

Post Rock Answers

By Cassie Thiessen October 10, 2025

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The Magic of Compost

Fall is here, and those piles of crunchy leaves are calling your name! It's the perfect time to start a compost pile and turn all that yard 'trash' into garden treasure. Compost is a mixture of soil and rotted, decomposed yard waste that has been transformed into rich, dark organic matter. It provides nutrients plants require and increases the water holding ability and texture of the soil.

Starting a compost pile is very simple. You can add many items from your lawn and garden. When starting a new pile, it's important to remember the rule of greens and browns. You will need to add "greens" which supply nitrogen. These are materials such as grass clippings (just make sure they weren't treated with chemicals), fruits and vegetables, kitchen waste, flowers, and coffee grounds. The next step is to add some "browns", these materials will supply your pile with carbon. The browns are very plentiful around our yards in the fall. They are leaves, straw, paper, nut shells, and pine needles. When adding materials to the pile, make sure to shred and chop them. Smaller pieces will create more surface area for the microorganisms to start the decomposition process. Moderate size pieces of half to one and a half inches are the best to use. Shoot for a 2:1 mix, two parts browns mixed with one part greens. If you are just starting a pile, think of it like a lasagna when adding materials. Layer alternating greens, browns, and a thin layer of soil. The soil provides micronutrients that will start the decomposition process. Adding water to your pile is also important; make sure it stays moist but not soggy.

Compost piles come in many shapes and sizes, but a general guideline is to use a 3-foot by 3-foot area. This is big enough for the pile to heat up, but small enough to easily turn. If you make your pile much larger it won't allow for enough air to reach the center of the pile. If you want a no fuss-approach you can keep your pile simple with no structure around it. You can also choose to make or purchase a composting bin. The structures can be chicken wire, wooden pallets, coated steel mesh, or a durable, hard plastic bin. Place your pile in an area of your yard that is level and well drained. Select a shady area to prevent the compost from drying out too quickly. Placing it within close proximity to your garden is also a wise decision.

Compost will be ready to use when it is a dark brown, soil-like substance with a good earthy smell. The breakdown of yard waste is a process dependent on microorganism activity. Like most living things, these microbes require favorable temperatures, moisture, oxygen, and nutrients. There is no exact time for the decomposition process to occur. If you shred or chop the materials into smaller pieces, build the pile correctly, keep it moist, and turn it every two to four weeks, the compost pile will be hot. A hot pile can produce compost in three to four months. Less effective piles can take from six months to a year to complete.

When the compost is complete it can be used in many ways. It is most commonly used as a soil amendment. Add it to your flower and vegetable gardens. Fall is the best time to incorporate a two to four-inch layer, working it into the soil about one foot deep. The compost can also be used as a mulch. Spread it around plants, trees, and shrubs in your landscape. Make sure you don't pile mulch up the trunk of the plant because this can lead to fungus.

Instead of tossing your leaves and lawn clippings into the trash, start a compost pile! Your garden will thrive in the spring with the extra addition of organic matter. If you have any questions about composting, contact your local extension office.

Post Rock Extension District of K-State Research and Extension serves Jewell, Lincoln, Mitchell, Osborne, and Smith counties. Cassie may be contacted at cthiessen@ksu.edu or by calling Beloit (785-738-3597).