Fee structure for the UF-IFAS Plant Diagnostic Center effective 1-2-2022. Questions? Special case? Bulk processesing need? Regulatory issue? Please call us: 352-392-1795. Thank you for using our service.

Type of test	Cost per sample (USD)	Description of test	Tissue needed* for test	Timeline from sample receipt to final test result*	Reporting
Standard general diagnosis (non-Rapid Turf)	**$40** ($50 for samples from outside the state of FL)	Triage, microscopy, culturing, and other basic tests as necessary. (Bacterial ID to genus is an additional $80.)	Freshly-collected, symptomatic tissue with live and sick tisue apparent	5-7 business days; bacterial pathogens can take up to 2 weeks	Primary disease-causing organism genus-level identification; cultural and chemical management recommendations.
Standard Rapid Turf diagnosis	**$75.00**	Triage, microscopy, culturing, and other basic tests as necessary (SCMV, pH/EC, etc.)	Freshly-collected, symptomatic tissue with live and sick tisue apparent. Two cup-cutter-cores or 8"x8" pieces of sod. Soil without turfgrass or aeration plugs are insufficient.	2 business days for prelim if samples received by noon Thursday. Final report 4-8 days later. Samples received after noon or on Friday will start the reporting clock the next business day.	Generally genus-level identification; cultural and chemical management recommendations
International (non-Rapid Turf)	**$250.00**	Triage, microscopy, culturing, and other basic tests as necessary (immunostrips, pH/EC, HR, oxidase, etc.)	Freshly-collected, symptomatic tissue with live and sick tisue apparent	5-7 business days; bacterial pathogens can take up to 2 weeks	Primary disease-causing organism genus-level identification; cultural and chemical management recommendations.
International, Rapid Turf	**$300.00**	Triage, microscopy, culturing, and other basic tests as necessary (SCMV, pH/EC, etc.)	Freshly-collected, symptomatic tissue with live and sick tissue apparent. Cup-cutter-cores or 8"x8" pieces of sod are good. Soil without turfgrass or aeration plugs are insufficient.	2 business days for prelim if samples received by noon Thursday. Final report 4-8 days later. Samples received after noon or on Friday will start the reporting clock the next business day.	Generally genus-level identification; cultural and chemical management recommendations

Pathogen	Disease	Type of test	Cost per sample	Description of test	Tissue needed* for test	Timeline from sample receipt to final test result*	Reporting
Fusarium oxysporum f.sp. *canariensis* and *palmarum*	Fusarium wilt of palm suspected	Culturing, microscopy	$40.00	Triage, culturing, microscopy	Trunk sawdust or rachis/petiole piece, usually from a frond showing one-sided blight. Photo of palm is required by email. Trunk/root tissue or any tissue from dead palms is not	7-9 days	Genus-level identification; positive culture generally moves to PCR test for palm pathogens. If negative for Fusarium, other diagnosis will be reported.
Fusarium oxysporum f.sp. *canariensis* and *palmarum*	Fusarium wilts of palm confirmed	PCR	$40.00	This test is only applied after traditional diagnostic workup ($40) has resulted in a *Fusarium* culture from rachis/stem/trunk tissue. DNA extraction, PCR, gel electrophoresis	Fusarium culture from infected rachis/petiole	2-3 business days (added to culturing timeline)	Species-level identification; does not differentiate between *canariensis* or *palmarum* fomae specialies; reports as detected/not detected

Palm phytoplasmas	Lethal Yellowing or Lethal Bronzing	Real-time PCR	$60.00	Quantitative real-time PCR	Approx. 2 tablespoons of drill shavings from the trunk of a symptomatic tree, pseudobark discarded prior to sample collection. Photo of palm is required (email)	5 business days	Specific to palm phytoplasmas; reported as LY or TPPD detected/not detected
Fusarium oxysporum fsp. *cubense, TR4*	Banana Fusarium wilt, Tropical Race 4	Isothermal amplification	$80.00	Extraction, isothermal amplification	Fresh stems with wilt or vascular discoloration	5 business days	Sub-species-level identification; reports as detected/not detected
Tomato Brown Rugose Fruit Virus, ToBRFV	Tomato Brown Rugose Fruit Virus	Isothermal amplification	$80.00	Extraction, isothermal amplification	Fresh symptomatic fruit, leaves, or plants (NOT seeds)	5 business days	Species-level identification; reports as detected/not detected
Blueberry Red Ringspot Virus	Blueberry Red Ringspot	Conventional PCR	$60.00	DNA extraction, PCR, gel electrophoresis	fresh, symptomatic stems and/or leaves	5 business days	Species-level identification; reports as detected/not detected
Xylella fastidiosa	Bacterial leaf scorch	Real-time or isothermal PCR	$80.00	Stem extraction, DNA extraction, qPCR	Stems with leaves attached from symptomatic plants.	5 business days	Species-level identification; reports as detected/not detected
Rhizobium radiobacter (Agrobacterium)	Crown gall	Culturing and inoculation	$120.00	semiselective media, plant inoculation	Fresh stem/roots with gall tissue; dead tissue is not acceptable	14-21 business days	Genus-level identification; reports as detected/not detected
Rhizobium radiobacter (Agrobacterium)	Crown gall	Conventional PCR	$60.00	DNA extraction, PCR, gel electrophoresis	Fresh stem with gall tissue; dead tissue is not acceptable	5 business days	Species-level identification; reports as detected/not detected
Ca. Liberibacter asiaticus	Citrus greening	Real-time qPCR, protocol set by USDA-APHIS	$80.00	DNA extraction, PCR	Fresh symptomatic leaves with petiole and stem attached	5 business days	Species-level identification; reports as detected/not detected
Ca. Liberibacter solanacearum	Zebra chip/tomato yellows	Real-time qPCR	$80.00	DNA extraction, qPCR	Fresh tubers or symptomatic leaves with petiole and stem attached	5 business days	Species-level identification; reports as detected/not detected
Phytophthora or Pythium spp.	Phytophthora/Pythium blight or rot	Baiting, culturing	$65.00	1 L water or soil sample saturated with water, baited with green pear or popcorn, plated on semiselective media for *Phytophthora/ Pythium* spp., microscopy and morphological confirmation	prenotification to the lab is required. 1 L soil, with field moisture, sent overnight. I L water, from surface, sent overnight.	14 business days	Genus-level identification of detected/not detected; positive result does not indicate pathogenicity
Raffaelea lauricola	Laurel wilt	Real-time qPCR	$80.00	Specialized DNA extraction, qPCR	Symptomatic wood from trunk/branch showing dark streaking; leaves/twigs or dead wood not acceptable	5 business days	Species-level identification; reports as detected/not detected
Phytophthora ramorum	Sudden oak death/Ramorum blight	Real-time qPCR, protocol set by USDA-APHIS	$150.00	DNA extraction, triple qPCR	fresh, symptomatic stems and/or leaves	5 business days	Species-level identification; reports as detected/not detected
Clavibacter michiganensis subsp. *michiganensis or sepdonicus*	Tomato bacterial canker, potato rot	Isothermal amplification	$80.00	Extraction, isothermal amplification	Fresh stems with wilt or vascular discoloration	5 business days	Sub-species-level identification; reports as detected/not detected

Ralstonia solanacearum	Southern wilt of Solanaceae, blueberry, rose	Streaming, immunostrip; if immunostrip +, sample will be reported to APHIS as required by law	$40.00	Immunostrip and streaming triage	Fresh crown or stems with vascular discoloration	Ralstonia +/- report in 1 day; fungal vs. bacterial report as early as 48 hours; sub-species-level identification may take up to 7 days at APHIS lab if needed	Ralstonia sp. +/-; Fungal vs. bacterial reported to genus; sub-species-level identification report generated by APHIS
Dickeya spp.	Soft rot of potato and other plants	Isothermal amplification	$80.00	Extraction, isothermal amplification	Fresh stems/tubers with wilt or vascular discoloration	5 business days	Genus-level identification; reports as detected/not detected
Dickeya dianthicola	Black leg of potato	culturing, double conventional PCR, sequencing, BLAST analysis	$150.00	Culturing, selection, HR, DNA extraction, PCR of 2 genes, gel electrophoresis, sequencing, BLAST analysis	Fresh stems with wilt or vascular discoloration	Fungal vs. bacterial issue report as early as 48 hours; species-level identification may take up to 10 days	Fungal vs. bacterial issue report as early as 48 hours; species-level identification reports as detected/not detected
Phytosanitary testing upon request	Many bacteria, fungi, and viruses; call to inquire	PCR, ELISA, Immunostrip, culturing	depends on test needed	depends on test needed (per sample: culture $40, ELISA $20, PCR $80, qPCR $80, baiting $65)	depends on test needed (seed, tissue culture plants, cuttings, etc.)	depends on test needed	Depends on test needed; reports as detected/not detected or "sample deemed free from" letter to phytosanitary offical
Rush service	Moves sample to front of line for immediate triage and preliminary report in 2 business days from triage of sample	PCR, ELISA, Immunostrip, culturing	$50 for 1-5 samples; $100 for >5 samples	prenotification requested to prepare for sample and discuss sampling	depends on test needed (seed, tissue culture plants, cuttings, etc.)	preliminary report 2 business days from triage of sample; final report depends on test type needed	

A la cart tests	Example	Type of test	Cost per sample	Description of test		Reporting
Single conventional PCR	ITS, 16S, specific target	molecular	$50.00	DNA extraction, conventional PCR, and gel electrophoresis		detected/not detected if specific target; ITS and 16S are linked to sequencing
Sequencing	ITS, 16S, specific target	molecular	$20.00	amplicon cleanup and sequencing (single run, two directions) of single PCR product		raw sequence, sent in a Word or text file with sample report
BLAST analysis	ITS, 16S, specific target	molecular	$40.00	sequence editing and comparison to BLAST NCBI database		top similar results (BLAST accessions), identity and query coverage
Single real-time qPCR	*Xylella fastidiosa*	molecular	$80.00	DNA extraction plus qPCR (real-time PCR)		detected/not detected
MLSA (multi-locus sequence analysis)	Species of *Xanthomonas, etc.*	molecular	$400-700	Construction of concetenated phylogenetic tree for up to 4 genes	Charges on top of culturing, PCR, sequencing, and BLAST	concetenated phylogenetic tree; may take up to 3 weeks from date of pure culture
ELISA	SCMV	immunological	$40.00	crude extraction, 96-well plate, spectrophotometric analysis		detected/not detected, family, genus, or species level
Immunostrip	INSV	immunological	$10.00	lateral flow device		detected/not detected, genus or family-level
Baiting	*Phytophthora/Pythium* spp. only	baiting, culture, microscopy	$65.00	Plant material is floated in water or growth medium slurry, then plated on semi-specific culture media, followed by microscopy at 48 and 72 hours.		detected/not detected at genus level

***Notes and explanations**

Days are business days, generally Monday through Friday, 9-5. We are closed all university, state, and federal holidays. Samples received before noon are processed that day; samples received after noon may be processed the next day. We make every effort to triage samples the day they arrive, and in the order in which they are received.
Timeline and outcome assumes high-quality and appropriate samples shipped quickly. Dead/dry tissue is insufficient and a resubmission will be required. Insufficient samples are billed at the base charge price; resubmission is encouraged. Resubmission of samples must be within a month of primary sample, and must refer to primary sample number to avoid double-billing.
Prices are in-state (Florida); add $10 for out-of-state due to containment processing. The basic sample fee is considered a client co-pay; much of your diagnostic costs are covered by the University of Florida and the National Plant Diagnostic Network (a USDA-NIFA program).
Our molecular and serological tests are conducted once per week; ship samples to arrive by 5 pm Tuesday to be included in weekly test; samples received Wednesday-Friday (by noon) will be extracted upon arrival, but test may be completed the following week.

Effective 1-2-2022