Soil Biology Report Performed By:

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SALEM SOIL SOLUTIONS
Microscopy

Client:

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Date Observed: 03-11-23

Sample Name: Area 3

Sample Type: Soil

Plants Present/Desired: Fig Trees

Plant Succession: Deciduous Trees

Beneficial Microorganisms

	Recommended Range		Sample Results	
Fungi (ug/g)	675	9,000	106	Low: The fungal biomass is below the recommended minimum level for your plant's stage in succession. Please contact your Soil Biology Consultant.
Standard Deviation			164	Few target organism were present and variability was very high. Precision is very low.
Bacteria (ug/g)	135	900	3,368	The bacterial biomass is significantly greater than the maximum recommended level. Please contact your Soil Biology Consultant.
Standard Deviation			125	Distribution of the target organisms in the sample was uniform; variation was small.
Actinobacteria (ug/g)	1	4	1.48	Good: The actinobacterial biomass is within the recommended range for your plant's succession.
Standard Deviation			1.34	Few target organism were present and variability was very high. Precision is very low.
F:B Ratio	5:1	100:1	0.03	The F:B ratio is low. Increase fungal biomass or reduce bacterial biomass, and check predators to assess balance. Please contact your Soil Biology Consultant.

	Minimum Value		
Protozoa (Total)	> 10,000	61,593	Good: The number of beneficial protozoa is above the minimum requirement.
Standard Deviation		69,931	Few target organism were present and variability was very high. Precision is very low.
Flagellate (#/g)	(See Total)	61,593	
Standard Deviation		69,931	
Amoebae (#/g)	(See Total)	0	
Standard Deviation		0	

Nematodes			
Bacterial-feeding (#/g)	200	0	None detected: Bacterial-feeding nematodes help keep bacterial populations in balance and enhance nutrient cycling.
Fungal-feeding (#/g)	300	0	None detected: Fungal-feeding nematodes help to release nutrients from fungal hyphae to the plants.
Predatory (#/g)	200	0	None detected: Predatory nematodes help reduce root-feeding nematode numbers.

Detrimental Microorganisms

Disease-Causing Fungi	Maximum Value	Sample Results	
Oomycetes (ug/g)	0	3	Some oomycetes detected. Beneficial fungi should be more than double the disease-causer's biomass to outcompete them and hold the disease fungi in check.
Standard Deviation		6	Few target organism were present and variability was very high. Precision is very low.

Anaerobic Protozoa			
Ciliate (#/g)	0	7,699	Ciliates were detected, but the sample is not necessarily anaerobic, especially if flagellates and amoebae were present in high numbers.
Standard Deviation		17,216	Few target organism were present and variability was very high. Precision is very low.

Nematode			
Root-feeding (#/g)	0	0	None detected: No root-feeding nematodes were observed. Great!

Additional Comments: