

## DIVISION OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES

## Compost is a gardener's best friend

Compost is a term that's used liberally in the gardening world, but what exactly is it? Compost is a mixture of ingredients used as a plant fertilizer, as well as to improve soil's physical, chemical and biological properties.

It's prepared by decomposing plant and food waste and recycling organic materials and/or manure. The resulting mixture is rich in plant nutrients and beneficial organisms such as bacteria, protozoa, nematodes and fungi.

Compost has a variety of beneficial uses in the garden. It's a great way to improve soil structure and texture, especially in areas with heavy clay or sandy soil. In clay soil, compost loosens the clay and improves drainage. It can increase the water-holding capacity of sandy soil.

Compost is also good to be used as potting soil, as well as mulch around shrubs to help maintain moisture through hot Oklahoma summers.

How long does it take for compost to form? That depends on the type and amount of materials used, as well as the climate, size and style of compost bin used and the amount of aeration. When gardeners have the correct carbon-to-nitrogen ratio, water and air, it should be ready to use in about four to six months. The process goes quicker if the pile is turned more frequently. The smaller the individual pieces of material means more surface area the microorganisms have to work, which speeds up the process.

The compost is done when the temperature of the pile falls to ambient levels. Other signs of completion include the material is dark, it crumbles easily, the pieces are small and there's no odor.

Using the right kind of material is important, as well as knowing what not to use in the compost bin. Most yard waste, food scraps not containing fat, egg shells, manure, twigs or chipped branches, coffee grounds and tea leaves are compostable materials. Don't use greasy or fatty foods, large branches, diseased plants, weeds and vegetables that produce a lot of seeds, pet or human waste and bones.

There are many benefits of making compost. First, gardeners are reducing waste that would normally end up in the landfill, which in turn prolongs the life of the landfill. Rich compost can help gardeners reduce the use of chemical fertilizers.

OSU Extension offers more composting information in fact sheet HLA-6448.