



Soil Foodweb Canada
285 Service Rd. Box 420
Vulcan, AB T0L 2B0
Ph: (403)485-6981
Fax: (403)485-6982
Email: info@soilfoodweb.ca

Part 1: Compost Tea Inoculation

Materials (Suggested):

- 1L jar
- plastic beaker for measuring mL or large syringe
- large plastic container (Rubbermaid, Tupperware etc.)
- scale
- spray bottle (for Reverse Osmosis water only)

Ingredients:

	20L Brew	40L Brew
Worm castings	500g	1kg
Oats (ex: Quaker rolled oats)	100g	200g
Kelp	21mL	42mL
Fish	21mL	42mL
Molasses 50:50	20mL	40mL
Humic Acid	52mL	104mL
Soil Aid (or Agri-Gro Ultra for Organic*)	10mL	20mL
Reverse Osmosis water	as needed	as needed

Procedure:

1. Mix worm castings and oats in a large container, once mixed well add in the wet ingredients, ensuring all ingredients are mixed together thoroughly. (Hint: if you measure out all of the wet ingredients except molasses then weigh the molasses into the same container it is easier to transfer the full volume of molasses)
2. Ensure moisture is approximately 50% by squeeze method (when palm full of mixture is squeezed, moisture comes out). Maintain 50% moisture throughout the activation.
3. Lightly mix after 24 hours then again after 3 to 4 days.
4. After 24 hours assess fungal growth visually or under a microscope to ensure worm castings have sufficient microbial activity.

**If preparing an organic Compost Tea, Agro-Grow Ultra can be used as a direct substitution for Soil Aid*

***If wanting a more fungal tea add humates*

****If wanting a more protozoan tea use aerated tap water- raises pH without adding anything (tap water has a higher pH than RO water)*

Part 2: Compost Tea Brewing

Materials:

20L bucket
Paint strainer
¼” hose
Window screen (stainless steel)
Air pump
PVC sleeve (with hole for window screen)
Regular tap water

Ingredients:

	20L Brew	40L Brew
Activated compost	3-500g	600g-1Kg
Kelp	21mL (22g)	42mL (44g)
Fish	16mL	32mL
Molasses 50:50	60mL	120mL

Procedure:

1. Fill bucket with regular tap water and set up water bubbler to bubble out gases from the water. Use only materials that have been thoroughly cleaned. *See Part 4*
2. Set up PVC pipe sleeve with screen and round aquarium house, pushing to the very bottom of the sleeve. Hook the other ¼” hose (no rounded end) through the side of the sleeve for stabilization in the bucket.
3. Bubble out the gases from the water for approximately 45 minutes.
4. Prepare the wet ingredients. If molasses is especially viscous it can be heated before measuring out, also helps to measure into the container with the rest of the wet ingredients to avoid it sticking to the container.
5. Once the 45 minutes has passed add the wet ingredients to the bubbled-out water (rinse out the wet ingredients’ container in the water to ensure correct volumes are added) and put the activated compost into a paint strainer and into the PVC sleeve with screen.
6. Keep compost in bubbler for 24 hours, checking on it regularly to ensure all parts are functioning correctly and air is being adequately bubbled through compost.
7. After the brewing time has elapsed the liquid in the bucket has now become the finished Compost Tea.

Part 3: Application of Compost Tea

Procedure:

1. Dilute Compost Tea by half before applying. (ex. 20L Brew makes 40L ready-to-apply Compost Tea)

2. Whatever the container for application is- just ensure it is pesticide free! The organisms in the Compost Tea are living and can be killed by introducing them to a pesticide environment.
3. Once the Compost Tea is diluted and added to the spraying device, it can be applied just as water would to plant surfaces.

Part 4: Clean-Up

Procedure:

1. Thoroughly wash all glassware and other materials used in all previous steps in hot soapy water.
2. Once materials are washed and rinsed thoroughly, place clean materials into a diluted bleach solution to get rid of any possible traces of leftover organisms or soil material. Recommended dilution of 250mL bleach in 5 gallons of water (or add water directly to pail used for brewing and add in materials for soaking). Allow everything to soak for 2 hours and triple rinse with water to remove all traces of bleach.

***It is very crucial to thoroughly clean and disinfect all materials used in this procedure to ensure there are no leftover byproduct of the compost organisms which could result in a Bio Film growing on material.*

Supplementary Notes

- Compost Tea usually consists of 1 part compost to 5 parts water and is sometimes referred to as 'aerated compost tea'. It is responsible for boosting the number and diversity of microorganisms in a soil's food web: making it more stable and positively impacting a soil's ability to consume organic material, nutrients and hold moisture.
- Compost Tea Brew gets cut to half (diluted 1 part brew: 1 part water)
- Compost Inoculation the act of introducing microorganisms or suspension of microorganisms (ex: bacteria) into a culture medium.
- Activated Compost has greater biodiversity and higher quantity of biology. It is the ideal inoculum for making high quality activated compost tea. Benefits of using activated compost include: better root growing and more stress tolerance for dry periods, better usage of soluble nutrients, higher water holding capacity, an increase in decomposition of dead plant material, improved soil structure and stabilization of the natural nutrient cycle.
- Aerobic Conditions are conditions for growth or metabolism in which the organisms are sufficiently supplied with oxygen. **Necessary during all parts of Compost Tea Brewing
- Bio Film is created from leftover byproduct being left on materials used for Compost Tea preparation. Is easily avoided by thoroughly cleaning and bleaching materials after a Compost Tea preparation.
- If concerned about E. Coli being present in Molasses, microwaving the molasses before any other ingredients are added will destroy any E. Coli that may be present

