

Routine Plant Pathogen Assays*

**Please ask if you do not see a specific assay listed. The listed tests are usually in stock, and we order/develop new tests when needed.*

Culture analysis for plant pathogen determination

Microscopy (insect identification, symptomatic plant examination)

Plant pathogenic nematode extraction and genus level identification

Soybean cyst nematode egg extraction and egg counts

Lateral Flow Tests

Acidovorax avenae subsp. *citrulli* (AAC)

Alternanthera mosaic virus (AltMV)/Papaya mosaic virus (PapMV)

Arabis mosaic virus (ArMV)

Calibrachoa mottle virus (CbMV)

Clavibacter michiganensis subsp. *michiganensis* (Cmm)

Cucumber green mottle mosaic virus (CGMMV)

Cucumber mosaic virus (CMV)

Cymbidium mosaic virus & Odontoglossum ringspot virus (CymMV & ORSV)

Erwinia amylovora (Ea)

Hosta virus X (HVX)

Impatiens necrotic spot virus (INSV)

Iris yellow spot virus (IYSV)

Maize chlorotic mottle virus (MCMV)

Maize dwarf mosaic virus (MDMV)

Melon necrotic spot virus (MNSV)

Melon severe mosaic virus (MeSMV)

Pepino mosaic virus (PepMV)

Pepper mild mottle virus (PMMoV)

Phytophthora spp. (Phyt)

Plantago asiatica mosaic virus (PIAMV)

Plum pox virus (PPV)

Potyvirus group (Poty)

Ralstonia solanacearum (Rs)

Squash mosaic virus (SqMV)

Tobacco etch virus (TEV)

Tobacco mosaic virus (TMV)

Tobacco ringspot virus (TRSV)

Tobacco streak virus (TSV)

Tomato brown rugose fruit virus (ToBRFV)

Tomato ringspot virus (ToRSV)

Tomato spotted wilt virus (TSWV)

Xanthomonas spp. (Xan)

Xanthomonas hortorum pv. *pelargonii* (Xhp)

Zucchini yellow mosaic virus (ZYMV)

Enzyme linked immunosorbent assays (ELISA)

Xanthomonas axonopodis pv. *begoniae* (Xab)
Xantomonas genus specific (Xan)
Alfalfa mosaic virus (AMV)
Arabidopsis mosaic virus (ArMV)
Barley stripe mosaic virus (BSMV)
Barley yellow dwarf virus-MAV (BYDV-MAV)
Barley yellow dwarf virus-PAV (BYDV-PAV)
Cereal yellow dwarf virus-RPV (CYDV-RPV)
Cucumber mosaic virus (CMV)
Grapevine fanleaf virus (GFLV)
Hibiscus chlorotic ringspot virus (HCRSV)
High Plains wheat mosaic virus (HPWMOV)
Hosta virus X (HVX)
Impatiens necrotic spot virus (INSV)
Phytophthora spp. (Phyt)
Plum pox virus (PPV)
Potyvirus group (Poty)
Prunus necrotic spot virus (PNRSV)
Ralstonia solanacearum (Rs)
Soil-borne wheat mosaic virus (SBWMV)
Tobacco mosaic virus (TMV)
Tobacco ringspot virus (TRSV)
Tobacco streak virus (TSV)
Tomato aspermy virus (TAV)
Tomato mosaic virus (ToMV)
Wheat spindle streak mosaic virus (WSSMV)
Wheat streak mosaic virus (WSMV)

DNA based testing methods

Agrobacterium spp.
Bacterial ID (16S sequencing)
Badna virus group
Beet curly top virus (BCTV)
Bipolaris spp.
Canna yellow mottle virus (CaYMV)
Erwinia amylovora
Fungal ID (ITS, Bt, EF or other sequencing)
Ophiostoma ulmi
Phytoplasma spp.
Phymatotrichum omnivorum
Pseudomonas savastanoi
Rhodococcus fasciens
Xylella fastidiosa

RNA based methods

Alfalfa mosaic virus (AMV)
Alternanthera mosaic virus (AltMV)

Arabidopsis mosaic virus (ArMV)
Bean yellow mosaic virus (BYMV)
Canna yellow streak virus (CaYSV)
Cucumber mosaic virus (CMV)
Emara virus group
Grapevine leafroll associated virus 3 (GLRaV-3)
High Plains wheat mosaic virus (HPWMoV)
Hosta virus X (HVX)
Japanese holly fern mottle virus (JHFMoV)
Luteovirus group
Potex virus group
Poty virus group
Rose rosette virus
Soil-borne wheat mosaic virus (SBWMV)
Tobacco mosaic virus (TMV)
Tobacco rattle virus (TRV)
Tobamo virus group
Tobra virus group
Tomato brown rugose fruit virus (ToBRFV), not for export certification
Tomato mosaic virus (TMV)
Tospo virus group
Triticum mosaic virus (TriMV)
Wheat spindle streak mosaic virus (WSSMV)
Wheat streak mosaic virus (WSMV)