Compost

Yard and kitchen scraps can turn a garden to gold

BY KRIS WETHERBEE

By turning organic waste into nutrient-rich compost, you can fertilize, mulch, prevent weeds and add organic matter all in one easy step. Compost is a mix of biodegradable yard and kitchen waste that decompose into a dark and nutrient-rich, soil-like substance through a combination of biological and chemical processes. The organic waste serves as food and energy sources for a diversity of soil-dwelling microorganisms such as bacteria, fungi, earthworms and other beneficial creatures that break down the organic material into a well-rotted, fiber-rich humus known as compost.

INGREDIENTS TO SUCCESS

Like any good recipe, the right ingredients and cooking method are essential to creating a great-tasting meal—whether that meal is for humans or microbes. In the case of compost, the ingredients consist of nitrogen- and carbon-rich organic wastes, soil, water, and air.

Organic wastes comprise a combination of "green" (nitrogen sources) and "brown" (carbon sources) materials. Good green sources include grass clippings, green leaves and plant material, animal or human hair, animal manure and kitchen waste, such as fruit and vegetable scraps, eggshells, coffee grounds and tea bags. Brown sources can be found in woody materials, such as garden trimmings, dry leaves, pine needles, straw, wood chips and sawdust, shredded paper products and used potting soil.

Do not add animal fat, meat, bones, dyed human hair, colored or glossy paper products, chemically treated wood products, pet or human wastes, noxious weeds or diseased plant parts.

A small amount of garden soil helps introduce the microorganisms needed to break down the organic matter. Adequate moisture and air—introduced via woody material and/or by turning the pile—are essential so the microbes can live and multiply, which makes for better and faster composting.

BUILDING A PILE

You'll save time and energy if you locate the pile close to your major source of organic material or where you'll be using the compost. Make sure the area is somewhat level, well-drained and easily accessible.

The method for cultivating compost is the same whether it's created in ready-made bins purchased from a gardening center or in bins you make yourself.

Always build your pile, or add ingredients, in alternating layers of three parts carbon material (brown) to one part nitrogen (green), with a thin layer of soil in between each addition.

Whenever you start a new pile, use a coarse material like branches or twigs to start the bottom layer. Add layers until your bin is almost full, then top it off with a 4- to 6-inch layer of carbon (brown) material.

It helps to break, cut, chop or shred anything that is large or easily mats: tree branches, corn stalks, watermelon rinds, leaves, etc.

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A container or enclosure of some type will help define your composting area and keep materials from being scattered. A homemade bin should be at least 3 feet wide by 3 feet high by 3 feet deep. A three-sided bin can be made from a variety of materials, such as straw bales, cinder blocks, old pallets or flexible wire panels.

Compost tumblers provide clean and odor-free composting in a drum-shaped container that you either crank, turn or roll to aerate the pile. Bins are available at garden centers and home improvement stores. For first-class tumbling that is easy to load up and turn, Gardener's Supply Co. (www.gardeners.com) offers a Tumbling Compost Mixer. Find more tumblers and bins at www.composters.com.

TURNING GARBAGE TO GOLD

Water is a vital element of a well-functioning pile. Too much or too little moisture can put a halt to the decomposition process. Be sure to test the moisture of your "compost in progress" by grabbing a handful every now and squeezing it. The material should feel moist but not wet.

Whether you turn a pile often or not at all is entirely up to you. You might have compost in four to six weeks if you turn the pile daily, or it might take up to a year if you don't turn the pile at all.

Once the compost process gets under way, the pile heats up and begins to settle. (Temperatures can reach between 110 and 150 degrees Fahrenheit.) Your compost is ready to use when the interior of the pile is no longer hot and the remaining soil-like substance is dark and crumbly with a rich earthy smell.

Mature compost can be used as a soil amendment or high-quality mulch in flower beds, vegetables gardens, in landscapes or on lawns. Because it acts like a slow-release fertilizer, you can use compost to nourish transplants and seedlings, as well as outdoor container plants and indoor houseplants.

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