Connecticut Resource Conservation & Development

CSAG Equipment Sharing Hub

Compost Tea Trailer Operator's Manual

Please refer to the Compost Tea Trailer Maintenance Checklist before proceeding with the brewing/spraying process. Here we grow!

Brewing:

Some important considerations:

- Ideal growth occurs in 18-24 hours
- Optimal temperature for microbe growth is 55-75 degrees Fahrenheit.
- Compost and amendments should minimally be at room temperature for use.
- Organic practices (not necessarily certified) must be utilized in the compost tea brewing process as to not affect the organic farms through cross-contamination. It is also essential for adequate proliferation of microbes in the compost tea.

The following Brewing guidelines/recipe are based on the 50-gallon brewer. It can be adjusted for smaller batches by utilizing the same ratios provided.

1. 50 gallons water (70-85 degrees adjust in this range according to outside temp., i.e. 70-summer/85-winter, due to rapid loss of temp. in winter)
2. 10 lbs. worm castings or equivalent organic compost
3. 1 cup-Liquid Kelp
4. ¼ cup Fish Hydrolysate
5. Splash of Humic Acid (used to bind the nutrients and neutralize the chlorine if utilizing chlorinated water).

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Instructions:

1. Fill the compost tea brewer and 5-gallon bucket with water.
2. Plug in the brewer.
3. In a separate container (measuring cup provided) mix the Liquid Kelp, Fish Hydrolysate, and Humic Acid.
4. Pour the amendments into the brewer.
5. Add 1 tsp. Humic Acid to the 5-gallon bucket full of water to neutralize any chlorine.
6. Pour 10 lbs of compost or worm castings into the provided 400 micron brewing bag.
7. Place the brewing bag into the 5-gallon bucket full of water (between 55-75 degrees) and massage the contents of the bag once it is submerged in the water to release and break up larger aggregates and to allow microbes to move freely and feed on the amendments more rapidly.
8. Remove the brewing bag from the 5-gallon bucket and set aside.
9. Pour the contents of the 5-gallon bucket into the brewer.
10. Take the brewing bag and hang it on the top of the brewer, making sure it is submerged, but above the water line, to avoid materials spilling over the top of the brewing bag.
11. Allow to brew for 18-24 hours. ***
12. Ensure the soil conditions are within the recommended temperature range for optimal benefit.
13. Pour the tea into a sprayer filtered through a clean 400-micron filter.
14. Apply the Compost tea to your desired plants.

*** For colder weather brewing, consider utilizing a space heater in the trailer during the brewing process to ensure that the tea remains in the optimal 55–75-degree range.

Brewer Cleaning Process:

- *Brewer tends to have a biofilm after brewing. As soon as you empty the brewer, immediately clean it to make the cleaning process easier and more effective.*

- *No cleaning products (even organic products) are to be used in the brewing unit itself. Any potential residue can affect the microbe growth in future brews.*

1. Rinse out the brewer with clean water from a hose set on a higher-pressure setting (jet).
2. If needed, utilize the brush provided in the trailer to remove any additional buildup.
3. Detach the hose leading to the motor and lower it to the ground. Open that valve to allow water to run through the house. Once rinsed, close this valve.
4. Open the valve that leads to the spigot, allowing the water to run through the spigot.
5. If possible and weather appropriate, leave the trailer doors open to allow the unit to dry faster.

Sprayer Cleaning Process:

1. Rinse the sprayer with clean water from a hose set on a high-pressure setting (jet).
2. Fill the sprayer with enough water to run through the sprayer hose and handle and thoroughly clean the lines.
3. Use the cleaning brushes provided in the trailer to scrub the sprayer to loosen any debris.

Backpack sprayer instructions:

1. Place a 400 Micron filter over the opening of the sprayer.
2. Fill the sprayer with Compost Tea.
3. Replace cap and tighten it to seal.
4. Pump handle on sprayer to build pressure
5. Spray desired plants (Spray pattern/flow can be adjusted by turning the tip of the sprayer nozzle).
6. Pump handle as needed to retain appropriate flow of tea.
7. Clean thoroughly when done and run clean water through hose and nozzle before draining as much as possible.
8. Allow to air-dry before replacing cap.

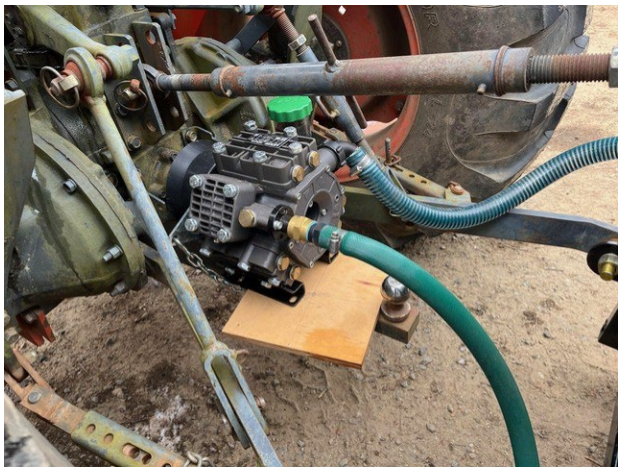
PTO Driven Sprayer instructions:

Photo Credit: John Aldrich, Brown Farm

1. With the trailer on a level area and the trailer still attached to the hitch of the truck, release the ratchet straps that prevent movement of the wagon/sprayer unit.
2. Wheel the wagon/sprayer unit out of the trailer (this is a 2-person task since the sprayer unit is heavy and it is best to have someone "spotting", who can hold back pressure on the wagon to slow it down as it descends the ramp).
3. While sprayer is on level ground, remove ratchet straps that attach sprayer to the wagon.
4. Back tractor up to the sprayer and attach 3-point hitch to the sprayer.
5. Unhook chain from PTO motor and attach to tractor's PTO.

6. Attach PTO pump chains to the tractor, otherwise the pump will spin and break when the PTO is engaged.
7. Attach PTO pump hoses and ensure they are not catching on the hitch arms when raising/lowering the sprayer.
8. Once attached, use lift arms to bring sprayer up from the wagon and drive closer to the compost tea brewer.
9. Properly grease PTO and grease fittings before engaging PTO.
10. Fill sprayer and proceed to intended area for spraying.
11. Engage PTO and spray designated areas.
12. Once you have finished spraying, clean sprayer thoroughly and run water through the sprayer nozzle until water runs clear.
13. Drain hoses as much as possible.
14. Sprayer is to be placed back on the wagon and secured in the trailer when finished spraying.

- *Upon completion of cleaning the sprayer and brewer, return all equipment to trailer and secure properly.*



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