

Compost Tea Should be Brewed

by John Kochanowski

UCCE / El Dorado County Master Gardener

For hundreds of years, farmers and gardeners have made compost extracts and manure extracts by suspending a bag of manure or compost in water for a couple of weeks, or by collecting the liquid from worm bins and compost piles. The use of these extracts especially on food crops is now recognized as dangerous due to the presence of harmful bacteria in these extracts. Soaking compost has been replaced by brewed compost teas.

To distinguish between the different types of liquids, the liquid from soaking compost or collecting run off from a worm bin or compost pile is called an extract. Because these liquids sit without oxygen (aeration), harmful bacteria will grow. The rotten odor from these liquids is a sign of the growth of anaerobic (living without air) bacteria. These liquids can be harmful to both humans and plants. If your tea or compost pile smells bad, it contains bacteria that can be harmful to plants and humans. Do not use it.

The current recognized definition for compost tea is that of an aerated (oxygenated) liquid extract of compost that has been fed additional nutrients to maximize the growth of preexisting beneficial microorganisms. These teas are different from soaked extracts because they are actively bubbled and fed to grow beneficial microorganism. The aeration process reduces the growth of harmful anaerobic bacteria. While tea systems vary in complexity, the basic system is a tank, a mesh container for the compost and an aeration system.

Compost tea systems can be purchased or they can be made with tanks as small as a 5 gallon bucket. Aeration can be provided with an aquarium pump, tubing and aeration stones. A mesh bag holds the compost. The tea will only be as good as the beginning compost, so high quality compost or worm castings are normally used.

Most commercial systems use a supplemental food source such as molasses, kelp, or rock dust to promote the growth of the beneficial microorganisms. A ratio of one pound of compost to 5 gallons of water will produce a concentrated tea that can be diluted before application. The normal brewing period is 24 hours and the resulting brew should be used within hours while the microorganisms are at their peak. Letting the tea sit before application introduces the danger of growing harmful bacteria.

Aerated tea systems have only been available commercially since 1997, so research is continuing on the benefits and applications of compost tea. Compost tea does contain nutrients, but should not be thought of as a fertilizer. Because of the dangers of potential pathogens, the University of California does not recommend the use of compost teas or extracts for pest management on any crops nor does it recommend their use on any edible crops. Research has not proven that foliar sprays of compost teas prevent plant disease. Compost tea should be thought of as a boost to the microorganisms that help plants take in nutrients and a component in good organic practices.

Saturday October 27th, Master Gardeners present "African Violets". Learn how to plant and care for the many varieties of African Violets and other house plant selections. There is no charge for

the class, it starts at 9:00 a.m. and will be held in the Veterans Memorial Building, 130 Placerville Dr., in Placerville.

Master Gardeners are available to answer home gardening questions Tuesday through Friday, 9 a.m. to noon, by calling (530) 621-5512. Walk-ins are welcome. The office is located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our Master Gardener website at http://ucanr.edu/sites/EDC_Master_Gardeners/. Sign up to receive our online notices and e-newsletter at <http://ucanr.edu/mgenews/>. You can also find us on Facebook.

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