



COMPOSTING

Good composting is a matter of providing the proper environmental conditions. Composting is a biological decomposition made by billions of bacteria, fungi, worms and other organisms of organic wastes. The organisms use carbon, nitrogen and other nutrients released from the organic matter during the decomposition process. If the pile is cool enough, worms, insects and their relatives will help out. The result is an accumulation of dark, partially decomposed material. This will slowly make compost out of your yard and kitchen wastes under any conditions. However, like people, these living things need air, water and food. If you maintain your pile to provide for their needs, they'll happily turn your yard and kitchen wastes into compost much more quickly. At home, the process can be managed by placing the raw organic materials in a backyard composting structure. Proper management is a key factor, since unmanaged compost heaps may become an eyesore and an odor nuisance.

Why compost?

Composting of yard trash is an environmentally sound way of reducing solid waste by recycling a useful resource where it is generated. Yard trash material makes up about 20% of the volume of collected municipal solid waste, and seasonally it may account for up to 80%. Keeping this material out of the waste stream will extend the useful life of existing landfills and slow the need to acquire more land for future landfills. Composting also creates a useful soil amendment. Most people compost for personal reasons, such as the need for organic material in the garden, and/or as a way to be committed to recycling. Whatever the motivation, an understanding of the requirements for successful composting is necessary.

How does compost benefit the soil?

Compost does several things to benefit the soil that synthetic fertilizers cannot do. First, it adds organic matter, which improves the way water interacts with the soil. In sandy soils, compost acts as a sponge to help retain water in the soil that would otherwise drain down below the reach of plant roots. In clay soils, compost helps to add porosity (tiny holes and passageways) to the soil, making it drain more quickly so that it doesn't stay waterlogged and doesn't dry out into a bricklike substance. Compost also inoculates the soil with vast numbers of beneficial microbes (bacteria, fungi, etc.) and the habitat that the microbes need to live. These microbes are able to extract nutrients from the mineral part of the soil and eventually pass the nutrients on to plants.

When is my compost finished?

Finished compost is dark in color and has an earthy smell (like the smell of soil). Usually, it's difficult to recognize any of the original ingredients, although bits of hard-to-decompose materials (such as straw) sometimes can be seen.

There is no single point at which compost is finished. For many outdoor garden applications it can be fine to use compost that still has a few recognizable bits of leaves or straw -- it will finish rotting in the soil. If you plan to use compost in seed-starting mixes, though, you're best off having a well-finished compost, because seedling roots may be attacked by decomposer microbes if the roots contact unfinished compost.

Make Your Own Compost

1. Combine leaves, grass and yard clippings in a bin. The bin should be placed where it can receive equal amounts of sun and shade throughout the day.
2. Add kitchen debris such as fruit and vegetable scraps, egg and nut shells, paper towels, tea bags, coffee grinds and filters. Do not use meat, dairy products, fat or grease. These will attract animals to your compost pile.
3. Alternate food wastes with garden debris. The ideal compost mixture contains three parts "browns" (dry leaves, brush and twigs) to one part "greens" (food scraps, weeds and grass clippings).
4. A balance of damp and dry materials is necessary for the composting process. If the pile appears too dry, lightly sprinkle it with water.
5. Turn the materials periodically with a pitchfork or shovel to circulate air and distribute moisture.

DO Compost

- Grass and lawn clippings
- Hay
- Kitchen waste
- Leaves
- Manure
- Straw
- Weeds and other garden waste
- Woodchips and sawdust

DO NOT Compost

- Chemically treated wood products
- Diseased plants
- Human and pet waste
- Meats, bones and fatty food waste
- Pernicious weeds

How else can I use finished compost?

Compost as soil amendment:

Many people put compost into their garden soil by digging it in prior to spring planting. Others actually do their composting in the soil, by burying kitchen wastes and other materials in trenches in the garden. Compost can also be used as a 'top dressing' on the soil during the growing season. On lawns, many people sprinkle/broadcast sifted compost as a top dressing in the spring. It is also fine to top-dress houseplants occasionally with small handfuls of finished compost.

Compost as mulch:

Compost can be left on the surface as mulch around landscape and garden plants. This is essentially the same as a 'top dressing' application, described above, but mulches are typically meant to cover all of the soil around the plants that get mulched. Mulches protect the soil from erosion. They also save water by shielding soil from the drying effect of the wind and sun. As they decompose, mulches add nutrients to the soil, and if composed of small-enough particles, worms may slowly eat the mulch and incorporate it into the soil.

Compost as tea:

Compost tea is made by combining equal parts of compost and water and letting it sit for a while. The liquid can help to provide a 'quick boost' to ailing houseplants or young seedlings and transplants (I recommend diluting it quite a bit for use on seedlings). When you're finished making compost tea, use the mucky dregs as a mulch in the garden or landscape.