

Table S1. List of the plant diseases and their causal pathogenic organisms as reviewed in the systematic quantitative literature review.

Plant	Disease	Causal organism	Biological group	Type
Apple tree	Cedar rust	<i>Gymnosporangium juniperi-virginianae</i>	Fungus	Biotroph
	Scab	<i>Venturia inaequalis</i> Cooke (Wint.)	Fungus	Hemibiotroph
	Fire blight	<i>Erwinia amylovora</i>	Bacterium	Biotroph
Areca palm	Yellow leaf disease	Areca palm velarivirus 1	Virus	Biotroph
Banana	Yellow sigatoka	<i>Mycosphaerella musicola</i> Leach	Fungus	Necrotroph
	Xanthomonas wilt of banana	<i>Xanthomonas vasicola</i> pv. <i>musacearum</i>	Bacterium	Biotroph
	Banana bunchy top virus	<i>Babuvirus</i> spp.	Virus	Biotroph
	Fusarium wilt	<i>Fusarium oxysporum</i> f. sp. <i>cubense</i> race 4	Fungus	Biotroph
Bermudagrass	Spring dead spot	<i>Ophiosphaerella herpotricha</i> and <i>O. Korrae</i>	Fungi	Biotroph
Citrus	Citrus canker	<i>Xanthomonas citri</i> subsp. <i>citri</i>	Bacterium	Biotroph
	Citrus huanglongbing disease	<i>Candidatus Liberibacter asiaticus</i>	Bacterium	Biotroph
	Phytophthora foot rot	<i>Candidatus Liberibacter asiaticus</i>	Bacterium	Biotroph
	Citrus gummosis disease	<i>Phytophthora</i> spp.	Fungus-like oomycete	Biotroph
Coffee	Coffee leaf rust	<i>Hemileia vastatrix</i>	Fungus	Biotroph
Cotton	Cotton root rot	<i>Phymatotrichopsis omnivora</i>	Fungus	Necrotrophic
Eucalyptus tree	Various leaf diseases	n.a.	n.a.	n.a.
Grapevine	Grapevine leaf stripe	<i>Phaeomoniella chlamydospora</i> , <i>Phaeoacremonium</i> spp. and <i>Fomitiporia mediterranea</i>	Fungi	Biotroph
	Flavescence doree phytoplasma	<i>Candidatus Phytoplasma vitis</i>	Bacterium	Biotroph
	Black rot	<i>Guignardia bidwellii</i>	Fungus	Biotroph
	Isariopsis leaf spot	<i>Pseudocercospora vitis</i>	Fungus	Biotroph
Kiwifruit	Kiwifruit decline	<i>Phytophthora chamaehyphon</i> , <i>Phytophthora vexans</i> and <i>Fusarium solani</i>	Stramenopila, Fungus	Biotroph
Lettuce	Soft rot	<i>Pectobacterium carotovorum</i> subsp. <i>Carotovorum</i>	Bacterium	Biotroph
Maize	Northern leaf blight	<i>Setosphaeria turcica</i> (Luttrell) Leonard & Suggs (anamorph <i>Exserohilum turcicum</i>)	Fungus	Biotroph

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	Southern leaf blight	<i>Puccinia polysora</i> Underw.	Fungus	Biotroph
	Maize streak virus disease	Maize streak virus	Virus	Biotroph
	Tar spot	<i>Phyllachora maydis</i>	Fungus	Biotroph
Norway spruce	Needle bladder rust	<i>Chrysomyxa rhododendri</i>	Fungus	Biotroph
Oil palm	Basal stem rot	<i>Ganoderma boninense</i>	Fungus	Hemibiotroph
Oilseed rape	Sclerotinia	<i>Sclerotinia sclerotiorum</i> (Lib.) De Bary	Fungus	Necrotroph
Okra	Cercospora leaf spot	<i>Cercospora abelmoschi</i>	Fungus	Biotroph
Olive tree	Verticillium wilt	<i>Verticillium dahliae</i> Kleb	Fungus	Biotroph
	<i>Xylella fastidiosa</i>	<i>Xylella fastidiosa</i>	Bacterium	Biotroph
	Peacock spot	<i>Venturia oleaginea</i>	Fungus	Biotroph
Onion	Anthraxnose-twister	<i>Olletotrichum gloeosporioides</i> , <i>Gibberella moniliformis</i>	Fungi	Hemibiotroph
	Stemphylium leaf blight	<i>Stemphylium vesicarium</i>	Fungus	Biotroph
Opium poppy	Downy mildew	<i>Peronospora arborescens</i> (Berk.)	Fungus	Biotroph
Paperbark tree	Myrtle rust	<i>Austropuccinia psidii</i>	Fungus	Biotroph
Peach tree	Fire blight	<i>Erwinia amylovora</i>	Bacterium	Biotroph
Peanut	Bacterial wilt	<i>Ralstonia solanacearum</i>	Bacterium	Biotroph
Pine tree	Pine wilt disease	<i>Bursaphelenchus xylophilus</i>	Nematode	Biotroph
	Red band needle blight	<i>Dothistroma septosporum</i>	Fungus	Biotroph
Potato	Potato late blight	<i>Phytophthora infestans</i> (Mont.) De Bary	Fungus	Biotroph
	Potato early blight	<i>Alternaria solani</i> Sorauer	Fungus	Biotroph
	Potato Y virus	Potato Y virus	Virus	Biotroph
	Vascular wilt	<i>Pseudomonas solanacearum</i>	Bacterium	Biotroph
	Soft rot	<i>Erwinia bacteria</i>	Bacterium	Biotroph
Radish	Fusarium wilt	<i>Fusarium oxysporum</i>	Fungus	Biotroph
Rice	Sheath blight	<i>Rhizoctonia solani</i> AG1-1A	Fungus	Necrotroph
	Bacterial leaf blight	<i>Xanthomonas oryzae</i> pv. <i>Oryzae</i>	Bacterium	Biotroph
	Bacterial panicle blight	<i>Burkholseria glumae</i>	Bacterium	Biotroph
Soybean	Target spot	<i>Corynespora cassiicola</i>	Fungus	Necrotroph

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	Powdery mildew	<i>Microsphaera diffusa</i>	Fungus	Biotroph
Squash	Powdery mildew	<i>Podosphaera xanthii</i>	Fungus	Biotroph
Sugar beet	Cercospora leaf spot	<i>Cercospora beticola</i> Sacc.	Fungus	Biotroph
	Anthracnose	<i>Colletotrichum lindemuthianum</i> (Sacc. & Magn.)	Fungus	Biotroph
	Alternaria leaf spot	<i>Alternaria alternata</i>	Fungus	Necrotroph
	Beet cyst nematode	<i>Heterodera schachtii</i>	Nematode	Parasite
Sugarcane	White leaf phytoplasma	<i>Phytoplasma</i> spp.	Bacterium	Biotroph
Switchgrass	Rust disease	<i>Puccinia novopanici</i>	Fungus	Biotroph
Tea	Anthracnose	<i>Gloeosporium theae-sinensis</i> Miyake	Fungus	Biotroph
Tomato	Bacterial spot	<i>Xanthomonas campestris</i> pv. <i>Vesicatoria</i> and <i>X. perforans</i>	Bacteria	Biotroph
	Early blight	<i>Alternaria solani</i>	Fungus	Biotroph
	Late blight	<i>Phytophthora infestans</i>	Fungus-like oomycete	Hemibiotroph
	Septoria leaf spot	<i>Septoria lycopersici</i>	Fungus	Biotroph
	Tomato mosaic virus	Tomato mosaic virus	Virus	Biotroph
	Leaf mold	<i>Fulvia fulva</i>	Fungus	Biotroph
	Target leaf spot	<i>Corynespora cassiicola</i>	Fungus	Biotroph
	Tomato yellow leaf curl virus	Tomato yellow leaf curl virus	Virus	Biotroph
Watermelon	Gummy stem blight	<i>Didymella bryoniae</i>	Fungus	Biotroph
	Anthracnose	<i>Colletotrichum orbiculare</i>	Fungus	Hemibiotroph
	Fusarium wilt	<i>Fusarium oxysporum</i> f. sp. <i>niveum</i>	Fungus	Hemibiotroph
	Phytophthora fruit rot	<i>Phytophthora capsici</i>	Fungus-like oomycete	Hemibiotroph
	Alternaria leaf spot	<i>Alternaria cucumerina</i>	Fungus	Biotroph
	Cucurbit leaf crumple	Cucurbit leaf crumple virus	Virus	Biotroph
	Downy mildew	<i>Pseudoperonospora cubensis</i>	Fungus-like oomycete	Biotroph
Wheat	Yellow rust	<i>Puccinia striiformis</i> f. sp. <i>tritici</i>	Fungus	Biotroph
	Leaf rust	<i>Puccinia triticina</i>	Fungus	Biotroph
	Septoria leaf spot	<i>Zymoseptoria tritici</i>	Fungus	Hemibiotroph

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	Wheat powdery mildew	<i>Blumeria graminum</i> f. sp. <i>tritici</i>	Fungus	Biotroph
	Tan spot	<i>Pyrenophora tritici-repentis</i>	Fungus	Necrotroph
	Fusarium head blight	Complex of <i>Fusarium graminearum</i> Schwabe and <i>F. culmorum</i>	Fungus	Hemibiotroph