

Soil Biology Report Performed By:

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Client:

Name: Smoot Family
 Organization:
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 Email: shermsmoot@yahoo.com
 Date Observed: 12-08-2022

Sample Name: Smoot Vermicompost

Sample Type: Worm Castings

Plants Present/Desired:

Plant Succession: Vegetables, Early Successional Grasses

Beneficial Microorganisms

	Recommended Range		Sample Results	
Fungi (ug/g)	68	225	33	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			35	Few target organism were present and variability was very high. Precision is very low.
Bacteria (ug/g)	135	450	1,418	The bacterial biomass is significantly greater than the maximum recommended level. Please contact your Soil Biology Consultant.
Standard Deviation			208	Distribution of the target organisms in the sample was uniform; variation was small.
Actinobacteria (ug/g)	10	16	0.94	Low: The actinobacterial biomass is below the expected range. This is not a problem.
Standard Deviation			2.09	Few target organism were present and variability was very high. Precision is very low.
F:B Ratio	0.4:1	0.6:1	0.02	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	889,280	Good: The number of beneficial protozoa is above the minimum requirement.
Standard Deviation		538,985	Target organisms were present in the sample, but extremely patchy in distribution. Precision is poor.
Flagellate (#/g)	(See Total)	25,408	
Standard Deviation		56,814	
Amoebae (#/g)	(See Total)	863,872	
Standard Deviation		526,872	

Nematodes

Bacterial-feeding (#/g)	200	200	Good: Minimum numbers met.
Fungal-feeding (#/g)	0	0	None detected: Fungal-feeding nematodes help to release nutrients from fungal hyphae to the plants.
Predatory (#/g)	0	0	None detected: Predatory nematodes help reduce root-feeding nematode numbers.

Detrimental Microorganisms

Disease-Causing Fungi	Maximum Value	Sample Results
Oomycetes (ug/g)	0	0
Standard Deviation		0
None detected: No disease-causing fungi were observed in the sample. Great!		
Distribution of the target organisms in the sample was uniform; variation was small.		

Anaerobic Protozoa

Ciliate (#/g)	0	0
Standard Deviation		0
None detected: No ciliates were observed in the sample. Aerobic conditions prevail. Great!		
Distribution of the target organisms in the sample was uniform; variation was small.		

Nematode

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

Additional Comments: Mostly Amoebae, many different species. I suspect slightly more fungal than the readings because I saw more in the Nematode scan.