

SMART GUIDE TO HOUSEHOLD COMPOSTING

How to turn your biodegradable waste into organic fertilizer

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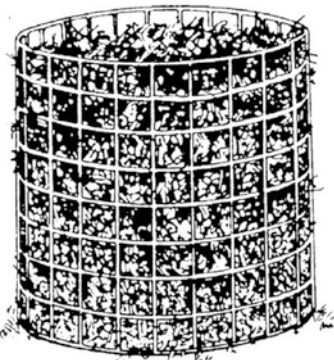
ROTATING BARREL COMPOSTER

Why use compost?

A healthy soil needs adequate nutrients, helpful bacteria, animal and plant organisms as well as a good structure to allow it to breathe and absorb moisture. To produce

vegetables at a bigger size and a quicker rate, gardeners normally make use of synthetic fertilizers. However, these types of fertilizers have several disadvantages. They sacrifice the long-term texture and flavor of vegetables. They are derived from deteriorating petroleum resources, and consume excessive energy during production. Excess chemicals also leach out of the soil, pollute waters, and drive away or destroy helpful soil organisms.

The most effective yet simple way to boost your soil is by composting. Compost is nothing more than decayed organic matter. Advantages of composting include: contribution to proper waste disposal; conversion of organic wastes into rich fertilizer; reduced dependence on inorganic fertilizers; feeding of microorganisms that aid plants in growing; and improvement of the structure of soil and its ability to retain nutrients. Composting is also based on renewable and locally available raw materials. It can generate employment opportunities and lessen environmental pollution. Best of all, it's easy. Once the compost bin itself is built, it is just as quick to take your food scraps out to the compost pile as to your garbage can. ■



WIRE-FENCING HOLDING UNIT

THE ORGANIC GARDENER'S RECIPE FOR QUICK COMPOST

1. The ideal composting site is shaded, well drained and near a source of water. But an open area can be used. Build the compost pile in the spot of your garden where collection of raw materials is easiest.
2. Build a compost bin out of easily available materials such as scrap lumber, chicken wire, bricks, or concrete blocks. Or just build free-standing piles, and cover them with tarps to protect them against the wind.
3. Make sure the bin has enough openings to allow air to penetrate the pile so that the bacteria and fungi that do the composting can get enough oxygen.

4. Compost works best with a mixture of coarse and fine materials, layered together in 6- to 8-inch layers. Lay down a bottom layer of twigs, cornstalks, wood chips, or other coarse material (such as shredded corn cobs or sawdust). Follow with a layer of high-nitrogen material such as manure or grass clippings. Be careful not to layer wet grass clippings in the pile as they tend to mat, and matted wet clippings become sticky masses of slime through anaerobic decomposition, restricting air and water movement in the pile. You can add a layer of garden soil, then more rough materials, more clippings, and so on. Sprinkle the materials with water as you build the pile. Repeat the sequence until the pile is 4 or 5 feet high, and keep everything covered until the pile is built up.

5. As you build the pile, make sure it's at least 3 feet square and 3 feet high. The pile should be large enough to hold the heat that it generates, yet small enough to allow air movement into the center of the pile. But don't let the pile get over 5 feet high. The mass may pack down, squeeze out air and slow down decomposition. It will also be difficult to turn.

6. Turn the pile every 3 or 4 days to move the fully composted material out of the hot center of the pile, and replace it with partially composted material on the sides. Turning the compost also helps prevent strong smells from building up. Remoisten the material as you turn it. The finished compost pile should be half the size of the original pile.

7. Compost may be ready as early as 12 days after you begin the process, though most well-managed piles will produce usable compost in four to eight weeks. Generally, the more compost is turned the faster it decomposes. The time required to develop finished compost also depends on the size of the pile and time of year or air temperature.

TROUBLESHOOTING COMPOSTING PROBLEMS	
SYMPTOM/ PROBLEM	SOLUTION
Rotten egg smell Insufficient air; excess moisture	Turn pile and incorporate coarse organic matter (sawdust, leaves)
Ammonia smell Organic material too high in nitrogen	Add coarse organic material (sawdust, leaves)
Pile does not heat up Pile too small	Add more organic matter
Insufficient moisture	Turn pile and add water
Lack of nitrogen	Incorporate manure, fertilizer or low C: N (carbon-nitrogen) ratio plant material (lawn clippings)
Poor aeration Cold weather	Turn pile Increase pile size or insulate with straw

MAINTAINING A COMPOST PILE

The compost pile may fail to heat up and decompose properly for a number of reasons. The table above by George Dickerson shows some common symptoms, problems and solutions.

DRAWBACKS OF COMPOSTING

If odors are successfully controlled, contamination of compost, making it undesirable or unsafe for use, may also be a problem. This can result from: a) incomplete separation of organic from inorganic wastes; as well as b) composting grass clippings from chemically treated lawns. Nevertheless, these problems are manageable, and do not outweigh the benefits of composting in general. ■

Sources:
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