Avid gardeners know that compost has many benefits. In sandy soils, it can improve the moisture-holding capacity of the soil and increase the drought resistance of grass, shrubs, and flowers. In heavy soils, such as clay, compost can increase the infiltration of the soil, allowing moisture to move easily into a plant’s root zone.

While compost has some nutrient value, its real value is that it holds the nutrients in the root zone, making them more available to plants. In addition to these benefits, recent research has shown that compost has the ability to suppress some plant diseases and reduce the need for pesticides.

Compost is frequently used as a top dressing on lawns, shrubs, and vegetable and flower gardens. It can also be used as a component of potting mixes to hold water in potted plants on decks and patios. In vegetable gardens, compost not only adds a low level of nutrients, but it also adjusts the soil’s moisture-holding capacity, increasing the soil’s ability to shed or retain water.

What you’ll need

Potted plants, flower gardens, and new trees and shrubs all require specific ratios of compost to soil. These soil mixes range from 5 to 20 percent compost.

To blend your soil and compost, you’ll need:

- container to measure components, such as a measuring cup, coffee can, or garden trowel
- soil
- compost
- some sand or vermiculite, if desired
- large container for mixing

The most important part of the mixing process is to use a standard container, trowel, or shovel to measure the different components of your soil mix.
Creating your soil mixes

To get a 5 percent mix of compost to soil, you use your measuring container and mix 19 containers of soil to one container of compost. This would make a soil that contains approximately 5 percent compost. To get a 20 percent mix of compost to soil, you mix four containers of soil to one container of compost. This would make a soil that contains approximately 20 percent compost.

Potted plants
A 5 to 20 percent soil blend would be the best mixture to use for pots on a deck or patio, since potted plants tend to dry out quickly. A higher percentage of compost helps hold more moisture, decreasing the rate at which the soil dries out. For instance, if you have clay pots that wick moisture more easily, use a higher percentage compost to soil blend.

Vegetable gardens
If you use a rototiller, you would apply up to one inch of compost on top of the soil and till it to a depth of five inches of soil.

If you are using a shovel to turn your garden, you could measure the depth of the shovel blade and calculate the depth of the compost needed to accommodate the depth of the shovel blade. Using one-fifth of an inch of compost for every inch of depth of the shovel.

Flower gardens
Create a soil compost blend that is 20 percent compost. Mix four parts soil with one part compost. You may also top dress perennial flower gardens with no greater than ¼ to ½ inch of compost.

New trees and shrubbery
A soil mix for this use should be around 10 percent. To obtain a 10 percent mixture, you should mix 9 parts soil to 1 part compost.

Established trees and shrubbery
Top dress with compost to a depth of about ¼ to ½ inch around the base of the tree out to the drip line.

Established lawns
Top dress lawn with ¼ to ½ inch of compost and rake into grass. For best results, aerate your lawn before applying the compost.

Seeding new lawns
Apply 1 to 2½ inches of compost to surface and till well into the top 6 inches of soil. Then apply seed and rake into surface.

For more information on home composting, call the MPCA Resource Center at 651-215-0232 or 800-877-6300, or visit the website at www.reduce.org/compost/index.html

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