

Composting 101

Compost is created when you provide the right mixture of key ingredients for the millions of microorganisms that do the dirty work. These microorganisms will eat, multiply, and convert raw materials to compost as long as the environment is right. The environment doesn't have to be absolutely "perfect," so you don't need to be a microbiologist or chemist to have successful compost. You need to provide: food, water, and air.

The water and air are easy. The food is a little more complex. Food for your little micro friends consists of two classes of materials, simply referred to as "Greens" and "Browns." *Green materials are high in nitrogen, while brown materials are high in carbon. The green materials provide protein for the micro bugs, while the brown materials provide energy.*

Typical green materials are:

- Fresh (green) Grass clippings
- Fresh manure (horse, chicken, rabbit, cow)
- Kitchen scraps (fruit, vegetables, coffee grounds, tea bags)
- Weeds
- Green leaves
- Leftover fruits from the garden

Typical brown materials are:

- Brown, dry leaves
- Dried grass
- Cornstalks (shredded)
- Straw
- Sawdust (small amounts)

Just like us, the little microorganisms need a balanced diet, along with water and air. Too much, or too little of any ingredient significantly reduces their productivity. It is hard to have too much of the brown category. Too much green is usually the problem. A pile of kitchen garbage will never become useful compost; it simply becomes a smelly pile of garbage. Landfills are not composting sites. Most municipal composting operations begin with the huge quantities of dry leaves that are collected each fall.

A good mix of browns and greens also helps the pile maintain the right amount of moisture and air. A pile that is 100% grass clippings, for example, will quickly become a matted, soggy mess, with too much moisture and too little air. It will decompose, quickly at first, but then stall. Mix in some dry leaves, and you'll have a significantly more efficient mixture. The dry leaves help maintain air pockets within the pile and also provide a more balanced diet for the bacteria and fungi that cause the decomposition.

The ideal combination of brown to green is 4:1

The best combination of browns and greens is about 4 parts of "browns" to 1 part "greens" by volume (4:1). Of course, this is a rough approximation. If you have more browns, you'll still get compost, it'll just take a little longer. If you are on the side of too much green, you'll likely have a smelly garbage heap.

The best source of brown material is dry leaves. In many parts of the country, the annual fall clean-up of leaves from deciduous trees is seen as a necessary chore. I choose to see it as the harvest for next year's compost pile! Harvesting, shredding, and storing dry leaves is the best thing you can do to create great compost.

Excerpted from: <http://www.thegardenofoz.org/composting101.asp>.