

		Type of test	Cost per sample (USD)	Description of test	Tissue needed* for test	Timeline from sample receipt to final test result*	Reporting
Fee structure for the UF-IFAS Plant Diagnostic Center. Effective 1-1-2017. Questions? Special case? Bulk processing need? Regulatory issue? Please call us: 352-392-1795. Thank you for using our service!		Standard general diagnosis (non-Rapid Turf)	\$40.00	Triage, microscopy, culturing, and other basic tests as necessary (immunostrips, pH/EC, HR, oxidase, etc.)	Freshly-collected, symptomatic tissue with live and sick tissue apparent	3-7 days; bacterial pathogens can take up to 2 weeks	Generally genus-level identification; cultural and chemical management recommendations
		Standard Rapid Turf diagnosis	\$75.00	Triage, microscopy, culturing, and other basic tests as necessary (SCMV ELISA, fungicide resistance, 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 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)	\$200.00	Triage, microscopy, culturing, and other basic tests as necessary (immunostrips, pH/EC, HR, oxidase, etc.)	Freshly-collected, symptomatic tissue with live and sick tissue apparent	3-7 days; bacterial pathogens can take up to 2 weeks	Generally genus-level identification; cultural and chemical management recommendations
		International, Rapid Turf	\$300.00	Triage, microscopy, culturing, and other basic tests as necessary (SCMV ELISA, 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 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
<i>Fusarium oxysporum</i> f.sp. <i>canariensis</i> and <i>palmarum</i>	Fusarium wilt of palm	Culturing, microscopy	\$40.00	Triage, culturing, microscopy	rachis/petiole, usually from a frond showing one-sided blight. Photo of palm is required by email. Trunk/root tissue is not acceptable.	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.
<i>Fusarium oxysporum</i> f.sp. <i>canariensis</i> and <i>palmarum</i>	Fusarium wilt of palm	PCR	\$40.00	This test is only used after traditional diagnostic workup has resulted in a <i>Fusarium</i> culture from rachis/stem tissue. DNA extraction, PCR, gel electrophoresis	Fusarium culture from infected rachis/petiole	2-3 days (added to culturing timeline)	Species-level identification; does not differentiate between <i>canariensis</i> or <i>palmarum</i> fomae specialies; reports as detected/not detected
Lethal yellowing phytoplasma	Lethal yellowing/Texas Phoenix Palm Decline	Conventional nested PCR (2rxns)	\$75.00	DNA extraction, PCR, second PCR, gel electrophoresis	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 days	Specific to palm phytoplasmas; reported as detected/not detected; does not differentiate between LY and TPPD

<i>Blueberry Red Ringspot Virus</i>	Blueberry Red Ringspot	conventional PCR	\$40.00	DNA extraction, PCR, gel electrophoresis	fresh, symptomatic stems and/or leaves	5 days	Species-level identification; reports as detected/not detected
<i>Xylella fastidiosa</i>	Bacterial scorch	Real-time PCR	\$75.00	Stem extraction, DNA extraction, qPCR	Stems with leaves attached from symptomatic plants.	5 days	Species-level identification; reports as detected/not detected
<i>Rhizobium radiobacter (Agrobacterium)</i>	Crown gall	Culturing and inoculation	\$40.00	semiselective media, inoculation	Fresh stem/roots with gall tissue; dead tissue is not acceptable	14 days	Genus-level identification; reports as detected/not detected
<i>Rhizobium radiobacter (Agrobacterium)</i>	Crown gall	conventional PCR	\$40.00	DNA extraction, PCR, gel electrophoresis	Fresh stem with gall tissue; dead tissue is not acceptable	7 days	Species-level identification; reports as detected/not detected
<i>Ca. Liberibacter asiaticus</i>	Citrus greening	qPCR, protocol set by USDA-APHIS	\$75.00	DNA extraction, PCR	Fresh symptomatic leaves with petiole and stem attached	5 days	Species-level identification; reports as detected/not detected
<i>Ca. Liberibacter solanacearum</i>	Zebra chip/tomato yellows	qPCR	\$75.00	DNA extraction, qPCR	Fresh tubers or symptomatic leaves with petiole and stem attached	5 days	Species-level identification; reports as detected/not detected
<i>Phytophthora or Pythium spp.</i>	Phytophthora/Pythium blight or rot	Baiting, culturing	\$75.00	1 L soil sample saturated with water, baited with green pear, plated on semiselective media for <i>Phytophthora spp.</i> , microscopy and morphological confirmation	prenotification to the lab is required. 1 L soil, with field moisture, sent overnight. 1 L water, from surface, sent overnight.	14 days	Genus-level identification of detected/not detected; positive result does not indicate pathogenicity
<i>Raffaelea lauricola</i>	Laurel wilt	qPCR	\$75.00	DNA extraction, qPCR	Symptomatic wood from trunk/branch showing dark streaking	5 days	Species-level identification; reports as detected/not detected
<i>Phytophthora ramorum</i>	Sudden oak death/Ramorum blight	qPCR, protocol set by USDA-APHIS	\$75.00	DNA extraction, triple qPCR	fresh, symptomatic stems and/or leaves	5 days	Species-level identification; reports as detected/not detected
<i>Clavibacter michiganensis subsp. michiganensis</i>	Tomato bacterial canker	conventional PCR	\$40.00	DNA extraction, amplification, gel electrophoresis	Fresh stems with wilt or vascular discoloration	5 days	Sub-species-level identification; reports as detected/not detected

***Notes and explanations**

Days are business days, generally Monday through Friday, 8-5. 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.