

Partial List of Pathogen Testing Capabilities of WLPPD from Plant, Soil, and Irrigation Water

Crop/Source	Disease/Target	Causal Organism	Organism Classification
Brassica	Black rot	<i>Xanthomonas campestris pv. Campestris</i>	Bacteria
Brassica	Black Leg, Canker, Dry Rot	<i>Phoma lingam</i>	Fungus
Carrots	Bacterial Leaf Blight	<i>Xanthomonas campestris pv. carotae</i>	Bacteria
Carrots	Leaf Blight of Carrot	<i>Alternaria dauci</i>	Fungus
Cucurbits	Bacterial Fruit Blotch	<i>Acidovorax avenae ssp. citrulli</i>	Bacteria
Cucurbits	Cucumber Green Mottle Mosaic Virus	<i>Cucumber Green Mottle Mosaic Virus</i>	Virus
Cucurbits	Melon Necrotic Spot Virus	<i>Melon Necrotic Spot Virus</i>	Virus
Cucurbits	Squash Mosaic Virus	<i>Squash Mosaic Virus</i>	Virus
Grapevine	Crown Gall Disease	<i>Agrobacterium tumefaciens</i>	Bacteria
Grapevine	Bacteria	<i>Xylella fastidiosa</i>	Bacteria
Grapevine	Powdery Mildew	<i>Erysiphe necator</i>	Fungi
Grapevine	<i>Phytophthora</i> spp.	<i>Phytophthora</i> spp.	Fungus
Grapevine	Black Foot Disease	<i>Cylindrocarpon</i> spp.	Fungus
Grapevine	Oak Root Fungus	<i>Armillaria mellea</i>	Fungus
Grapevine	Eutypa Dieback	<i>Eutypa</i> spp.	Fungus
Grapevine	Bot Canker	<i>Botryosphaeria</i> spp.	Fungus
Grapevine	Trunk Disease	<i>Phomopsis viticola</i>	Fungus
Grapevine	Petri Disease, Esca	<i>Phaeoacremonium</i> spp.	Fungus
Grapevine	Petri Disease, Esca	<i>Phaeoconiella chlamydospora</i>	Fungus
Grapevine	Petri Disease, Esca	<i>Cylindrocarpon</i> spp.	Fungus
Grapevine	Vine Decline Fungi	<i>Phaeoacremonium</i> spp. and <i>Phaeoconiella chlamydospora</i>	Fungus
Grapevine	Canker Diseases	<i>Eutypa</i> , <i>Botryosphaeria</i> , <i>Phomopsis</i> , etc.	Fungus
Grapevine	Oak Root Disease	<i>Armillaria mellea</i>	Fungus
Grapevine	Black Foot Disease	<i>Cylindrocarpon</i> spp.	Fungus
Grapevine	Powdery Mildew	<i>Erysiphe necator</i>	Fungus
Grapevine	Downy Mildew	<i>Plasmopara viticola</i>	Fungus
Grapevine	Botrytis Bunch Rot	<i>Botrytis cinerea</i>	Fungus
Grapevine	Summer bunch rot	<i>Cladosporium</i> , <i>Penicillium</i> , and others	Fungus
Grapevine	Phomopsis cane and leaf spot	<i>Phomopsis viticola</i>	Fungus
Grapevine	Phytoplasmas	<i>Phytoplasmas</i>	Phytoplasma
Grapevine	GLRD	<i>Grapevine leafroll associated virus 1</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus 2</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus 2RG</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus 3</i>	Virus

Grapevine	GLRD	<i>Grapevine leafroll associated virus 4</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus 5</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus 6</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus 7</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus 9</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus 10</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus 11</i>	Virus
Grapevine	GLRD	<i>Grapevine leafroll associated virus Car.</i>	Virus
Grapevine	Vitivirus	<i>Grapevine virus A</i>	Virus
Grapevine	Vitivirus	<i>Grapevine virus B</i>	Virus
Grapevine	Vitivirus	<i>Grapevine virus D</i>	Virus
Grapevine	Vitivirus	<i>Grapevine virus E</i>	Virus
Grapevine	Vitivirus	<i>Grapevine virus F</i>	Virus
Grapevine	Redblotch disease	<i>Grapevine red blotch virus</i>	Virus
Grapevine	Phytoplasma	<i>Phytoplasma</i>	Virus
Grapevine	Nepoviruses	<i>Grapevine fanleaf virus</i>	Virus
Grapevine	Nepoviruses	<i>Arabis mosaic virus</i>	Virus
Grapevine	Nepoviruses	<i>Blueberry leaf mottle virus</i>	Virus
Grapevine	Nepoviruses	<i>Grapevine deformation virus</i>	Virus
Grapevine	Nepoviruses	<i>Raspberry ringspot virus</i>	Virus
Grapevine	Nepoviruses	<i>Tobacco ringspot virus</i>	Virus
Grapevine	Nepoviruses	<i>Strawberry latent ringspot virus</i>	Virus
Grapevine	Nepoviruses	<i>Tomato black ring virus</i>	Virus
Grapevine	Nepoviruses	<i>Tomato ringspot virus</i>	Virus
Grapevine	Nepoviruses	<i>Peach rosette mosaic virus</i>	Virus
Grapevine	Nepoviruses	<i>Grapevine Bulgarian latent virus</i>	Virus
Grapevine	Nepoviruses	<i>Grapevine chrome mosaic virus</i>	Virus
Grapevine	Nepoviruses	<i>Grapevine Tunisian ringspot virus</i>	Virus
Grapevine	Nepoviruses	<i>Grapevine Anatolian ringspot virus</i>	Virus
Grapevine	Marafivirus	<i>Grapevine syrah virus-1</i>	Virus
Grapevine	Marafivirus	<i>Grapevine rupestris vein feathering virus</i>	Virus
Grapevine	Marafivirus	<i>Grapevine asteroid mosaic virus</i>	Virus
Grapevine	Maculavirus	<i>Grapevine fleck virus</i>	Virus
Grapevine	Maculavirus	<i>Grapevine redglobe virus</i>	Virus
Grapevine	Foveavirus	<i>Grapevine rupestris stemmitting associated virus</i>	Virus
Grapevine	Badnavirus	<i>Grapevine vein-clearing virus</i>	Virus
Grapevine	Trichovirus	<i>Grapevine pinot gris virus</i>	Virus
Irrigation water	<i>Total Coliform/Generic E. coli</i>	<i>Total Coliform/Generic E. coli</i>	BacT

Lettuce	Lettuce Mosaic Virus	<i>Lettuce Mosaic Virus</i>	Virus
other crops/Soil samples	BACTERIAL DISEASE DIAGNOSIS	<i>Pseudomonas sp.</i>	Bacteria
other crops/Soil samples	FUNGAL DISEASE DIAGNOSIS	<i>Aspergillus sp.</i>	Fungus
other crops/Soil samples	FUNGAL DISEASE DIAGNOSIS	<i>Mucor sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Alternaria sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Collectotrichum sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Cylindrocarpon sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Fusarium sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Phytophthora sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Pythium sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Rhizoctonia sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Stemphyllium sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Verticillium sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Aspergillus sp.</i>	Fungus
other crops/Soil samples	PATHOGENIC FUNGI	<i>Cladosporium sp.</i>	Fungus
other crops/Soil samples	BENEFICIAL FUNGI	<i>Penicillium sp.</i>	Fungus
other crops/Soil samples	BENEFICIAL/PATHOGENIC FUNGI	<i>Rhizopus sp.</i>	Fungus
other crops/Soil samples	BENEFICIAL FUNGI	<i>Trichoderma sp.</i>	Fungus
Pistachios	PBTS	<i>Rhodococcus fascians</i>	Bacteria
Potato	Bacterial Ring Rot in Potato	<i>Clavibacter michiganensis subsp. sepedonicus (Cms)</i>	Bacteria
Potato	Brown Rot of Potato	<i>Ralstonia solanacearum (Rs)</i>	Bacteria
Potato	Blackleg Disease on Potato	<i>Dickeya spp.</i>	Fungus
Potato	Potato virus M (PVM)	<i>Potato virus M (PVM)</i>	Virus
Potato	Potato virus A (PVA)	<i>Potato virus A (PVA)</i>	Virus
Potato	Potato leafroll virus (PLRV)	<i>Potato leafroll virus (PLRV)</i>	Virus
Potato	Potato latent virus (PotLV)	<i>Potato latent virus (PotLV)</i>	Virus
Potato	Potato aucuba mosaic virus (PAMV)	<i>Potato aucuba mosaic virus (PAMV)</i>	Virus
Potato	Potato virus T (PVT)	<i>Potato virus T (PVT)</i>	Virus
Potato	Potato virus V (PVV)	<i>Potato virus V (PVV)</i>	Virus
Potato	Potato virus X (PVX)	<i>Potato virus X (PVX)</i>	Virus
Potato	Potato virus Y (PVY)	<i>Potato virus Y (PVY)</i>	Virus
Potato	Potato virus Y-common strain (PVY-c)	<i>Potato virus Y-common strain (PVY-c)</i>	Virus
Potato	Potato virus Y-necrotic strain (PVY-n)	<i>Potato virus Y-necrotic strain (PVY-n)</i>	Virus
Potato	Potato virus Y-o+c strains (PVY-o+c)	<i>Potato virus Y-o+c strains (PVY-o+c)</i>	Virus
Potato	Andean potato latent virus (APLV)	<i>Andean potato latent virus (APLV)</i>	Virus
Spinach	Downy Mildew	<i>Eronospora farinosa f. sp. Spinaciae</i>	Fungus

Spinach	Verticillium Wilt	<i>Verticillium dahliae</i>	Fungus
Tomato	Bacterial Canker	<i>Clavibacter michiganensis subsp. michiganensis (Cmm)</i>	Bacteria
Tomato	Bacterial Wilt	<i>Ralstonia solanacearum (formerly P. solanacearum)</i>	Bacteria
Tomato	Bacterial Spot	<i>Xanthomonas vesicatoria</i>	Bacteria
Tomato	Early Blight	<i>fungi Alternaria tomatophila</i>	Fungus
Tomato	Early Blight	<i>fungi A. solani</i>	Fungus
Tomato	Late blight	<i>Phytophthora infestans</i>	Fungus
Tomato	Septoria Leaf Spot	<i>Septoria lycopersici</i>	Fungus
Tomato	Leaf Mold	<i>Passalora fulva</i>	Fungus
Tomato	Tomato Mosaic Viruses	<i>Tomato Mosaic Viruses</i>	Virus
Tomato	Tomato Spotted Wilt Virus	<i>Tomato Spotted Wilt Virus</i>	Virus
Tomato	Tomato Yellow Leaf Curl Virus (TYLCV)	<i>Tomato Yellow Leaf Curl Virus (TYLCV)</i>	Virus
Tomato/Pepper	Bacterial Leaf Spot	<i>Xanthomonas campestris pv. vesicatoria</i>	Bacteria
Tomato/Pepper	Bacterial Wilt and Canker	<i>Clavibacter michiganensis ssp. Michiganensis</i>	Bacteria
Tomato/Pepper	Pepino Mosaic Virus	<i>Pepino Mosaic Virus</i>	Virus
Tomato/Pepper	Tobamoviruses (TMV, ToMV)	<i>Tobamoviruses (TMV, ToMV)</i>	Virus