

Massachusetts Master Gardener Association

FACT SHEET

Have gardening questions? Contact the **Master Gardener Help Line.**

At *Mass Hort, Wellesley*: mghelpline@masshort.org, 617-933-4929

At *Tower Hill Botanic Garden, Boylston*: hortline@towerhillbg.org, 608-869-6111 x104

Please visit our website for Help Line hours: <http://massmastergardeners.org/what-i-do/>



BASIC COMPOSTING

Why compost? By composting your organic waste, you transform material that would otherwise go into the garbage into your garden's best additive. The value of compost lies in the enzymes, carbon, microbes and fungi it adds to the soil, as well as its ability to absorb and hold water. Brown matter is mixed with green material and the microbes in the compost convert organic nitrogen into the inorganic nitrogen compounds that are easily used by plants. The beneficial fungi in compost clump together pieces of soil into structures called aggregates. These aggregates keep minerals, carbon and essential nutrients near the plant roots and provide space for air and water to be readily available. This is how compost adds structure and life to the soil.

Compost is not a strong fertilizer; usually its N-P-K (nitrogen, phosphorous and potassium) value is less than 2-1-2. This nitrogen conversion in compost occurs slowly and consistently over a long period of time eliminating excess nitrogen that may run off into ground water and streams.

Compost Containers. A simple stationary bin can be made of wooden posts or a wooden crate with chicken wire fencing. It doesn't need to be fancy, just well ventilated. If you want to purchase a container rather than build your own, consider a compost tumbler. It is easy to turn, holds the heat well and speeds up the composting process. There are containers for use in the kitchen as well. Depending on the size of your garden and available space, choose the one that works best for you.

How to Make Compost. Composting is very simple; it's happening everywhere, every day - in the leaf litter of our woodlands, in the grass clippings of your lawn and the garden mulch that disappears from your beds each year.

Compost is made by adding **one part green material** (Nitrogen) to **three parts brown material** (Carbon matter). Layer or mix the parts, adding a shovelful of rich soil or completed compost to the pile. The soil or completed compost adds needed microorganisms and fungi. Add water to the pile only to keep it moist - wet as a well wrung out sponge.

Turn the pile to add oxygen allowing microorganisms to mix. If you choose not to turn the pile, it will take longer for the pile to break down into usable compost. Do not add weed seed heads or diseased plant material into the compost pile. Home compost piles seldom reach the internal temperature of 140-160°F needed to kill seeds and disease pathogens.

Green Materials: grass clippings, fresh leaves, seedless weeds, fruit and vegetables waste, egg shells, coffee grounds, tea bags and garden trimmings.

Brown Materials: dry leaves, straw, shredded black and white newspaper, old bread, rice or pasta (but not with a meat sauce), paper towels and cardboard, sawdust, pine needles, chipped branches and brush.

Do Not Add oil, fat, meat, bones, dairy products, weeds gone to seed or diseased plants.

The Massachusetts Master Gardener Association is a non-profit organization whose mission is to share knowledge and experience with the public through outreach programs in education, horticulture and gardening; to provide the Master Gardener Training Program to interested members of the public; and to provide graduates of the Master Gardener Training Program with educational and practical opportunities to extend their knowledge and interests in gardening and related topics.

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