Leaf Mold Compost
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Leaf mold is a nutrient-rich, valuable soil amendment produced through fungal decomposition of tree leaves.

WHAT IS LEAF MOLD?
Leaf mold is essentially “composted” shade tree leaves. However, unlike traditional compost that undergoes a heat-generating, bacterially-driven process, leaf mold is produced through a cooler and much slower fungal-driven process. The resulting decomposed material is an excellent additive to soil. It can be mixed in during tillage, or used as a surface mulch for no-till gardening.

HOW IS LEAF MOLD DIFFERENT THAN OTHER COMPOST?
Tree leaves are high in carbon and low in nitrogen compared to other compostable materials. The carbon to nitrogen ratio (C:N) is typically 60:1. The C:N ratio to support ideal bacterial decomposition is 24:1. Because of this, tree leaves cannot be conventionally composted without adding a nitrogen-rich material to increase the C:N ratio. The high C:N ratio is also the reason that tilling leaves directly into soil is not recommended. The soil microorganisms will use up the soil nitrogen in an effort to break down the leaves, which leads to nitrogen deficiency in plants. However, given adequate time and moisture, separate fungal decomposition of leaves results in an excellent material that can be added to the soil.

WHAT ARE THE BENEFITS OF LEAF MOLD FOR MY GARDEN?
Leaf mold adds valuable organic matter to the soil. This natural soil conditioner improves water-holding capacity, enhances soil structure (and therefore water and air movement within the soil), and provide habitat for the soil’s micro- and macro–organisms. Research has shown that leaf mold and other composts can increase crop yield, improve plant health, and even enhance a plant’s resistance to disease. As a mulch, leaf mold moderates soil temperature and reduced evaporation. Our growing understanding of soil health principles underscores the value of natural organic materials such as leaf mold in plant health and productivity.


MAKING & USING LEAF MOLD
Collect, pile, moisten. A simple pile is effective; a wire compost bin can be used to better contain the leaves. The leaves should be moist, but not wet, to provide adequate moisture for the fungi. Let the pile “mold” for two years before using.

You can speed the process. Chop the leaves with a lawn mower before piling, and/or occasionally turn the pile. This will increase the speed and uniformity of the leaf molding process. The leaf mold will be ready in about a year.

Add to soil. Leaf mold can be tilled into soil, however, a 2-inch layer is an effective mulch for a no-till garden. Add leaf mold to the soil surface; worms and micro–organisms will incorporate the humus and nutrients into the soil. Or, skip the leaf mold process and sheet mulch with “raw” leaves. They will naturally cure in-place.

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