

University of Florida-IFAS, Indian River Research and Education Center (IRREC)

Soil and Water Science Core Laboratory

Mission Statement: This core laboratory will maintain IRREC’s capability to provide physical, chemical, and biological analysis of soil/sediment, water, plant/residues samples.

Locations: Room 201 (Molecular Biology), 207 (Isotope analysis), 209 (GC/high speed centrifuge/column leaching), 211 (Root scanner/Freeze dryer) 317 (Soil and Environmental Chemistry)

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Fee/price for analytical service (per sample):

Water	Fee (\$)	Soil/sediment	Fee (\$)	Plant/tissues	Fee (\$)
NH ₄ -N	8	Soil texture	80	Total N	6
NO ₃ -N	8	Soil moisture	10	Total P and metals	6 per element
TKN	16	CEC	50	Root parameters ^b	20 per sample
Total N	20	pH	2		
Total dissolved C	10	EC	2		
Phosphate-P	8	Total organic C	5		
Active-P	8	Total N	5		
Total dissolved P	10	Extractable NH ₄ -N	10		
Total P	10	Extractable NO ₃ -N	10		
pH	2	Extractable P	10		
EC	2	Mehlich 3 Extractable metals ^a	5 per element		
Solids	8	Bulk density/porosity	20		
Turbidity	8				
F ⁻	8				
Cl ⁻	8				
SO ₄ -S	8				
Fecal coliform	50	Microbial biomass C	40		
<i>E. Coli</i>	50	Microbial biomass N	40		
<i>Enterococci</i>	50	Microbial biomass P	40		
<i>Salmonella</i>	80	Soil respiration	40		
		Community structure	120		

^aMetals - Ca, Mg, K, Fe, Mn, Cu, Zn, Mo, Cd, Hg, Pb, Cr, Ni, Co, B.

^bRoot parameters: root length, diameter (D), surface area (S), S/D ratio, and number of tips.

Fee/price for use of equipment (per sample):

Name of Equipment	Fees (\$)
PCR	5/sample
Gel-Doc	10/image
Real-Time PCR	100/plate
Liquid Scintillation Analyzer	5/sample
High speed centrifuge	2/sample
Nano-drop 2000 DNA spectrophotometer	4/sample
Freeze Dryer	10/sample
Spad meter for chlorophyll measurement	10/hour
Fluorometer for chlorophyll measurement	20/hour