Making Compost

You’ve probably thought about starting a compost pile, but hesitated because it seems to be a very involved process. Actually, it’s not at all complicated! All that’s needed is a place to create a favorable environment for the fungi, bacteria and other organisms to do their work turning fallen leaves, dead tomato vines, corn stalks and other yard and garden wastes into a valuable, soil-amending material.

It’s important to know that there are two types of plant materials to consider when making compost; green material and brown material. Each kind varies in its relative composition of nitrogen and carbon. Green materials are moist, green leafy plant wastes rich in nitrogen (microbes love the nitrogen). These materials decay fast and are more likely to give off offensive odors when used exclusively in the compost pile. Brown materials are dry, non-green plant wastes rich in carbon but depleted of nitrogen; they are slow to decay. Blending these two materials improves the compost making process and eliminates or greatly reduces odor problems.

Sometimes there may not be enough green material to supply the nitrogen needed by the hard-working microbes. This problem can be overcome by adding manure or a commercial fertilizer to the compost pile. As a general rule of thumb, when the compost pile is heavy on brown materials, add one cup of urea fertilizer to each volume of brown material that would fit into a bin measuring four feet on each side. If manure is used, mix one-part manure to five parts brown plant material.

Another essential ingredient in compost making is water. Microbes absolutely must have water to do their work of decomposition; no water, no compost! When plant materials are dry it’s very helpful to thoroughly moisten the compost pile’s ingredients while it’s being constructed. Check the pile often during the first few weeks, and remoisten it as needed to keep the composting process moving along smoothly.
In addition to water, compost piles need air. Carbon dioxide accumulates in the pile (due to the respiration of the hard-working microbes), and it needs to exit so oxygen can re-enter. Normally, compost piles have an adequate exchange of carbon dioxide and oxygen. Piles that become soggy wet may have a problem with air exchange; for this reason, it’s very important to choose a well-drained site for the compost pile. Turning the pile from time to time also helps get oxygen into the compost.

Although they’re not ingredients, the outdoor temperature and the passing of time have an effect on the compost’s progress. As winter sets in and the temperature slides to freezing, compost-making microbes begin to pack it in. Microbial activity resumes the following spring when the outdoor warms to a more desirable level. It takes from a few months to as much as a couple of years to make compost; be patient! Finished compost is ready to use when it has an earthy smell and is peat-like appearance.

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