## Active Aerobic Compost Tea and Compost Dormant Extract

**Compost Tea** is used as a soil and leaf spray. It is great for helping stop diseases in fruit trees, as its stickiness helps it adhere to leaves. It is also helpful for slope stabilization. Compost Tea is made by placing all Micro Organism ingredients and Food in a proper sized mesh bag. This is hung like a tea bag in the proper sized bucket full of non-chlorinated water. (Chlorine can be removed by holding high the hose from a chlorinated water source so that the water has at least a 12" arc before it enters the bucket.)

## **Aeration for Compost Tea:**

Since Compost Tea is full of active aerobic microbes, it must be mixed and aerated for hour before spraying. When average outside temperature is above 60°F: aeration time is 18-24 hours. At temps below 60°F, aeration time is 48-72 hours. After this, the mesh bag is removed, and the tea is sprayed.

- -For smaller homesteads, a cheap aquarium pump with two line attachment points works well. The attached \_" lines can be laid out in a circle at the bottom of a 5 gallon bucket with purchased \_" T barb.
- -For larger homesteads and farms, 55 gallon drums are used with a DC pump and battery on a small trailer. For more information, contact Vital Landscaping, website: <a href="mailto:vitallandscaping.com">vitallandscaping.com</a>, e-mail: info@vitallandscaping.com; 12817 Loma Rica Drive, Grass Valley, CA 95945, (530) 273-3187

**Note**: All compost tea equipment/lines must be cleaned carefully after each use so anaerobic microbes don't build up in them.

**Compost Dormant Extract** is a soil drench or spray. It is quick to make, but is not sprayed on leaves as it does not stick. It works great sprayed on the soil of cover crops and sheet mulch gardens. It is made by placing the first group of Micro-organism Ingredients into the appropriate sized mesh bag. Do not add Food yet. The bag is dunked 100 times into the proper sized bucket full of water. The bag is then removed. (This bag full of microbes can be used twice for dormant extract, and then the contents are spread in a garden or orchard under moist mulch.) Now add the Food to the bucket of water and stir for 5 minutes. It is ready to apply.

## Why We Have Different Recipes for Different Kinds of Plants

## **Fungus to Bacteria Ratio for Annuals and Perennials**

	Annual	Plants	Perennial Plants		
Successional Group	Early	Mid	Late	Old Growth	
F:B Ratio	Bacterial (0:1 - 1:2)	Balanced (1:1)	Fungal (2:1 - 200:1)	High Fungal (201:1 - 1000:1)	
Example Plant Groups	Leafy greens, true weeds, grasses	Woody annuals, grasses	Bushes, berries, nuts, stone fruits, grasses	Conifers, oaks, nuts	
Example Species	Spinach, carrot, broccoli	Tomato, corn, wheat	Strawberry, apple, timothy grass	Redwood, pecan, chestnut	

Directions are above, Recipes are below				
Aerated Compost Tea for Perennials				
Aerated Compost Tea for Annuals, Vegies and Grass				
Compost Dormant Extract for Perennials				
Compost Dormant Extract for Annuals, Vegies and Grass				
On Site and International:				
Compost Dormant Extract for Perennials				

Purchased or Self Grown Ingredients	Aerated Compost Tea	Aerated Compost Tea	Compost Dormant Extract	Compost Dormant Extract
*Ingredients available from Vital Landscaping vitallandscaping.com, or grow your own.	Size of Barrel	Size of Bucket	Size of Barrel	Size of Bucket
Micro-Organism Ingredients for Initial Inoculation of Perennials For subsequent inoculations, use _ the amount of micro-organisms and food.	55 gallon	5 gallon	55 gallon	5 gallon
Size of Mesh Bag	5 gallon paint strainer bag Vital Landscape Bio Extractor Bag	1 gallon paint strainer bag	5 gallon paint strainer or Vital Landscapes Bio Extractor Bag	1 gallon paint strainer bag
1. Baseline Humus Concentrate* Humus and/or compost containing high fungal biomass as a complete probiotic soil supplement. Benefits: reduced water inputs, increased yields, vigorous root growth, increased resistance to plant pests & diseases, builds and maintains aerobic soil structure, reduces salt buildup & nutrient leaching, breaks down & neutralizes pesticide & fertilizer residues	2 quarts or 8 cups	1 cup	2 quarts or 8 cups	1 cup
2. <b>Vital Earth's Organic Compost*</b> Thermal compost made by allowing compost pile to heat to 145°F, then the pile is stirred, and this cycle repeated three times.	1 quart or 4 cups	_ cup	1 quart or 4 cups	_ cup
3. Mega Worm Earthworm Castings* rich in microbial life, that convert nutrients already available in soil into plant-ready forms. Contains worm mucus which help prevent nutrients from washing away with watering and holds moisture	1 quarts or 4 cups	1/2 cup	1 quarts or 4 cups	1/2 cup
4. NMC Native Mycelium Culture  Gather mycelium from soil around roots of ancient trees, drought tolerant trees, local trees. Use in tea bag. Store remainder of mycelium in personal NMC pile where extra mycelium is placed to inoculate the pile. NMC Pile is made up of moist wood chips or straw covered with moist cardboard, kept moist. Mycelium will increase.	2 handfuls	Small handful	2 handfuls	Small handful
5. Myco Apply's Mycorrhiza* available many places	none	none	_ cup or 4 oz Endo/Ecto	2 Tablespoons of Endo/Ecto
6. Fish Hydrolysate (mild heat, enzymatically treated) available many places. This is NOT fish emulsion.	_ to 2 cups 2 cups	_ cup	_ to 2 cups 4 cups	_ cup
7. <b>Maxicrop kelp*</b> or use available powdered kelp or seaweed	_ cup	1 tsp	_ cup	1 tsp

Annuals, Vegies and Grass

Purchased or Self Grown Ingredients	Aerated Compost Tea	Aerated Compost Tea	Compost Dormant Extract	Compost Dormant Extract
*Ingredients available from Vital Landscaping vitallandscaping.com, or grow your own.	Size of Barrel	Size of Bucket	Size of Barrel	Size of Bucket
Micro-Organism Ingredients for initial inoculation of Annuals, Vegies & Grass. For subsequent inoculations, use _ the amount of micro-organisms and food.	55 gallon	5 gallon	55 gallon	5 gallon
Size of Mesh Bag	5 gallon paint strainer or Vital Landscapes Bio Extractor Bag	1 gallon paint strainer bag	5 gallon paint strainer or Vital Landscapes Bio Extractor Bag	1 gallon paint strainer bag
1. Baseline Humus Concentrate* Humus and/or compost containing high fungal biomass as a complete probiotic soil supplement. Benefits: reduced water inputs, increased yields, vigorous root growth, increased resistance to plant pests & diseases, builds and maintains aerobic soil structure, reduces salt buildup & nutrient leaching, breaks down & neutralizes pesticide & fertilizer residues	1 quarts or 4 cups	1/2 cup	1 quart or 4 cups	_ cup
2. Vital Earth's Organic Compost*  Thermal compost made by allowing compost pile to heat to 145°F, then the pile is stirred, and this cycle repeated three times.	1 quart or 4 cups	_ cup	1 quart or 4 cups	_ cup
3. Mega Worm Earthworm Castings*	2 quarts or 8 cups	1 cup	2 quart s or 8 cups	_ cup
4. NMC Native Mycelium Culture Gather mycelium from soil around roots of ancient trees, drought tolerant trees, and local trees. Use this in the tea bag. Store remainder of mycelium in your personal NMC pile where you place the extra mycelium to inoculate the pile. Pile is made up of moist wood chips or straw covered with moist cardboard, kept moist. The mycelium will increase.	2 handfuls	Small handful	2 handfuls	_ cup
5. Myco Apply's Mycorrhiza* available many places. Comes as Endo, Ecto, or a mix of Endo/Ecto	_ cup or 2 ounces	1 Table spoon	4 oz or _ cup Endo	2 Tablespoons Endo
Food	_ to 2 cups			2 Tablespoons of Endo/Ecto

<b>6. Fish Hydrolysate*</b> (mild heat, enzymatically treated) available many places. This is NOT fish emulsion.	2 cups	_ cup	2 cups	_ cup
7. Maxicrop kelp* or use available powdered kelp or seaweed	_ cup	1 tsp	2 oz	1 TBL

On-Site Ingredients and International Work

Note: When working overseas, I scrounge up all the ingredients on site except for when I make Compost Dormant Extract, I bring Myco Apply's Mycorrhiza with me.

On Site Items	Aerated Compost Tea	Aerated Compost Tea	Compost Dormant Extract	Compost Dormant Extract
This recipe is for perennials. For Annuals, Vegies & Grass, use _ of ingredients except double the amount for worm compost	Size of Barrel	Size of Bucket	Size of Barrel	Size of Bucket
Micro-Organism Ingredients	55 gallon	5 gallon	55 gallon	5 gallon
Size of Mesh Bag	2 - 5 gallon paint strainer Bag	1 gallon paint strainer bag	2-5 gallon paint strainer Bag	1 gallon paint strainer bag
1. Organic Compost	1 quart or 4 cups	_ cup	1 quart or 4 cups	_ cup
2. Worm Castings	2 quarts or 8 cups	1 cup	2 quarts or 8 cups	1 cup
4. Native mycelium culture	2 handfuls	1 Tablespoon or 14 grams	2 handfuls	1 Tablespoon or 14 grams
5. Myco Apply's Mycorrhiza*	none	none	1 cup	_ cup
Food				
Fine Flour: Quinoa, Wheat, Barley, Oat, Whatever available	_ cup	1 Tablespoon or 14 grams	_ cup	1 Tablespoon or 14 grams
Ground Up Fish	2 cups	_ cup	2 cups	_ cup
Kelp, Seaweed, Alga de Marinos  No sugar added to package	_ cup	1 Tablespoon or 14 grams	_ cup	1 Tablespoon or 14 grams

Cathe' Fish
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