

HAITI AGROFORESTRY RESEARCH PROJECT

SOUTH EAST CONSORTIUM FOR INTERNATIONAL DEVELOPMENT/

AUBURN UNIVERSITY

February 1990

This work was performed under USAID Contract No.
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BIOLOGICAL, PHYSIOLOGICAL AND ENVIRONMENTAL
FACTORS AFFECTING THE HEALTH OF TREES
IMPORTANT TO HAITI

by

G. Brett Runion and Walter D. Kelley
Forest Pathologists

SECID/AUBURN AGROFORESTRY REPORT NO. 19

The views expressed herein are the views of the contractor and not necessarily those of the U. S. Agency for International Development.

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DIRECTIONS FOR USE

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This report contains an extensive, although not necessarily complete, listing of biological, physiological and environmental factors which can affect the health of trees in genera important to the people of Haiti. These factors include: fungi, listed by classification, algae and lichens, parasitic higher plants, nematodes, bacteria, viruses; other factors such as physiological and environmental problems; and diseases of problems whose cause is unknown.

The information on the tree genera in this list was derived from work conducted in many parts of the world, although it concentrates on work conducted in the tropics and in America. Therefore, the presence of a factor on a host genus in this list does not, necessarily, confirm that the factor occurs in Haiti, merely that the factor is known to occur on the host genus somewhere in the world.

It is possible that the references used in this report acknowledged different taxonomic names for a single disease organism or factor since the information contained was derived from sources written at different times. We included all information from all references, and recognize that two or more names may exist for the same disease organism or factor in this report.

AF00428

Host genera denoted by an asterisk (*) indicate ones which have been examined in Haiti by the authors. Fungi and other factors denoted by a single asterisk (*) indicate factors reported in the reference literature which the authors found to occur in Haiti. Fungi and other factors denoted by a double asterisk (**) indicate factors which the authors found to occur in Haiti but which had NOT been reported in the reference literature.

This listing was compiled from reference works indexing the work of many scientists. Numerous citations of work by original investigators contained in the reference works included more detailed information on many of the factors listed in this report. We gratefully acknowledge the efforts of individuals who compiled the source references, as well as the many scientists whose works were included in these references.

REZIME KREYOL

Rapo sa-a geyen youn list pwoblem biologik, fizik, é d'environman ké yo jwenn sou pyebwa ki geyen enpotans pou moun nan peyi d'Ayiti. Pwoblem sa-yo sé champion, viris ak tout youn seri ti mikrob, ti ve, ak plants ki chita manjé nan-nan lot plant; pwoblem fizik ak environman é maladi san koz aparant.

Nou jwenn enfomasayon sa yo nan youn seri reschech ki fet nan plizyé peyi twopikal ak peyi Etatzuni. Sé kon sa lé nou di youn pwoblem affecté youn nan pyebwa sou list-la, sa pas vlé di ké geyen mem pwoblem sa-a en Ayiti, min sa vlé di ké ou geyen dwa jwenn pwoblem-sa sou youn pyebwa youn lot koté nan mond-la.

Nan dokimen nou itilizé pou ékri rapo sa-a, yo ka bay mem kalité pwoblem-la plizyé non. Yo geyen dwa sevi ak plizyé non pou men pwoblem-lan, paské non-yo kapab chanjé tenzaout é rapo sa-yo pat ékri mem le. Tout infomasayon ki nan lot rapo yo disponib nan rapo sa.

Nou itilizé asterisk (*) pou montré pyebwa nou té examiné en Ayiti. Lé nou te jwenn champion ou byen youn lot pwoblem ki dekrit nan dokimen yo sou pyebwa en Ayiti, nou maké non li ak youn sel asterisk. Lé nou jwenn champions e lot pwoblem sou pyebwa en Ayiti, men pas nan dokimen reference yo, nou maké non yo ak de asterisk (**).

Nou paré list sa-a sou baz dokimen referans paré pa plizyé scientis. Nan dokimen sa-yo, geyen infomasayon sou ki koté ou ka jwenn travay scientifk ki geyen plis detay sou pwoblem la. Nou remezyé out moun ki patisipé nan preparasyon dokimen referans-yo, ainsi ak tout scientifk ki fé premyée travay-la.

CONTENTS

<u>Acacia</u>	1
<u>Amyris</u>	3
<u>Anacardium</u>	3
<u>Annona</u>	5
<u>Artocarpus</u>	6
<u>Azadirachta</u>	7
<u>Bambusa</u>	8
<u>Bucida</u>	10
<u>Bursera</u>	11
<u>Calophyllum</u>	11
<u>Capparis</u>	11
<u>Carica</u>	12
<u>Cassia</u>	14
<u>Casuarina</u>	16
<u>Catalpa</u>	17
<u>Cecropia</u>	18
<u>Cedrela</u>	19
<u>Ceiba</u>	20
<u>Chlorophora</u>	20
<u>Chrysophyllum</u>	20
<u>Citrus</u>	21
<u>Clusia</u>	26
<u>Coccoloba</u>	27
<u>Cocos</u>	28
<u>Coffea</u>	31
<u>Coluabrina</u>	35
<u>Comocladia</u>	36
<u>Cordia</u>	36
<u>Crescentia</u>	36
<u>Cupania</u>	37
<u>Delonix</u>	37
<u>Didymopanax</u>	38
<u>Eucalyptus</u>	38
<u>Gliricidia</u>	43
<u>Grevillea</u>	44
<u>Guaiacum</u>	44
<u>Guazuma</u>	44
<u>Haematoxylum</u>	44
<u>Hibiscus</u>	45
<u>Hura</u>	48
<u>Inga</u>	49
<u>Jatropha</u>	50
<u>Krugiodendron</u>	51
<u>Leucaena</u>	51
<u>Lysiloma</u>	52
<u>Malpighia</u>	53

CONTENTS

<u>Mammea</u>	53
<u>Mangifera</u>	53
<u>Manilkara</u>	56
<u>Melia</u>	57
<u>Melicoccus</u>	58
<u>Moringa</u>	58
<u>Muntingia</u>	58
<u>Musa</u>	59
<u>Ocotea</u>	62
<u>Oxandra</u>	63
<u>Parkinsonia</u>	63
<u>Persea</u>	64
<u>Phyllostylon</u>	68
<u>Pinus</u>	68
<u>Prosopis</u>	79
<u>Psidium</u>	80
<u>Punica</u>	82
<u>Rhizophora</u>	84
<u>Ricinus</u>	85
<u>Roystonea</u>	86
<u>Sabal</u>	87
<u>Samanea</u>	89
<u>Simarouba</u>	90
<u>Spondias</u>	91
<u>Swietenia</u>	92
<u>Syzygium</u>	93
<u>Tamarindus</u>	94
<u>Tectona</u>	94
<u>Terminalia</u>	95
<u>Tetragastris</u>	96
<u>Theobroma</u>	96
<u>Trema</u>	100
<u>Trichilia</u>	100
References	101

ACACIA SPP. *

Oomycetes

Phytophthora sp. - decline

Pythium sp. - root rot

Ascomycotina

Botryosphaeria sp. - leaf spot

Calonectria spp. - collar rot

Cucurbitaria sp. - on dead limbs

Diaporthe spp. - on twigs, dieback

Erysiphe sp. - powdery mildew

Glomerella sp. -

Hypoxyton sp. -

Khuskia sp. - on leaf surface

Lophodermium spp. - leaf spot

Meliola spp. - black mildew, sooty mold on leaves

Mycosphaerella spp. - on leaves, on decaying fruit

Nectria spp. - twig canker, on leaves

Nummularia sp. -

Pestalosphaeria sp. - on dry pods

Phyllachora sp. - leaf spot, tar spot

Physalospora sp. - leaf spot

Pleospora sp. - on leaves

Preussia sp. - on leaf surface

Pyrenophora sp. - on leaves

Thyridaria sp. - on decaying leaves

Xylaria spp. - decline

Basidiomycotina - Uredinales

Atelocauda spp. - rust (autoecious)

Diabole sp. - leaf rust

Endoraecium spp. - rust (autoecious)

Ravenelia spp. - rust (autoecious), leaf rust

Uromyces spp. - winter rust

Basidiomycotina - Other

Armillaria spp. - root rot, heart rot

Auricularia sp. -

Corticium sp. - pink branchrot

Eichleriella sp. -

Fomes spp. - on wood, wood rot

Ganoderma spp. - on wood, root rot, basal disease

Inonotus sp. -

Laetiporus sp. - brown cubicle rot

Peniophora sp. - on wood

Perenniporia spp. -

Phaeolus sp. - brown cubicle butt and root rot

Phanerochaete spp. - white rot

Phellinus spp. - on wood

Phlebiella sp. -

Pleurotus sp. - heart and root rot

Polyporus sp. - heart and root rot
Schizophyllum sp. - wound rot
Scytinostroma sp. -
Stereum sp. -

Deuteromycotina - Hyphomycetes

Acremonium spp. - on leaves
Alternaria spp. - leaf spot
Aspergillus sp. - on leaves
Aureobasidium sp. - on leaves
Bipolaris sp. - on leaves
Cercospora sp. - leaf spot
Chalara sp. - on leaves
Cladosporium spp. - on leaves
Cylindrocarpon spp. - on leaves, on twigs, twig rot
Cylindrocephalum sp. - on leaves
Cylindrocladium spp. - leaf spot
Dicyma sp. - on leaves
Drechslera sp. - on leaves
Epicoccum sp. - on leaves
Exosporium sp. -
* Fusarium spp. - on leaves, wilt, root and stem rot, dieback complex, damping-off
Fusisporium sp. - on legumes
Gliocladium spp. - on leaves
Hansfordia sp. - on leaves
Helminthosporium sp. - leaf spot
Humicola sp. - on leaves
Microdochium sp. - on leaves
* Nigrospora spp. - on leaves
Oidium sp. - powdery mildew
Paecilomyces sp. - on leaves
Papulospora sp. - on leaves
Penicillium spp. - on leaves
Periconia sp. - on leaves
Periconiella sp. - on leaves
Phymatotrichopsis sp. - root rot
Pithomyces sp. - on bark and leaves
Rhinocladiella sp. - on leaves
Rhodotorula sp. - on leaves
Schizotrichella sp. - on leaves
Scolecobasidium spp. - on leaves
Scopulariopsis sp. - on leaves
Sporotrichum sp. - on leaves
Stachybotrys sp. - on litter
Stemphylium sp. - on leaves
Strumella sp. - on limbs and twigs
Trichoderma sp. - on leaves
Triscelophorus sp. - on leaf litter
Tritirachium sp. - on leaves
Tuberculina sp. - on hypertrophied shoots infected by Uromyces spp.
Volutella sp. - on leaves

Zygosporium sp. - on leaves

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose

Coniothyrium sp. - on limbs, branch disease

Cylindrosporium sp. - on leaves

Diplodia spp. - canker on limbs and twigs, on leaves and phyllodes

Gloeocoryneum sp. - on living leaves

Macrophomina sp. - leaf spot

Monochaetia sp. - on leaves

* Pestalotia spp. - on leaves, leaf spot

Pestalotiopsis sp. - on dry pods

Phoma sp. -

Phomopsis sp. - dieback

Phyllosticta sp. - leaf spot

Sphaeropsis sp. - canker, stem gall

Deuteromycotina - Other

* Rhizoctonia spp. - root rot, damping-off

Algae and Lichens

Cephaleuros sp. - algal leaf spot, green scurf

Parasitic Higher Plants

Cassytha sp. - green dodder

Cuscuta sp. - dodder

Korthalsella sp. - mistletoe

Phoradendron spp. - bushy mistletoes

Phthirusa spp. - recumbent mistletoes

Psittacanthus spp. - parasitizing bush on tree branches

Nematodes

Melioidogyne spp. - root-knot nematode

** Unidentified nematodes associated with seedling damping-off/root decay

AMYRIS SPP.

ANACARDIUM SPP.

Oomycetes

Phytophthora sp. - leaf spot

Pythium spp. - root rot, decline

Ascomycotina

Asterina sp. - black mildew

Balladynastrum sp. - leaf disease

Ceratocystis sp. - branch death, fruit-stem rot, wood stain

Glomerella sp. -

Irenopsis sp. - black mildew

Meliola spp. - black mildew

Microcallis sp. - scab spot
Micropeltella sp. - leaf infection
Nectria spp. - stem disease and dieback complex
Parodiella sp. - leaf spot
Trichomerium sp. - leaf spot
Valsa sp. -
Zukalia sp. - foliage disease

Basidiomycotina - Uredinales
Uredo sp. - leaf rust

Basidiomycotina - Other
Botryobasidium spp. -

Deuteromycotina - Hyphomycetes

Atichia sp. -
Botrytis sp. - fruit mold
Cercospora sp. - leaf spot
Cladosporium sp. - on fruit
Dendrodochium sp. - leaf spot
Dendryphiella sp. - leaf disease
Fusarium sp. - dieback complex
Helminthosporium sp. - leaf spot
Oidium sp. - powdery mildew
Penicillium sp. - fruit rot

Deuteromycotina - Coelomycetes

Colletotrichum sp. - blossom blight, leaf spot, fruit rot and russet
Diplodia sp. - dieback, fruit mummy
Gloeosporium sp. - anthracnose
Pestalotia spp. -
Phomopsis sp. -
Phyllosticta spp. - leaf spot
Sphaceloma sp. -

Deuteromycotina - Other

Rhizoctonia spp. - seedling constriction
Sclerotium sp. - seedling blight, seedling basal rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot
Stomatochroon sp. - systemic algal leaf attack

Parasitic Higher Plants

Loranthaceae - numerous genera; mistletoe-like parasites
Porella sp. - leafy liverwort smother of flushing buds

Diseases of Unknown Etiology

Unidentified yeast - fruit riperot

ANNONA SPP.

Oomycetes

Phytophthora sp. - fruit and seedling rots

Pythium sp. - root rot

Zycomycotina

Rhizopus sp. - fruit riperoth

Ascomycotina

Botryosphaeria sp. - branch canker

Calothyriopeltis sp. - on leaves

Capnodium sp. - sooty mold

Cryptosphaerella sp. - branch infection, leaf disease

Diaporthe spp. - fruit rot

Elsinoe sp. - spot scab

Eutypa sp. - foliage stroma

Glomerella sp. - anthracnose, fruit rot

Limacinia sp. - sooty mold

Meliola spp. - black mildew spots

Mycosphaerella spp. - on leaves, on decaying fruit, leaf spot

Nectria spp. - on twigs, leaves and stems

Peroneutypa sp. - branch and stem disease

Phaeobotryosphaeria sp. - branch disease

Phyllachora spp. - tar spot, black leaf spot, dark sunken leaf spot

Pocosphaeria sp. - leaf disease

Rosellinia sp. - white root rot

Tryblidium sp. - log-wood and branch rot

Zignoella sp. - branch and leaf disease

Basidiomycotina - Uredinales

Aecidium sp. - yellow rust

Phakopsora sp. - rust

Basidiomycotina - Other

Armillaria spp. - root rot

Corticium sp. - leaf rot, pink disease

Fomes sp. - trunk base-rot

Mycena sp. - round leaf spot

Deuteromycotina - Hyphomycetes

Alternaria spp. - leaf spot

Cephalosporium sp. - target leaf spot

Cercospora spp. - leaf spot

Cladosporium sp. - senescent leaf invasion

Coniosporium sp. - branch rot

Cylindrocarpon sp. - root rot

Fusarium sp. - secondary infections

Helminthosporium sp. - leaf spot

Isariopsis sp. - leaf spot

Penicillium sp. -

Phymatotrichopsis sp. - root rot

Ramularia sp. - root rot
Verticillium sp. -

Deuteromycotina - Coelomycetes

Ascochyta sp. - leaf spot, stem lesions
Botryodiplodia sp. - mummy, dieback, leaf spot
Colletotrichum spp. - anthracnose, fruit rot
Diplodia sp. - fruit black rot and mummy, dieback
Dothiorella sp. -
Haplosporella sp. - on leaves
Lasiodiplodia sp. - stem blight
Melophia sp. - leaf disease
Pestalotia sp. - leaf and petiole spot
Phomopsis sp. - leaf and fruit spot, black spot
Phyllosticta sp. - leaf spot
Phyllostictina sp. - leaf spot
Septoria sp. - leaf spot

Deuteromycotina - Other

Rhizoctonia spp. - damping-off

Algae and Lichens

Cephaleuros sp. - algal leaf spot
Strigula sp. - white lichen spot

Nematodes

Hemicycliophora sp. - nematode
Pratylenchus sp. - lesion nematode, on roots
Xiphinema sp. - dagger nematodes

ARTOCARPUS SPP.

Oomycetes

Phytophthora spp. - shoot rot, cutting rot, fruit rot
Pythium sp. - root rot

Zycomycotina

Rhizopus sp. - ripe fruit rot, soft fruit rot

Ascomycotina

Capnodium spp. - sooty molds
Didymomosphaeria sp. -
Meliola sp. - black mildew
Mycosphaerella sp. - on leaves
Orbilia sp. - on logs
Physalospora sp. - stem end rot, fruit rot
Rosellinia spp. - black root rot
Setella sp. - leaf rot
Sphaerostilbe sp. - root stain
Zignoella sp. - on dying leaves infected with Cephaleuros

Basidiomycotina - Uredinales

Physopella sp. - rust

Uredo sp. - rust

Basidiomycotina - Other

Botryobasidium sp. -

Corticium sp. - leaf rot, pink disease

Fomes spp. - friable heart rot, foot rot

Ganoderma sp. - stump rot

Hymenochaete sp. - bark disease

Marasmius sp. - cordblight of leaves

Mycena sp. - leaf spot

Rigidoporus sp. - white root disease

Deuteromycotina - Hyphomycetes

Aspergillus sp. - fruit rot

Botrytis sp. - gray mold of fruit, inflorescence mold

Cercospora sp. - leaf spot

Cladosporium spp. - ragged leaf, on leaves

Fusarium sp. - fruit peduncle disease

Rhombostilbella sp. - foliage disease

Trichosporum sp. - leaf disease

Deuteromycotina - Coelomycetes

Colletotrichum sp. - on living leaves, anthracnose, dieback

Diplodia sp. - dieback complex

Marssonina sp. - leaf spot

Pestalotia sp. - sunken leaf spot

Phoma sp. - twig dieback

Phomopsis sp. -

Phyllosticta spp. - white leaf spot, brown leaf spot, leaf blotch

Deuteromycotina - Other

Rhizoctonia sp. - dieback

Sclerotium sp. - sclerotial rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Stomatochroon sp. - leaf infection by systemic alga

Strigula sp. - lichen spot

Parasitic Higher Plants

Porella sp. - leafy liverwort smother

AZADIRACHTA SPP. *

Deuteromycotina - Hyphomycetes

** Cercospora sp. - leaf spot

** Fusarium sp. - damping-off

Deuteromycotina - Coelomycetes

** Phyllosticta sp. - leaf spot

Deuteromycotina - Other

** Rhizoctonia sp. - damping-off

Nematodes

** Unidentified nematodes associated with seedling damping-off/root decay

Diseases of Unknown Etiology

** Loss of apical dominance in seedlings resulting in a "carrot-top" appearance of young shoots and foliage possibly caused by insects

** Yellowing of foliage of nursery and outplanted seedlings most likely due to nutrient deficiency (i.e. iron) but could be caused by a virus or MLO

BAMBUSIA spp.

Zygomycotina

Glaziella sp. - branch infection and culm rot

Ascomycotina

Anthostomella spp. - stroma on culms and leaves

Apiospora spp. - on dead culms, culm blemish, culm disease

Ascopolyporus spp. - twig disease, twig infection

Asteridium sp. - leaf spot

Asterina sp. - black mold on green leaf

Balansia spp. - black crust of stem, stem disease, witches' broom

Brefeldiella spp. - culm cankers

Broomella sp. - weak culm-disease parasite

Calonectria sp. - severe disease on young branches

Cenangella sp. - on old branches

Didymosphaeria sp. - culm disease

Eutypa spp. - cane disease

Gillettiella sp. - stem disease

Gloniella sp. - on foliage

Guignardia sp. - on culms

Hypoxyton spp. - decay of culms used in construction

Laestadia sp. - anthracnose-like lesions on leaves and culms

Lageniformia sp. -

Leptosphaeria spp. - leaf and culm flyspeck

Mycosphaerella sp. - leaf spot

Nectria spp. - on dying foliage

Ophiodothis sp. - leaf disease

Paranectria sp. - leaf disease

Phillipsiella sp. - leaf stroma

Phyllachora spp. - shiny leaf black spot, tar spot, black leaf spot

Physalospora sp. - diseased branch

Placostroma sp. - on culms

Rosellinia spp. - root rot, root and base disease

Scirrhia sp. - on dead culms

Scirrhodothis sp. - on dead culms
Setiella sp. - sooty mold
Sphaerella sp. - lesion on foliage

Basidiomycotina - Uredinales

Puccinia spp. - yellow leaf rust, brown leaf rust
Uredo sp. - rust

Basidiomycotina - Ustilaginales

Ustilago sp. - stem smut, witches' brooming

Basidiomycotina - Other

Agaricus spp. - on rotting bamboo trash, on old building material
Auricularia spp. - on dead culms used in jungle buildings
Corticium sp. - mycelium and basidia on culms
Crinipellis sp. - cord fungus causing culm disease
Lentinus sp. - cane rot
Omphalia sp. - root disease
Schizophyllum spp. - on dead culms
Tomentella sp. - root and shoot rot

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot
Arthrimum sp. - on dead or dying culms
Arthrobotryum sp. - mold
Cladosporium spp. - on leaves
Coniosporium spp. - on dead stalk tips, dieback, culm tip rot
Corynespora sp. - on culms
Cordella sp. - leaf and culm disease
Fusarium spp. - on cut canes, decay of old culms
Helicomyces sp. -
Helminthosporium spp. - leaf spot, cane lesions
Hormomyces sp. - foliage disease
Idriella sp. - on dead stems
Melanographium sp. - on culms
Memnoniella sp. - on leaves
Nigrospora sp. - accompanying ragged-leaf condition
Papularia sp. - dieback, on culms
Phaeoisariopsis sp. - on living leaves
Rutola sp. -
Stachybotrys sp. - on leaves
Torula sp. - on dead stems

Deuteromycotina - Coelomycetes

Chaetophoma sp. - leaf disease
Colletotrichum sp. - anthracnose
Cylindrosporium sp. - on culms, leaf blight
Diplodia spp. - on shoots and culms, culm tip disease
Hendersonia sp. - on culms
Melanconium spp. - culm rind disease
Munkia spp. - stem disease, branch disease
Pestalotia sp. - leaf spot

Phoma sp. - leaf spot
Phyllostictina sp. - spot of young leaf
Pseudoseptoria sp. - culm spot
Pucciniospora sp. - "rust"
Rhabdospora sp. - on culms
Selenophoma sp. - culm spot
Septoria sp. - dark leaf spots
Zythia sp. - green leaf disease

Deuteromycotina - Other

Sclerotium sp. - basal rot

Algae and Lichens

Actiniopsis sp. - lichen attack causing culm injury
Cephaleuros sp. - green scurf, algal leaf spot
Geococcus sp. - on culms
Lichens - various kinds; disfiguring culms
Nostoc sp. - on culms
Phycopeltis sp. - on culms
Spirogyra sp. - on culms
Trentepohlia sp. - on culms

Parasitic Higher Plants

Corynaea sp. - tuberous root parasite

Nematodes

Criconemoides sp. - ring nematodes, on roots
Hemicycliophora sp. - nematode
Pratylenchus sp. - lesion nematode, on roots

Bacteria

Xanthomonas sp. - gumming disease

Viruses

Mosaic virus
Sugarcane mosaic virus

BUCIDA SPP.

Oomycetes

Pythium sp. - root rot

Ascomycotina

Botryosphaeria sp. - leaf spot

Basidiomycotina - Other

Armillaria sp. - root rot

Deuteromycotina - Hyphomycetes

Cristulariella sp. - leaf spot
Cylindrocladium sp. - leaf spot

Helminthosporium sp. - leaf spot

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose

Coniothyrium sp. - leaf spot

Diplodia sp. - stem gall, dieback

Fusicoccum sp. - leaf spot

Lasiodiplodia sp. - dieback, stem gall

Phomopsis sp. - twig dieback

Phyllosticta sp. - leaf spot

Sphaceloma spp. - spot anthracnose, scab

Sphaeropsis sp. - canker

Deuteromycotina - Other

Rhizoctonia sp. - root rot, basal stem rot

Algae and Lichens

Cephaleuros sp. - green scurf, algal leaf spot

BURSERA SPP.

Basidiomycotina - Other

Gloeodontia sp. - on wood

Oudemansiella sp. - on wood

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf spot

Oidium sp. - powdery mildew

Deuteromycotina - Coelomycetes

Diplodia sp. - stem gall

CALOPHYLLUM SPP.

Deuteromycotina - Coelomycetes

Phyllosticta sp. - leaf spot

Parasitic Higher Plants

Cuscuta sp. - dodder

CAPPARIS SPP.

Oomycetes

Albugo sp. - white blister

Ascomycotina

Asteridium sp. - black spot

Asterina spp. - black spot

Meliola spp. - sooty mold

Deuteromycotina - Coelomycetes

Diplodia sp. - dieback

CARICA SPP.

Oomycetes

Phytophthora spp. - damping-off, fruit, root, stem, and collar rot,
crown rot, stem canker, leaf blight

Pythium spp. - damping-off, root rot, on seedlings

Zygomycotina

Blakeslea sp. -

Choanephora sp. - blossom spot, leaf spot

Rhizopus sp. - watery soft rot of fruit

Ascomycotina

Asterina sp. - black mildew, linear petiole spot

Asterinella sp. - on leaves

Calonectria spp. - collar rot

Ceratocystis sp. - peduncle disease, fruit fall

Chaetomium spp. - fruit ripe rot, on senescent leaves and petioles

Diaporthe sp. - melanose

Didymella sp. - petiole spot

Dimeriosporium sp. - black moldy spot

Erysiphe spp. - powdery mildew

Glomerella sp. - anthracnose, fruit, stem and leaf spot

Guignardia sp. -

Leptosphaeria sp. - aureolate leaf spot

Meliola spp. - leaf mold spots

Mycosphaerella spp. - fruit and stem-end rot, leaf and target spot

Rosellinia sp. -

Saccharomyces spp. - ripe rots

Sphaerostilbe sp. - root stain, root rot

Sphaerotheca sp. - powdery mildew

Basidiomycotina - Uredinales

Cerotelium sp. - rust

Pucciniopsis sp. - rust

Basidiomycotina - Other

Armillaria sp. - root rot

Botryobasidium sp. -

Rigidoporus sp. - white root disease

Thanatephorus sp. -

Deuteromycotina - Hyphomycetes

Alternaria spp. - blossom-end rot, leaf spot, fruit spot, fruit drop

Aspergillus spp. - fruit ripe rot, on senescent leaves and petioles

Asperisporium sp. - black spot of fruit and leaves

Botrytis sp. - wet season bud blast

Cercospora spp. - leaf spot, fruit spot

Chaetostroma sp. -
Cladosporium sp. - internal "smut"
Corynespora sp. - leaf spot, stem lesion, bottle trunk, decline
Curvularia sp. -
Drechslera sp. -
Fusarium spp. - fruit rot, stem rot
Fusicladium sp. - leaf and fruit spots
Helminthosporium sp. - leaf spot
Oidium sp. - powdery mildew
Ovulariopsis - mildew
Penicillium spp. - fruit ripe rot, on senescent leaves and petioles
Phymatotrichopsis sp. - root rot
Rhizotrichum sp. - increases size of Cercospora spots
Stemphylium spp. - storage rot, leaf spot

Deuteromycotina - Coelomycetes

Ascochyta sp. - small spot of leaf, black fruit spot, stem-end rot
Asterostomella sp. -
Botryodiplodia sp. - fruit rot, trunk necrosis, on leaves & petioles
Colletotrichum spp. - anthracnose, leaf spot, fruit rot
Diplodia sp. - fruit rot
Lasiodiplodia sp. - fruit rot
Macrophomina sp. -
Melophia sp. - leaf scorch
Phaeoseptoria sp. - leaf spot
Phoma spp. - stem-end fruit rot, leaf spot
Phomopsis sp. - stem-end fruit rot
Phyllosticta spp. - leaf spot, target spot, shothole
Septoria sp. - leaf spot
Sphaceloma sp. -

Deuteromycotina - Other

Rhizoctonia spp. - damping-off, root rot, rainy season fruit rot
Sclerotium sp. - Southern blight

Algae and Lichens

Cephaleuros sp. - algal spot

Parasitic Higher Plants

Cuscuta sp. - dodder

Nematodes

Helicotylenchus sp. - spiral nematode
Meloidogyne spp. - root-knot nematode
Pratylenchus sp. - lesion nematode, on roots
Rotylenchus sp. - reniform nematode

Bacteria

Erwinia spp. - soft rot, purple stain
Pseudomonas sp. - stem rot

Viruses

Cuban mosaic virus
Cucumber mosaic virus
Distortion ringspot virus
Isabela mosaic virus - Carica candamarcensis is resistant
Papaw bunchytop - Leafhopper transmission, MLOs in tissues
Papaw leaf curl virus - whitefly transmission
Papaw ring spot virus- transmitted by aphids
Papaya mosaic virus
Puerto Rican Southern Coast papaw mosaic virus
Spotted wilt virus - transmitted by thrips
Tobacco ringspot virus - transmitted by Xiphinema nematodes
Tomato big bud virus
Yellow crinkle virus - transmitted via dodder (Cuscuta)

Diseases of Unknown Etiology

Dieback - top necrosis followed by defoliation and death of the plant
Feather leaf - small, leathery leaves restricted to top part of plant

CASSIA SPP. *

Ascomycotina

Asterina sp. - black mildew
Botryosphaeria sp. - on dead limbs, common branch canker
Botryotinia sp. - foliar necrosis
Cochliobolus sp. - on leaves, on seedlings
* Diaporthe sp. - on dead stems, associated with damped-off seedlings
Diaporthopsis sp. -
Erysiphe sp. - powdery mildew
Glomerella sp. - anthracnose, fruit rot, dieback
Irenina sp. - black mildew
Irenopsis sp. - moldy leaf spots
Leptosphaeria sp. - on dead stems
Meliola spp. - black mildews
Microsphaera sp. - powdery mildew
Myiocopron sp. -
Ophiobolus sp. -
Phyllachora spp. - tar spot, root rot, leaf spot
Physalospora sp. - on dead limbs
Pleospora sp. - on dead stems
Rosellinia spp. - severe root diseases
Tryblidiella sp. - on dead plants
Urosporella sp. -
Xylaria sp. - branch dieback

Basidiomycotina - Uredinales

Aecidium sp. - rust
Ravenelia spp. - rust (autoecious)
Uredo spp. - rust

Basidiomycotina - Other

Armillaria spp. - root rot

Fomes sp. - brown root rot

Ganoderma sp. - heart rot, root rot

Mycena sp. - leaf spot

Schizophyllum sp. - secondary invasion on old branches

Deuteromycotina - Hyphomycetes

- * Alternaria sp. - leaf spot, associated with damped-off seedlings
- Botrytis sp. - gray mold
- * Cercospora spp. - leaf spot, associated with damped-off seedlings
- Corynespora sp. - small leaf spots
- ** Curvularia sp. - associated with leaf spot lesions
- * Fusarium spp. - wilt, associated with dieback, associated with damped-off seedlings, associated with leaf spot lesions
- ** Fusoma sp. - associated with leaf spot lesions
- ** Myrothecium sp. - associated with damped-off seedlings
- Oidium sp. - powdery mildew
- Phaeoisariopsis spp. - leaf spot
- Phaeoramularia sp. - leaf spot
- Phymatotrichopsis sp. - root rot

Deuteromycotina - Coelomycetes

- Aplosporella sp. -
- * Colletotrichum sp. - anthracnose
- Diplodia sp. - dieback
- Lasiodiplodia sp. - dieback
- ** Macrophoma sp. - associated with leaf spot lesions
- * Macrophomina sp. - charcoal rot, associated with damped-off seedlings
- ** Pestalotia sp. - associated with leaf spot lesions
- Phoma sp. - dieback
- Phomopsis spp. - dieback
- Phyllosticta sp. - leaf spot
- Septoria sp. - leaf spot
- Sphaceloma sp. - spot anthracnose

Deuteromycotina - Other

- * Rhizoctonia sp. - seedling blight, seedling damping-off, root disease, associated with leaf spot lesions
- Sclerotium sp. - ground sclerotial rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Parasitic Higher Plants

Cassytha sp. - green pungent smelling dodder

Cuscuta sp. - common brittle dodder

Loranthus spp. - parasitizing coarse bushes

Struthanthus spp. - small leaved drooping bushes parasitizing branches

Nematodes

Meloidogyne sp. - root-knot nematode

Pratylenchus sp. - lesion nematode, on roots

Rotylenchus sp. - reniform nematode, on roots

** Unidentified nematodes associated with seedling damping-off/root decay

Virus

Cassia ring spot

Diseases of Unknown Etiology

** Unidentified stem blight/vascular wilt pathogen

CASUARINA SPP. *

Oomycetes

Phytophthora spp. - needle blight, streak in wood

Pythium sp. - root rot

Ascomycotina

Botryosphaeria sp. - dieback

Capnodium sp. - sooty mold

Diaporthe sp. - on dead twigs

Fenestella sp. - fallen-branch rot

Lophiostoma sp. - branch disease

Peroneutypa sp. - on stems and branches (possibly saprophyte)

Rhytidhysterium sp. -

Sphaerostilbe sp. - root disease

Zignoella spp. - branch disease

Basidiomycotina - Other

Armillaria spp. - root rot

Ganoderma spp. - wood rot, heart rot, base disease, stump rot

Inonotus sp. - on wood

Marasmius sp. - bark disease

Odontia sp. - log rot

Phellinus sp. - on wood

Polyporus sp. - log rot

Sebacina sp. -

Deuteromycotina - Hyphomycetes

Allescheriella sp. -

** Alternaria sp. - associated with needle blight symptoms

** Cercospora sp. - associated with needle blight symptoms

Fusarium sp. - on twigs

Helicosporium sp. - on fruits

Microxyphium sp. - sooty mold

* Oidium sp. - powdery mildew

Deuteromycotina - Coelomycetes

Botryodiplodia sp. - dieback

Colletotrichum sp. - anthracnose

Dendrophoma sp. - branch dieback, twig disease

Diplodia sp. - dieback

Macrophomina sp. - seedling blight

Phomopsis sp. - dieback

Sphaeropsis sp. - gall

Deuteromycotina - Other

Rhizoctonia sp. - root rot

Sclerotium sp. - Southern blight, seedling base rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot, green scurf

Nematodes

Meloidogyne spp. - root-knot nematode

Bacteria

Agrobacterium sp. - crown gall

Pseudomonas sp. - seedling blight

Viruses

Casuarina mosaic virus - causing leaf mottle, witches' broom & death

CATALPA SPP. *

Oomycetes

Pythium sp. - root rot

Ascomycotina

Botryosphaeria spp. - on limbs, on twigs

Dasyscyphus sp. -

Didymosphaeria sp. - on leaves

Eutypella sp. - on dead limbs

Hypoxyton sp. - on dead limbs

Hysteroglyphium sp. - on limbs

Microsphaera spp. - powdery mildew

Mycosphaerella sp. -

Phyllactinia sp. - powdery mildew

Propolomyces sp. - powdery mildew

Basidiomycotina - Other

Antrodia sp. - brown crumbly sapwood rot

Armillaria sp. - root rot

Bjerkandera sp. - on wood

Dendrophora spp. - white rot

Flammulina sp. - wound rot

Hohenbuehelia sp. -

Schizophyllum sp. - sapwood rot

Stereum spp. - white rot

Trametes spp. - white rot, spongy yellow heart rot

Deuteromycotina - Hyphomycetes

* Alternaria sp. - leaf spot

- ** Botrytis sp. - associated with leaf spot lesions
- * Cercospora sp. - leaf spot
- Cristulariella sp. - leaf spot
- Epicoccum sp. - zonate leaf spot
- Hyalotrochophora sp. - on wood
- Leptoxyphium sp. - on leaves
- Phymatotrichopsis sp. - sooty mold
- Sporidesmium sp. -
- Thielaviopsis sp. - black root rot (seedlings)
- Verticillium spp. - wilt

Deuteromycotina - Coelomycetes

- Ascochyta sp. - on leaves
- * Colletotrichum sp. - anthracnose
- Gloeosporium sp. - anthracnose
- Macrophomina sp. - anthracnose, leaf spot
- Phoma sp. - stem gall
- Phomopsis sp. - twig dieback
- Phyllosticta sp. - leaf spot
- Rhabdospora sp. - on limbs
- Sphaceloma sp. - spot anthracnose

Deuteromycotina - Other

- Rhizoctonia spp. - damping-off, root rot (seedling), stem rot
- Sclerotium sp. - Southern blight of seedlings

CECROPIA SPP.

Oomycetes

- Pythium sp. - root rot

Zygomycotina

- Mucor sp. - pod soft rot, fiber discoloration

Ascomycotina

- Amylis sp. - branch disease
- Anthostomella sp. - leaf scab-spot
- Appendiculella sp. - leaf mold injury
- Balladynella sp. - leaf spot
- Fracchiaria spp. - branch infection
- Irene spp. - black leaf spot
- Mycosphaerella sp. - leaf spot
- Phialea sp. - leaf-sheath lesion
- Thyridaria sp. - branch disease

Basidiomycotina - Other

- Armillaria sp. - root rot
- Hirneola sp. - log decay
- Mycocalia sp. - on petioles
- Oudemansiella sp. - log decay

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot
Cercospora sp. - leaf spot
Fusicladium sp. - leaf blotch disease
Passalora sp. - indistinct leaf blotch
Periconia sp. - on leaves
Torula sp. - on decaying trunk

Deuteromycotina - Coelomycetes

Diplodia sp. - leaf spot
Phyllosticta sp. - leaf spotting

Algae and Lichens

Cephaleuros sp. - algal leaf spot
Strigula sp. - white lichen spot

Nematodes

Meloidogyne sp. - root-knot nematode

CEDRELA SPP. *

Ascomycotina

Parodiopsis sp. - black-patch leaf disease
Phyllachora sp. - tar spot of mature foliage, seedling blight
Rosellinia spp. - black root rot, white root rot
Sphaerella sp. - leaf infection

Basidiomycotina - Ustilaginales

Doassansia sp. - smut

Basidiomycotina - Other

Corticium sp. - branch disease
Fomes sp. - honeycomb heart rot
Ganoderma sp. - trunk base rot
Mycena sp. - leaf spot, rare
Poria sp. - rot of bark on log
Schizophyllum sp. - wound rot

Deuteromycotina - Hyphomycetes

** Alternaria sp. - associated with leaf spot lesions
* Cercospora sp. - leaf spot

Deuteromycotina - Coelomycetes

** Colletotrichum sp. - anthracnose, associated with stem blight
Phyllosticta sp. - leaf spot

Deuteromycotina - Other

Rhizoctonia sp. - typical damping-off in seed beds

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Parasitic Higher Plants

Loranthus spp. - parasitic bush on branches

Psittacanthus sp. - parasitic bushes

Struthanthus spp. - bush with parasitizing roots attacking branches

Other

Sunscald of seedlings - associated with lack of shade

Diseases of Unknown Etiology

** Unidentified stem blight/vascular wilt pathogen

CEIBA SPP.

Zygomycotina

Rhizopus sp. -

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf spot

Corynespora sp. - leaf spot

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose

CHLOROPHORA SPP.

CHRYSOPHYLLUM SPP.

Ascomycotina

Asterina sp. - black moldy leaf spot

Capnodium sp. - sooty mold

Meliola spp. - black mildews

Phyllachora sp. - tar spot

Zukalia sp. - mold patch on leaf

Basidiomycotina - Uredinales

Uredo spp. - rusts

Basidiomycotina - Other

Polyporus sp. - basal infection on old trees

Deuteromycotina - Coelomycetes

Aschersonia sp. - parasitizing insects on leaves

Diplodia sp. - blackened twigs, dieback

Gloeosporium sp. -

Phomopsis sp. - leaf spot

Phyllosticta sp. - leaf spot

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Strigula sp. - lichen creamy white spot

Parasitic Higher Plants

Loranthus spp. - parasitic bush on branches

Struthanthus spp. - vine-like parasitizing bush

Nematodes

Radopholus sp. - burrowing nematode

CITRUS SPP. *

Chytridiomycetes

Physoderma sp. - bark infection of benign nature, on fruit

Oomycetes

* Phytophthora spp. - gummosis; damping-off; shoot and leaf blight; root disease; foot, collar and fruit brown rot; canker

Pythium spp. - root rot, damping-off, soft brown rot of fruit, decline

Zygomycotina

Mucor spp. - fruit rot

Rhizopus sp. - black soft rot of fruit

Ascomycotina

Amazonia sp. -

Amylirosa sp. - branch disease

Ashbya sp. - dry rot of fruit (associated with insect punctures)

Botryosphaeria spp. - gummosis, dieback, canker, stem-end rot

Camarops sp. -

Capnodium spp. - sooty mold, on leaves, black mold on fruit rind

Chaetothyrium sp. - on leaves

Coniochaeta sp. - rot of denuded wood

Cryptosporella sp. - branch canker

Daldina spp. - wood rot, trunk heart rot

Diaporthe spp. - gummosis, melanose, decorticosis, stem-end rot, dieback

Didymella spp. - twig disease, bark spot, fruit lesion

Elsinoe spp. - anthracnose, scab, on fruit, leaves, stems and twigs

Ephelidium sp. - twig bark disease

Erysiphe sp. - dry season mildew

Eutypa sp. - root rot

Eutypella sp. - on dead twigs, twig and branch disease, dieback

Gibberella sp. - on twigs

Glomerella sp. - anthracnose, withertip, fruit drop, on orange twigs

Guignardia sp. - black spots on fruit

Hypoxylon spp. - on old branches, disease on trunk

Leptosphaeria sp. - secondary parasite, areolate leaf spot

Limacinia spp. - sooty molds

Lophidiopsis sp. - weak twig parasite

Meliola spp. - black mildew spots on foliage

Mycosphaerella spp. - greasy leaf spot, rind blotch, pink fruit pitting

Myriangium spp. - fruit speck

Nectria spp. - on limbs, roots and bark, twig cankers, dieback, associated with red rot disease, firm rot of fruit
Nematospora spp. - dry rot of fruit, yeast spot
Nummularia sp. -
Peroneutypa sp. - rare foliage disease
Peziza sp. - bark inhabitant
Physalospora sp. - on limbs and twigs, root rot, twig dieback
Pleospora spp. - minor leaf spots, scabby lesions & black rot of fruit
Podonectria sp. -
Rhytidhysterium sp. - twig blight
Rosellinia spp. - root rots
Schizothyrium sp. - fly speck
Schizoxylon sp. - branch rot
Sclerotinia sp. - twig blight, cottony fruit rot, root rot
Scolecopeltis sp. - twig and fruit skin blemish
Solenoplea sp. - on foliage
Sphaerostilbe sp. - red rot, associated with insects, on fruit
Stomiopeltis sp. - black leaf disease, fruit flyspeck
Tryblidiella sp. - branch-tip dieback, twig blight
Ustulina sp. - following foot rot, rot of old roots, wood rot
Valsa sp. - on dying trees
Xylaria sp. - on living and dead roots, heart rot, wood rot

Basidiomycotina - Other

Amylospor sp. -
Antrodia sp. - brown cubicle rot
Armillaria spp. - shoestring root rot, clitocybe root rot
Bjerkandera sp. -
Botryobasidium spp. - Southern blight, pink disease
Ceratobasidium sp. - thread blight
Ceriporia sp. -
Coprinus sp. - root rot
Coriolopsis sp. - wood rot
Corticium spp. - thread blight, leaf spot, pink-arm disease, leaf rot
Dacryopinax sp. - on wood
Favolus sp. - rot of dead branch
Fomes spp. - trunk heart rot, wood rot
Ganoderma spp. - wood, heart, trunk, white, butt and root rot
Hexagonia sp. - wood rot
Hymenochaete sp. - root canker
Marasmius sp. - black cord blight
Meruliopsis sp. -
Mycena sp. - leaf spot
Omphalia sp. -
Oxyporus sp. -
Pellicularia sp. - thread blight
Peniophora sp. - on wood
Phanerochaete spp. -
Phellinus sp. - wood rot
Phylloporia sp. - on wood
Polyporus spp. - old tree-base infections, terminal rots
Polystictus spp. - on dead and dying roots, on old wood

Poria spp. - rots of fallen branches, root rot
Rigidoporus sp. -
Schizophyllum sp. - wood rot, branch and trunk rot
Septobasidium spp. - felt fungus, on fruit
Stereum sp. - wood rot
Terana sp. - attack of trunk
Thanatephorus sp. - damping-off
Trametes spp. - wound rot
Wolfiporia sp. - on roots

Deuteromycotina - Hyphomycetes

- * Alternaria sp. - leaf rot & spot, fruit black rot & spot, stem-end rot
- Aspergillopsis sp. - fruit rot
- Aspergillus spp. - black soft rot of fruit, root rot, dieback
- Botrytis sp. - gummosis, gray mold, blossom & twig blight, storage rot
- Candelospora sp. - skin lesion extending into albido
- Candida sp. - fruit rot
- Catenularia sp. - leaf spot
- Cephalosporium spp. - twig disease, associated with insects
- Cercospora spp. - tar spot, leaf spot, pink pitting, greasy spot
- Cladosporium spp. - scab, sooty mold, fruit blemish, leaf spot
- Clasterosporium sp. - weak parasite
- Coniothecium spp. - leaf disease, stem disease
- Corynespora sp. -
- Curvularia sp. -
- Cylindrocladium sp. - fruit rot
- Exosporina sp. -
- * Fumago sp. - sooty mold
- * Fusarium spp. - gummosis, wilt, dieback, root, collar and foot rot, twig rot, fruit rot, seedling wilt, red rot of fruit, associated with with blight/canker symptoms and leaf lesions
- Geotrichum spp. - sour rot
- Gliocladium sp. - pink mold, fruit rot
- Heterosporium sp. - dry galls
- Oidium sp. - powdery mildew
- Oospora sp. - yeasty sour-rot of fruit
- Melanoglyphium sp. - twig disease
- Monilia sp. - leaf lamina infection and collapse
- Oidium sp. - powdery mildew
- Oospora sp. - fruit sour rot, on leaves
- Penicillium spp. - green, blue and pink mold; fruit rot
- Phymatotrichopsis sp. - root rot
- Ramularia sp. -
- Spegazzinia sp. - on orange leaf
- Stemphylium sp. - end rot of fruit
- Thielaviopsis sp. - black root rot
- Torula sp. -
- Trichoderma sp. - fruit rot, chocolate rot
- Triposporium sp. - on leaves
- Verticillium sp. - dieback complex

Deuteromycotina - Coelomycetes

Amylorosa sp. - fruit disease

Ascochyta sp. - gummosis, an often mild leaf spot, bark blotch

Botryodiplodia spp. - dieback, root rot, red-edge canker, stem-end rot

Camarosporium sp. - branch decay

Chaetophoma spp. - leaf spot complex, on foliage

* Colletotrichum spp. - anthracnose, dieback, fruit rot, twig lesions

Deuterophoma sp. - root rot, wilt, dieback, drying of foliage

Diplodia spp. - stem-end rot, dieback

Dothiorella sp. - stem-end rot, stem and twig rot and canker, gummosis

Gloeodus sp. - sooty blotch

Gloeosporium sp. - anthracnose

Haplosporella sp. - attack on living branches

Hendersonula sp. - canker, dieback, gummosis, wilt

Lasiodiplodia sp. - dieback, melanose, fruit and stem-end rot

Leptothyrium sp. - fruit and leaf flyspeck

Macrophoma sp. - twig lesion

Macrophomina sp. - charcoal root rot, ashy stem

Nothopatella sp. - large-branch and trunk canker

Pestalotia spp. - sunken leaf and twig spots

Pestalotiopsis sp. - on twigs

* Phoma spp. - leaf and stem disease, on foliage, black spots on fruit

Phomopsis sp. - melanose, post harvest fruit decay, on twigs

Phyllosticta spp. - leaf spot

Rhabdospora spp. - bark disease, secondary branch infection

Septoria spp. - leaf spot, fruit spot, tear-stain of fruit, fruit pit

Sirodothis sp. - on leaves

Sirothyrium sp. - leaf spotting

* Sphaceloma sp. - scab

Sphaeropsis sp. - branch knot, limb knot, fruit rot

Deuteromycotina - Other

Anthina sp. -

Rhizoctonia sp. - root rot, seedling damping-off, fruit brown rot

Sclerotium spp. - seedling blight, fruit rot, young plant rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot, splitting of pedicel, green scurf

Phycopeltis sp. - algal plaques on leaf

Strigula sp. - white lichen spot

Trentepohlia sp. - algal hairy growth

Parasitic Higher Plants

Cassytha sp. - pungent smelling dodder

Cuscuta spp. - common dodders

Dendropemom spp. - small parasitic woody bushes

Loranthus spp. - strong growing parasitic shrubs

Oryctanthus spp. - parasitic drooping shrubs

Phorodendron sp. - coarse and upright parasitic bushes on branches

Phthirusa spp. - pendant parasitic shrubs

Psittacanthus sp. - parasitic bush

Struthanthus spp. - drooping bushes parasitizing branches, mistletoes

Nematodes

Aphelenchoides spp. - nematode, on roots
Belonolaimus sp. - sting nematode, on roots
Criconemoides sp. - ring nematode, on roots
Helicotylenchus sp. - spiral nematode
Hemicycliophora sp. - nematode at roots
Longidorus sp. - nematode, on root
Meloidogyne sp. - root-knot nematode
Paratrichodorus sp. - stubby root nematode
Pratylenchus sp. - lesion nematode, on roots
Pseudohalenchus sp. - nematode, on roots
Radopholus sp. - burrowing nematode, causes spreading decline
Rotylenchus sp. - reniform nematode, on roots
Tylenchulus sp. - citrus nematode, causing slow decline
Xiphinema sp. - dagger nematode, on roots

Bacteria

Bacterium spp. - gumtiness of twig and branch
Erwinia sp. - bacterial spot of fruit
Pseudomonas spp. - leaf disease, tip blast, fruit black pit and blast
Xanthomonas sp. - citrus canker, bacterial scab on fruit

Viruses

Citrange stunt
Citrus likubin - could be MLO
Cristacortis
Exocortis
Fruit chlorosis and fruit spots
Greening - not common, could be MLO
Gummy bark
Gum pocket
Impietratura
Infectious chlorosis yellow vein disease
Leaf curl
Leaf mottle chlorosis
Multiple sprouting
Psorosis
Psorosis crinkly leaf
Ringspot
Satsuma
Scaly Butt (Exocortis) - on orange
Seedling yellows
Stubborn disease - could be MLO
Tatter Leaf virus
Tristeza virus - quick decline
Woody gall virus
Xyloporosis virus (cachexia)

Other

Copper deficiency - exanthema
Copper toxicity - star melanose from late season foliar applications
Iron deficiency - chlorosis

Magnesium deficiency - foliar bronzing
Mesophyll collapse - drought with drying winds
Molybdenum deficiency - yellow spot
Zinc deficiency - leaf mottle

Diseases of Unknown Etiology

** Unidentified root rot pathogen

CLUSIA SPP.

Myxomycetes

Physarum sp. - epiphyte

Oomycetes

Pythium sp. - root rot

Ascomycotina

Amazonia sp. - black leaf mildew

Amphisphaeria sp. - on twigs and leaves

Asterina sp. - black leaf-patches

Bertia sp. - on leaves

Clithris spp. - leaf spots

Coccomyces sp. - large leaf spots

Guignardia sp. - striking leaf spots

Lophodermium sp. - leaf disease

Meliola spp. - black leaf mildew

Mycosphaerella spp. - leaf spot

Parodiopsis sp. - black mildew

Stictis sp. - on decayed leaf spot and old petiole

Xylaria sp. - in aerial root and at base of old dying plant

Basidiomycotina - Uredinales

Uredo sp. - rust

Basidiomycotina - Other

Mycena sp. - leaf spot

Physalacria sp. - on decaying stalk

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot

Ellisiella sp. - on dead leaves

Helminthosporium sp. - leaf and petiole disease

Sporidesmium sp. - on leaves

Deuteromycotina - Coelomycetes

Ascochyta sp. - leaf spot

Botryodiplodia sp. - stem canker

Pestalotia spp. - sunken leaf spots

Phomopsis sp. - witches' broom

Phyllosticta spp. - leaf spot

Septogloeum sp. - leaf disease

Deuteromycotina - Other

Grallomyces sp. - commensal development with black mildew fungi

Rhizoctonia sp. - root rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Strigula sp. - algal tomentose spots on leaves

Trentepohlia sp. - algal hairy growth

COCCOLOBA SPP.

Oomycetes

Pythium sp. - root rot

Ascomycotina

Asterina sp. - black leaf-patches

Clypeotrabutia sp. - raised tar spots on leaves

Cryphonectria sp. -

Dictyonella sp. - grayish sooty mold

Endothia sp. - on roots, branch and trunk disease

Fabraea sp. - brown leaf spots

Glomerella sp. - anthracnose

Gnomonia sp. - leaf disease

Irenopsis sp. - black mildew

Lembosia spp. - black mildews

Meliola spp. - black mildews

Micropeltella sp. - moldy spots

Phyllachora sp. - anthracnose, tar spot, black stromata on leaves

Physalospora sp. - foliage disease

Rhytisma sp. - tar spot

Scolecopeltis sp. - black mildew

Stictus sp. - stem and leaf disease

Basidiomycotina - Uredinales

Uredo spp. - rust

Basidiomycotina - Other

Armillaria spp. - root rot

Oudemansiella sp. - on living and fallen trunks

Septobasidium spp. - felt fungus

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot

Cercospora sp. - leaf spot

Fusarium sp. - dieback

Helminthosporium sp. - leaf spot

Sporotrichum sp. - insect parasite

Verticicladium sp. - on leaves

Deuteromycotina - Coelomycetes

Botryodiplodia sp. - twig dieback

Colletotrichum sp. - anthracnose
Dendrophoma sp. - stem canker
Diplodia sp. - leaf spot
Diplodina sp. - leaf spot
Melasmia sp. - black leaf spots
Pestalotia sp. - leaf spot, on petioles
Phomopsis sp. - dieback, leaf spot
Phyllosticta spp. - purple leaf spots
Septoria sp. - leaf spot
Sphaeropsis sp. - stem canker

Deuteromycotina - Other

Rhizoctonia sp. - damping-off, basal stem rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot, green scurf
Strigula sp. - mottled gray lichen spots

Parasitic Higher Plants

Cassytha sp. - pungent smelling dodder
Oryctanthus spp. - parasitic woody plant
Phthirusa spp. - parasitic woody plant
Struthanthus spp. - vine-like parasitic bush

Nematodes

Rotylenchus sp. - reniform nematode

Viruses

Mottle symptoms and shoe-string leaf malformation

COCOS SPP.

Oomycetes

Phytophthora spp. - wilt; bud, petiole, leafstalk and peduncle rot
Pythium sp. - root rot, wilt

Ascomycotina

Botryosphaeria spp. - leaf spot, on roots and trunk
Capnodium sp. - sooty mold
Catacauma sp. - scabby leaf spot, tar spot
Ceratocystis spp. - stem bleeding, bleeding canker, bud rot
Chaetomium sp. - weak parasite associated with decay of old leaf
Echidnodes sp. - mildly parasitic black mildew
Endoconidiophora sp. - stem bleeding
Guignardia sp. -
Halosphaeria sp. - on fruit mesocarp washed up on shore
Herpotrichia sp. - felt
Hypoxyton sp. - bursting midribs of leaves
Laestadia sp. - leaf spot disease
Leptosphaeria sp. - diseased leaflet tips
Metasphaeria sp. - spots on leaves

Mycosphaerella sp. - leaf spot
Neohenningsia sp. - leafsheath disease
Phialea sp. - on nut
Physalospora spp. - leaf spot; on leaves, roots and trunks
Rosellinia sp. - root disease
Scoptria sp. - weak parasite on leaflets
Sphaerella spp. - leaf spots
Sphaerostilbe sp. - insect disease
Sphaerulina sp. -
Torpedospora sp. - on fruit exocarp washed up on shore
Ustilina sp. - root disease on old trees
Valsa spp. - root disease
Xylaria sp. - root attack

Basidiomycotina - Uredinales

Trichobasis sp. - leaflet rust

Basidiomycotina - Ustilaginales

Graphiola sp. - false smut on leaves

Basidiomycotina - Other

Armillaria sp. - root rot
Corticium sp. - stringy thread blight
Fomes spp. - friable rot, brown rot
Ganoderma sp. - butt rot, root disease, stem rot
Marasmiellus sp. - lethal bole rot
Marasmius sp. - thread blight
Pellicularia sp. - thread blight, black rot
Poria sp. -
Rigidoporus sp. - white root disease

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot
Aspergillus sp. -
Bipolaris sp. - leaf spot
Cephalosporium sp. - from spots on leaflets
Cercospora sp. - leaf spot
Curvularia sp. - leaf spot
Cylindrocladium sp. - leaf spot
Drechslera spp. - leaf spots
Endocalyx sp. - on petioles
Epicoccum sp. - leaf spot
Exosporium sp. - from leaf spot
Fusarium spp. - bud, stem, petiole, and root rot; husk infection
Gliocladium sp. - leaf rot
Graphium sp. - bud rot
Helminthosporium sp. - leaf spot
Macrosporium sp. - leaf spot
Memnomium sp. - scabby leaf spot
Microcera sp. - discoloration of root tissues
Oidium sp. - powdery mildew
Pyricularia sp. - small gray spot on leaflet

Ramularia sp. - leaf spot
Sporotrichum sp. - develops symptoms that suggests leaflet infections
Trichosporum sp. - recovered from palm insects

Deuteromycotina - Coelomycetes

Botryodiplodia sp. - inflorescence spot, fruit drop
Colletotrichum sp. - anthracnose, leaf edge infections
Cryptospora sp. - frond spot
Cytospora sp. - leaf blight, leaf spot
Diplodia sp. - leaf and stalk rot, leaf edge infections, dieback
Gloeosporium sp. - anthracnose, leaf spot
Lasiodiplodia sp. - nut rot
Lasmeniella sp. - on leaves
Macrophoma sp. - leaf spot, leaflet disease
Melanconium sp. - leaf spot
Pestalotia spp. - leaf blight, sunken gray leaf spots
Pestalotiopsis sp. - gray leaf spot
Phoma spp. - leaflet black spot
Phomopsis sp. - leaf spot, on nuts
Phyllosticta sp. - leaf spot
Sphaeropsis sp. - leaf spot, petiole infections

Deuteromycotina - Other

Rhizoctonia sp. - root rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot
Strigula spp. - varied lichen leaf spots

Parasitic Higher Plants

Cassytha sp. - pungent smelling dodder
Cuscuta sp. - dodder

Nematodes

Rhadinaphelenchus sp. - cause of redring, fatal nematode disease,
vectored by Rhynchophorus beetles
Scutellonema sp. -

Bacteria

Bacillus sp. - isolated from budrot
Xanthomonas sp. - bacterial bud blight, leaf blight

Viruses

Bronze-leaf drop
Malda folha - rolled and malformed leaves

Other

Cadang cadang - most likely caused by a viroid
Lethal yellows - MLO which is insect transmitted
Lightning strike - sometimes only kills bud = false budrot

Diseases of Unknown Etiology

Bud failure - possibly from rats, mechanical damage and old age
Gum splits - poor or no inflorescences formed
Tapering stem - probably poor nutrition
Yeast-like organisms causing leaf damaging infections
Yellowing with poor root growth - potash "hunger" or drought

COFFEA SPP. *

Zygomycotina

Mucor sp. - ripe stored fruit rot, moldy beans

Oomycetes

Blepharospora sp. - blue gangrene of stem cortex

Phytophthora sp. - fruit brown rot, pre-emergence damping-off

Pythium sp. - root rot, damping-off

Trachysphaera sp. - fruit spot, fruit rot

Ascomycotina

Aithaloderma sp. - scabby mold leaf spot

Anthostomella sp. - leaf spot, stem spot, dieback

Ashbya sp. -

Asterina spp. - black mildews

Botryotinia sp. - gray mold

Calostilbe sp. -

Capnodium spp. - sooty molds

Ceratocystis spp. - canker, wood stain

Clypeolum sp. - a blackening leaf disease

Cryptosphaerella sp. - on branch and stem

Cucurbitaria sp. - wound infection

Diatrypella sp. - branch disease

Dictyothyriella sp. - black mildew

Didymella sp. - branch disease, peduncle and fruit rot

Didymosphaeria sp. - on dieback branches

Dimerosporium sp. - hyperparasite of Capnodium

Euryachora sp. - cold region leaf spot

Gibberella spp. - bark disease

Glomerella sp. - dieback, leaf spot, anthracnose

Guignardia sp. -

Irenina sp. - mildew

Kalmusia spp. - on dead branches

Laestadia sp. - whitish leaf spot

Leptosphaeria sp. - leaf and fruit-branch disease

Leucothyridium sp. - branch disease

Limacina sp. - sooty mold

Lisea sp. - disease of green fruit epicarp

Lophiotrema sp. - rot of old bark

Massarina sp. - leaf spot, dieback

Meliola spp. - black mildews on leaves

Metasphaeria spp. - on branches, fruits and leaf lesions

Micropeltis spp. - black mildews

Microthyrium sp. - black mold of leaves and stems
Mycosphaerella sp. - leafspots, brown eyespot
Nectria spp. - branch disease, pruning disease, machete-cut disease
Nematospora sp. - seed or bean injury, yeast spot
Ophiobolus sp. -
Oraniella sp. - common on branches
Phaeosaccardinula sp. - leaf disease, scabby leaf spot
Physalospora spp. - on dieback tissues in wet season
Pseudodiaporthe spp. - leaf spot, dieback
Rosellinia spp. - black root rots, white root rot
Saccardinula spp. - moldy leaf spots
Saccharomyces spp. - yeasts, part of fruit rot complexes
Sclerotinia sp. -
Seuratia sp. - on leaves
Sphaerella sp. - leaf infection
Sphaerotheca sp. - powdery mildew, on branch
Thyridium sp. - branch and trunk rot
Ustulina sp. -
Valsa sp. - dieback complex
Venturia sp. - scab
Vivianella sp. - from branch lesions
Xylaria spp. - tree decline complex
Zukalia spp. - hyperparasites on Meliola black mildews on leaves

Basidiomycotina - Uredinales

Aecidium sp. - rust
Hemileia spp. - yellow leaf rust, gray rust

Basidiomycotina - Other

Aleurodiscus sp. - branch disease
Armillaria spp. - shoestring and mushroom root rots
Auricularia spp. - on dead pruned wood
Botryobasidium spp. - pink disease, damping-off
Ceratobasidium sp. - thread blight
Corticium spp. - pink disease, fruit drop, thread blight
Crinipellis sp. - wood attack, on main trunk
Cyathus sp. - birds-nest fungus
Flammula sp. - associated with rot of old cut trunks
Fomes spp. - root rot, trunk rot disease
Ganoderma sp. - accompanying death of old trees
Gloeoporus sp. - on old pruned branches
Helicobasidium sp. - collar canker
Hirneola sp. - bark rot complex
Hymenochaete sp. - stem canker of young trees
Lentinus spp. - decay of stump and base of aged trees
Lenzites sp. - leather-cap rot of old tree
Marasmius spp. - cord blights
* Mycena sp. - American leaf spot disease, fruit spots
Nolanea sp. - on leaf
Odontia sp. - branch and trunk disease
Pellicularia sp. - web-thread blight and rot of leaf, fruit, & branch
Peniphora sp. -

Pistillaria sp. - wood rot
Pleurotus sp. - decay on old tree
Polyporus spp. - root and trunk-base rots
Polystictus sp. - root disease
Poria sp. - root rot
Rhizomorpha sp. - rhizomorphic fungus on decaying roots
Schizophyllum spp. - secondary branch decay after dieback
Septobasidium sp. -
Stereum spp. - trunk decay, on pruned twigs and branches
Thanatephorus sp. - damping-off
Trametes sp. - large branch attack

Deuteromycotina - Hyphomycetes

- Acremonium sp. -
** Alternaria sp. - associated with leaf spot lesions
Antennaria sp. - sooty mold
Aspergillopsis sp. - on decayed leaf and harvested fruit
Aspergillus spp. - leaf rot, black rot of fruit
Atichia sp. - black mildew
Beauveria sp. - parasite of Stephanoderes berry borers
Botrytis sp. - warty disease, on fruit
* Cephalosporium spp. - branch and leaf disease, zonate leaf spot
* Cercospora sp. - brown eyespot, leaf spot, brown spot of berries
Chaetostroma sp. - on foliage
Cladosporium sp. - on older leaves, bean infection affecting flavor
Curvularia sp. - causes a slow spreading canker
Cylindrocarpon sp. - reddish branch canker
Epicoccum sp. - on epicarp of fruits
Fusarium spp. - seedling blight, bark disease, neck rot, stem canker,
on moldy bean shells, wilt, dieback, leaf spots
Helminthosporium sp. - small black leaf spot
Monilia sp. - harvested fruit rot
Myrothecium spp. - leaf spot, stem girdle
Nigrospora sp. - blackening fruit rot, from green-fruit drop
Penicillium spp. - seedbed damping-off, fruit rot, leaf spot, dieback
Ramularia sp. - zonate leaf spot
Rhombostilbella sp. - on leaf
Sarcopodium sp. - mold, on leaves
Speira sp. - fruit rot
Sporhelminthium sp. - leaf spot, green flush stem spots
Stilbum sp. - leaf spot
Torula sp. - wood stain following injury, rare
Trichoderma sp. - branch canker, root invasion
Trichothecium sp. - pink mold
Triposporium sp. - sooty mold, on foliage
Tubercularia sp. - reddish-brown stem canker
Verticillium sp. - wilt
Volutella sp. - spots on leaves and fruit

Deuteromycotina - Coelomycetes

- Aschersonia sp. -
Ascochyta sp. - darkedged brown leaf spot, leaf blight

- Botryodiplodia spp. - dieback, sclerotia on stems
Chaetophoma sp. - stem lesions
 * Colletotrichum spp. - anthracnose, brown blight, flower blast, dieback
 coffee berry disease
Coniothyrium sp. - leaf spot, fruit rot
Fusicoccum sp. - on mummied fruit
Gloeosporium sp. - leaf spot
Hendersonia sp. - mild leaf disease
Leptothyrium sp. - fruit skin flyspeck
Macrophomina sp. -
Myxosporium sp. - in old leaf spots, on bark of dieback fruit branch
 * Pestalotia spp. - dieback, fruit rot, leaf spot
Phoma spp. - black lesion of fruit, tip-blast of branches, brown spot
Phomopsis sp. - leaf spot, fruit rot
 * Phyllosticta spp. - leaf spot, shot hole, derrite
Septoria sp. - leaf spot, green stem spot
Trachythyriolum sp. - on leaves

Deuteromycotina - Other

- * Rhizoctonia spp. - damping-off, seedling stem lesions, root disease
 web blight, cobweb disease
Sclerotium spp. - target-board leaf spot, ground-rot

Algae and Lichens

- Cephaleuros sp. - algal leaf spot, "red rust"
Phycopeltis sp. - tomentose algal growths on old tree branches
Strigula spp. - varied lichen leaf spots
Trentepohlia sp. - algal hair-like growths

Parasitic Higher Plants

- Cassytha sp. - pungent smelling dodder
Clusia spp. - tree-like smothering epiphytes
Cuscuta sp. - dodder
Loranthus spp. - mistletoe-like bushes parasitizing branches
 Mosses - can result in smothering effects
Oryctanthus sp. - a creeping mistletoe-like branch parasite
Phoradendron spp. - coarse growing parasitic bushes
Phthirusa spp. - vine-like, weeping woody parasites
Porella sp. - leafy liverwort smother
Struthanthus sp. - blume, parasitic vine or woody drooping perennial

Nematodes

- Aphelenchoides spp. - rhizosphere inhabitants, questionably injurious
Aphelenchus spp. - rhizosphere inhabitants, questionably injurious
Criconemoides sp. - ring nematodes, in root area
Ditylenchus sp. - on roots
Helicotylenchus sp. - spiral nematode, on roots
Hemicriconemoides sp. - from soil next to roots
Longidorus sp. - on roots
Meloidogyne spp. - root-knot nematodes
Pratylenchus spp. - lesion nematodes, on roots
Psilenchus sp. - coffee nematode

Radopholus sp. - burrowing nematode, decline
Rotylenchus sp. - spiral nematode, in rhizosphere
Trichodorus sp. - stubby root nematode
Tylenchorhynchus sp. - stunt nematode, on roots
Xiphinema spp. - dagger nematodes, in rhizosphere

Bacteria

Bacillus sp. -
Phytophthora sp. - phloem necrosis, red phloem, wilt
Pseudomonas sp. - bacterial halo-blight

Viruses

Blister spot virus - graft and aphid transmitted
Bottle virus - swollen stem
Coffee ringspot virus -
Crespera virus -
Grease or oil spot virus -
Rugose virus -

Other

Boron deficiency - dead growing tips, aborted flowers, leaf necrosis
Calcium deficiency - paling of green leaves, fruit drop
Iron deficiency - leaf chlorosis becoming whitish, no fruiting
Manganese deficiency - leaf spotting, rare
Zinc deficiency - little leaf, stunt, no fruiting

Diseases of Unknown Etiology

- Unidentified bacteria - from root and trunk tissues
- ** Unidentified stem blight/vascular wilt pathogen
- Weakspot - an arrested fungal leaf spot
- Witches' broom

COLUABRINA SPP. *

Basidiomycotina - Uredinales

Phakopsora sp. -

Deuteromycotina - Hyphomycetes

- ** Alternaria sp. - associated with stem blight/damping-off symptoms on seedlings, associated with leaf spot lesions
- * Cercopora sp. - leaf spot
- ** Fusarium sp. - associated with stem blight, damping-off and vascular wilt symptoms
- ** Myrothecium sp. - associated with leaf spot lesions

Deuteromycotina - Coelomycetes

- ** Colletotrichum sp. - anthracnose, associated with stem blight symptoms

COMOCLADIA SPP.

CORDIA SPP.

Ascomycotina

Elsinoe sp. - scab

Erysiphe sp. - powdery mildew

Basidiomycotina - Uredinales

Alveolaria sp. - rust

Puccinia sp. - rust

Uromyces sp. - rust

Basidiomycotina - Other

Armillaria sp. - root rot

Deuteromycotina - Hyphomycetes

Phymatotrichopsis sp. - root rot

Deuteromycotina - Coelomycetes

Phyllosticta sp. - leaf spot

Algae and Lichens

Cephaleuros sp. - algal leaf spot, green scurf

CRESCENTIA SPP.

Zygomycotina

Rhizopus sp. - on stored, poorly cured calabashes seen in markets

Ascomycotina

Calonectria sp. - on calabash shell

Hysterium sp. - scab-like lesion on fruit

Irenina sp. - scanty black mildew

Meliola sp. - black mildew

Phyllachora sp. - black leaf spot

Basidiomycotina - Other

Hydnum sp. - rot at base of old tree

Marasmius spp. - cord blights

Polyporus spp. - trunk wood rot

Xanthochrous sp. - trunk rot

Deuteromycotina - Hyphomycetes

Bactridiopsis - on leaves and small branches

Cercospora sp. - leaf spot

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose

Phyllosticta sp. - small leaf spots

Algae and Lichens

Algae - many types, in rough bark

Strigula spp. - whitish lichen leaf spots

Parasitic Higher Plants

Cassytha sp. - dodder, in tops of tree

Cuscuta sp. - dodder

Epiphytes of many types - bromeliads, mosses, orchids

Loranthus spp. - a coarse woody bush parasitic on branches

Phoradendron spp. - a woody bush parasitic on branches

Struthanthus spp. - small bush parasite

CUPANIA SPP.

DELONIX SPP.

Oomycetes

Phytophthora sp. - root disease in nursery

Ascomycotina

Botryosphaeria sp. - small-limb canker, dieback

Glomerella sp. - pod drop and leaf disease

Meliola sp. - black mildew

Basidiomycotina - Uredinales

Ravenelia sp. - rust (autoecious)

Basidiomycotina - Other

Armillaria spp. - root rot

Fomes spp. - trunk and stump rots

Ganoderma sp. - trunk base attack of old trees

Hexagonia sp. - on wood

Marasmiellus sp. - branch infection

Phanerochaete sp. -

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf spot

Ciliciopodium sp. - on a branch

Fusarium sp. - wood rot

Phymatotrichum sp. - root rot

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose

Diplodia sp. - dieback

Gloeosporium sp. - anthracnose

Pestalotia sp. - leaf and petiole spot

Phomopsis sp. - twig dieback

Phyllosticta sp. - leaf spot

Sphaeropsis sp. - canker

Deuteromycotina - Other

Rhizoctonia sp. - root rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Strigula sp. - common lichen spot on leaves and petioles

Parasitic Higher Plants

Cassytha sp. - green dodder

Cuscuta spp. - yellow dodders

Phoradendron spp. - bushy parasite

Phthirusa sp. - semi-pendant bush parasite

Psittacanthus spp. - large bush parasites causing "wood rose"

Bacteria

Agrobacterium sp. - crown gall in nursery plants

DIDYMOPANAX SPP.

Deuteromycotina - Hyphomycetes

Fusarium sp. - root and basal stem rot

EUCALYPTUS SPP. *

Chytridiomycetes

Urophlyctis sp. - blight of lush shoots

Myxomycetes

Reticularia sp. - on decorticated log

Oomycetes

* Phytophthora spp. - decline, root rot, branch & stem lesion, gummosis
damping-off, associated with leaf spot lesions

Pythium sp. - root rot, seedling damping-off

Ascomycotina

Arachnomyces sp. - on fallen leaves

Aulographina sp. - leaf spot

Bagnisiopsis sp. - twig disease

Botryosphaeria spp. - basal & branch canker, twig dieback & blight

Botryotinia sp. - foliar necrosis

Bysotheciella sp. - on foliage

Calonectria spp. - collar rot

Ceratocystis sp. - sapwood stain

Chaetosphaeria spp. - on leaves, decaying bark

Coccomyces sp. - on leaves

Cryphonectria spp. - basal canker, stem canker

Dasyscyphus sp. -

Diaporthe spp. - on stems, twigs, limbs and leaves, gummy canker

Didymosphaeria spp. - on leaves, on limbs, branch disease

Discohainesia sp. - on leaves
Emericella sp. - on decaying leaves
Endothia sp. - branch and twig canker
Erysiphe sp. - powdery mildew
Eutypa sp. - log and stump decay
Eutypella sp. - bark disease
Fracchiæa spp. - on dead stems
Glomerella sp. - dieback
Gloniopsis sp. - on lumber and cut stakes
Glyphium sp. - on dead leaves
Gnomoniella sp. -
Helotium spp. - on dead wood
Hypocrea sp. - twig disease
Hypocreopsis sp. - on twigs
Hypoderma sp. - on leaves
Hypoxyton sp. - on dead branch
Hysterium sp. - on wood
Kalmusia spp. - on cut stakes, on dying stems
Laestadia sp. - on fallen leaves and bark
Lecanidion sp. - on bark of old branches
Lembosia sp. -
Metasphaeria sp. - on twigs
Microthyrium sp. - mold on leaves
Mollisia spp. - on dead limbs, on dead leaves
Mycosphaerella sp. - leaf spot
Nectria spp. - on limbs, on wood, branch attack
Nummularia sp. - under dead bark on post
Ophiostoma sp. -
Orbilia sp. - on wood, on fallen branches
Pezizella spp. - twig and leaf disease
Phaeocreopsis sp. - on atrophied branches
Phragmodothidea sp. - on bark
Phyllachora sp. - leaf spot, on twigs
Physalospora spp. - on leaves and twigs, dieback
Pleonectria sp. - bark disease
Pleosphaeria sp. - on limbs
Propolis sp. - on leaves
Rosellinia spp. - on decaying bark, root rots
Schizoparme sp. - on leaves
Schizoxylon sp. - on living diseased branch
Scleroderris sp. - on limbs
Sclerotinia sp. - inflorescence and fruit rot
Sphaerotheca sp. - powdery mildew
Sphaerulina sp. -
Stomiopeltis sp. - on leaves
Valsa sp. - on dead bark and twigs, dieback
Valsaria sp. - on twigs
Xylaria sp. - on dead wood

Basidiomycotina - Uredinales

Puccinia sp. - rust
Uredo sp. - rust

Basidiomycotina - Other

Armillaria spp. - root rot, collar rot
Aseroe sp. -
Athelia sp. - on leaves
Basidioradulum sp. - on wood
Cladoderris sp. - branch and trunk disease
Claudopus sp. - log rot
Clavaria sp. - capsule decay
Corticium spp. - pink disease, leaf rot, on leaves
Dacrymyces sp. - on log
Fomes spp. - heart rots
Ganoderma spp. - heart, collar and root rot, delimited rot of base
Gloeoporus sp. - mushroom root rot
Laetiporus sp. -
Lepiota sp. - on rotted log
Marasmius sp. - stump rot
Mycena spp. - log, leaf and stem decay
Omphalia sp. - on fruit
Peniophora sp. - on wood
Phaeolus sp. -
Phellinus spp. -
Pisolithus sp. - forms mycorrhizae
Pleurotus sp. -
Polyporus spp. - brown heart, butt rot
Polystictis sp. - wood rot
Poria spp. - root infection, "tuckahoe" development, wood rot
Pseudophaeolus sp. - blight
Ramaria sp. - canker
Schizophyllum sp. - on dead branches
Schizopora sp. -
Scleroderma sp. - rot of stump and base of live tree
Septobasidium sp. - felt fungus
Stereum spp. - white rot
Trametes spp. - white rot, wood rot
Wolfiporia sp. - on wood

Deuteromycotina - Hyphomycetes

- * Alternaria sp. - leaf spot
- Anungitea sp. - on leaves
- Beltrania spp. - on leaves, on leaf litter
- Beltraniella sp. - on leaves
- Botryotrichum sp. - on dead bark
- Botrytis spp. - gray mold of seedlings, foliage blight, twig disease
- Camposporium sp. - on bark
- Cephalothecium sp. - probably saprophytic
- * Cercospora spp. - common leaf spot, large angular leaf spot
- Chaetopsina spp. - on leaves
- Chelisporium sp. - on twigs and stakes
- Circinotrichum spp. - on leaf litter, on leaves
- Cladosporium sp. - often found on decadent leaves
- Codinaea spp. - on leaves
- Coniothecium sp. - branch disease

- Conoplea sp. - on leaves
Coremium sp. - leaf disease
Corynespora sp. - leaf spot
Cryptophiale spp. - on leaves
** Curvularia sp. - associated with leaf spot lesions
Cylindrocladium spp. - foliar spot & blight, root & trunk rot, stem lesions, seedling damping-off or blight
* Fusarium spp. - seedling blight and wilt; root, stem and inflorescence rot, twig infection, damping-off
Gyrothrix sp. - on leaves
Helicosporium sp. - on bark
Helminthosporium sp. - wood infection
Hemibeltrania sp. - on leaf litter
Heterosporium sp. - on leaves
Lobatopedis sp. - on fallen leaves
Microdochium spp. - on leaves
Mycoleptodiscus sp. - on leaves
** Myrothecium sp. - associated with damping-off and leaf spot lesions
* Oidium sp. - powdery mildew, leaf crinkle
Olpitrichum sp. - on leaf litter
Oramasia sp. - on leaves
Penicillium sp. - on leaves
Phialocephala sp. - on leaves
Phymatotrichopsis sp. - root rot
Polyscytalum sp. - on leaves
Pseudobeltrania sp. - on leaves
Pseudomicrodochium sp. - on leaves
Ramichloridium sp. - on leaf litter
Ramularia sp. -
Scolecobasidium sp. - on leaves
** Scolecotrichum sp. - associated with damped-off seedlings
Selenosporella sp. - on leaves
Septonema spp. - leaf disease in nursery, trunk lesion, branch attack
Septosporium sp. - on leaves
Speiropsis sp. - on leaves
Stilbella sp. - stem gall
Taeniolella sp. - on trunks
Troposporella sp. - on leaves
Verticillium sp. - on leaves, seedling wilt
Volutella sp. - on twigs
Wiesneriomyces sp. - on leaf litter, on leaves
Zygosporium sp. - on leaves
- Deuteromycotina - Coelomycetes**
Amerosporium sp. - leaf spot
Aplosporella sp. -
Ceuthospora sp. - on withered leaves
* Colletotrichum spp. - anthracnose of leaves, capsules and branches, associated with damped-off seedlings
Coniella sp. - on leaves
Coniothyrium spp. - branch diseases
Cryptosporium spp. - leaf spot, on limbs, branch disease

Cylindrosporium sp. - foliage disease
Cytospora spp. - on dead and dying branches
Dendrophoma sp. - on fallen leaves
Diplodia spp. - dieback, on limbs and bark, dieback, branch disease
Discosia sp. - on leaves
Dothiorella sp. - seed capsule abortion, twig dieback
Eriosporella sp. - on leaves
Fairmaniella sp. - on fruit and leaves, erumpent canker
Fusicoccum sp. - stem canker
Gamphonema sp. - on leaves
Gloeosporium sp. - anthracnose, on fruits
Harknessia spp. - leaf and twig blight, on fruit
Hendersonia sp. - twig dieback, on limbs, branch attack, leaf spot
Macrophoma sp. - twig dieback, leaf spot
Melanconium spp. - on limbs, branch disease
Microdiplodia sp. - on leaves
Microsphaeropsis sp. - on fallen leaves
Monochaetia sp. - leaf disease
Mycotribulus sp. - on leaves
Pestalotia spp. - leaf spot, leaf diseases, top kill of seedlings
Pestalotiopsis sp. - leaf spot
Phaeoseptoria sp. -
Phoma sp. - a large leaf spot
* Phomopsis sp. - leaf spot, associated with damping-off and stem canker
Phyllosticta spp. - leaf spot
Pilidium sp. - on leaves
Pleurophomopsis sp. - on decorticated wood
Satchmopsis sp. - on leaves
Sclerotiopsis sp. - rot of decaying leaves
Seimatosporium sp. - on leaves
Septoria spp. - leaf spot, defoliation
Sonderhenia sp. - on leaves
Sphaeronaema sp. - on leaves, branch disease
* Sphaeropsis spp. - dieback, stem gall, on leaves
Stagonosporium sp. - on cut stakes without bark
Truncatella sp. - on leaves
Waydora sp. - on leaves

Deuteromycotina - Other

Rhizoctonia sp. - damping-off, root and basal stem rot
Sclerotium sp. - decay of leaves

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Parasitic Higher Plants

Loranthus spp. - mistletoe-like bushes parasitizing branches

Nematodes

Aphelenchoides spp. - rhizosphere nematodes
Aphelenchus spp. - root nematode
Axonchium sp. - a root nematode

Ditylenchus sp. - from root zone
Meloidogyne spp. - root-knot nematodes
Tylenchus sp. - rhizosphere nematode

Bacteria

Agrobacterium sp. - crown gall in nursery plants
Xanthomonas sp. - leaf spot, dieback of twigs

Viruses

Eucalyptus choroisis virus

GLIRICIDIA SPP. *

Ascomycotina

Ceratocystis sp. - wood stain
Meliola sp. - discrete black mildew spots
Nectria spp. - on limbs, on wood, branch attack
Rosellinia spp. - root rots

Basidiomycotina - Other

Corticium sp. - leaf rot, branch bark infections
Cypbella sp. - small fungus cup associated with dieback
Fomes spp. - root rots
Ganoderma sp. - rot of old tree base
Lenzites sp. - wood rot
Pellicularia sp. - thread-web blight
Poria sp. - on dead branches
Trametes spp. - wood rot on felled trees

Deuteromycotina - Hyphomycetes

Cercospora spp. - leaf spot, large leaf spot, defoliation
Fusarium sp. - stem canker, twig-tip disease
Isariopsis sp. - leaf spot

Deuteromycotina - Coelomycetes

Botryodiplodia sp. - common dieback
Colletotrichum spp. - foliage and fruit anthracnose
Pestalotia sp. - gummosis
Phoma sp. - gummosis
Phomopsis sp. - dieback

Deuteromycotina - Other

Rhizoctonia sp. - gummosis, disease inhibiting rooting of cuttings

Parasitic Higher Plants

Loranthus spp. - large mistletoe-like parasite
Phthirusa spp. - recumbent Phanerogamic parasites
Psittacanthus sp. - mistletoe-like parasite

GREVILLEA SPP.

Oomycetes

Phytophthora sp. - root rot

Pythium sp. - root rot

Ascomycotina

Asterina sp. - black leaf spot

Botryosphaeria spp. - dieback, gumming, on limbs, on branches

Nectria sp. -

Rhytidhysterium sp. -

Seuratia sp. - anthracnose, black leaf spot

Ustilina sp. -

Basidiomycotina - Other

Armillaria spp. - root rot

Ganoderma sp. - root and basal stem rot

Deuteromycotina - Hyphomycetes

Fusarium sp. - root rot

Phymatotrichopsis sp. - root rot

Ramularia sp. - leaf spot

Deuteromycotina - Coelomycetes

Diplodia sp. - dieback, gumming

Macrophomina sp. - charcoal root rot

Deuteromycotina - Other

Rhizoctonia sp. - basal stem rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot, green scurf

GUAIACUM SPP.

Oomycetes

Pythium sp. - root rot

Basidiomycotina - Other

Ganoderma sp. - butt rot

Deuteromycotina - Hyphomycetes

Fusarium sp. - root rot

GUAZUMA SPP.

HAEMATOXYLUM SPP.

HIBISCUS SPP. *

Oomycetes

- Phytophthora spp. - leaf and stem blight; collar, root, foot and cutting rot; wilt; root failure of cuttings; damping-off
Pythium spp. - root rot, cutting rot, root failure of cuttings

Zygomycotina

- Choanephora spp. - blossom blight, leaf disease

Ascomycotina

- Botryosphaeria spp. - canker, dieback, leaf spot, stem rot
Byssosphaeria sp. -
Capnodium spp. - sooty molds
Dactylospora sp. -
Diaporthe spp. - on twigs, limbs and branches, pod disease
Diatrypella sp. -
Dothidea sp. -
Erysiphe sp. - powdery mildew
Glomerella sp. - anthracnose, black leaf spot
Halosphaeria sp. - on dead limbs, drift wood and pilings
Hydronectria sp. - on dead limbs, on wood and dead bark
Hysteropatella sp. -
Irenopsis sp. - black mildew
Lecanidion sp. - on stems
Leptosphaeria spp. - leaf spot, on submerged limbs
Leveillula sp. - powdery mildew
Lignincola sp. - on submerged limbs
Lulworthia sp. - on submerged limbs
Meliola sp. - black mildew
Metasphaeria sp. - on wood of submerged branch
Microsphaera spp. - powdery mildew
Microthyriella sp. -
Mollisia sp. -
Mycosphaerella sp. -
Nectria spp. - on limbs, on bark, branch canker, dieback
Ophiobolus sp. - on old dead stem
Patellaria sp. - on stems
Physalospora spp. - leaf spot, dieback, stem canker, branch disease
Pleosphaerulina sp. - stem and leaf disease
Rhytidhysterium sp. -
Rosellinia spp. - black root rot, white root rot
Sclerotinia spp. - stem rot, calyx rot, seedling collapse, collar rot
flower bud rot and drop
Sphaerostilbe sp. - root disease, insects associated with injury
Sphaerotheca sp. - powdery mildew
Tryblidiella sp. - in dieback complex
Valsaria sp. -
Xylaria sp. - wilt, root disease

Basidiomycotina - Uredinales

- Aecidium sp. - rust

Kuehneola sp. - rust (autoecious)
Puccinia spp. - rusts (autoecious and heteroecious = aecial host)

Basidiomycotina - Other

Armillaria spp. - root rots, mushroom root rot
Auricularia sp. -
Botryobasidium spp. - stem canker, web blight
Campanella sp. -
Corticium sp. - branch pink disease, web blight
Crepidotus spp. -
Dendrophora sp. - on wood
Galerina sp. - on limbs
Mycena sp. - luminescent leaf spot
Pellicularia spp. - thread blight, large zonate leaf spot, on old stem
Pleuroflammula sp. -
Scytinostroma sp. -
Thanatephorus sp. - web blight, target spot, stem canker

Deuteromycotina - Hyphomycetes

Acrostalagmus sp. - parasite of sucking insects
* Alternaria spp. - small leaf spot, black stem lesion and pod streak,
associated with stem blight/damping-off symptoms
Aspergillus spp. - flower and pod injury
Aureobasidium sp. -
Botrytis spp. - gray mold blight, stem canker, leaf spot, flower rot
Cercospora spp. - leaf spots, defoliation, calyx spot, sooty patches
Cladosporium sp. - leaf edge infections, on moldy pods in markets
Cristulariella sp. - zonate leaf spot
Curvularia sp. - leaf spot
Cylindrocladium sp. - stem and leaf disease, leaf spot
* Fusarium spp. - dieback, wilt, root, fruit stem & cortex rot, on seeds,
associated with stem blight/damping-off symptoms
Fusoma sp. - stem disease
Helminthosporium sp. - large leaf spot
Myrothecium spp. - leaf spot
Oidiopsis sp. - powdery mildew
Oidium sp. - powdery mildew
Penicillium sp. - seed-borne disease
Periconia sp. -
Phymatotrichopsis sp. - root rot
Pseudocercospora sp. - leaf spot
Thielaviopsis sp. - root rot
Trichoderma sp. - severe root rot, in dieback complex after pruning
Trichothecium sp. - leaf spot, rare
Tubercularia sp. -
Verticillium spp. - wilt
Volutella sp. - canker, brown rot
Xenosporium sp. - on stems

Deuteromycotina - Coelomycetes

Aplosporella sp. - on limbs
Ascochyta spp. - leaf spot, leaf blight, pod spot

Botryodiplodia sp. - stem canker, dieback, pod rot
Camarosporium sp. - on twigs
Colletotrichum spp. - common anthracnose, dieback, stem canker
Coniothyrium spp. - dieback, on twigs
Cytosporina sp. -
Dendrophoma sp. - leaf spot
Diplodia spp. - leaf spot, on limbs and branches, stem rot
Diplodina sp. - on twigs
Gloeosporium sp. - black leaf spot
Lasiodiplodia sp. -
Macrophoma sp. - leaf spot
Macrophomina sp. - stem blight, charcoal rot, dry rot, ashy stem
Microxyphiella sp. - leaf disease
Pestalotia sp. - part of dieback complex
Phoma spp. - black stem lesions, on submerged limb, blight
Phomopsis spp. - limb dieback, leaf spot
Phyllosticta spp. - leaf spot, leaf blight
Rhabdospora sp. - on stems
Septoria sp. - leaf spot
Sphaeropsis sp. - witches' broom

Deuteromycotina - Other

Rhizoctonia spp. - damping-off, root and stem rot, leaf blight, cutting disease, nursery bed collar rot, web blight, target leaf spot

Sclerotium sp. - Southern blight, collar rot, ashy stem blight

Algae and Lichens

Buellia sp. - on dead wood

Cephaleuros sp. - green scurf, algae leaf spot

Strigula sp. - lichen white spot

Trentepohlia sp. - brownish hair-like tufts of alga on old branches

Parasitic Higher Plants

Cassytha sp. - green dodder, love-vine

Cuscuta sp. - common yellow dodder, spaghetti vine

Phthirusa sp. - phanerogamic parasite

Struthanthus sp. - woody vine-like parasite

Nematodes

Aphelenchoides sp. - foliar nematode

Hoplolaimus sp. - lance nematode

Meloidogyne spp. - root-knot nematodes

Paratylenchus sp. - pin nematodes, in rhizosphere

Rotylenchulus sp. - reniform nematode

Bacteria

Agrobacterium sp. - crown gall

Pseudomonas spp. - bacterial wilt, leaf spot

Xanthomonas sp. - angular leaf spot

Viruses

Abutilon mosaic virus
Black splash virus
Brazilian tobacco streak virus
Cotton anthocyanosis virus - stunting, chlorosis
Euphorbia mosaic virus - leaf mottle, leaf malformation
Hibiscus ringspot virus
Hibiscus yellow vein mosaic virus
Okra mosaic virus
Sida yellow variegation virus
Tobacco leaf curl virus

Other

Chlorosis - minor element deficiencies
Lightning strike - circular areas of plants dead

Diseases of Unknown Etiology

Bud chlorosis disease - ending in bud death, probably physiological
Pod tip shrivel and blackening - probably physiological
Unidentified algae - excessive growth inhibited rooting of cuttings

HURA SPP.

Ascomycotina

Irenopsis sp. - black mildew
Leptosphaeria spp. - leaf spot, often small lesions
Meliola sp. - black mildew
Parodiopsis sp. - black mildew spots
Valsaria sp. - branch canker

Basidiomycotina - Other

Fomes sp. - trunk rot of cut or fallen trees
Poria sp. - on fallen branch

Deuteromycotina - Hyphomycetes

Cercospora spp. - leaf spots
Helminthosporium sp. - leaf spotting that may become confluent

Deuteromycotina - Coelomycetes

Colletotrichum sp. - common anthracnose leaf spot

Parasitic Higher Plants

Cuscuta sp. - yellow brittle dodder

Diseases of Unknown Etiology

Dieback - saprophytic bacteria and fungi isolated from branches

INGA SPP.

Ascomycotina

- Antennaria spp. - sooty molds
- Asteridium sp. - black mildew
- Belonopsis sp. - leaf spot
- Calothyrium sp. - leaf disease
- Ceratospermopsis sp. - fumago, sooty mold
- Creonectria sp. - canker
- Diatractium sp. - large dark leafspots
- Dimerosporium sp. - black mildew
- Elsinoe sp. - spot anthracnose
- Glomerella sp. - anthracnose
- Gloniella sp. - leaf spot
- Guignardia sp. - leaf spot, stem spot
- Irenina sp. - black mildew
- Irenopsis sp. - black mildew
- Linospora sp. - leaf spot
- Meliola spp. - black mildew diseases
- Mycosphaerella sp. - on fallen leaves
- Nectria sp. - branch canker
- Nematospora sp. - pod disease
- Parodiopsis spp. - black mildews
- Perisporina spp. - black mildews
- Phaeosaccardinula sp. - sooty mold
- Phyllachora sp. - shiny-black leaf spot
- Polystomella sp. - leaf disease
- Rosellinia spp. - black root rot, white root rot
- Scolecopeltis sp. - black leaf spot
- Thallochaete sp. - leaf disease
- Trabutia sp. - crusty leaf spot
- Xylaria spp. - associated with dieback, wood rot, root rot
- Zukalia sp. - on foliage

Basidiomycotina - Uredinales

- Chaconia sp. - common leaf and stem rust
- Dicheirinia sp. - leaf rust
- Uredo sp. - rust

Basidiomycotina - Other

- Auricularia sp. - on fallen trunk, wood rot
- Corticium sp. - pink disease
- Helicobasidium sp. - wood rot
- Henningsomyces sp. - wood rot
- Hydnum sp. - on old roots of fallen tree
- Marasmius spp. - black horse-hair blight, white horse-hair blight
- Mycena sp. - luminescent leaf spot
- Pellicularia spp. - target leaf spot, leaf rot
- Poria sp. - on old dead exposed root
- Schizophyllum sp. - near ends of exposed roots
- Septobasidium spp. - stem-bark diseases
- Stereum sp. - wood rot

Deuteromycotina - Hyphomycetes

Arthrobotryum sp. - stem infection

Cercospora sp. - leaf spot

Eriomycopsis sp. - on foliage

Fusarium spp. - stem and twig cankers, dieback complex

Oidium sp. - powdery mildew, ash disease

Septoidium sp. - leaf disease

Verticillium sp. - wilt of young trees

Deuteromycotina - Coelomycetes

Actinothyrium sp. - on leaf lamina

Botryodiplodia spp. - dieback, pod rots, leaf diseases

Colletotrichum sp. - anthracnose

Diplodia spp. - dieback, pod rots, leaf diseases

Melasmia sp. - leaf disease

Microstroma sp. - common witches' broom

Microxyphiella sp. - tufts at base of main leaflet vein

Pestalotia spp. - stem and leaf lesions

Phyllosticta sp. - leaf spot

Septoria sp. - leaf spot

Sphaceloma sp. - spot anthracnose

Xenochora sp. - stem and leaf disease

Algae and Lichens

Cephaleuros sp. - common algae leaf spot

Gleocapsa sp. - alga in chronically "wet branch cleft"

Spirogyra sp. - alga in chronically "wet branch cleft"

Stomatochroon sp. - alga, may be systemic in leaf

Parasitic Higher Plants

Cuscuta sp. - hyperparasite of Loranthus sp.

Loranthus sp. - large leaved mistletoe-like parasites

Oryctanthus sp. - woody stemmed mistletoe-like parasite

Phoradendron sp. - large mistletoe-like bushy parasites

Pilostyles sp. - root and trunk attack by small phanerogamic parasite

Psittacanthus spp. - tall woody mistletoe-like parasite

Struthanthus spp. - mistletoe-like recumbent woody parasites

Viruses

Mottling and chlorosis

Witches' broom

Diseases of Unknown Etiology

Pod diseases - spots and tip rots from various unidentified organisms

Root failures - often follows heavy shade pruning

JATROPHA SPP.

Oomycetes

Pythium sp. - root rot

Basidiomycotina - Uredinales

Aecidium sp. - rust
Phakopsora sp. -
Uromyces spp. - rust (autoecious)

Basidiomycotina - Other

Armillaria spp. - root rot
Septobasidium spp. - brown felt, parasitic on scale insects

Deuteromycotina - Hyphomycetes

Alternaria sp. - storage rot
Cercospora spp. - leaf spot
Fusarium sp. - root rot
Phymatotrichopsis sp. - root rot
Stemphylium sp. - leaf spot

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose, leaf spot
Macrophoma sp. - leaf spot
Phomopsis sp. - twig dieback
Sphaeropsis sp. - witches' broom

KRUGIODENDRON SPP.

Ascomycotina

Botryosphaeria sp. - anthracnose
Meliola sp. - black mildew, sooty mold on leaves

LEUCAENA SPP. *

Oomycetes

Phytophthora sp. - canker
Pythium sp. - damping-off in seed beds

Ascomycotina

Botryosphaeria spp. - on limbs and branches, twig canker
Diaporthe sp. - on limbs, on dead and dying branches
Oothia sp. - on dry twigs
Physalospora sp. - on branches
Rhytidhysterium sp. -
Tryblidiella sp. - on die-back stems

Basidiomycotina - Uredinales

Ravenelia sp. - leaf rust (autoecious)

Basidiomycotina - Other

Armillaria sp. - on roots of dying trees
Ganoderma sp. - root rot, tree base and stump decay
Thanatephorus sp. - on debris near seedlings

MALPITI Deuteromycotina - Hyphomycetes

- ** Alternaria sp. - associated with damped-off seedlings
- Camptomeris sp. - yellow leaf spot
- ** Fusarium sp. - associated with damped-off seedlings
- ** Myrothecium sp. - associated with damped-off seedlings

Deuteromycotina - Coelomycetes

- Botryodiplodia sp. - common dieback
- Diplodia spp. - on decaying limbs
- Sphaeropsis sp. - canker

Deuteromycotina - Other

- * Rhizoctonia sp. - damping-off and strangle of seedlings

Algae and Lichens

- Strigula sp. - lichen milky white, pink or gray leaf & petiole spots

Parasitic Higher Plants

- Cassytha sp. - green dodder
- Cuscuta sp. - yellow dodder
- Loranthus spp. - bushy mistletoe-like parasites
- Oryctanthus spp. - scandent phanerogamic parasite1

MALPITI Viruses

- Mild leaf mottle and slight malformation

MALPITI Diseases of Unknown Etiology

- ** Unidentified stem blight/vascular wilt pathogen

LYSILOMA SPP.

Ascomycotina

- Nectria sp. - stem gall
- Nectriella sp. - stem gall

Basidiomycotina - Uredinales

- Ravenelia spp. - rust (autoecious)

Basidiomycotina - Other

- Phellinus spp. - on wood, white pocket heart rot

Deuteromycotina - Hyphomycetes

- Helicomina sp. - leafspotch

Deuteromycotina - Coelomycetes

- Phomopsis sp. - leaf spot

MALPIGHIA SPP.

Oomycetes

Phytophthora sp. - root rot

Pythium sp. - root rot

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot

Cercospora spp. - leaf spot

Fusarium sp. - root rot

Helminthosporium sp. - leaf spot

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose

Fusicoccum sp. - dieback

Deuteromycotina - Other

Rhizoctonia sp. - root rot, basal stem rot

Nematodes

Meloidogyne spp. - root-knot nematodes

MAMMEA SPP.

MANGIFERA SPP. *

Oomycetes

Phytophthora sp. - root rot

Pythium sp. - root rot

Ascomycotina

Antennellina sp. -

Antennellopsis sp. - leaf scab-spot

Botryosphaeria spp. - dieback, on limbs, stem canker

Capnodium sp. - sooty mold

Ceratocystis spp. - dieback, wilt, wood stain

Chaetothyrium sp. -

Dasyscypha sp. -

Diaporthe sp. - on twigs and limbs

Didymella sp. -

Dimerosporium sp. - black mildew

Elsinoe sp. - spot anthracnose, scab

Erysiphe sp. -

Gibberella spp. -

Glomerella sp. - anthracnose, flower and twig blight, withertip

Guignardia sp. - anthracnose

Hypoxylon sp. -

Lachnum sp. -

Leptosphaeria sp. - leaf spot

Lophodermium sp. - leaf disease

Meliola sp. - black mildew
Microthyrium sp. - twig disease
Nummularia sp. - on trunks and larger limbs
Orbilina sp. - on logs
Phaeosphaerella sp. - leaf spot
Physalospora spp. - on limbs, fruit rot, dieback
Rhytidhysterium sp. - on dead limbs
Rosellinia sp. - black root rot
Sclerotinia sp. - flower blast
Scutellinia sp. -
Sphaerognomonium sp. - leaf-edge spot
Sphaerostilbe sp. - red root rot, rare
Trabutia sp. - stroatoid leaf spot
Tryblidiella spp. - on dead branches
Ustulina sp. - collar rot
Vialaea sp. - on decaying and dead leaves

Basidiomycotina - Other

Armillaria sp. - shoestring root rot
Botryobasidium sp. - pink disease
Ceratobasidium sp. - thread blight
Corticium sp. - pink branch disease
Crepidotus spp. - on dead stump
Earliella sp. - on wood
Ganoderma sp. -
Hexagonia sp. - on wood, root rot
Marasmius sp. - cord blight disease
Mycena sp. - leaf spot
Omphalia sp. - leaf spot
Oudemansiella sp. - agaricaceous branch decay
Pellicularia sp. - thread-web foliage blight
Phellinus sp. - sapwood rot
Polyporus sp. - sapwood rot
Pycnoporus sp. - on wood
Rigidoporus sp. -
Schizophyllum sp. - branch dieback
Septobasidium spp. - brown felt, parasitic on scale insects
Trametes spp. - on dead wood

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot, spotting on fruit and twigs
Aspergillus sp. - market and storage fruit rot
Botrytis sp. - blossom blight
Cercospora sp. - leaf spot
Cladosporium sp. - common leaf-edge disease of old leaves
Clasterosporium sp. - leaf spot
Curvularia sp. - leaf spot
Fusarium sp. - witches' broom
Johncouchia sp. - parasitic on scale insects
Oidium spp. - powdery mildews
Phymatotrichopsis sp. - root rot
Spiegazzinia sp. - leaf infections

Stigmina sp. - small circular to somewhat angled leaf spots
Thielaviopsis sp. -
Trichoderma sp. - part of a dieback complex
Verticillium spp. - wilt, leaf spot

Deuteromycotina - Coelomycetes

Botryodiplodia sp. - twig disease, dieback, leaf spot, postharvest rot
Colletotrichum sp. - anthracnose, blossom blight, fruit stain and rot
Cryptosporium sp. - on leaves
Diplodia sp. - twig blight
Gloeosporium sp. -
Hendersonia sp. - on foliage
Leptothyrium sp. -
Macrophoma sp. - leaf spot, leaf blight
Pestalotia sp. - leaf spot, twig lesions
Pestalotiopsis sp. - leaf spot
Phoma sp. - stem canker
Phomopsis sp. - dieback
Phyllosticta spp. - leaf spot
Phyllostictina sp. - leaf spotting
Septoria sp. - leaf spot
Sphaceloma sp. - on leaves
Sphaeropsis sp. - dieback, stem gall

Deuteromycotina - Other

Rhizoctonia sp. - root rot, leaf necrosis
Sclerotium sp. - groundline seedling disease, rot of fallen fruit

Algae and Lichens

Cephaleuros sp. - algal leaf spot, leaf scurf

Parasitic Higher Plants

Aethanthus sp. - parasitic shrub, called "mucuma", rare
Cuscuta sp. - dodder

Nematodes

Criconemoides sp. - ring nematodes
Pratylenchus sp. - lesion nematodes
Xiphinema sp. - dagger nematodes

Bacteria

Erwinia sp. - soft rot of fruit
Pseudomonas sp. - bacterial leaf spot

Other

Zinc deficiency - little leaf

Diseases of Unknown Etiology

** Unidentified leaf spot pathogen

MANILKARA SPP.

Oomycetes

Phytophthora sp. - fruit rot

Ascomycotina

Botryosphaeria sp. - branch disease

Capnodium sp. - sooty mold

Elsinoe sp. - scab, on leaves

Glomerella sp. -

Guignardia sp. - leaf spot

Meliola sp. - black mildew

Physalospora sp. -

Rosellinia sp. -

Basidiomycotina - Uredinales

Acrotelium sp. -

Maravalia sp. -

Scopella sp. - rust

Uredo sp. - rust

Basidiomycotina - Other

Armillaria spp. - root rot, mushroom root rot

Botryobasidium sp. -

Ganoderma sp. - butt rot

Deuteromycotina - Hyphomycetes

Fusicladium sp. -

Nigrospora sp. -

Phymatotrichopsis sp. - root rot

Deuteromycotina - Coelomycetes

Botryodiplodia sp. -

Colletotrichum sp. - anthracnose

Gloeosporium sp. -

Pestalotia spp. - limb gall, limb tumor, leaf spot

Pestalotiopsis spp. -

Phyllosticta sp. - leaf spot

Septoria sp. - leaf spot

Algae and Lichens

Cephaleuros sp. - algal spot

Strigula sp. - white lichen spot

Trentepohlia sp. - algal tufts

Parasitic Higher Plants

Cassytha sp. - dodder

Oryctanthus spp. - recumbent mistletoes

Phorandendron sp. - coarse mistletoes

Phthirusa sp. - slender mistletoe

MELIA SPP.

Oomycetes

Phytophthora sp. - root rot

Ascomycotina

Botryosphaeria spp. - dieback, on limbs, twig dieback

Diatrype spp. -

Didymosphaeria sp. -

Dothidea sp. -

Eutypella spp. - twig dieback, on branches

Glomerella sp. - anthracnose, on twigs and berries

Meliola sp. - black mildew

Melogramma sp. -

Nectria spp. - canker, dieback, on twigs, stem gall

Nectriella sp. - canker, stem gall

Nummularia sp. -

Phyllactinia sp. - powdery mildew

Physalospora spp. - on limbs, twig dieback

Proliferodiscus sp. - on leaves

Stictis sp. -

Valsaria sp. -

Basidiomycotina - Other

Abortiporus sp. -

Amylosporus sp. - at base of living tree

Armillaria spp. - root rot

Fomitopsis sp. - brown cubical rot

Helicobasidium sp. - root rot

Mycena sp. - on bark

Oxyporus sp. -

Pellicularia sp. - limb blight

Peniophora sp. -

Phellinus sp. - on wood

Schizophyllum sp. - sapwood rot

Trametes sp. -

Deuteromycotina - Hyphomycetes

Cercospora spp. - leaf spot

Fusarium spp. - twig blight, on berries

Phymatotrichopsis sp. - root rot

Pseudocercospora sp. - leaf spot

Stilbella sp. -

Deuteromycotina - Coelomycetes

Diplodia spp. - dieback, on limbs

Macrophoma spp. - stem gall, on limbs

Phomopsis sp. - canker, dieback

Phyllosticta spp. - leaf spot

Septoria sp. - leaf spot

Vermicularia sp. - on petioles

Deuteromycotina - Other
Rhizoctonia sp. - root rot

MELICOCCUS SPP.

Ascomycotina
Meliola spp. - black mildew

Basidiomycotina - Other
Armillaria sp. - root rot
Hydnum sp. - sporocarps on wood
Tricholoma sp. - mushroom on decayed tree trash

Deuteromycotina - Hyphomycetes
Fusarium sp. - leaf spot

Deuteromycotina - Coelomycetes
Ascochyta sp. - leaf spotting
Colletotrichum sp. - anthracnose of fruit, leaf and stem
Pestalotia sp. - lesions of leaf and petiole
Phyllosticta spp. - leaf spot
Septoria sp. - leaf spot

Algae and Lichens
Cephaleuros sp. - algal leaf spot
Strigula sp. - lichen spotting on stem

Parasitic Higher Plants
Phoradendron sp. - mistletoe-like phanerogamic parasite
Phthirusa sp. - phanerogamic parasite

Viruses
Mottle and leaf malformation like typical mosaic

Diseases of Unknown Etiology
Fruit rot - dark color, not Colletotrichum
Leaf spot - unusually large and black, no fungus or bacteria recovered

MORINGA SPP.

MUNTINGIA SPP.

Deuteromycotina - Hyphomycetes
Cercospora sp. - leaf spot
Pseudocercospora sp. - leaf spot

Deuteromycotina - Coelomycetes
Phyllosticta spp. - leaf spot

Bacteria

Agrobacterium sp. - crown gall

MUSA SPP.

Myxomycetes

Fuligo sp. - rare saprophyte on moist banana trash

Oomycetes

Phytophthora sp. - leaf rot

Pythium sp. - root rot, basal stem rot, rootlet necrosis

Trachysphaera sp. - cigar-end rot of fruit

Zygomycotina

Mucor sp. - infection of dead flower ends

Rhizopus sp. - fruit rot

Ascomycotina

Anthostomella sp. -

Calostilbe sp. - associated with banana corm and fruit stalk failure

Capnodium sp. - sooty mold

Ceratocystis sp. - fruit rot, banana and plantain stalk and finger rot

Chaetothyria sp. - sooty blotch on fruit

Coccomyces sp. - on leaves

Diaporthe sp. -

Dothidella sp. -

Gibberella sp. -

Glomerella sp. - on fruit, leaves and stems

Gnomonia sp. - leaf vein anthracnose disease, leaf tip browning

Guignardia sp. - leaf freckle

Helotium sp. - leaf lesion

Khuskia sp. -

Leptosphaeria sp. - leaf ring spot

Melanospora sp. - banana leaf disease

Meliola sp. - black mildew

Mycosphaerella spp. - black leaf streak, speckle, Sigatoka disease

Nectria sp. - on dead plantain pseudostems

Nectriella sp. - on leaves

Peziza spp. - on dying pseudostems

Phaeosaccardinula sp. - banana leaf disease

Phyllachora sp. -

Pseudoplea sp. - banana fruit rot

Rosellinia spp. - plant base rot, black root rot

Sclerotinia sp. - banana fruit rot, generally in cooler climates

Sphaerella sp. - banana leaf disease

Sphaerulina sp. -

Sphaeroderma sp. - on banana leaves

Sphaerostilbe sp. -

Sporormia sp. - on banana leaves

Stictis spp. - on banana and plantain trash

Basidiomycotina - Uredinales

Puccinia sp. - leaf rust

Uredo sp. - rust

Uromyces sp. - found on banana in the Orient

Basidiomycotina - Other

Armillaria spp. - root rot, corm rot

Asterostroma sp. - leathery, semi-saprophytic growth on fallen trash

Botryobasidium sp. - pseudostem rot

Cyphella sp. - plantain pseudostem disease

Glabrocypbella sp. - on dead leaves

Marasmiellus sp. - root, stem and trunk rot

Marasmius sp. - common root rot, truck rot

Mycena sp. - leaf infections

Naucoria sp. -

Polyporus sp. - root and plant base disease complex

Thanatephorus sp. - soil rot

Deuteromycotina - Hyphomycetes

Acrothecium sp. - a part of the banana fruit disease complex

Alternaria sp. - leaf-edge disease complex

Aspergillus sp. - a part of banana and plantain fruit rot complex

Botrytis sp. - tip-end rot

Chalara sp. - basal stem rot

Cephalothecium sp. - a part of banana and plantain fruit decay complex

Cercospora spp. - brown spot on fruit, part of diamond spot on leaves

Chloridium sp. - leaf speckle

Cladosporium spp. - sooty moldy of bagged banana fruit, brown spot

Clasterosporium sp. - weak parasite

Cordana sp. - leaf spot, blotch

Corynespora sp. - fruit spot, leaf spot

Cylindrocarpon sp. - wound parasite

Cylindrocolla sp. - on banana fruit skin

Curvularia sp. - fine speckle, leaf spot

Deightoniella sp. - anthracnose, speckle, eye spot, fruit spot, black tip,
black spot, damping-off, pseudostem deepspot

Drechslera sp. - leaf eye spot, fruit spot

Fumago sp. - sooty mold of bagged banana fruit

Fusarium spp. - fruit end rot, Panama disease, wilt, heart rot, part of
diamond spot on leaves, leaf sheath disease, storage fruit
rot, banana fruit peduncle disease, root rot

Haplobasidium sp. - leaf spot

Haplographium sp. - on leaves

Helminthosporium sp. - fine speckle, black leaf spot, black fruit tip

Hormodendrum sp. - leaf and fruit moldy disease

Macrosporium sp. -

Microxyphium sp. - sooty moldy of bagged banana fruit

Mycogone sp. - on diseased leaf, possible hyperparasite

Nigrospora sp. - on senescent leaves

Oospora sp. - sour rot

Papularia sp. - banana leaf disease

Penicillium spp. - sooty moldy of bagged banana fruit

Periconiella sp. - leaf speckle and smoky blotch
Pseudocercospora sp. - Sigatoka disease, leaf spot
Pyricularia sp. - banana fruit pitting, semi-parasitic on dying leaves
Ramichloridium sp. -
Sporotrichum sp. - hyperparasite of insects
Stachylidium sp. - cigar-end fruit rot, flower infection
Thielaviopsis sp. - blackhead
Veronaea sp. -
Verticillium sp. - cigar-end, fruit rot, corm rot, plant wilt
Zygothia sp. - banana leaf speckle
Zygosporium sp. - on leaves

Deuteromycotina - Coelomycetes

Aposphaeria sp. - on drying leaves
Botryodiplodia sp. - fruit peduncle, finger & stalk rot, corm blackhead,
post harvest decay
Colletotrichum spp. - anthracnose, fruit & stem rot, common fruit spot,
leaf spot, fruit neckrot, fruit scald
Diplodia sp. - fruit and stem rot
Dothiorella sp. - fruit rot
Gloeosporium sp. - on rinds, black end, leaf spot, stem rot
Hendersonia sp. - leaf spot
Hendersonula sp. - fruit tip rot, leaf spot
Lasiodiplodia sp. - fruit and stem rot
Leptothyrium sp. - banana leaf disease
Macrophoma sp. - freckle
Macrophomina sp. - charcoal rot
Pestalotia spp. - ring spot, fruit spot, stalk rot, leaf spot
Phoma spp. - black finger disease, fruit freckle
Phomopsis sp. - banana fruit stalk disease
Phyllosticta spp. - leaf spot on banana, freckle, black spot
Phyllostictina spp. - freckle leaf disease, black spot
Sphaeropsis sp. - banana and plantain leaf fungus
Stagnospora sp. -

Deuteromycotina - Other

Rhizoctonia sp. - root and stem rot, leaf infections on young plants
Sclerotium sp. - on seedlings

Algae and Lichens

Stomatochroom sp. - systemic leaf blade invasion

Parasitic Higher Plants

Cuscuta sp. - yellow dodder
Loranthus spp. - seeds germinate and pierce leaf lamina but dies

Nematodes

Belondira sp. - banana root nematodes
Criconea sp. - banana rhizosphere nematode
Criconemoides sp. - ring nematode
Helicotylenchus spp. - sting root nematodes
Hemicyclophora sp. - banana rhizosphere nematode

Hoplolaimus sp. - banana rhizosphere nematode
Meloidogyne spp. - rootknot nematodes
Paratylenchus sp. - rhizosphere nematode
Pratylenchus sp. - lesion nematode, on roots
Radopholus spp. - burrowing root and corm nematode, nematode root rot
Rotylenchulus sp. - reniform nematode, root attack
Scutellonema sp. -
Trichodorus sp. - banana rhizosphere nematode
Tylenchorhynchus sp. - stunt nematode
Tylenchus sp. - banana root attack
Xiphinema sp. - dagger nematodes, banana rhizosphere nematode

Bacteria

Erwinia spp. - soft rot of fruit, part of storage fruit rot complex, head rot, rhizome rot
Pseudomonas sp. - bacterial wilt, Moko disease
Xanthomonas spp. - blood disease, bacterial leaf spot, wilt

Viruses

Banana Bunchy Top
Cucumber Mosaic causing leaf mottle, dwarfing, heart rot
Mosaic - other than cucumber mosaic

Other

Finger-drop of banana - mechanical pedicel injury invaded by Botryodiplodia, Colletotrichum, Fusarium, bacteria and other organisms
Physiological diseases - blow down, chlorosis in alkaline soils, corm navel rot, leaf streak, fruit black spot, corm root inhibition

OCOTEA SPP.

Oomycetes

Phytophthora sp. - root disease

Ascomycotina

Asteridiellina sp. - black leaf spot
Catacauma sp. - scabby leaf spot
Dothidella sp. - tar spot
Echidnodes sp. - black mildew
Irenina spp. - black mildews
Lembosia sp. - black leaf spot
Meliola sp. - black mildew
Micropeltis sp. - small black leaf spots
Microphyma sp. - leaf spot
Microthytiella sp. - small star-like leaf spots
Phyllachora spp. - anthracnose, black leaf spot
Rosellinia sp. - black root rot
Zukalia sp. - leaf disease

Basidiomycotina - Uredinales

Uredo sp. - rust deforming inflorescences

Basidiomycotina - Other

Drepanoconis spp. - galls

Mycena sp. - leaf spot

Deuteromycotina - Hyphomycetes

Cephalosporium sp. - on foliage

Didymaria sp. - on foliage

Fusarium sp. - stem lesions

Helicomyces sp. - on living leaves

Helminthosporium sp. - apparently a hyperparasite of Meliola

Napicladium sp. - scab-like leaf spot

Verticillium sp. -

Deuteromycotina - Coelomycetes

Clinoconidium sp. - gall disease

Leptothyrium sp. - small leaf and stem spots

Phragmopeltis sp. - leaf spot

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Lichens - many genera causing overburdened branches

Strigula sp. - white lichen leaf spot

Parasitic Higher Plants

Cassytha sp. - slender green dodder

Cuscuta sp. - yellow dodder

Loranthus spp. - phanerogamic attack on branches of mature trees

Oryctanthus sp. - phanerogamic attack on branches of mature trees

Phthirusa sp. - phanerogamic attack on branches of mature trees

Psittacanthus sp. - phanerogamic attack on branches of mature trees

OXANDRA SPP.

PARKINSONIA SPP.

Oomycetes

Pythium sp. - seedling root rot

Ascomycotina

Erysiphe sp. - powdery mildew

Leptosphaeria sp. - stem canker

Nectriella sp. - stem gall

Basidiomycotina - Other

Armillaria spp. - root rot

Dacrymyces sp. -

Ganoderma sp. -

Inonotus sp. - on wood
Peniophora sp. - white rot
Perenniporia sp. -
Phanerochaete sp. - white rot
Phellinus sp. -

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot
Cercospora sp. - leaf spot
Cylindrocladium sp. - root rot
Fusarium sp. - damping-off
Phymatotrichopsis sp. - root rot
Ptychogaster sp. -

Deuteromycotina - Coelomycetes

Asteroma sp. - on pods
Coniothyrium sp. - twig dieback
Cylindrosporium sp. - leaf spot
Diplodia sp. - dieback
Macrophoma sp. - twig dieback
Phoma sp. - twig dieback
Phomopsis sp. - twig dieback
Phyllosticta sp. - leaf spot

PERSEA SPP. *

Oomycetes

Phytophthora spp. - collar, root, crown and fruit rot; trunk and branch
canker; decline; seedling blight; leaf spot; slow
death; damping-off
Pythium spp. - root rot, associated with "decline" of trees
Trachysphaera sp. -

Zygomycotina

Mucor sp. - on moist fallen leaves, occasionally in fruit rot complex
Rhizopus sp. - fruit rot, soft rot

Ascomycotina

Anthostomella spp. - leaf diseases
Asteridiella sp. - black mildew
Asterina spp. - anthracnose, black mildews, black leaf spots
Belonium sp. - branch canker, on decorticated logs
Botryosphaeria spp. - branch, limb and fruit canker, twig dieback, gumming
on bark, surface rot
Calloriopsis sp. - leaf spot
Calothyrium sp. - black leaf mold
Calycina sp. - on living leaves
Capnodium sp. - sooty mold, fumagina
Cenangium sp. - on limbs
Coccoidella sp. - tar spot on leaves
Daldina sp. -

Diaporthe sp. - fruit rot
Diatrype sp. - eruption disease of bark
Echidnodella sp. - black mildew
Endothia sp. - branch and twig disease
Englerula sp. - black leaf spot
Entosordaria sp. - leaf disease
Fracchia sp. - branch and twig disease
Gibberella spp. -
Glomerella sp. - anthracnose
Gloniopsis sp. - on wood
Glonium sp. - log rot
Graphostroma sp. - on bark
Guignardia spp. - leaf, fruit and twig infection, leaf spot
Helotium sp. - on dead branches
Hypocrea sp. - on decorticated logs
Hypoxyton spp. - branch rot, on decorticated logs
Irene sp. - black mildew on leaves
Irenopsis sp. - black mildew
Lambottiella sp. - leaf disease
Lembosia sp. - leaf spot
Leptosphaerella sp. - on foliage
Lophodermium sp. - on leaves and petioles causing defoliation
Melanopsamma spp. - wood disease, wood discoloration
Meliola spp. - black mildew on leaves
Metasphaeria sp. - branch canker disease
Microcyclus sp. - twig disease
Microthyrium sp. - on leaves
Mycosphaerella spp. - leaf spot, occasionally fruit spot
Nectria sp. - twig canker
Ostreichnion sp. - on dead twigs
Othiella sp. - on foliage
Paranthostomella sp. - leaf decay
Phyllachora spp. - tar spot, on leaves
Physalospora spp. - leaf, fruit and stem disease; branch canker
Pseudomassaria sp. - on leaves
Pseudoplea sp. - rare leaf spot
Pyrenopeziza sp. - branch and bark rot
Rhytidenglerula sp. - anthracnose, black mildew
Rosellinia spp. - black or white root rot, branch decay
Sclerotinia sp. - seedling collar rot
Sphaerostilbe sp. - fruit canker
Stomiopeltis sp. - leaf smudge
Trichopeziza sp. - canker
Trochila sp. - leaf disease
Tryblidiella sp. - following anthracnose dieback
Valsa sp. - death of seedlings in nurseries
Xylaria sp. - root disease

Basidiomycotina - Uredinales

Uromyces sp. - rust, on Persea spp. but not yet found on P. americana
Uredo sp. - rust, on Persea spp. but not yet found on P. americana

Basidiomycotina - Other

- Armillaria spp. - root rot
- Clathrus sp. - tan bark rot
- Claudopus sp. - bark and wood decay
- Corticium sp. - branch pink disease
- Cristinia sp. -
- Exidia sp. - on bark
- Fomes spp. - log and stump rot, honey-comb wood rot
- Fomitella sp. - on wood
- Ganoderma spp. - butt rot, root and trunk-base infection, root disease
- Hydnum sp. - root and stump rot
- Hymenochaete sp. - tan-bark decay
- Hyphoderma sp. -
- Laetiporus sp. - on wood
- Marasmius spp. - thread fungi causing leaf attack
- Mycena spp. - leaf spot, defoliation, agaric root disease
- Mycoacia sp. -
- Pellicularia sp. - web-blight, leaf rot
- Phellinus sp. - basal trunk rot
- Polyporus spp. - stump and heart rot of old standing trees, wood rot
- Polystictus spp. - branch and log rot
- Poria spp. - tan-bark, branch and log decay
- Pseudofavolus sp. - on wood
- Rigidoporus sp. - on wood
- Schizophyllum sp. - weak parasite causing secondary branch decay
- Septobasidium sp. - felt fungus, parasitic on scale insects
- Stereum sp. - tan-bark and branch infectious fungal growth
- Thanatephorus sp. -
- Trametes spp. - on wood

Deuteromycotina - Hyphomycetes

- Acrothecium sp. - on leaves
- Alternaria sp. - fruit rot
- Antennaria sp. - black leaf mold on wild Persea
- Aspergillus sp. - fruit rot
- Aureobasidium sp. -
- Botrytis sp. - mold on leaves and flowers
- Cephalothecium sp. - pink rot of fruit
- Cercoseptoria sp. -
- Cercospora spp. - blotch or spot of fruit and leaves
- Chaetochalara sp. - on fallen leaves
- Circinotrichum sp. - on fallen leaves, leaf disease
- Cladosporium sp. - leaf-edge disease, fruit spot
- Clasteroporium sp. - leaf spot
- Coryne sp. - leaf spot
- Cristulariella sp. - leaf spot
- Cylindrocladium spp. - fruit rot, root rot
- Ellisiella sp. - leaf disease
- Epicoccum sp. - on foliage
- Fusarium spp. - bark, fruit and root rot, branch canker, dieback, wilt
- Helminthosporium spp. - leaf spot, smudgy spot, on green twigs
- Menisporopsis sp. - on fallen leaves

Nigrospora sp. - mild leaf and fruit spots
Oidium sp. - white powdery mildew
Penicillium spp. - blue mold dry rot, fruit rots and molds
Phymatotrichopsis sp. - root rot
Pseudocercospora sp. - leaf spot
Redbia sp. - on fallen leaves
Scolecobasidium sp. - on fallen leaves
Spegazzinia sp. - leaf disease
Sporidesmium sp. - on wood
Sporotrichum sp. -
Stilbella sp. - secondary invasion of branch-tip following dieback
Thozetella sp. - on fallen leaves
Trichoderma sp. - root rot, part of branch disease and dieback complex
Tripodsporium sp. - leaf infection
Uberispora sp. - on fallen leaves
Verticillium spp. - wilt and quick death, vascular discoloration

Deuteromycotina - Coelomycetes

Asteromella sp. - on leaves and twigs
Botryodiplodia sp. - stem end rot, fruit mummy, dieback
Ceuthospora sp. - on foliage, a wet season leaf disease
Colletotrichum sp. - anthracnose, fruit and leaf spot, withertip, dieback, ripe rot of fruit, rusty blight
Diplodia spp. - dieback, stem-end rot of fruit
Dothiorella spp. - stem end rot, postharvest decay of fruit, trunk rot, surface rot and other fruit rots, leaf diseases
Gloeosporium sp. - rusty blight
Hendersonia sp. - twig rot, leaf disease
Macrophoma sp. - gall-like swellings on twigs and leaves
Pestalotia spp. - on dead leaves, fruit and leaf spot, seedling blight, bud and graft union failure
Phoma sp. - branch lesion and rot
Phomopsis sp. - stem dieback, fruit stem-end rot, branch-tip disease
Phyllosticta spp. - leaf spot or blotch
Sphaceloma sp. - foliage and fruit scab, anthracnose
Sphaeropsis sp. - fruit-skin disease

Deuteromycotina - Other

Rhizoctonia spp. - root and seed rot, seedling stem disease, aerial web-blight on young shoots in nursery
Sclerotium sp. - seedling blight, ground blast

Algae and Lichens

Cephaleuros spp. - algal leaf spot, jelly spot, parasitic alga
Phycopeltis sp. - algal plaque on leaves
Stomatochroon sp. - algal systemic leaf disease
Strigula sp. - lichen-caused milky spot on leaf

Parasitic Higher Plants

Cuscuta sp. - dodder
Loranthus spp. - large bushes parasitizing old tree tops
Phoradendron spp. - spectacular phanerogamic parasites on branches

Phthirusa sp. - drooping vine-like phanerogamic parasite on branches
Porella sp. - leafy liverwort smother
Psittacanthus sp. - large bush parasite on main branches of host trees

Nematodes

Criconemoides sp. - rhizosphere nematode
Helicotylenchus sp. - sting root nematodes
Meloidogyne sp. - rootknot nematodes
Pratylenchus sp. - lesion nematode, rhizosphere inhabitant
Radopholus spp. - burrowing nematode, in root zone
Tylenchorhynchus sp. - stunt nematode, in rhizosphere
Xiphinema sp. - dagger nematodes, in rhizosphere

Bacteria

Agrobacterium sp. - crown gall
Pseudomonas sp. - fruit spot, blossom blight, dieback

Viruses

Avocado pear sunblotch

Other

Copper deficiency - dieback
Iron deficiency - chlorosis, weakened growth
Leaf bronzing - is caused by red spider mite attack
Nitrogen deficiency - yellowing
Nitrogen toxicity - leaftip necrosis and arrested growth
Physiological diseases - fruitcracks from unseasonable weather, fruit-end drying from overmaturity, leaftip burn from salt accumulation in poorly drained fields, mottling of leaves from several physiological disturbances
Salt toxicity - ragged leaf chlorosis and necrosis, tip burn
Sulphur toxicity - leaf drop, in volcanic regions
Water logging injury - root failure and wilting
Zinc deficiency - little leaf and rosette

Diseases of Unknown Etiology

Leaf sterile spots - from numerous undetermined causes
Russetting of leaves and fruit - from undetermined physiological disturbances

** Unidentified leaf spot pathogen

PHYLLOSTYLON SPP.

PINUS SPP. *

Myxomycetes

Arcyria sp. -
Licea sp. - slime mold, on bark
Physarum spp. -
Stemonitis sp. -

Chytridiomycetes

Phlyctochytrium spp. - parasitic on pollen in water

Rhizophydium sp. - parasitic on pollen in water

Sporophlyctidium sp. - parasitic on pollen in water

Oomycetes

Chytridium sp. - on pollen

Phytophthora spp. - seedling blight, root rot, littleleaf disease, decline,
stem canker of young trees

Pythium spp. - damping-off, root rot, basal attack of seedlings

Zygomycotina

Mortierella sp. - on treated southern yellow pine utility poles

Rhizopus sp. - on treated southern yellow pine utility poles

Ascomycotina

Acanthostigma sp. - on decorticated wood

Anthostomella sp. - on needles

Appendiculella sp. - black mildew

Ascocalyx sp. - canker

Ascocoryne sp. - on decorticated wood

Atropellis spp. - twig, branch, limb and trunk canker

Belonopsis sp. - leaf disease

Bertia sp. - on wood

Bifusella spp. - needle cast, tar spot

Bisporella sp. -

Botryosphaeria spp. - death, wilt, cone rot, on limbs, branch cankers,
needle browning

Caliciopsis sp. - canker, gall

Calonectria sp. -

Capnodium spp. - black mildew on needles

Cenangium spp. - on needles, twig blight, canker, dieback

Ceratocystiopsis spp. - on wood, associated with bark beetles

Ceratocystis spp. - wood stain, associated with bark beetle attack

Ceratostoma sp. -

Ceratostomella sp. - wood stain, blue stain

Ceriosporopsis sp. - on driftwood in ocean

Chaetomium spp. - on treated southern yellow pine utility poles

Cistella sp. - on bark

Clithris sp. -

Coccomyces spp. - canker, on wood

Coccomycetella sp. - on wood

Coccophacidium sp. -

Colpoma sp. -

Coniochaeta spp. - on end of cut logs

Crumenulopsis spp. - on dead tips

Cucurbitodthis sp. - twig canker

Cyclaneusma spp. - needle cast

Dasyscyphus spp. - twig canker, saprophytic on limbs and twigs

Davisomycella spp. - tar spot, needle cast

Didymopeltis sp. - on needles

Didymosphaeria sp. -

Dimerosporiopsis sp. -
Discina sp. -
Discohainesia sp. - on twigs
Dothiora sp. -
Elytroderma sp. - needle blight and cast, witches' broom
Endoxyla spp. -
Eriosphaeria sp. -
Eutypella sp. -
Fracchia sp. - branch and trunk disease
Gibberella spp. -
Gorgoniceps sp. -
Grovesiella sp. -
Gyromitra sp. - on rotting logs
Haligena sp. -
Halosphaeria spp. - on driftwood in ocean
Hansenula spp. - on dead tree
Helotium sp. -
Hemiphacidium spp. - needle blight, on bark and wood
Herpotrichia sp. - brown felt blight
Hyaloscypha sp. -
Hymenoscyphus sp. -
Hypocrea spp. -
Hypoderma spp. - needle blight, gray leaf spot
Hypodermella spp. - needle cast, needle tar spot, on wood
Hysterium spp. - on boards
Hysterographium spp. - on living bark
Kalmusia sp. - on needles
Karschia sp. -
Lachnella sp. -
Lachnellula spp. - on blister rust cankers, branch and twig canker
Lecanidiella sp. -
Lembosia sp. - black mildew
Leucostoma sp. - on limbs and twigs
Lignincola sp. - on driftwood in ocean
Lophodermella spp. - needle blight and cast, defoliation
Lophodermium spp. - needle cast, on needles
Lulworthia sp. - on driftwood in ocean
Meloderma sp. - needle cast
Microthyrium sp. - on needles
Mitrula sp. -
Mollisia spp. - on dead needles
Monascostroma sp. -
Monascus sp. - isolated from roots
Mycosphaerella spp. - brown spot needle blight, black and needle spot
Mytilinidion spp. - on twigs
Naemacyclus spp. - on cone scales, needle cast, needle drop
Nectria spp. - trunk canker
Neopeckia sp. - brown felt fungus
Niesslia spp. - on boards, on needles
Nitschkia sp. -
Odontotrema spp. - on wood

Ophiostoma spp. - blue stain, wood stain, sapwood stain, black stain rot, tracheomycosis, associated with bark beetles

Orbilina sp. -

Ostreola spp. - on bark

Patinella spp. - on limbs

Pezicula sp. - on limbs

Pezizella sp. - on needles

Phacidium spp. - snow blight and mold, on trunks and limbs

Phaeociboria sp. - on foliage

Phaeocryptopus sp. - on needles following brown spot

Plectania sp. -

Pleospora sp. -

Ploioderma spp. - needle blight and cast, gray needle blight

Pragmopora spp. - isolated from basal cankers

Propolis spp. - on bark and cones

Propolomyces sp. -

Quasiconcha sp. - on roots

Rhizina sp. - seedling blight

Rhizodiscina sp. -

Rosellinia spp. - on roots, on freshly cut stump, root rots

Sarcoscypha sp. - on decayed wood

Sarcosoma sp. - on decayed wood

Sarea sp. - on resin

Schizothyrium sp. - on dead needles

Schizoxylon sp. - on scales of fallen cones

Scirrha spp. - brown spot needle blight, red band needle blight

Sclerotinia sp. - moldy attack of seedlings

Scolecconectria sp. - burn blight, canker, parasitic on moribund limbs

Scorias sp. - snow mold

Soleella sp. - needle cast

Sphaerella sp. - on cone scales

Stictis spp. -

Stomiopeltis sp. -

Tapesia sp. - on scales of fallen cones

Therrya spp. - on dead limbs, on limbs and twigs

Thielavia sp. - root rot

Thyridaria sp. -

Thyronectria sp. -

Trichoscyphella sp. - on twigs

Tryblidiopsis sp. - limb canker

Tubeufia spp. - wood stain

Tympanis spp. - canker, on blister rust cankers, on bark, trunk canker

Unguiculella sp. -

Valsa spp. - on limbs and twigs, branch canker

Valsaria sp. -

Xerotrema sp. - on wood

Xylaria spp. - on wood, on logs

Xylopezia sp. - on cone scales and wood

Basidiomycotina - Uredinales

Coleosporium spp. - needle rust (heteroecious: aecial host; autoecious)

Cronartium spp. - gall rusts (heteroecious: aecial host), cone rust

Endocronartium sp. - rust (autoecious)
Peridermium spp. - needle rusts

Basidiomycotina - Other

Acanthophysium spp. - on wood
Aleurodiscus spp. - on suppressed, injured or recently dead trees, on limbs
and trunks, on bark, white rot
Amphinema sp. - white rot
Amylocorticium spp. -
Amylocystis sp. -
Amylostereum sp. -
Anomoporia sp. -
Antrodia spp. - brown cubical rot, brown rot
Antrodiella spp. -
Armillaria spp. - butt, root, stem and white rot, decay of stumps
Arrhytidia sp. - on wood
Asterodon sp. -
Asterostroma spp. -
Athelia spp. - on wood
Auriporia sp. -
Auriscalpium sp. - on cones
Baeospora sp. - on cones
Basidiodendron spp. - on bark and wood, white rot
Bjerkandera sp. - isolated from treated utility poles
Bondarzewia spp. - butt rot
Boreostereum sp. - on logs
Botryobasidium spp. - on rotten wood
Botryohypochnus sp. -
Bulbillomyces sp. - white rot
Byssocorticium spp. - on logs, on wood
Byssoporia sp. -
Callistosporium sp. - on wood
Calocera sp. -
Candelabrochaete spp. - white rot
Ceraceomyces spp. - on bark
Ceriporia spp. - on wood, isolated from treated utility poles
Ceriporiopsis spp. - isolated from treated utility poles
Cerreana sp. - on wood
Chaetoderma sp. - brown rot
Chaetoporellus sp. -
Clavicornia sp. -
Climacocystis sp. - rot
Climacodon sp. - on wood
Clitocybe sp. - on dead needles
Collybia sp. - on dead wood
Coltriciella sp. - on wood
Columnocystis spp. - brown cubical rot
Confertobasidium sp. - on wood
Coniophora spp. - brown cubical rot
Coriolopsis sp. - on wood
Corticium spp. - seedling disease
Crepidotus spp. - on decorticated logs

Crustoderma spp. - brown rot, on wood
Cryptoporus sp. - trunk and stump rot
Cylindrobasidium spp. - on wood
Cyptotrama sp. -
Cystobasidium sp. - on inner surface of bark of dead tree
Cystostereum sp. - isolated from mine timbers
Dacrymyces spp. - on logs and wood, on dead limbs, sapwood stain
Dacryobolus spp. - on wood, brown cubical rot
Dacryopinax sp. - on wood
Daedaleopsis sp. -
Dichomitus sp. - white pocket rot
Dichostereum sp. -
Diplomitoporus spp. -
Ditiola sp. - on limbs
Entomocorticium sp. - in bark beetle galleries
Exidia spp. -
Exidiopsis spp. - on bark, on fallen logs, on limbs
Fibricium sp. -
Flammula sp. - rot on fallen branches
Fomes spp. - butt, pocket, redring, stump, log, wood and root rots
Fomitopsis spp. - brown cubical rot, brown trunk rot, wood rot
Galerina sp. - on dead limbs
Galzinia spp. - on wood
Ganoderma spp. - white rot, butt rot
Gloeocystidiellum spp. - white rot, on wood
Gloeophyllum spp. - on logs, wood rot, brown rot, brown cubical rot
Gloeoporus sp. - on wood
Grandinia spp. - on wood, white rot
Grifola sp. -
Guepiniopsis spp. - on limbs
Gymnopilus spp. - on wood, on fallen cones, on stumps
Hapalopilus sp. - white rot
Helicobasidium sp. - brown cubical pocket rot
Henningsomyces sp. -
Heterobasidion sp. - white, root and butt rot
Hohenbuehelia sp. - on twigs
Hydnum sp. - wood rot
Hymenochaete spp. - white rot, on wood
Hyphoderma spp. - isolated from treated utility poles, on wood
Hyphodontia sp. -
Hypholoma spp. -
Hypochniciellum spp. -
Hypochnicium spp. - on wood chips
Hypochnopsis sp. -
Inonotus spp. - white, root and butt rot, white pocket heart rot
Irpex sp. - isolated from treated utility poles and mine timbers
Ischnoderma sp. - stem rot
Junghuhnia spp. - on stumps
Kavinia spp. -
Kneiffia sp. - on branchlets
Laetiporus sp. - brown cubicle rot
Laurilia sp. - on wood

Laxitextum sp. -
Lentinellus spp. -
Lentinus sp. -
Lenzites sp. - on wood
Lepiota sp. - under trees, probably not parasitic
Leptoporus sp. -
Leptosporomyces sp. -
Leucogyrophana spp. - on wood
Lindtneria sp. -
Marasmius spp. - on needles
Megacollybia sp. -
Melanotus sp. - on limbs
Meripilus sp. - on wood
Meruliopsis spp. - on wood, on rotten wood
Meruliporia sp. - decay of structural timber
Merulius sp. - on wood
Micromphale sp. -
Microporellus sp. -
Mucronella sp. -
Mycena spp. - on dead needles, on dead wood
Mycoacia sp. -
Mycorrhaphium sp. - on dead limbs
Neolentinus spp. - brown cubical sapwood rot, on wood
Nigroporus sp. - on wood
Odonticium sp. -
Oliveonia sp. - on bark
Omphalia spp. - root rots
Osteina sp. - brown butt rot
Oxyporus sp. -
Panellus sp. -
Parmastomyces sp. -
Paullicorticium sp. -
Paxillus sp. - brown root rot
Peniophora spp. - on wood, wood rot
Perenniporia spp. - white rot
Phaeolus sp. - brown cubicle butt rot, root rot
Phanerochaete spp. - white rot, isolated from treated utility poles
Phellinus spp. - white pocket heart rot, butt rot, root rot
Phlebia spp. - wood rot, isolated from treated utility poles, on limbs
Phlebiella spp. - white rot
Pholiota spp. - heart rot, sometimes of living trees, on wood
Phyllotopsis sp. - on wood
Physisporinus spp. - on living trees, on treated utility poles
Piloderma spp. - white rot
Pleurotellus sp. -
Pluteus spp. - on stumps
Polyporus spp. - brown wood, butt, heart and sapwood rot
Poria sp. - root disease, root rot
Porotheleum sp. - on wood
Postia spp. - on wood, brown cubical rot, stem rot
Pseudohydnum sp. -
Pseudomerulius spp. - wood rot

Pseudotomentella spp. - on wood
Pycnoporellus spp. - wood rot
Pycnoporus spp. - wood rot
Ramaricium sp. - on wood
Rectipilus spp. -
Resinicium spp. - on wood, white rot
Resupinatus sp. -
Rigidoporus spp. -
Rhizopogon sp. - an ectotrophic mycorrhiza
Schizophyllum sp. - on wood
Schizopora sp. -
Scytinostroma spp. - root rot
Scytinostromella sp. -
Serpula spp. - on logs, leaves and wood, dry rot of structural timber
Sistotrema spp. - on wood, fallen needles and treated utility poles
Skeletocutis spp. - white rot
Sparassis sp. - yellow-mottled root rot
Sphaerobasidium sp. - on wood
Steccherinum spp. - isolated from treated utility poles
Stella sp. - black mildew
Stereum sp. - heart rot, trunk disease
Tapinella sp. -
Thanatephorus sp. - on bark
Thelephora sp. - seedling blight, smothering of seedlings
Tomentella spp. - on logs, on wood
Tomentellastrum sp. -
Tomentellina sp. -
Tomentellopsis sp. - on wood
Trametes spp. - wood rot
Trechispora spp. - white rot, on wood
Trichaptum spp. - white rot, isolated from treated utility poles
Tricholomopsis spp. - on wood
Tubulicrinis spp. - on wood
Tulasnella spp. - on wood
Tyromyces sp. - on wood
Uthatobasidium sp. -
Vararia spp. - white rot
Veluticeps sp. - brown rot
Vesiculomyces sp. -
Wolfiporia sp. - brown cubical butt rot, root rot
Wrightoporia sp. -
Xeromphalina spp. - on cone debris
Xerula sp. - stem rot
Xylobolus sp. - on stumps

Deuteromycotina - Hyphomycetes

Acremonium sp. - on treated southern yellow pine utility poles
Acrodontium sp. - on treated southern yellow pine utility poles
Alternaria spp. - wood stain, from basal cankers, blackening of needles
Ambrosiella sp. -
Antennaria sp. - needle smoky-mold
Arthrographis sp. - on treated southern yellow pine utility poles

Aspergillus sp. - on treated southern yellow pine utility poles
Atichia sp. -
Aureobasidium spp. - on utility poles, stored pulpwood and wood chips,
 needle blight following insect damage, gray stain
Berkleasmium sp. - on wood
Botryophialophora sp. -
Botrytis spp. - gray mold, seedling blight, damping-off, root rot
Cadophora spp. - wood stains
Cephalosporium sp. -
Cercospora sp. - needle blight
Cercoseptoria sp. - blight
Chalara sp. - on needles
Cirrenalia sp. - on driftwood in ocean
Cladosporium spp. - isolated from basal cankers and utility poles
Confistulina sp. -
Conoplea sp. - on fallen cones
Constantinella sp. -
Curvularia sp. - on treated southern yellow pine utility poles
Cylindrocarpon sp. -
Cylindrocladium spp. - seedling blight, root decay and rot, damping-off
Doratomyces sp. -
Epicoccum spp. - isolated from basal cankers and utility poles
Eversia sp. - on rotten wood
Exophiala spp. - on treated southern yellow pine utility poles
Fumago sp. - sooty mold
Fusarium spp. - seedling blight, pitch canker, damping-off, hypocotyl and
 root rot, shoot dieback, twig lesions
Geotrichum sp. - pink wood stain
Gliocladium spp. - on treated southern yellow pine utility poles
Glonium sp. - dieback, on dead branches
Gonatobotrys sp. - red-mottled heart rot
Graphium spp. - gray stain of wood, on cone scales, sapwood stain
Haplotrichum spp. - on wood, on railroad ties
Helicosporium sp. - on fallen cones
Heterosporium sp. -
Hormiscium sp. - blue stain of wood
Hormoconis sp. - on treated southern yellow pine utility poles
Hyalotrochophora sp. - on wood
Illosporium spp. - on palings, on cones
Leptodontium sp. - on treated southern yellow pine utility poles
Leptographium spp. - associated with bark beetles, stem and root canker,
 root rot, wilt, blue stain, black stain root disease
Lylea sp. - on twigs
Moniliella sp. - on treated southern yellow pine utility poles
Oidiodendron sp. - on treated southern yellow pine utility poles
Oidium sp. - white mildew
Paecilomyces spp. - on treated southern yellow pine utility poles
Penicillium spp. - red lumber stain, on utility poles
Phaeococcus sp. - on treated southern yellow pine utility poles
Phialocephala sp. - on treated southern yellow pine utility poles
Phialophora spp. - wood stain, on treated utility poles
Phymatotrichopsis sp. - root rot, basal rot of young trees

Ptychogaster sp. - on treated southern yellow pine utility poles
Pullularia sp. - isolated from basal cankers
Rhinocladiella sp. - on treated southern yellow pine utility poles
Scopularia sp. -
Scoriomyces sp. -
Scytalidium sp. - on treated southern yellow pine utility poles
Septonema sp. - on treated southern yellow pine utility poles
Sphaerocolla sp. - root disease
Spiniger sp. - root rot
Sporothrix sp. - on treated southern yellow pine utility poles
Sporotrichum sp. - on leaves
Stigmina sp. -
Taeniolella spp. -
Tetraploa sp. - on twigs
Tilachlidium sp. -
Torula spp. - seedling root rot
Toxosporium sp. - twig blight, on needles
Trichoderma spp. - damping-off, root rot, on treated utility poles
Trichosporum sp. -
Trichothecium sp. -
Tuberculina sp. -
Verticicladiella sp. - root stain
Verticillium sp. - seedling wilt
Volutella sp. - on leaves

Deuteromycotina - Coelomycetes

Aplosporella spp. -
Asteromella sp. - on treated southern yellow pine utility poles
Botryodiplodia sp. - twig and stem lesions, dieback
Camaropycnis sp. - on limbs
Camarosporium sp. - on twigs
Colletotrichum sp. -
Cryptocoryneum sp. -
Cryptosporium sp. - on living blister rust cankers
Cylindrosporium sp. -
Cytospora spp. - canker, needle blight, brown sapwood stain
Diplodia spp. - blue-gray stain, shoot blight, twig dieback
Discosia sp. - on seedlings
Dothiorella spp. - on live blister rust-cankered branch, on tree
Dothistroma spp. - needle blight, needle cast, red band disease
Furcaspora sp. - on needles
Fusicoccum sp. -
Gelatinosporium sp. - associated with blister rust cankers
Gloeocoryneum sp. - on needles
Haplosporella sp. - dieback
Hendersonia spp. - on living needles
Hendersonula sp. -
Kirschsteiniella sp. -
Lasiodiplodia sp. - wood stain
Lecanosticta spp. - brown spot needle blight
Leptostroma spp. - on needles, on green needles
Leptothyrium sp. - on needles

Macrophoma sp. - twig blight
Macrophomina sp. - charcoal or black root rot, seedling root rot
Microdiplodia sp. - on cones
Monochaetia sp. - needle disease, needle blight
Neofuckelia sp. - on limbs
Pestalotia spp. - on needles and twigs, on dying needles, needle blight
Pestalotiopsis sp. - seedling blight and root rot, on needles
Phacidiopycnis sp. - canker, dieback
Phoma spp. - on twigs and cones, damping-off, root rot
Phomopsis spp. - on twigs, associated with rust galls, branch dieback
Phragmotrichum sp. -
Pragmopycnis sp. -
Pseudocenangium sp. - on needles
Rhabdospora spp. - stem canker of seedlings, on limbs
Rhizosphaera sp. -
Sclerophoma spp. - on twigs, cones and needles
Seimatosporium sp. - on needles
Septopatella sp. - on needles
Septoria spp. - needle blight, lesions on needles, black spot
Sirococcus sp. - shoot blight, tip dieback
Sirothyriella sp. - on needles
Sphaeronaema sp. - on limbs and trunks
Sphaeropsis spp. - seedling, shoot and tip blight, bleeding canker, dieback, collar rot, on dead limbs and trunks
Stilbospora sp. - needle blight
Thyrinula sp. - on fallen needles
Tuberculariella sp. - blue stain

Deuteromycotina - Other

Rhizoctonia spp. - root rot, damping-off, bud and needle blight
Sclerotium sp. - charcoal rot

Parasitic Higher Plants

Arceuthobium spp. - dwarf mistletoes causing witches' brooms
Psittacanthus sp. - bush-like parasite on trunk and branches
Struthanthus sp. - woody parasitic bush

Nematodes

Aphelenchoides sp. - root nematode
Aphelenchus sp. - appears to be connected with bluestain of wood
Meloidogyne sp. - seedling rootknot nematodes
Pratylenchus sp. - lesion nematode, rhizosphere inhabitant
Trichodorus sp. - root disease nematode

Other

Boron deficiency - severe dieback
Mycorrhizae - deficiency results in seedling failure with exotics
Zinc deficiency - little leaf, stunt, growth failure

Diseases of Unknown Etiology

- ** Unidentified damping-off pathogen
- ** Unidentified needle blight pathogen

PROSOPIS SPP.

Ascomycotina

- Botryosphaeria spp. - on limbs
- Diaporthe sp. - on limbs, on dead and dying branches
- Diatrypella sp. -
- Didymosphaeria sp. - on limbs
- Leveillula sp. - powdery mildew
- Pleochaeta sp. - on living leaves
- Physalospora spp. - on branches
- Rhytidhysterium sp. -
- Rhytidhysterium sp. -
- Tryblidiella sp. - on dead wood

Basidiomycotina - Uredinales

- Ravenelia spp. - rust (autoecious)

Basidiomycotina - Other

- Antrodia sp. - brown cubical rot
- Athelia spp. - white rot
- Bjerkandera sp. -
- Ceriporia sp. - white rot
- Coniophora spp. - brown rot
- Coriolopsis sp. - white rot
- Dacrymyces spp. - on wood
- Dendrophora sp. - white rot
- Eichleriella sp. - white rot
- Exidiopsis spp. - white rot
- Ganoderma spp. - white root and butt rot of living trees, root rot
- Grandinia spp. - white rot
- Heliocybe sp. - brown cubical rot
- Henningsomyces sp. - white rot
- Hymenochaete spp. - white root and butt rot of living trees
- Hyphoderma spp. - white rot
- Hypochnicium spp. - white rot
- Inonotus sp. - white-mottled heart rot
- Lindtneria sp. - white rot
- Meruliopsis sp. - white rot
- Mycoacia sp. - white rot
- Oxyporus spp. - white rot
- Peniophora spp. - white rot
- Perenniporia sp. - white rot
- Phanerochaete spp. - white rot
- Phellinus spp. - white heart rot, white rot, butt rot
- Phlebia sp. - white rot
- Polyporus sp. - uniform white rot
- Schizophyllum sp. - heart rot
- Schizopora sp. - white rot
- Scytinostroma sp. -
- Skeletocutis spp. - white rot
- Tomentella sp. -
- Trametes sp. -

Trichaptum sp. - on wood
Vararia spp. - white rot
Wolfiporia sp. -

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf blight
Napicladium sp. - leaf spot
Oidium sp. - powdery mildew
Phymatotrichopsis sp. - root rot

Deuteromycotina - Coelomycetes

Aplosporella sp. - on limbs
Colletotrichum sp. - pod spot
Discella sp. -
Phoma spp. - black pod spot
Phyllosticta sp. - leaf spot
Scleropycium sp. - leaf blight
Sphaeropsis spp. - canker, stem gall

Parasitic Higher Plants

Cassytha sp. - parasitic vine, slender green dodder
Psittacanthus sp. - bush-like parasite on trunk and branches
Struthanthus sp. - woody parasitic bush

Nematodes

Rotylenchulus sp. - reniform nematode

PSIDIUM SPP.

Oomycetes

Phytophthora spp. - root, fruit and crown rot; damping-off; leaf blight,
stem canker
Pythium sp. - root rot

Zygomycotina

Mucor sp. - soft rot
Rhizopus spp. - blossom-end rot, fruit rot
Syncephalis sp. - fruit rot

Ascomycotina

Asterina spp. - black leaf patches
Asterolibertia sp. - on leaves
Botryosphaeria spp. - twig dieback and canker, brown rot of fruit
Capnodium sp. - sooty mold
Catacauma sp. - scab-like leaf spots
Caudella sp. - black patches on leaves
Diaporthe sp. - on limbs, on dead and dying branches
Elsinoe sp. - spot anthracnose-scab of fruit and foliage
Glomerella spp. - anthracnose, ripe rot
Guignardia sp. - blossom-end rot
Limaciniella sp. -

Lophodermium sp. - branch disease
Meliola spp. - black mildews and leaf patches
Opeasterinella sp. - black mildew on leaves
Orbilbia sp. - on wood
Phyllachora spp. - black tar spots, leaf spots with scab-like stroma
Physalospora sp. - dieback, on foliage
Pycnopeltis sp. - leaf spot
Rosellinia spp. - root diseases
Scolecopeltis sp. - leaf infection
Seurattia sp. - on leaves
Tonduzia sp. - leaf mildew
Trabutia spp. - leaf lesions
Trichomerium spp. - black mold on leaves
Trichopeltis sp. -
Trichothyrium sp. -
Valsa sp. - part of a dieback complex

Basidiomycotina - Uredinales

Puccinia sp. - rust, attacks fruit and causes defoliation

Basidiomycotina - Other

Armillaria spp. - root rots, on branches
Auricularia sp. -
Ceratobasidium sp. - thread blight
Corticium sp. - thread blight
Crepidotus spp. -
Cyrtotrampa sp. - on branches
Earliella sp. -
Fomes sp. - heart rot of trunks
Ganoderma sp. - stump rot
Mycena sp. - luminescent leaf spot
Pellicularia sp. - thread blight, branch disease, leaf rot
Pleurotus sp. - on decayed wood
Polyporus sp. - trunk rot
Septobasidium sp. - felt disease
Trametes sp. - wound rot, wood rot

Deuteromycotina - Hyphomycetes

Acrostalagmus sp. - fungus fruiting on old foliage
Aegerita sp. - fungus on whitefly on guava
Alternaria spp. - fruit decay, leaf spot
Atichia sp. - on leaves
Cephalosporium sp. - found on scale insects on guava
Cercospora spp. - leaf spots on upper and lower leaf surfaces
Cercosporina sp. -
Corynespora sp. - leaf spot
Curvularia sp. -
Fusarium spp. - root rot, wilt, twig and branch disease
Gliocephalotrichum sp. - on decaying wood
Penicillium spp. - fruit rots
Phymatotrichopsis sp. - root rot
Spegazzinia sp. - hyperparasite of black mildew fungi

Triscelophorus sp. - on leaf litter
Tubercularia sp. - branch bark disease

Deuteromycotina - Coelomycetes

Aschersonia sp. - parasitic on insects found on guava
Botryodiplodia sp. - dieback, twig and branch canker
Colletotrichum spp. - common anthracnose of leaves, fruit and twigs
Coryneum sp. - stem canker
Gloeosporium sp. - anthracnose
Macrophoma sp. -
Pestalotia spp. - fruit canker, leaf and twig lesions
Pestalotiopsis sp. -
Phoma sp. - blossom-end rot, fruit rot, black leaf lesions
Phomopsis spp. - fruit spot, leaf spot
Phyllosticta spp. - on fruits, small leaf spots
Placosphaeria sp. - leaf disease
Sphaceloma sp. - spot anthracnose-scab of fruit and foliage
Zythia sp. - branch disease

Deuteromycotina - Other

Rhizoctonia spp. - root rot, thread blight

Algae and Lichens

Cephaleuros spp. - algal scurf-spot of leaf, fruit malformation
Linhartia sp. - rare leaf spot
Strigula sp. - white lichen spot on leaf

Parasitic Higher Plants

Cassytha sp. - parasitic vine, slender green dodder
Cuscuta sp. - dodder
Loranthus spp. - phanerogamic parasites
Oryctanthus sp. - phanerogamic parasite on branches
Phoradendron spp. - flowering bush parasites on branches
Porella sp. - leafy liverwort smother
Psittacanthus sp. - large red-flowered parasitic bush on trunk
Struthanthus spp. - weeping vine-like woody branch parasite

Nematodes

Meloidogyne sp. - rootknot nematodes, guavas seem somewhat tolerant

Bacteria

Agrobacterium sp. - crown gall

PUNICA SPP.

Oomycetes

Phytophthora sp. - root rot, canker on lower stems
Pythium sp. - root rot

Ascomycotina

Botryosphaeria sp. - canker

Megalonectria sp. - trunk and branch canker
Mycosphaerella sp. - leaf blotch, fruit spot
Nectriella sp. -
Nematospora sp. - fruit dry rot

Basidiomycotina - Other

Armillaria spp. - root rot
Ceratobasidium sp. -
Corticium sp. - thread blight
Ganoderma sp. - stump rot
Omphalia sp. - root disease
Pellicularia sp. - thread-web blight of branch and leaf

Deuteromycotina - Hyphomycetes

Alternaria sp. - fruit rot
Aspergillus sp. - internal rot, fruit rot
Botrytis sp. - gray mold rot
Cercospora spp. - leaf spot and blotch, fruit blotch, defoliation
Curvularia sp. -
Fusarium sp. -
Nigrospora sp. -
Penicillium sp. - blue mold of fruit
Phymatotrichopsis sp. - root rot
Pseudocercospora sp. - leaf spot

Deuteromycotina - Coelomycetes

Colletotrichum spp. - anthracnose, fruit spot, fruit rot
Coniella sp. - fruit rot
Coniothyrium sp. - stem canker
Coryneum sp. - fruit rot
Cytospora sp. - associated with dieback
Diplodia sp. -
Dothiorella sp. -
Macrophoma sp. - dieback
Phoma sp. - fruit black spot, black blotch
Phomopsis sp. - on twigs
Phyllosticta sp. - leaf spot
Sphaceloma spp. - scab, spot anthracnose of leaves and fruit

Deuteromycotina - Other

Rhizoctonia spp. - foliage blight

Nematodes

Meloidogyne sp. - rootknot nematodes

Bacteria

Xanthomonas sp. - bacterial leaf spot

Other

Physiological diseases - bursting of fruit on trees

RHIZOPHORA Diseases of Unknown Etiology
Witches' broom

RHIZOPHORA SPP.

Oomycetes

Phytophthora spp. -
Pythium spp. - root rot

Ascomycotina

Anthostomella sp. - leaf spot
Botryosphaeria sp. - leaf spot
Dactylospora sp. - on wood core of prop roots
Didymosphaeria sp. - on wood
Glomerella sp. - leaf spot
Helicascus sp. - on dead prop roots, on wood
Hydronectria sp. - on dead roots, on bark and seedlings
Keissleriella sp. - on bark
Leptosphaeria sp. - on prop roots
Lignincola sp. - on seedlings
Lulworthia sp. - on bark
Metasphaeria sp. - on prop roots
Mycosphaerella sp. - leaf spot

Basidiomycotina - Other

Halocyphina sp. - on roots

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot
Cercospora sp. - leaf spot
Cladosporium sp. - leaf spot, isolated from macerated roots
Cylindrocarpon sp. - stem root gall, prop root gall
Cylindrocladiella sp. - isolated from macerated roots
Fusarium spp. - isolated from macerated roots
Geotrichum sp. - isolated from macerated roots
Gliocladium sp. - isolated from macerated roots
Penicillium sp. - isolated from macerated roots
Scopulariopsis sp. - isolated from macerated roots
Trichoderma sp. - isolated from macerated roots

Deuteromycotina - Coelomycetes

Cytospora spp. - on prop roots, aerial roots and green seedlings
Pestalotiopsis sp. - leaf spot
Phoma spp. - leaf spot, isolated from macerated roots
Robillarda sp. - on roots and seedlings
Selenophoma sp. - leaf spot

RICINUS SPP.

Chytridiomycetes

Synchytrium sp. - red stem gall

Oomycetes

Phytophthora spp. - root, stem, crown, and fruit rot, stem canker, seedling blight, damping-off, leaf blight

Pythium spp. - root rot, damping-off

Ascomycotina

Botryosphaeria spp. - stem canker, on stems, dieback

Botryotinia sp. - gray mold; leaf, raceme and inflorescence blight

Capnodium sp. - sooty mold

Ceratocystis sp. - branch death, wood stain

Diaporthe spp. - on limbs, branch disease

Didymella sp. - on stems

Erysiphe sp. - powdery mildew

Eutypa spp. - trunk cancers, branch lesions

Laestadia sp. - branch disease

Leptosphaeria sp. -

Leveillula sp. - powdery mildew

Massarina sp. -

Peroneutypa spp. - branch, stem and trunk lesions

Physalospora spp. - stem tip collapse, branch lesion, dieback, capsule disease

Pleospora sp. - leaf spot with gray center and marked stippling

Sclerotinia sp. - stem rot, gray mold

Sphaerella sp. - a part of branch disease complex

Thyridium sp. - lesions killing branches

Tryblidiella sp. - on dead branches

Basidiomycotina - Uredinales

Melampsora sp. - rust

Melampsorella sp. - rust

Basidiomycotina - Other

Armillaria spp. - root rots

Irpex sp. - trunk rot

Mycena sp. - leaf spot

Schizophyllum sp. - twig dieback, on dead stems

Deuteromycotina - Hyphomycetes

Alternaria spp. - leaf spot, seedling blight, leaf & pod rot, on stems

Botrytis sp. - gray mold, capsule mold and leaf blight

Cercospora spp. - white leaf spot, isolated from blasted racemes

Cercosporina sp. -

Cladosporium sp. - fruit mold

Fusarium spp. - seedling blight, on stems, wilt

Heterosporium sp. - on seed pods and stems

Phymatotrichopsis sp. - root rot

Thielaviopsis sp. -

Tuberculina sp. -
Verticillium sp. - wilt

Deuteromycotina - Coelomycetes

Botryodiplodia spp. - severe disease of pods and stems, dieback
Chromocytospora sp. - black twig disease
Colletotrichum sp. - stem lesions, common anthracnose
Diplodia sp. - twig dieback, on seed pods and stems
Gloeosporium sp. -
Lasiodiplodia sp. -
Macrophoma sp. -
Macrophomina sp. - charcoal rot, on stems
Phoma sp. - leaf blight, branch disease
Phomopsis sp. - on stems
Phyllosticta sp. - leaf spot
Sphaceloma sp. - scab

Deuteromycotina - Other

Rhizoctonia spp. - damping-off, root rot, seed rot, foliar web blight,
shoot canker, base strangle
Sclerotium spp. - Southern blight, ground-line rot, charcoal rot

Algae and Lichens

Strigula sp. - white lichen spot on older trees

Nematodes

Meloidogyne sp. - rootknot nematodes

Bacteria

Pseudomonas sp. - bacterial wilt
Xanthomonas sp. - bacterial leaf spot

Virus

Chlorosis and malformed leaves, apparently spread by whiteflies
Tobacco ringspot

ROYSTONEA SPP.

Oomycetes

Phytophthora sp. - bud rot, wilt
Pythium sp. - root rot

Ascomycotina

Glomerella sp. - leaf spot
Linocarpon sp. - on leaf stalks
Nectria sp. - on bark
Ophiobolus sp. - on leaf stalks
Physalospora sp. - on fronds

Basidiomycotina - Ustilaginales

Graphiola sp. - false smut

Basidiomycotina - Other

Ganoderma sp. -

Deuteromycotina - Hyphomycetes

Alternaria sp. - leaf spot

Cercospora sp. -

Epicoccum sp. - leaf spot

Exserohilum sp. - leaf spot

Fusarium sp. - bud and heart rot

Helicoma sp. - on inflorescences and leaves

Helminthosporium sp. - leaf stripe

Septonema sp. - leaf spot

Stigmina sp. - leaf spot

Thielaviopsis sp. - black root rot

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose

Diplodia sp. - leaf spot

Macrophomina sp. - charcoal rot

Melanconium sp. - on leaf stalks

Pestalotiopsis sp. - leaf spot

Phyllosticta sp. - leaf spot

Deuteromycotina - Other

Rhizoctonia sp. - root rot

SABAL SPP.

Oomycetes

Pythium sp. - root rot

Ascomycotina

Acanthorhynchus sp. -

Anthostomella spp. - on dead leaf blades, stalks and fronds

Asterina sp. - black mildew, leaf spot

Catacauma sp. - black spot

Cenangium sp. - on leaf stalks

Ceratocystis sp. - stem bleeding

Cocconia sp. - on leaf stalks

Diatrypella sp. -

Ellisiodothis sp. - on dead leaves

Endoconidiophora sp. - stem bleeding

Eutypella sp. - on leaf stalks

Gloniopsis sp. -

Hypoxylon sp. -

Hysterostomella sp. - on leaf stalks

Linocarpon spp. - on leaf stalks

Massarina sp. - on leaf stalks

Meliola spp. - sooty mold, black mildew

Metasphaeria spp. - on petioles

Mollisia sp. - on petioles

Mycosphaerella sp. - leaf spot
Mycothyridium sp. - on petioles
Myrianginella sp. - black speck
Myriangium sp. - black speck, on leaves
Ophiobolus sp. - on leaf stalks
Oxydothis sp. - black speck
Valsa sp. - on leaf stalks
Venturia sp. - on dead leaves
Xylaria sp. -

Basidiomycotina - Ustilaginales

Graphiola spp. - false smuts

Basidiomycotina - Other

Epithele sp. - on bark
Favolaschia sp. - on dead leaves
Ganoderma sp. - butt and root rot
Hydropus sp. - butt and root rot
Hyphoderma sp. -
Hyphodontia sp. - on inflorescences
Irpex sp. - on dead stems
Mycena sp. - on petioles
Phanerochaete sp. - white rot
Poria spp. - mushroom rot, on leaf stalks
Rectipilus sp. -
Schizophyllum sp. - on dead trunks
Septobasidium sp. - felt fungus
Tomentella sp. -
Trametes sp. - on dead trunks
Wolfiporia sp. - roots rot
Wrightoporia sp. - on wood

Deuteromycotina - Hyphomycetes

Alternaria sp. - root rot
Cercospora sp. - leaf spot
Curvularia sp. - leaf blotch
Endocalyx sp. -
Fusarium spp. - root rot, bud rot, leaf spot
Helminthosporium spp. - bud rot, leaf spot
Mycoleptodiscus sp. - frond necrosis, leaf spot
Stigmina sp. - frond necrosis, leaf spot

Deuteromycotina - Coelomycetes

Amerosporium sp. - on dead leaves
Ascochyta sp. - leaf spot
Colletotrichum sp. - leaf spot
Coniothyrium sp. - leaf spot
Hendersonia sp. - on leaves
Leptothyrium sp. - leaf spot
Melanconium sp. - on leaf stalks
Pestalotia sp. - leaf spot
Pestalotiopsis sp. - on leaf stalks

Phyllosticta spp. - leaf spot
Rhabdospora sp. - on leaf stalks
Septoria sp. -
Sphaeropsis sp. - on leaf stalks

Deuteromycotina - Other

Rhizoctonia sp. - root rot

Algae and Lichens

Cephaleuros spp. - algal leaf spot, green scurf

SAMANEA SPP. *

Oomycetes

Phytophthora sp. - root rot

Pythium sp. - root rot

Ascomycotina

Aphanopeltis sp. - on old leaves

Botryosphaeria spp. - on limbs

* Capnodium spp. - sooty molds

Eutypella spp. - on limbs

Meliola sp. - mold spots on leaves

Nectria spp. - limb canker, dieback, on bark

Nectriella sp. - stem gall

Orbilbia sp. -

Rhytidhysterium sp. -

Thyronectria sp. -

Valsa sp. - canker

Zopfia sp. -

Basidiomycotina - Uredinales

Ravenelia sp. - leaf rust

Sphaerophragmium sp. - rust (autoecious)

Basidiomycotina - Other

Armillaria spp. - root rot

Dendrophora sp. - on wood

Ganoderma sp. - white rot and butt rot

Irpex sp. - on limbs

Marasmius spp. - cord blights

Microstroma sp. - leaf mold

Mycena sp. - leaf spot on seedlings

Odontia sp. - branch rot

Omphalia sp. - root rot

Oxyporus sp. -

Phellinus sp. - on wood

Polyporus sp. - on roots of uprooted trees

Poria sp. - on branches torn from tree by overloading of epiphytes

Schizophyllum sp. - on limbs

Trametes spp. - on limbs, white rot, heart rot

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf spot

Cladosporium sp. - on senescent leaves

Fusarium spp. - dieback, wilt, canker, on twigs, root infection

Stilbella sp. - gall, gumming

Tubercularia sp. - limb canker

Deuteromycotina - Coelomycetes

Botryodiplodia sp. - twig dieback

Colletotrichum sp. - anthracnose

Cytoplea sp. - on twigs

Diplodia sp. - twig dieback

Lasiodiplodia sp. - twig dieback

Leptothyrium sp. - leaf spot

Pestalotia sp. - part of dieback complex

Phoma spp. - dieback, on dead pods, leaf spot

Phomopsis sp. - dieback, wilt

Phyllosticta spp. - pod spot

Deuteromycotina - Other

Rhizoctonia sp. - root rot

Algae and Lichens

Cephaleuros sp. - algal leaf spot, green scurf

Strigula sp. - lichen leaf spot of yellowish color

Parasitic Higher Plants

Cissus sp. - climbing vines on branches

Cuscuta sp. - yellow dodder on foliage

Loranthus spp. - phanerogamic large parasitic bush

Struthanthus spp. - phanerogamic recumbent bushes on branches

Various epiphytes that can develop abundantly and break limbs - bromeliads, orchids, ferns, mosses, etc

Nematodes

Meloidogyne sp. - rootknot nematodes

Other

Heartrot - various fungi can be isolated

Diseases of Unknown Etiology

- ** Loss of apical dominance in seedlings resulting in a "carrot-top" appearance of young shoots and foliage possibly caused by insects
- Wood stains of unknown origin

SIMAROUBA SPP. *

Deuteromycotina - Hyphomycetes

- * Fusarium spp. - dieback, wilt, canker, on twigs, associated with stem blight and damping-off symptoms

Deuteromycotina - Coelomycetes

Phomopsis sp. - twig dieback

SPONDIAS SPP.

Ascomycotina

Endothia sp. - branch and twig disease

Glomerella sp. - foliar anthracnose, fruit rot

Irenopsis sp. - leaf black spot and smudge

Meliola sp - black mildew

Stomiopeltis sp. - foliage disease

Basidiomycotina - Uredinales

Cerotelium sp. - rust

Sphaerophragmium sp. - rust (autoecious)

Basidiomycotina - Other

Daedalea sp. - wood rot

Fomes sp. - honeycomb wood rot

Ganoderma sp. - on stumps and fallen logs

Polyporus sp. - wood rot

Schizophyllum sp. - branch dry rot

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf spot

Deuteromycotina - Coelomycetes

Botryodiplodia sp. - dieback

Chaetopeltopsis sp. - fruit flyspeck

Colletotrichum sp. - foliar anthracnose, fruit rot

Sphaceloma sp. - spot anthracnose, scab

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Parasitic Higher Plants

Loranthus spp. - mistletoe-like parasite on branches

Phthirusa sp. - scandent parasitic bush on branches

Psittacanthus sp. - parasitic bush on branches

Tillandsia sp. - epiphytic smothering plant

Nematodes

Meloidogyne sp. - rootknot nematodes

Diseases of Unknown Etiology

Unidentified fungi causing fruit decay

Unidentified yeasts causing fruit rot

SWIETENIA SPP. *

Oomycetes

Phytophthora sp. - isolated from dying seedling
Pythium sp. - root rot

Ascomycotina

Calonectria sp. - leaf spot
Capnodium sp. - sooty mold
Glomerella sp. - anthracnose
Hypoxylon sp. - canker
Meliola sp. - black mildew leaf spots
Mycosphaerella sp. - leaf spot
Nectria sp. - canker
Phyllachora spp. - on leaves, tar spots
Pleospora sp. - leaf spot
Rosellinia spp. - root rots
** Taphrina sp. - associated with leaf blister symptoms
Typanopsis sp. - wood decay
Xylaria sp. - associated with twig dieback

Basidiomycotina - Other

Corticium sp. - pink branch disease
Crinipellis sp. - on branch wood
Fomes sp. - white pocket trunk rot
Marasmius sp. - cord disease causing weakened foliage
Pellicularia sp. - leaf rot
Septobasidium sp. - felty sheaths on stems and twigs
Trametes sp. - fallen branch wood rot

Deuteromycotina - Hyphomycetes

* Alternaria sp. - leaf spot
Botrytis sp. - on edges of dying leaves
Cercospora sp. - leaf spots, premature defoliation
Cladosporium sp. - on leaves
Curvularia sp. - leaf tip burn
Cylindrocarpon sp. - stem canker, gall
* Fusarium sp. - root rot, leaf spot, associated with stem blight, vascular wilt, damping-off and branch lesion symptoms
Fusicladium sp. - leaf spot
Helminthosporium sp. - leaf spot
Oidium sp. - powdery mildew
Pseudocercospora sp. - leaf spot

Deuteromycotina - Coelomycetes

* Botryodiplodia sp. - dieback
* Colletotrichum sp. - anthracnose, associated with stem blight symptoms
Cytospora sp. - canker
Diplodia sp. - witches' broom
** Macrophoma sp. - associated with stem blight and damping-off symptoms
Pestalotia spp. - leaf spot; leaf, petiole and twig lesions
Phoma sp. - black lesions with entire edges on leaves and stems

Phyllosticta sp. - leaf spot, seedling blight

Deuteromycotina - Other

Rhizoctonia sp. - root rot, cortex lesions on base of seedlings

Algae and Lichens

Cephaleuros sp. - twig infection

Parasitic Higher Plants

Cassytha sp. - dodder on young trees

Phoradendron sp. - large phanerogamic bushy parasite

Psittacanthus sp. - parasitic bush on branches

Struthanthus sp. - short phanerogamic bushy parasite

Tillandsia sp. - smothering epiphytic moss

Nematodes

Axonchium sp. - rhizosphere nematode

Dolichodorus sp. - rhizosphere nematode

Trophurus sp. - rhizosphere nematode

Diseases of Unknown Etiology

Defoliation of unknown cause

Seedling decline - probably insects and weak parasitic fungi

Stem cankers of unknown cause which heal over

Unidentified agaric fungus on fallen decayed branch

Unidentified epiphytic fungus on leaves and twigs

Witches' broom on branch tips

SYZYGIIUM SPP.

Ascomycotina

Asterinella sp. - anthracnose, black leaf spot

Capnodium sp. - sooty mold

Cryptosporella sp. - dieback

Glomerella sp. - anthracnose

Mycosphaerella sp. - leaf spot

Peziza sp. -

Seuratia sp. -

Valsa sp. - sudden death

Basidiomycotina - Other

Armillaria sp. - root rot

Crepidotus spp. -

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf spot

Cylindrocladium sp. -

Fusarium sp. - root rot

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose

Diplodia sp. -
Gloeosporium sp. -
Pestalotia sp. -
Phyllosticta spp. - leaf spot, on dead limbs

Algae and Lichens

Cephaleuros sp. - green scurf, algal leaf spot

TAMARINDUS SPP.

Ascomycotina

Capnodium sp. - sooty mold

Meliola sp. - black mildew

Deuteromycotina - Hyphomycetes

Aspergillus sp. - on poorly stored pods

Deuteromycotina - Coelomycetes

Colletotrichum sp. - anthracnose

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Stomatochroon sp. - systemic algal leaf infection

Strigula spp. - white, gray and blue-green leaf spots

Parasitic Higher Plants

Loranthus spp. - phanerogamic woody bus parasites on branches

Oryctanthus spp. - phanerogamic woody bus parasites on branches

Phoradendron spp. - phanerogamic woody bus parasites on branches

Phthirusa spp. - phanerogamic woody bus parasites on branches

Nematodes

Meloidogyne sp. - rootknot nematodes

Diseases of Unknown Etiology

Leaf spots of unknown origin

Root diseases of unknown origin - suspect Rosellinia and Pythium but have been unable to isolate

Unidentified yeasts causing unpleasing pulp fermentation

TECTONA SPP.

Ascomycotina

Nectria sp. - dieback

Rosellina sp. - rot of exposed roots on fallen tree

Basidiomycotina - Uredinales

Olivea sp. - leaf rust

Basidiomycotina - Other

Armillaria sp. - root rot

Cyathus sp. - birds-nest fungus associated with wood decay

Daedalea sp. - on fallen branch

Helicobasidium sp. - root rot

Marasmius sp. - foliage disease, cord blight

Polyporus sp. - old plank decay, on rotted logs

Rigidoporus sp. - root rot

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf spot

Fusarium sp. - rootlet rot

Deuteromycotina - Coelomycetes

Sphaceloma sp. - scab

Deuteromycotina - Other

Rhizoctonia sp. - seedling damping-off

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Parasitic Higher Plants

Loranthus spp. - phanerogamic woody bush parasites on branches

Virus

Leaf mottle and malformation

Other

Chlorosis - probably due to excess lime

Physiological - leaf distortion, limber-trunk of young trees

TERMINALIA SPP.

Ascomycotina

Capnodium sp. - sooty mold

Glomerella sp. - common anthracnose

Meliola sp. - black mildew

Mollisia sp. -

Tryblidiella sp. - branch and twig dieback

Basidiomycotina - Uredinales

Uredo sp. - leaf rust

Basidiomycotina - Other

Fomes sp. - honeycomb trunk rot

Schizophyllum sp. - branch dry rot, diebark

Trametes sp. - wood decay

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf spot

Nigrospora sp. - from diseased leaves

Deuteromycotina - Coelomycetes

Botryodiplodia sp. - associated with dieback

Colletotrichum sp. - common anthracnose

Fusicoccum spp. - on dead twigs, part of dieback complex

Pestalotia sp. - leaf spot

Pestalotiopsis sp. - leaf spot

Phoma sp. - black lesions on leaves and twigs

Phomopsis sp. - leaf spot

Phyllosticta spp. - leaf spot

Septoria sp. - leaf spot

Sphaceloma sp. - spot anthracnose

Deuteromycotina - Other

Rhizoctonia sp. - leaf necrosis

Algae and Lichens

Cephaleuros sp. - algal leaf spot

Stomatochroon sp. - algal leaf lesion, systemic leaf petiole infection

Strigula spp. - white lichen leaf spots

Parasitic Higher Plants

Cassytha sp. - olive-green dodder

Cuscuta sp. - yellow dodder

Loranthus spp. - phanerogamic woody bush parasites on branches

Oryctanthus spp. - phanerogamic woody bush parasites on branches

Phoradendron spp. - phanerogamic woody bush parasites on branches

Phthirusa spp. - phanerogamic woody bush parasites on branches

TETRAGASTRIS SPP.

THEOBROMA SPP.

Myxomycetes

Physarum sp. - on pods piled after harvest

Oomycetes

Phytophthora spp. - branch canker, chupon and bud wilt, pod and root rot,
black pod

Pythium sp. - root rot

Trachysphaera sp. - mealy pod

Zygomycotina

Choanephora sp. - blossom blight and drop, infection of harvested beans

Circinella sp. - mold on curing beans

Cunninghamella sp. - mold of harvested pods

Mucor spp. - spoilage infections of beans

Ascomycotina

- Anthostomella sp. - stem disease
Botryosphaeria sp. - stem canker, pod spot
Calonectria sp. - dieback, branch canker, pod rot, green point cushion galls
Calospora sp. -
Calostilbe sp. - stem canker, root rot
Capnodium spp. - sooty molds
Ceratocarpia sp. -
Ceratocystis spp. - vascular wilt & discoloration, branch death, fruit rot, canker, often associated with Xyleborus borers
Diaporthe sp. - melanose
Eutypa sp. - bark and wood rot
Glomerella sp. - anthracnose
Hypoxyton sp. - attack on trunk bark and disease of wood under affected bark
Hysteropsis sp. - twig and leaf disease
Irenopsis sp. - black mildew leaf patches
Lasionectria sp. - branch canker
Leptosphaeria sp. - foliage disease
Letendraea sp. - chupon disease
Macbridella sp. - bark disease
Melanomma sp. - stem disease
Meliola sp. - black mildew
Micropeltis sp. - black mildew on leaves
Nectria spp. - pod, branch and petiole diseases; branch, stem and trunk cankers; pod rot; on dried seed
Phaeopeltosphaeria sp. - pod shell lesions
Physalospora sp. -
Rosellinia spp. - root rots
Saccharomyces sp. - yeasts involved in the fermentation process
Sphaerostilbe sp. - violet root rot
Taphrina sp. - witches' broom
Thyridaria sp. - defoliation and dieback
Triblidiella sp. - secondary on dead twigs
Ustulina sp. - wood rot on stumps and fallen material, collar rot
Xylaria sp. - branch disease

Basidiomycotina - Uredinales

Uredo sp. - rust

Basidiomycotina - Other

- Armillaria sp. - white root rot, collar crack
Botryobasidium sp. - pink disease
Ceratobasidium sp. - thread blight
Corticium sp. - leaf rot, pink branch disease, thread blight
Crinipellis sp. - witches' broom
Fomes spp. - brown and white root diseases; root, trunk and stump rots
Ganoderma spp. - root, stump and log rots
Hymenochaete sp. - twig and branch canker, wood disease
Marasmius spp. - witches' broom, chupon swelling, cord blights
Mycena spp. - uncommon leaf spot, false witches' broom

Oncobasidium sp. - vascular streak dieback
Pellicularia sp. - branch thread-web blight, leaf rot
Phellinus sp. - root rot, stem rot
Polyporus spp. - wood rot of trunks
Polystictus spp. - wood infection of old trees
Poria sp. - wood rot
Pterula sp. - stem decay, dieback complex
Rigidoporus sp. - white root disease
Schizophyllum sp. - branch dry rot
Septobasidium sp. - bark disease, felty fungus
Trametes spp. - wood rots of old trees

Deuteromycotina - Hyphomycetes

Alternaria spp. - black smudge on dried beans
Aspergillus spp. - associated with pod rot and mold
Calostilbella sp. - stem canker
Cephalothecium sp. - infection of trunk bark
Cladosporium sp. - injury of mature leaves and dried beans
Fusarium spp. - branch disease; leaf lesions; root, pod and pedicel rot;
dieback, pod disease, infection of flower cushions
Geotrichum sp. - cause of musty flavor in beans
Helminthosporium sp. - leaf disease
Menispora sp. - part of pod rot complex
Monilia sp. - watery pod rot, frosty pod rot, gray pod rot
Mycogone sp. - mold on processed beans
Oidium sp. - powdery mildew
Oospora spp. - causing altered flavor in processed beans
Penicillium spp. - mustyness of beans, mold on decaying pod husks
Periconia sp. - associated with leaf scorch
Podosporium sp. - foliage disease
Pseudosaccharomyces sp. - found in curing bins during processing
Ramularia sp. - seedling cotyledon white mold, damping-off
Spicaria spp. - canker-like branch infection
Stachylidium sp. - dieback
Stilbella sp. - on dead branches
Thielaviopsis sp. - pod rot
Torula sp. - wood stain disease
Trichoderma sp. - isolated from cushion galls
Tripospermum sp. - sooty mold
Verticillium sp. - wilt, sudden death, pod black pit and spot, dieback

Deuteromycotina - Coelomycetes

Asterostomella sp. - black mildew-like leaf disease
Botryodiplodia sp. - pod charcoal rot and mummy, wilt, dieback, cutting
root failure
Colletotrichum sp. - anthracnose, leaf spot, pod rot, twig infection
Diplodia sp. - dieback, brown rot of pods
Labrella sp. - on foliage
Lasiodiplodia sp. - dieback, brown rot of pods
Macrophoma sp. - attacks foliage and roots of young plants
Pestalotia spp. - part of pod disease complex
Phomopsis sp. - dieback

Phyllosticta spp. - leaf spots
Septoria sp. - leaf spot
Sphaeronaema sp. - stem lesion, pod spot
Stilbospora sp. - on dead leaves
Strionemadiplodia sp. - part of pod rot complex

Deuteromycotina - Other

Rhizoctonia spp. - seedbed and cutting bench disease, root rot, black collar of young trees, discrete necrotic leaf spot
Sclerotium sp. - soil-line rot of nursery plants

Algae and Lichens

Cephaleuros spp. - algal leaf spot, redrust, twig canker
Stomatochroon sp. - systemic algal leaf spot
Strigula spp. - white lichen leaf spots
Trentapohlia sp. - algal hair-like tufts growing epiphytically

Parasitic Higher Plants

Acanthosyris sp. - trees which kill cacao by root parasitism
Cuscuta spp. - dodders, common in nurseries
Epiphytes of many types - cause smothering and poor fruit set
Lophophytum sp. - a low growing phanerogam parasitizing host roots
Oryctanthus spp. - phanerogamic bush parasites on branches
Phoradendron spp. - phanerogamic bush parasites on branches
Phthirusa spp. - phanerogamic bush parasites on branches
Porella sp. - leafy liverworts on old foliage
Psittacanthus sp. - phanerogamic bush parasites on branches
Struthanthus spp. - phanerogamic bush parasites on branches

Nematodes

Aphelenchus sp. - nematode on roots
Helicotylenchus sp. - rhizosphere nematode
Rotylenchulus sp. - rhizosphere nematode

Viruses

Cacao Dented Leaf
Cacao Mottle Leaf
Cacao Necrosis
Cacao Red Mottle
Cacao Swollen Shoot - causes a red vein banding
Cacao Vein Clearing
Cacao Yellow Mosaic
West Indian Mosaic

Other

Copper deficiency - leaf twist and curvature
Physiological wilt - so sudden that leaves do not become chlorotic
Potash deficiency - leaf margin scorch

Diseases of Unknown Etiology

Branch dieback - isolations yield Fusarium, Colletotrichum, Botryodiplodia and bacteria

Cherelle wilt of young pods - isolations yield Botryodiplodia, Fusarium, Phytophthora, Ceratocystis, Pestalotia

Cutting disease showing tissue discoloration and roots that fail to grow - associated organisms include Fusarium, Botryodiplodia, bacteria and nematodes

Morte subita - sudden death with red exudate, believed to be a complex of organisms including Botryodiplodia

Unidentified bacterium - part of cause of failure of cuttings to root

TREMA SPP.

Deuteromycotina - Hyphomycetes

Cercospora sp. - leaf spot

TRICHILIA SPP.

REFERENCES

- Barnett, H. L. and Hunter, B. B. 1972. Illustrated Genera of Imperfect Fungi. Third Ed. Burgess Publishing Co., Minneapolis, MN. 241 pp.
- Cook, A. A. 1981. Diseases of Tropical and Subtropical Field, Fiber and Oil Plants. Macmillan Publishing Co., New York. 450 pp.
- Farr, D. F., Bills, G. F., Chamuris, G. P., and Rossman, A. Y. 1989. Fungi on Plants and Plant Products in the United States. APS Press, St. Paul, MN. 1252 pp.
- Holliday, P. 1980. Fungus Diseases of Tropical Crops. Cambridge University Press, London. 607 pp.
- Kranz, J., Schmutterer, H. and Koch, W. 1977. Diseases, Pests and Weeds in Tropical Crops. John Wiley & Sons, New York. 666 pp.
- Raabe, R. D., Conners, I. L., and Martinez, A. P. 1981. Checklist of Plant Diseases in Hawaii. Hawaii Inst. Trop. Agric. and Human Resour. Univ. Hawaii, Honolulu Information Text Series 022. 313 pp.
- Runion, G. B., Reid, R. K., and Kelley, W. D. 1989. Pathology of nursery seedlings in Haiti: Diseases, their etiology and control. SECID/Auburn Univ. Haiti Agrofor. Res. Proj. Rep. No. 12. 25 pp.
- Thurston, H. D. 1984. Tropical Plant Diseases. APS Press, St. Paul, MN. 208 pp.
- Wehlburg, C., Alfieri, S. A., Jr., Langdon, K. R., and Kimbrough, J. W. 1975. Index of Plant Diseases in Florida. Florida Dept. Agric. and Consumer Serv., Div. Plant Industry. Bull. No. 11. 285 pp.
- Wellman, F. L. 1977. Dictionary of Tropical American Crops and Their Diseases. Scarecrow Press, Metuchen, NJ. 495 pp.