



Soil Foodweb NY
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Compost Foodweb Analysis

Client: John Moriarty
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Sample Received: 1/31/03
 Compost type: Chicken manure
 Invoice #:
 Grower:

Date Mailed: 2/12/03

Organism Biomass Data

| Sample # | Treatment | Dry Weight of 1 gram Fresh Material | Active Bacterial Biomass (µg/g) | Total Bacterial Biomass (µg/g) | Active Fungal Biomass (µg/g) | Total Fungal Biomass (µg/g) | Hyphal Diameter (µm) | Protozoa Numbers /g | | | Total Nematode Numbers (#/g) |
|-----------------------|--------------|-------------------------------------|---------------------------------|--------------------------------|--|--------------------------------|--|---------------------|---------|----------|------------------------------|
| | | | | | | | | Flagellates | Amoebae | Ciliates | |
| 1095 | Composted CM | 0.78 | 29 | 3861 | 9.6 | 525 | 3 | NR | NR | NR | NR |
| | | OK | In good range | Excellent!! | Just below the desired range. Some of the fungi are being put to sleep by reduced moisture | Excellent total fungal biomass | Highly beneficial species of fungi are present | | | | |
| Bold means low | | | | | | | | | | | |
| Desired Range | | 0.45 - 0.85 | See A 15 - 30 | See B 150-300+ | See A 2 - 10+ | See B 150 - 200+ | C | 10,000+ | 10,000+ | 20-50 | 50 - 100 |

A - Immature compost can have activity ranging from 10 to 100%. Mature compost should have activity between 2 to 10%

B - Fungal activity and biomass depends greatly on the plant being grown. Desired range given here is for a 1:1 compos

C - Hyphal diameter of 2.0 indicates mostly actinomycete hyphae, 2.5 indicates community is mainly ascomycete, typical soil fungi for grassland diameters of 3.0 or higher indicate community is dominated by highly beneficial fungi, a Basidiomycete communit

Season, moisture, soil and organic matter must be considered in determining optimal foodweb structure. If sample information, such as pesticide, fertiliz tillage, irrigation are not included on the submission form, sender's locale is used. One report is sent to the mailing address on the submission form

Organism Ratios

| Sample # | Treatment | Total Fungal to Total Bacterial Biomass | Active to Total Fungal Biomass | Active to Total Bacterial Biomass | Active Fungal to Active Bacterial Biomass | Plant Available N Supply from Predators (lbs/ac) | Root-Feeding Nematode Presence |
|----------|---------------|--|--|---|---|--|--------------------------------|
| 1095 | Composted CM | 0.14 | 0.02 | 0.01 | 0.33 | NR | NR |
| | | Strongly bacterial compost. This should be used with some fungal foods or fungal compost for most plants | Fungal activity is 2% which indicates it is mature | Bacterial activity is 1% which indicates maturity | There is much more bacterial activity than fungal activity currently. This indicates the compost is becoming more bacterial | | |
| | Desired Range | (1) | (2) | (2) | (3) | (4) | (5) |

- (1) For the following plants, Grass:0.5-1.5; Berries, Shrubs, grape: 2-5; Deciduous Trees: 5-10; Conifer: 10-100
- (2) Active organisms in mature compost should be below 0.10. Compost is not mature, i.e., not stable, if greater than 0.10.
- (3) For annuals, ratio should be 1 or less, for perennials, ratio should be 2 or greater
- (4) Based on release of N from protozoan and nematode consumption of bacteria and fungi. Often protozoa and nematodes compete for food resources. When one is high, the other may be low. Also, if predator numbers are high, the prey may have low numbers
- (5) Identification to genus.

Fungal foods are humic acids, woody mulch, fungal compost, fungal compost tea.