

## Compost Tea

It could be very handy if there were something for both home gardens and commercial enterprises to use as a fertilizer and disease controller. It would be even more desirable if this were low-tech, low-cost, and relatively easy to use.

Fortunately, there is such a thing, and it is readily available.

Most people know that compost is a source of organic matter that can help improve soil fertility and drainage. Compost is plant or animal material that has been broken down by microbial action into a dark-colored material that smells like good soil. Starting as plant or animal material, it contains most of the nutrients that were originally present – nutrients that growing plants need. It is possible either to create one's own compost, or to purchase it at local nurseries. The process of composting appears to destroy most microorganisms that cause disease while keeping beneficial organisms alive. Another composting method is using compost worms, but there is less research on destruction of pathogens with this method.

Incorporating compost into the soil is a good way to give plants a head start when they are first put into place. There are times when it is not practical to do this, however. In places where the roots of established plants could be damaged, agitating the soil while adding compost could cause more problems than it solves.

Those are the times when using “compost tea” become a very good option. Not only does it provide valuable nutrients to growing plants, it also appears to be a source of healthful soil organisms. This tea is a brew using compost, water, and occasionally some additive such as molasses, although this is not essential. There are many different methods of making compost tea, ranging from a simple bucket with an air pump, to large systems with constant stirring mechanisms.

Whatever system is used, nutrients and beneficial microorganisms come out of the compost into the water. Compost organisms are active and perform a host of functions, and the most beneficial of these organisms breathe air. It is critical keep the tea aerated while it brews. As long as compost and compost tea are aerated, they will not produce offensive odors.

After a few days of stirring or gentle agitation, the tea is ready to use. Let the suspension settle, and dilute the liquid until it is the color of weak tea. It is not necessary to apply it frequently, but once a month is a good idea for many plants, less often for desert plants. It can be poured on the soil, or sprayed on foliage. Applying it to the soil increases soil fertility and microbial life. Applying it to leaves gives a quick “green up” action, but will not have the same long-term effect.

If it is to be applied to anything edible, the compost tea should not contain additives, which are not necessary in a small-scale operation. Like anything else, good starting materials are more likely to result in a quality end product. Good compost will produce good compost tea. Dr. Angela O'Callaghan is the Social Horticulture Specialist for Clark County Cooperative Extension. Contact [ocallaghana@unce.unr.edu](mailto:ocallaghana@unce.unr.edu) or 702-257-5581.



