
 Squash (*Cucurbita* sp.)

Myxogastria

Begonia (*Begonia* sp.)
 Fern (undetermined sp.)
 Holly (*Ilex* sp.)
 Impatiens (*Impatiens* × *hybrida* 'SunPatiens')
 Lantana (*Lantana camara*)
 Rose (*Rosa* sp.)
 Ryegrass (*Lolium* sp.)

***Stemonitis* sp.**

Azalea (*Rhododendron* sp.)
 Bermudagrass, lawn/golf/athletic hybrids (*Cynodon dactylon*)
 Blackberry (*Rubus* sp.)
 Gardenia (*Gardenia* sp.)

Stemphylium* sp.**Tomato (*Solanum lycopersicum*)Stemphylium solani***Cotton (*Gossypium* sp.)***Stenocarpella macrospora***Corn (*Zea mays*)***Stenocarpella maydis***Corn (*Zea mays*)***Stereum* sp.**Oak (*Quercus* sp.)***Stereum hirsutum***Apple (*Malus* × *domestica*)***Stigmina palmivora***Palm, canary date (*Phoenix canariensis*)***Tranzschelia pruni-spinosae* var. *discolor***Plum (*Prunus* sp.)***Tremallales***Muscadine (*Vitis rotundifolia*)***Trichaptum biforme***Oak (*Quercus* sp.)***Trichoniella padwickii***Rice (*Orzya sativa*)***Tubakia* sp.**

Oak (*Quercus* sp.)
 Oak, bur (*Quercus macrocarpa*)
 Oak, post (*Quercus stellata*)
 Oak, red group (*Quercus* sp.)
 Oak, Shumard (*Quercus shumardii*)
 Oak, swamp white (*Quercus bicolor*)
 Oak, white group (*Quercus* spp.)
 Oak, willow (*Quercus phellos*)

Uromyces* sp.**Clover (*Trifolium* sp.)Ustilago cynodontis***Bermudagrass (*Cynodon dactylon*)

Ustilago triticiWheat (*Triticum aestivum*)***Venturia carpophila***Peach (*Prunus persica*)***Venturia effusa***Pecan (*Carya illinoensis*)***Venturia inaequalis***Apple (*Malus × domestica*)***Venturia pyrina***Pear (*Pyrus communis*)***Venturia saliciperda***Willow (*Salix* sp.)Willow, white (*Salix alba*)***Verticillium* sp.**Cotton (*Gossypium* sp.)Elm, American 'Princeton' (*Ulmus americana*)Elm, slippery (*Ulmus rubra*)Maple (*Acer* sp.)Maple, red (*Acer rubrum*)***Verticillium dahlia***Redbud (*Cercis canadensis*)***Wilsonomyces carpophilus***Cherry (*Prunus* sp.)Cherry laurel, common (*Prunus laurocerasus*)Peach (*Prunus persica*)Plum (*Prunus* sp.)***Zymoseptoria tritici***Wheat (*Triticum aestivum*)**Oomycete (water mold)*****Hyaloperonospora parasitica***Cabbage (*Brassica oleracea* var. *capitata*)Mustard (*Brassica juncea*)***Peronospora* sp.**Coleus (*Solenostemon scutellarioides*)***Peronospora antirrhini***Snapdragon (*Antirrhinum majus*)***Peronospora belbahrii***Basil, common (*Ocimum basilicum*)***Peronospora manshurica***Soybean (*Glycine max*)***Phytophthora* sp.**Abelia (*Abelia* sp.)Apple (*Malus × domestica*)Arborvitae (*Thuja* sp.)Aucuba (*Aucuba japonica*)Azalea (*Rhododendron* sp.)Bacopa (*Sutera cordata*)Blackberry (*Rubus* sp.)Blueberry (*Vaccinium* sp.)Boston fern (*Nephrolepis exaltata*)Boxwood (*Buxus* sp.)Boxwood, Japanese (*Buxus microphylla*)Cabbage (*Brassica oleracea* var. *capitata*)Camellia (*Camellia* sp./spp.)Camellia (*Camellia sasanqua*)Cauliflower (*Brassica oleraceae*)Cherry laurel, common (*Prunus laurocerasus*)Cowpea (*Vigna unguiculata*)Cypress, Leyland (*× Hesperotropis leylandii*)Easter lily (*Lilium longiflorum* var. *eximium*)Elaeagnus (*Elaeagnus* sp.)Elm, American 'Princeton' (*Ulmus americana*)Elm, winged (*Ulmus alata*)Gardenia (*Gardenia* sp.)Hairy vetch (*Vicia villosa*)Holly (*Ilex* sp.)Holly, Japanese (*Ilex crenata*)Hosta (*Hosta* sp.)Hydrangea (*Hydrangea* sp.)Impatiens (*Impatiens* sp.)Indian hawthorn (*Raphiolepis indica*)Ivy, English (*Hedera helix*)Japanese blueberry tree (*Elaeocarpus decipens*)Juniper (*Juniperus* sp.)Lantana (*Lantana camara*)Liriope (*Liriope* sp.)Maple (*Acer* sp.)Maple, Japanese (*Acer palmatum*)Maple, sugar (*Acer saccharum*)Oak (*Quercus* sp.)Oak, live (*Quercus virginiana*)Osteospermum (*Osteospermum* sp.)Periwinkle, Madagascar (*Catharanthus roseus*)Petunia (*Petunia × hybrida*)Pine, white (*Pinus strobus*)Podocarpus (*Podocarpus* sp.)Privet, Japanese (*Ligustrum japonicum*)Rhododendron (*Rhododendron* sp.)Rose (*Rosa* sp.)Sage (*Salvia* sp.)Soybean (*Glycine max*)Squash (*Cucurbita* sp.)Strawberry (*Fragaria × ananassa*)Tomato (*Solanum lycopersicum*)Verbena (*Verbena* sp.)

Yew (*Taxus* sp./spp.)

Zinnia (*Zinnia* spp.)

Phytophthora capsica

Tomato (*Solanum lycopersicum*)

Watermelon (*Citrullus lanatus*)

Phytophthora nicotianae

Ivy (*Hedera* sp.)

Periwinkle, Madagascar (*Catharanthus roseus*)

Phytophthora sojae

Soybean (*Glycine max*)

Pseudoperonospora cubensis

Cantaloupe (*Cucumis melo*)

Cucumber (*Cucumis sativus*)

Cucurbits (*Cucurbitaceae*)

Gourd (*Cucurbita* sp.)

Pumpkin (*Cucurbita pepo*)

Squash (*Cucurbita* sp.)

Squash, acorn (*Cucurbita pepo*)

Squash, butternut (*Cucurbita moschata* butternut)

Squash, Turk's Turban (*Cucurbita maxima*)

Watermelon (*Citrullus lanatus*)

Pseudoperonospora sparsa

Rose (*Rosa* sp.)

***Pythium* sp.**

African violet (*Saintpaulia* sp.)

Arborvitae (*Thuja* sp.)

Azalea (*Rhododendron* sp.)

Bahiagrass (*Paspalum notatum*)

Banana, Japanese (*Musa basjoo*)

Bean, green (*Phaseolus vulgaris*)

Begonia (*Begonia* sp.)

Bentgrass (*Agrostis* sp.)

Bermudagrass (*Cynodon dactylon*)

Boston fern (*Nephrolepis exaltata*)

Boxwood (*Buxus* sp.)

Camellia (*Camellia* sp.)

Camellia (*Camellia japonica*)

Camellia (*Camellia sasanqua*)

Carrot (*Daucus carota*)

Catalpa (*Catalpa bignonioides*)

Centipedegrass (*Eremochloa ophiuroides*)

Chrysanthemum (*Chrysanthemum* sp.)

Coneflower (*Rudbeckia* sp.)

Corn (*Zea mays*)

Cotton (*Gossypium* sp.)

Cowpea (*Vigna unguiculata*)

Cucumber (*Cucumis sativus*)

Cucurbits (*Cucurbitaceae*)

Cypress, Leyland ($\times$ *Hesperotropis leylandii*)

Fern, turkey tail 'Petticoat' (*Nephrolepis cordifolia*)

Gardenia (*Gardenia jasminoides*)

Geranium (*Pelargonium* $\times$ *hortorum*)

Hemp (*Cannabis sativa*)

Holly (*Ilex* sp.)

Holly, Japanese (*Ilex crenata*)

Holly, yaupon (*Ilex vomitoria*)

Impatiens (*Impatiens* $\times$ *hybrida* 'SunPatiens')

Ivy, Algerian (*Hedera canariensis*)

Ivy, English (*Hedera helix*)

Juniper (*Juniperus* sp.)

Lamb's ear (*Stachys byzantina*)

Lavender (*Lavandula* sp.)

Loropetalum (*Loropetalum chinense*)

Mandevilla (*Mandevilla* sp.)

Million bells (*Calibrachoa* sp.)

Mustard, Ethiopian (*Brassica juncea*)

Pansy (*Viola* sp.)

Papaya (*Carica papaya*)

Pea (*Pisum sativum*)

Pepper (*Capsicum* sp.)

Pepper, bell (*Capsicum annuum grossum*)

Periwinkle, Madagascar (*Catharanthus roseus*)

Petunia (*Petunia* $\times$ *hybrida*)

Pine, longleaf (*Pinus palustris*)

Pittosporum (*Pittosporum* sp.)

Poinsettia (*Euphorbia pulcherrima*)

Raspberry (*Rubus idaeus*)

Rose (*Rosa* sp.)

Ryegrass (*Lolium* sp.)

Snapdragon (*Antirrhinum majus*)

Soybean (*Glycine max*)

St. Augustinegrass (*Stenotaphrum secundatum*)

Tomato (*Solanum lycopersicum*)

Twinspur (*Diascia* sp.)

Viburnum (*Viburnum* sp.)

Watermelon (*Citrullus lanatus*)

Winter savory (*Satureja montana*)

Zoysiagrass (*Zoysia japonica*)

Pythium aphanidermatum

Pumpkin (*Cucurbita pepo*)

Pythium myriotylum

Peanut (*Arachis hypogaea*)

Viruses

Azalea ringspot disease (unknown virus)

Azalea (*Rhododendron* sp.)

Barley yellow dwarf virus (BYDV) (*Luteovirus* sp.)

Wheat (*Triticum aestivum*)

Bean yellow mosaic virus (BYMV) (*Potyvirus phaseoluteum*)

Gladiolus hybrids

Blueberry necrotic ring blotch virus (*Blunervirus vaccinii*)Blueberry (*Vaccinium* sp.)***Carlavirus***Tulip (*Tulipa* sp.)**Cucumber mosaic virus (CMV) (*Cucumovirus CMV*)**Cowpea (*Vigna unguiculata*)Cucumber (*Cucumis sativus*)Bean, green (*Phaseolus vulgaris*)Tomato (*Solanum lycopersicum*)Watermelon (*Citrullus lanatus*)**Fig mosaic virus (*Emaravirus fici*)**Fig, common (*Ficus carica*)**Impatiens necrotic spot virus (INSV) (*Orthotospovirus impatiensnecromaculae*)**African violet (*Saintpaulia* sp.)Anemone, Japanese (*Anemone* × *hybrida*)Impatiens (*Impatiens* sp.)Impatiens, double (*Impatiens walleriana*)Jimson weed (*Datura stramonium*)Mexican false heather (*Cuphea hyssopifolia*)**Panicum mosaic virus (*Panicovirus panici*)**St. Augustinegrass (*Stenotaphrum secundatum*)***Potyvirus* (*Potyvirus* sp.)**Angel trumpet (*Brugmansia suaveolens*)Corn (*Zea mays*)Iris (*Iris* sp.)**Squash mosaic virus (*Comovirus cucurbitae*)**Watermelon (*Citrullus lanatus*)**Tobacco mosaic virus (TMV) (*Tobamovirus tabaci*)**Angel trumpet (*Brugmansia suaveolens*)Pepper (*Capsicum* sp.)Tomato (*Solanum lycopersicum*)**Tomato spotted wilt virus (TSWV) (*Orthotospovirus tomatomaculae*)**Jimson weed (*Datura stramonium*)Mexican false heather (*Cuphea hyssopifolia*)Peanut (*Arachis hypogaea*)Pepper (*Capsicum* sp.)Pepper, bell (*Capsicum annuum grossum*)Tomato (*Solanum lycopersicum*)**Tomato yellow leaf curl virus (*Begomovirus coheni*)**Tomato (*Solanum lycopersicum*)**Yellow vein virus disease complex**Blackberry (*Rubus* sp.)**Nematodes*****Heterodera glycines***Soybean (*Glycine max*)***Hoplolaimus* sp.**Bermudagrass (*Cynodon dactylon*)***Meloidogyne* sp.**Bean, butter (*Phaseolus lunatus*)Beet (*Beta vulgaris*)Bermudagrass (*Cynodon dactylon*)Cantaloupe (*Cucumis melo*)Cotton (*Gossypium* sp.)Fig, common (*Ficus carica*)Impatiens, New Guinea (*Impatiens* sp.)Okra (*Abelmoschus esculentus*)Peach (*Prunus persica*)Peanut (*Arachis hypogaea*)Pepper, chili (*Capsicum frutescens*)Rutabaga (*Brassica napus* var. *napobrassica*)Soybean (*Glycine max*)Tomato (*Solanum lycopersicum*)**Parasitic Plant*****Phoradendron* sp.**Maple, red (*Acer rubrum*)

Glossary

Abiotic – Translates to “without life.” Nonliving factors that can influence plant health and vigor, such as environmental conditions, chemicals, and nutrients.

Anoxia – Lack of oxygen. Usually due to water-saturated soil.

Biotic – Living factors that can cause disease or influence plant health and vigor, such as fungi, bacteria, viruses, algae, nematodes, insects, and animals.

Burl – A large, woody swelling on a tree trunk that can be caused by a variety of abiotic and biotic factors.

Canker – Damage or death of a localized area on a stem, branch, or twig that may impact the functioning of the vascular tissue (xylem and phloem).

Decline – A disease caused by an interacting set of biotic and abiotic factors.

DMI fungicide – Demethylation inhibitors that interfere with ergosterol production in some fungi, leading to cell membrane dysfunction, which results in cessation of fungal growth.

Fasciation – Abnormal flattened, ribbon-like growth of plant parts with a variety of biotic and abiotic causes.

Herbicide groups – Herbicides are classified by their mode of action (how they affect plant growth). See the [Herbicide Resistance Action Committee online classification chart](#).

Group #2 – Inhibition of acetolactate synthase (ALS) – includes imidazolinones, sulfonylureas, triazolepyrimidines type 1, pyrimidinylbenzoates, triazolinones, triazolopyrimidine-type 2, and sulfonanilides.

Group #3 – Inhibition of microtubule assembly – includes dinitroanilines (DNA), pyridines, and phosphoroamidates.

Group #4 – Auxin mimics – includes phoxycarboxylates, 6-chloropicolinates, 6-arylpicolinates, pyridyloxycarboxylates, benzoates, and quinolinecarboxylates.

Group #9 – Inhibition of enolpyruvyl shikimate phosphate synthase (EPSPS) – glyphosate is the only member of this group.

Group #22 – PS 1 electron diversion – the pyridiniums (diquat and paraquat).

Included bark – Tree bark in branch junctions or between codominant trunks that reduces load-bearing capacity and increases the likelihood of failure.

J-rooted – A root defect in which the downward-growing tap root gets bent and begins growing back toward the soil surface, forming a J shape. Such roots do not function well and can lead to premature plant death.

Lichen – A complex of a fungus and a photosynthesizing partner, like an alga or cyanobacterium, living together symbiotically.

Myxomycete – Fungus-like organisms in the clade Amoebozoa. They are nonpathogenic and produce an amoeboid feeding stage that engulfs bacteria and a fungus-like reproductive stage that produces spores.

Nematode – A microscopic, worm-like animal. Plant parasitic nematodes use a spear-like stylet to pierce and feed on the contents of plant cells. Some nematodes can vector pathogens.

Oedema – Small bumps on leaves and stems that form when plant cells are unable to lose enough water during normal transpiration.

Oomycete – Commonly called “water molds,” they include species in the genera *Pythium* and *Phytophthora*, and organisms that cause downy mildew diseases. They look similar to fungi but are not related to fungi.

pH – A measure of acidity. Seven is considered neutral pH. Anything above seven is considered alkaline (basic), and anything below seven is considered acidic.

Phytotoxicity – Damage resulting from something toxic to plants.

Saprophyte – An organism that uses dead plant material for food.

Virus complex – A disease caused by the synergistic effect of infection with a combination of viruses and/or certain environmental conditions.

Vole – A small rodent that damages plants by gnawing on stems and roots and creating a system of surface runways and underground tunnels.



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