Foodweb Analysis
Soil

Report prepared for:

Olivenhain Municipal Water Dis
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Report Sent: 9/23/2010
Sample#: 01-110119 | Submission:01-020653
Unique ID: demo garden site
Plant: garden
Invoice Number: 5897
Sample Received: 9/8/2010

For interpretation of this report please contact:
Soil Foodweb Oregon
info@oregonfoodweb.com
(541) 752-5066

Consulting fees may apply

Organism Biomass Data	Dry Weight	Active Bacteria (µg/g)	Total Bacteria (µg/g)	Active Fungi (µg/g)	Total Fungi (µg/g)	Hyphal Diameter (µm)
Results	**0.90**	16.3	296	16.0	615	2.75
Comments	Above Range	In range	In range	In range	Above range	
Expected Range Low	0.45	10	150	10	150	
Expected Range High	0.85	25	300	25	300	

	Protozoa (Numbers/g)			Total Nematodes #/g	Mycorrhizal Colonization (%)	
	Flagellates	Amoebae	Ciliates		ENDO	ECTO
Results	**637**	**637**	**47**	**1.97**	**13%**	**0%**
Comments	Low	Low	Low	Low	Low	Low
Expected Range Low	10000	10000	50	20	40%	40%
Expected Range High			100	30	80%	80%

Organism Biomass Ratios	Total Fungi to Tot.Bacteria	Active to Total Fungi	Active to Total Bacteria	Active Fungi to Act.Bacteria	Plant Available N Supply (lbs/ac)	Actino Bacteria (µg/g)
Results	2.08	**0.03**	**0.05**	0.98	<25	25.4
Comments	High	Low	Low	Good		
Expected Range Low	0.8	0.1	0.1	0.75		
Expected Range High	1.5	0.15	0.15	1.5		

Nematode detail (# per gram or # per mL)
Classified by type and identified to genus.
(If section is blank, no nematodes identified.)

Bacterial Feeders	0.66	
Acrobeles		0.23
Butlerius		0.05
Cephalobus		0.19
Chiloplacus		0.14
Zeldia		0.05
Fungal Feeders	0.05	
Microdorylaimus		0.05
Fungal/Root Feeders	0.42	
Aphelenchoides	Foliar nematode	0.37
Filenchus		0.05
Predatory	0.05	
Mylonchulus		0.05
Root Feeders	0.61	
Hoplolaimus	Lance nematode	0.05
Meloidogyne	Root-Knot nematode	0.09
Pratylenchus	Lesion nematode	0.05
Rotylenchus	Spiral nematode	0.42

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Dry Weight:	Add organic matter to improve soil biology, build soil structure, increase water holding capacity.
Active Bacteria:	Aerobic bacterial activity in normal range
Total Bacteria:	Aerobic bacterial biomass in normal range
Active Fungi:	Filamentous fungal activity and diversity in normal range
Total Fungi:	Fungal biomass and diversity above typical range
Hyphal Diameter:	Good balance of disease suppressive and normal soil fungi
Protozoa:	Protozoa too low to provide needed nutrient cycling for plants. Fertilizer may be needed until foodweb is improved. Inoculum needed to improve protozoa to desired ranges rapidly. Inoculum can be obtained from good thermal or worm compost, or from compost teas.
Total Nematodes:	Low numbers, low diversity, root feeders present. Need to add beneficial nematodes, improve conditions to allow their survival.
Mycorrhizal Col.:	Mycorrhizal colonization of roots too low. Add an inoculum of mycorrhizal spores, then provide humic acids to feed mycorrhizal fungi and improve colonization.
TF/TB:	Too fungal-dominated for most garden vegetables. Need to improve beneficial bacteria to balance fungal biomass.
AF/TF:	Low activity relative to total biomass; need to add fungal foods to encourage fungi
AB/TB:	Low activity relative to total biomass; add bacterial foods.
AF/AB:	Soil is fungal dominated, but becoming more bacterial, wjhich may be desirable

Interpretation Comments:

Actinobacteria Biomass = 25.4 ug/g
Good fungal diversity. Hyphal diameter: 1.5 to 6um.
VAM: Hyphae and vesicles