

## Coffee Grounds Perk up Compost

Coffee grounds can be an excellent addition to a compost pile. The grounds are relatively rich in nitrogen, providing bacteria the energy they need to turn organic matter into compost. About 2 percent nitrogen by volume, used coffee grounds can be a safe substitute for nitrogen-rich manure in the compost pile.

Contrary to popular belief, coffee grounds are not acidic. After brewing, the grounds are close to pH neutral, between 6.5 and 6.8. The acid in the beans is mostly water-soluble, so it leaches into the coffee we drink. Recycling this valuable soil amendment and compost ingredient makes sense both economically and environmentally. Gardeners that compost are encouraged to arrange to collect coffee shop grounds for composting. But be sure to make prior arrangements with a coffee shop to collect grounds. Then, take a clean five-gallon bucket with a lid, label it with your name and telephone number on the bucket and lid and leave it at the shop and then pick it up at the shop's convenience.



Here are some suggestions for using composted grounds in the yard and garden:

- Mix grounds into soil as an amendment. Make sure to keep them damp. Add some nitrogen fertilizer if you do this, as coffee grounds encourage the growth of microbes in the soil, which use up nitrogen. While microbes are breaking down the grounds, the nitrogen will provide a source of nutrients for your plants.
- Spread grounds on the soil surface, then cover them with leaves or bark mulch.
- Add grounds to your compost pile, layering one part leaves to one part fresh grass clippings to one part coffee grounds, by volume. Turn once a week. This will be ready in three to six months.
- Or, put them in an existing unturned pile. Just make sure to add a high carbon source, such as leaves to balance it.
- Grounds may be stored for future use. They may develop molds but these appear to be consumed during the composting process. Or a large plastic bag works for storage as well.
- Paper coffee filters may be composted with the grounds.

Keep in mind that uncomposted coffee grounds are NOT a nitrogen fertilizer. Coffee grounds have a carbon-to-nitrogen ration of about 20 to 1, in the same range as animal manure. Coffee grounds help to sustain high temperatures in compost piles. High temperatures reduce potentially dangerous pathogens and kill seeds from weeds and vegetables that were added to the piles. Coffee grounds seem to improve soil structure, plus attract earthworms. Coffee grounds also can be added directly to soil but the grounds need a few months to break down.

An additional benefit of diverting coffee grounds from the landfill is that it helps cut greenhouse gas emissions. To keep organics out of the landfill is a good thing for reducing greenhouse gas emissions because organics decompose and produce methane. Methane is about 25 times as bad as carbon dioxide, a greenhouse gas. Recycling coffee shop grounds also fosters interactions between community residents and local businesses. The coffee grounds stay in their communities, meaning that fuel isn't being used to truck them from far-flung areas of the county to landfills.

This article adapted from Cooperative State Research, Education and Extension Service, USDA. Please contact Ken Churches at [cdcalaveras@ucdavis.edu](mailto:cdcalaveras@ucdavis.edu) or (209) 754-6475 with your agricultural questions. To speak with a Certified Master Gardener: Calaveras (209) 754-2880, Tuolumne (209) 533-5696, Amador (209) 223-6837, El Dorado (530) 621-5543.