Using Compost in the Home Garden

Our goal in gardening is to build healthy soil in a way that will help develop permanent fertility in the garden and landscape. The addition of compost to our soil is one of the most basic methods of meeting this goal. Good soil management will provide the nutrition our plants need today, but it will also build the reserves that future crops and plants will draw on in the years ahead.

THE BENEFITS OF COMPOST

- Improves the structure (tilth) of the soil
- Supplies nutrients at a slow, steady pace
- Improves the moisture holding capacity of the soil
- Promotes healthy microbial activity in the soil which improves nutrient availability & uptake
- Fosters strong, healthy plants resistant to disease and insects

COMPOST IN THE VEGETABLE GARDEN

- **SPRING APPLICATION:** Spread ½” to 3” of compost over the planting bed and gently incorporate into the top 4” of the soil.
- **FALL APPLICATION:** If your climate allows for a winter garden, apply at the same rate again and gently incorporate into the top 4” of soil.
- **SIDE DRESSING:** During the growing season, compost can be applied around the plants to act as a light mulch.

The rate of application depends on:

- The existing fertility of your soil.
- The previous crop planted and how much the soil has been depleted.
- The nutritional need of the crop you will be planting.

COMPOST TO IMPROVE SOIL STRUCTURE

To improve the structure (tilth) of your garden soil, a fall application of compost is best.

- Gently fork the compost in 12-18” deep and let it rest over the winter.

COMPOST IN THE FLOWER GARDEN

Fine, well-decomposed compost is a boost to both annual and perennial flowers.

- Apply a 1” thick layer around flowers/shrubs as mulch.
- Mix 1 part compost with 1 part soil and use it as a side dressing around flowers.
- Gently loosen the soil around your plants (being careful not to damage the roots) and mix an equal amount of compost into the loosened soil.

COMPOST IN THE LAWN

After aerating the lawn in the spring, spread a generous amount of compost (about ½”) over the surface of the grass, and rake lightly to help work it down into the holes made by the aerator. Water in after application.
COMPOST FOR TREES AND SHRUBS
Moisten the ground around your trees and place a 1" layer of compost in a ring around the tree. Start the compost two feet away from the trunk of the tree and extend the compost to one foot beyond the drip line. If possible, gently scratch or rake the compost into the top 2" of soil. Cover the composted area with mulch. Treat shrubs in the same manner, keeping the compost 6-12" from the base of the plant.

COMPOST AS A SEED STARTER
Compost can be used as one of the ingredients in seed starter. Make a mix of equal parts of fine compost, sand and soil. The mixture should be fine in texture and should crumble easily when squeezed in your hand.

COMPOST FOR HOUSE PLANTS
- Use the "seed starter" mix described above for potting indoor plants.
- Enrich your favorite potting mix by using 3/4 potting mix and 1/4 compost.
- Rejuvenate outdoor pots and planter boxes by scratching in a 1" layer of compost twice a year.

COMPOST AS A LIQUID FEED
Compost can be used to make a mild liquid feeding solution called compost tea. Compost tea is especially effective when setting out new plants.

MAKING THE TEA. Fill a bucket 1/4 full with compost; add water to fill the bucket. Stir the mixture repeatedly over 24 to 48 hours, the more frequently the better. You may wish to use a small aquarium pump to keep air flowing through the mixture. Good, "active" compost tea needs to have air incorporated into it, so keep it stirred up and moving.

USING THE TEA. Dilute the mixture until it’s the color of light tea, and pour 2 cups of this solution around the base of each plant. Larger plants can receive larger “doses”. Use up the tea mixture whenever you make it; it won’t keep its nutritional value when stored. Be wary of using too much though, especially in drought conditions. Fertilizing plants will encourage new growth, which then increases water needs to support that new growth.

ABOUT SOIL STRUCTURE & COMPOST APPLICATION
The instructions here emphasize handling your soil gently. The goal is to improve soil structure or tilth by encouraging microbial activity. The microbes create “glues” that bind humus and microscopic soil particles into larger units, leaving pore space for air and water, and thus encouraging and perpetuating a truly healthy, living, and fertile soil.

Mechanical soil disturbance works against the building of soil tilth and microbial habitat, so keep that disturbance to a minimum. Work the soil only when moderately moist; preferentially use hand tools rather than machines to work in compost; don’t pulverize the soil when working it. Over time, the frequency with which you’ll need to work in compost should decrease.

And, remember, always keep your soil covered with 2-4" of organic mulch whether you apply compost or not!

Originally prepared for the 2015 Get Dry Plant Sale produced by the UC Master Gardener Program of Contra Costa County.