

Composting

What is Composting?

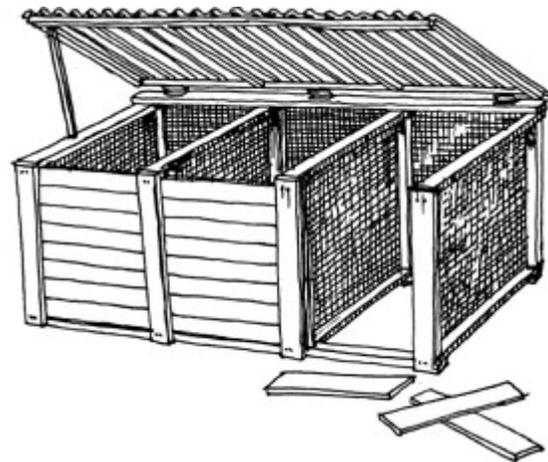
Composting is manipulating nature's natural process under controlled conditions to convert wastes into humus, a fine-grained, dark to black, organic material. Soil organisms, fungi and bacteria, literally "chew up" and decompose the waste, reducing it to elemental forms so their nutrients can be used again.



What Materials Can Be Composted?

Most types of organic material can be used, including grass clippings, leaves, weeds, sawdust, tree and shrub trimmings, and plant refuse from your garden. Materials that should be avoided include: diseased plants, weeds heavy laden with seeds, and table scraps containing grease, fat, meat, plastic, and bones. Also, avoid using material that has been treated for weed control. Shredding of larger woody material will speed up the process.

How Do You Create a Compost Pile?



Select a permanent area where refuse can be piled or stacked. A bin made of loosely fitted boards (3 compartments works well), a structure of snow fence or chicken wire, or barrels or tumblers usually work better than a pile or wind row. Place the refuse in layers, alternating coarse and fine material, moist and dry products, adding an application of nitrogen (1 cup of **Hi-Yield Ammonium Sulfate**, **Hi-Yield Blood Meal**, or **Hi-Yield Cottonseed Meal** per 10 sq ft of surface) or a product containing humic acid (**Natural Guard Soil Activator**). A layer of garden soil ½" to 1" deep can be added per layer to introduce microorganisms to speed up the process. The pile should be kept moist but not soggy. The temperature should reach 140 to 160 degrees (about a month). Soil thermometers are available at Town & Country Gardens. Piles should be turned or mixed periodically.

When is the Compost Ready?

The finished product will become dark and crumbly, with the identity of the original materials lost. It should have an earthy smell. Strong or offensive odors indicate improper process. Normal compost will take 2 to 9 months depending on the material used and climatic conditions. Apply 4 to 40 bushels per 1000 sq ft, depending on the fertility and organic matter in your garden soil.

Carbon/Nitrogen Ratios:

Serious gardeners utilize carbon/nitrogen ratios as a general guide to determine the proper balance of ingredients when making compost. The lower the first number, the higher the nitrogen content and the quicker a material will be broken down by microorganisms. The higher the first number, the more carbon the material contains and the longer decomposition will take.

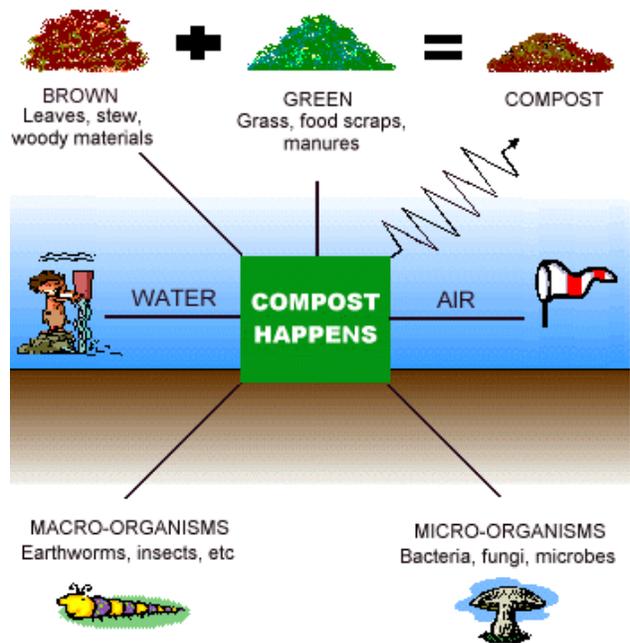
High Carbon		High Nitrogen	
Leaves	40:1 to 80:1	Humus	10:1
Sugar Cane Residues	50:1	Alfalfa Hay	12:1
Corn Stalks	60:1	Alfalfa	13:1
Oat Straw	80:1	Kitchen Scraps	15:1
Straw	80:1	Green Sweet Clover	16:1
Paper	170:1	Rotted Manure	15-25:1
Sawdust	500:1	Grass Clippings	19:1
Wood	700:1	Mature Sweet Clover	23:1
		Legume-Grass Hay	25:1
		Fruit Wastes	35:1

An ideal C-to-N ratio for quick composting is between 25 –to-1 and 30-to-1.

Benefits of Composting

Compost benefits your soil in many ways:

- 1) Increases the organic matter, building sound root structure.
- 2) Makes clay soils airy so they drain easier and gives sandy soils body to hold moisture.
- 3) Attracts and feeds earthworms.
- 4) Balances pH (acidity) in the soil.
- 5) Reduces water demands of plants and trees.
- 6) Helps control soil erosion and reduces plant stress from drought and freezing.
- 7) Can extend the growing season.
- 8) Improves vitamin and mineral content of food.
- 9) If generously applied, it reduces reliance upon petrochemical fertilizers.



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Town & Country Gardens, Inc.

5800 S. Yellowstone Hwy. ▪ Idaho Falls, ID 83402 ▪ 522-5247

1300 East Oak ▪ Pocatello, ID 83201 ▪ 232-7985

www.tcgardens.com