

From: [Chaos Springs](#)

Sent: Friday, 24 September 2021 8:22 AM

To: [Stuart Chaney](#)

Subject: FW: Soil Foodweb NZ Reports and account.

Hi Stuart,

Here are the Soil Food Web test results from the trial we did with your compost inoculum. We did not see much difference in the temperature profile or any of the parameters we measured during the composting cycle. The only physical difference we have observed is that the Penegetic pile seems a bit dryer this spring. However, the test results paint a different picture. The Penegetic pile is Number 103P, 103 was the control. 99 was a different recipe al together, but I have included here for you to look at. The next step is to do a bit of a growing trial.

Steve

07-863-7975

Compost Detail

Report prepared for:
Chaos Springs
Steve Erickson
131 Deam Road
Waihi, Waikato 0000

For interpretation of this report, please
contact your local Soil Steward or the lab.

Report Sent: 22/09/2021

Sample # 05-8160

Unique ID: 103

Plant: N/A

Season: N/A

Invoice Number: 26

Sample Received: 15/09/2021



Soil Foodweb NZ
107 Argelins Road
Hanmer Springs, North Canterbury 7334
02108214323
info@soilfoodweb.co.nz
http://www.soilfoodweb.co.nz

Assay Name	Result	Units	Range	Commentary
Organism Biomass Data				
Dry Weights	0.31	N/A	0.2 to 0.8	Within normal moisture levels for compost
Active Fungi	11.69	µ/g	> 3	Fungal activity within normal levels for compost.
Total Fungi	1611.88	µ/g	> 300	Good fungal biomass. - Fungal diversity appears at quite good levels.
Hyphal Diameter	2.25	µm	> 2.5	
Active Bacteria	143.14	µ/g	> 3	Bacterial activity at high levels for compost.
Total Bacteria	1254.11	µ/g	> 300	Good bacterial biomass.
Actinobacteria	149.06	µ/g	< 20	
Organism Biomass Ratios				
TF:TB	1.29		0.01 to 10	Balanced fungal and bacterial biomass. Suitable for most crops including pasture, kiwifruit and avocado.
AF:TF	0.01		< 0.1	Fungal component mature ie less than 10%
AB:TB	0.11		< 0.1	Not quite mature. Wait to apply this material until activity drops below 0.10.
AF:AB	0.08		0.01 to 10	Fungal dominated, becoming more bacterial.
Protozoa (Protists)				
Flagellates	44078.51	#/g	> 10000	Excellent protozoan numbers indicating good nutrient cycling potential. High ciliate numbers indicate possible anaerobic conditions occurring during composting process.
Amoebae	88157.02	#/g	> 10000	
Ciliates	1354.50	#/g	< 1322	
Nitrogen Cycling Potential	224+	kg/ha		Nitrogen levels dependent on plant needs. Estimated availability over a 3 month period.
Nematodes				
Nematodes	Not Ordered	#/g	> 10	
Bacterial		#/g		
Fungal		#/g		
Fungal/Root		#/g		
Predatory		#/g		
Root		#/g		
Miscellaneous Testing				
E.coli	Not Ordered	CFU/g	< 800	
pH	Not Ordered			
Electrical Conductivity	Not Ordered	µs/cm	< 1000	
Organic Matter	Not Ordered			
Notes				

Thermal Compost 8 Months old. Starting materials: Goat, Chip, Pasture, Fish etc.

Compost Detail

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Chaos Springs
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131 Deam Road
Waihi, Waikato 0000

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Report Sent: 22/09/2021
Sample # 05-8161
Unique ID: 103 P
Plant: N/A
Season: N/A
Invoice Number: 26
Sample Received: 15/09/2021



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Assay Name	Result	Units	Range	Commentary
Organism Biomass Data				
Dry Weights	0.33	N/A	0.2 to 0.8	Within normal moisture levels for compost
Active Fungi	41.79	µ/g	> 3	Fungal activity at good levels for compost.
Total Fungi	2697.83	µ/g	> 300	Excellent fungal biomass. - Fungal diversity appears at good levels.
Hyphal Diameter	2.50	µm	> 2.5	
Active Bacteria	165.50	µ/g	> 3	Bacterial activity at high levels for compost
Total Bacteria	1380.40	µ/g	> 300	Good bacterial biomass.
Actinobacteria	160.03	µ/g	< 20	
Organism Biomass Ratios				
TF:TB	1.95		0.01 to 10	Fungal dominated compost - Suitable for tree crops etc.
AF:TF	0.02		< 0.1	Fungal component mature ie less than 10%
AB:TB	0.12		< 0.1	Not quite mature. Wait to apply this material until activity drops below 0.10.
AF:AB	0.25		0.01 to 10	Fungal dominated, becoming more bacterial.
Protozoa (Protists)				
Flagellates	84366.68	#/g	> 10000	Excellent protozoan numbers indicating good nutrient cycling potential. High ciliate numbers indicate possible anaerobic conditions occurring during composting process.
Amoebae	42183.34	#/g	> 10000	
Ciliates	1399.72	#/g	< 1266	
Nitrogen Cycling Potential	224+	kg/ha		Nitrogen levels dependent on plant needs. Estimated availability over a 3 month period.
Nematodes				
Nematodes	Not Ordered	#/g	> 10	
Bacterial		#/g		
Fungal		#/g		
Fungal/Root		#/g		
Predatory		#/g		
Root		#/g		
Miscellaneous Testing				
E.coli	Not Ordered	CFU/g	< 800	
pH	Not Ordered			
Electrical Conductivity	Not Ordered	µs/cm	< 1000	
Organic Matter	Not Ordered			
Notes				

Thermal Compost 8 Months old. Starting materials: Goat, Chip, Pasture, Fish etc.

Compost Detail



Report prepared for:
Chaos Springs
Steve Erickson
131 Deam Road
Waihi, Waikato 0000

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contact your local Soil Steward or the lab.

Report Sent: 22/09/2021
Sample # 05-8162
Unique ID: 99 P
Plant: N/A
Season: N/A
Invoice Number: 26
Sample Received: 15/09/2021

Soil Foodweb NZ
107 Argelins Road
Hanmer Springs, North Canterbury 7334
02108214323
info@soilfoodweb.co.nz
<http://www.soilfoodweb.co.nz>

Assay Name	Result	Units	Range	Commentary
Organism Biomass Data				
Dry Weights	0.26	N/A	0.2 to 0.8	Within normal moisture levels for compost
Active Fungi	12.90	µ/g	> 3	Fungal activity within normal levels.
Total Fungi	5001.77	µ/g	> 300	Excellent fungal biomass. - Fungal Diversity very good with large mature looking fungal formations.
Hyphal Diameter	2.50	µm	> 2.5	
Active Bacteria	126.03	µ/g	> 3	Bacterial activity at high levels for compost
Total Bacteria	1767.15	µ/g	> 300	Good bacterial biomass.
Actinobacteria	114.25	µ/g	< 20	
Organism Biomass Ratios				
TF:TB	2.83		0.01 to 10	Fungal dominated compost - Suitable for tree crops etc.
AF:TF	0.00		< 0.1	Fungal component mature ie less than 10%
AB:TB	0.07		< 0.1	Bacterial component mature ie less than 10%
AF:AB	0.10		0.01 to 10	Fungal dominated, becoming more bacterial.
Protozoa (Protists)				
Flagellates	10758.98	#/g	> 10000	Good numbers of protozoa in the main. However high ciliate numbers indicate possible anaerobic conditions occurred during the composting process.
Amoebae	22324.98	#/g	> 10000	
Ciliates	1784.76	#/g	< 331	
Nitrogen Cycling Potential	112-168	kg/ha		Nitrogen levels dependent on plant needs. Estimated availability over a 3 month period.
Nematodes				
Nematodes	Not Ordered	#/g	> 10	
Bacterial		#/g		
Fungal		#/g		
Fungal/Root		#/g		
Predatory		#/g		
Root		#/g		
Miscellaneous Testing				
E.coli	Not Ordered	CFU/g	< 800	
pH	Not Ordered			
Electrical Conductivity	Not Ordered	µs/cm	< 1000	
Organic Matter	Not Ordered			
Notes				

Thermal Compost 8 Months old. Starting materials: Goat, Chip, Pasture, Fish etc.