

NATURE WORKS BEST

DIY INSTANT COMPOST TEA BREWING FOR FARMERS

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Please first read *DIY Instant Compost Tea – Introduction and Starter for Farmers*
<https://tinyurl.com/mvecbpm2>

[Note: As a precaution we suggest to brew in an open space and/or use a face mask when inspecting during aeration. Not all soil fungi are human-friendly in high concentrations.]

Aerated brewing

Good natural soil biology needs oxygen, so aerated brewing is necessary to get the aerobic conditions for the correct biology. An aerobic brew smells 'good', the sweet smell of good moist soil. Anaerobic biology does not need oxygen and smells like foul like rotten eggs or worse and is often harmful. Check by smelling and dump anaerobic brew.

Brew quantities

Brews are applied at 100L/ha plus water for practical distribution. Trials used a 1,000-litre pod for a 1,000-litre brew, enough for 10 ha. For smaller or larger brews, adjust accordingly.

Equipment



Photo1 - Overview



Photo 2 – Air spreader pipes

A 1,000-litre brew requires:

- Tank 1,000 L pod.
- Pipes 40 mm PVC pipe, two lengths (4m).
- Fittings PVC 40 mm: T pieces (2), 90° elbows (5), and end caps (3) to suit the above design.
- Air pump with a large enough capacity to pump at least 1 L air/1 L water /minute,
- Control tap 40mm PVC between pump and aerator.
- A sieve to remove large particles and prevent blockages.

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We recommend using a microscope to check for the presence of fungi and other biology.

Aeration.

Enough air needs to be pumped to give 2 – 8 cm boil on the water surface – a very jumpy surface. The air spreader pipes need holes on both sides, facing downwards and sideways to give agitation across the bottom and thus minimise anaerobic dead spots.



Feeding the biology

Multiplying biology requires food. The ingredients added during brewing, favour fungal growth, which is the part of the biology that builds soil structure and captures long-term carbon. Fungi needs the other biology as food to survive and grow.

Brewing

Mix into 1,000 L non-chlorinated water or rain water:

- 40 litre Starter
 - 2 L Fish emulsion,
 - 4 L Seaweed Liquid, and
 - 2 L Liquid Sea Minerals
- Brew for 24 hours in warm to hot conditions and 48 hours on cool to cold conditions.
 - Assess development under a microscope.
 - Apply within 3 - 4 hours after stopping aeration; biology starts dying without oxygen.

Note: There is a range of commercial compost tea brewers available - search for compost tea brewers.

Tips

If a starter bag is used to keep the brew free from floating solids, ensure air is supplied directly into the bag. Otherwise, this may create anaerobic conditions. A free-floating Starter dispersed throughout the brew is simpler and produces just as good a brew. Clean the tank and pipes after each brew.

Experience has taught that cleaning the tank and equipment while wet is easier than later. Otherwise, the biology keeps working and “glues” itself to the equipment. Don't overfill the tank – allow 10 cm for the jumping brew.

The secret to success is maintaining a very jumpy brew at all times.

See Photo Gallery for more photos of brewing and application.

For Application and further information: <https://tinyurl.com/mvecbpm2>
Further enquiries to : trevorbundy8@gmail.com