

UNIVERSITY OF CALIFORNIA Agriculture and Natural Resources

UC Master Gardener Program Orange County

COMPOST

What Is Compost? Compost is the biologically active material that results from decomposition of organic matter under controlled circumstances.	 Why Compost? Reduces green waste and landfill use Reuses valuable green waste Recycles waste into a useful garden asset Restores soil health
Composting Basics	
GREENS include grass clippings, yard trimmings, green leaves, fruit and vegetable scraps, coffee grounds, tea bags, and horse, cow, chicken or rabbit manure. Greens contain nitrogen that increases the rapid breakdown of organic material.	BROWNS include dried leaves, woody plant material, chopped/ground branches and twigs, straw, hay, shredded newspaper or cardboard, and sawdust. Browns contain carbon that increases the surface area and makes decomposition easier.
WATER creates a favorable environment for the microorganisms that break down organic material. The compost pile should be as moist as a wrung-out sponge.	AIR provides the environment necessary for microorganisms to live and multiply. Turning the compost inhibits the growth of odor-causing bacteria and speeds up creation of the finished product.

Do Not Use meat, fish, poultry, bones, dairy products, grease, lard, weed seeds, Bermuda grass, nut sedge, dog and cat manure, charcoal or Duraflame ashes or treated wood products. Homemade compost that includes manure is recommended only for ornamental plants, not edibles.

UC Rapid (Hot) Method

The UC Cooperative Extension recommends using the Rapid Method to produce high quality compost by following these easy, but essential, steps:

- 1. Gather enough brown and green materials of equal volume to construct a pile that will be at least 3'x3'x3'.
- 2. Use a compost bin size of at least 3'x3'x3' to minimize heat loss and to reach the temperature needed to kill seeds and pathogens. Heat is very important in rapid composting and is supplied by naturally occurring microorganisms as they break down the organic materials.
- 3. Chop materials into one inch or smaller pieces to provide greater surface area for decomposition.
- 4. Place coarser material at the bottom of the compost bin to provide air circulation.
- 5. Mix browns and greens in a 4–6-inch layer.
- 6. Moisten so that the moisture content of materials feels like a wrung-out sponge.
- 7. Repeat Steps 5 and 6 until the pile mound is 3-4 feet high.
- 8. Turn every 3-6 days depending on the temperature of pile. Frequent turning results in a more quickly finished product. Temperatures of at least 130 °F for 3 days are needed to reduce pathogen and weed seeds in the pile.

The UC Rapid Method requires extra physical effort on the part of the composter. However, for those who want large amounts of compost in a relatively short period of time, the effort is worthwhile.

Traditional (Cold) Method

This time-honored method involves making a pile of organic materials and letting it stand for a year, after which there will be finished compost. This slower composting works for people who lack the ingredients to make a full pile and lack the time or ability to turn the compost pile frequently. Build the pile by alternating green and brown materials as they become available. It is less labor intensive and still makes a batch of compost in about one year.

Harvesting and Using Finished Compost

Compost is ready when the contents have a pleasant, earthy aroma, a dark brown color, and a crumbly texture. None of the original materials placed in the bin should be recognizable. There may be a few large chunks of woody material that can be screened out and placed in the next batch for further decomposition. Incorporating compost into soil is a common way compost is used. Compost will help improve the texture and water retention of Orange County soils that tend to be mostly clay or sandy. Spread 2-4 inches of compost over the soil and mix with the soil to a depth of approximately six inches.

Advice to grow by . . . ask us.

UCCE Master Gardeners of Orange County

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