



PHILADELPHIA ORCHARD PROJECT

COMPOST TEA SPRAYS FOR ORCHARDS

Compost tea sprays are one of the best means to improve the health and productivity of orchard trees and other plants. Brewing compost tea is a way to multiply beneficial microbes to be applied to your plants and soil.

There are three primary application times:

1. Early spring applications of compost tea as a soil drench are used to boost orchard soil life and fertility, resulting in healthier, more resilient and productive fruit trees.
2. Foliar applications throughout the spring can provide further nutrient boosts and possibly aid in colonizing leaves and branches with beneficial microbes that may out-compete disease-causing fungi and bacteria.
3. Late fall applications after most leaves have dropped help to speed decomposition of fallen leaves and fruit, thus reducing the amount of disease pathogens remaining for the next year.

HOW TO MAKE COMPOST TEA

Compost is suspended in vigorously aerated water for 12-16 hours and after which the compost is removed. You will need a brewer, which consists of a container and appropriately sized means of aeration. You can make your own (search DIY online) or purchase ready-made kits from recommended sources:

composttealab.com

Simplici-tea.com

kisorganics.com/search?q=brewer

You need a mesh bag that will hold the compost in the container. The bag of compost should rest at the surface of the water during the aeration period.

Recipe for 5 gallon compost tea brewer:

Essential ingredients:

4.5 gallons of unchlorinated water (rainwater or dechlorinated tap water)

2 cups of compost (vermicompost or hot compost)

1 tablespoon blackstrap or unsulphured molasses (feeds bacteria/fungi)

1 ml dechlorinator if starting with chlorinated tap water

Recommended added ingredients:

1 tablespoon of mycorrhizal fungi spores (strongly recommended for woody plants)

1 tablespoon of kelp powder or liquid seaweed (contains trace elements)

1 tablespoon of humic acid (an ore mined from the earth that feeds bacteria/fungi)

1 tablespoon of cold pressed fish emulsion (feeds bacteria/fungi)



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Recipe for 50 gallon compost tea brewer:

Essential ingredients:

45 gallons of unchlorinated water (rainwater or dechlorinated tap water)

20 cups of compost (vermicompost or hot compost) = 1.25 gallons

0.5 cups of blackstrap or unsulphured molasses (feeds bacteria/fungi)

10 ml dechlorinator if starting with chlorinated tap water

Recommended added ingredients:

0.5 cups of mycorrhizal fungi spores (strongly recommended for woody plants)

0.5 cups of kelp powder or liquid seaweed (contains trace elements)

0.5 cups of humic acid (an ore mined from the earth that feeds bacteria/fungi)

0.5 cups of cold pressed fish emulsion (feeds bacteria/fungi)

HOW TO APPLY COMPOST TEAS

After the brewing process is complete, the tea should be used within 6 hours. Dilute the finished tea 50-50 with unchlorinated water. A backpack sprayer is the easiest means of application, although smaller sprayers can be used as well. Use a mesh bag or other filter as you fill the sprayer to avoid any blockage from larger particles. Using a larger concrete nozzle for your sprayer can also reduce the likelihood of blockage. Early spring and late fall soil drenches can also be done with a bucket or watering can!

For spring foliar sprays, use a backpack sprayer to cover all leaf, branch, and trunk surfaces evenly. As with all sprays, avoid applying during the heat of day and any time bees are active. A morning application time is best. Foliar sprays can be applied every couple weeks during spring.

RESOURCES:

The Holistic Orchard, Michael Phillips (book and DVD)

Compost Tea Making, Marc Remillard

Teaming with Microbes, Lowenfels & Lewis