

Using Compost

Solid Waste Management Fact Sheet No. 4

Many gardeners follow the steps to make compost without an understanding of how compost can be used around the home. Compost can be very beneficial in a variety of horticultural applications.

Fertilization and Soil Improvement.

The addition of organic material improves looseness and workability of soil. Heavy, tight clay soils benefit from the loosening effects of organic materials. But, sandy soils benefit as well from the improved water holding capacity and fertility that organic materials provide. Compost also contains nutrients that plants require. While the specific nutrient content of compost varies with the types of materials composted and the amount of water the compost contains, a general recommendation is to apply compost at the rate of 50 to 100 pounds per 100 square feet. This is generally translated to a bushel or two of material for every 10 feet by 10 feet area of the garden. The best time for applying compost is just prior to tillage—either in the spring or fall. Tilling incorporates the compost throughout the plant root zone. Many Kansas gardeners till garden soils in the fall and compost made early in the season should be ready for use by then. If you have a two-pile system, compost from last year can be used.

Compost at Planting.

A band in the bottom of a row trench or several shovels full of compost can be added to the bottom of planting holes. This is especially true of singly planted tomato plants, perennial flowers, or trees or shrubs. The “slow release” nutrient release of compost works through the early growth period. Compost can also be used as a “top dressing” over the row to prevent crusting of soil for seeded vegetables or flowers. Compost can also be mixed with water to form ‘compost tea’—a substitute for soluble fertilizers or starter solutions. As a general rule, mix equal parts of compost and water. The leftover compost can be added to garden soil later.

Mulching.

One of the most beneficial practices for summer gardening in Kansas is the use of a mulch. Mulches hold moisture in the soil, prevent weed growth, and reduce soil crusting and splashing. Mulches also help to keep the soil cooler in hot summer conditions. A layer of compost 2 to 3 inches thick along the row of garden vegetables or flowers, or spread around perennial flowers, trees or shrubs reduces the moisture fluctuations and reduces evaporation of water from the soil surface. After the garden season, simply till the mulch into the soil as a source of organic material.

A Potting Mix for Seedlings.

Compost that has been screened for large particles can be mixed with soil or sand (in about equal parts) as a plant growing mixture. It is essential that the compost be well deteriorated and free of harmful disease or insect (i.e. the compost was properly heated) so problems do not occur when growing young seedling plants.

Using Compost on a Lawn.

The best way to use compost for a lawn is to make liberal applications of compost before planting the lawn. A fine top dressing of compost can be added each year to provide annual fertilization of the lawn; however, only a thin layer can be added.

Problems in Using Compost

Compost is not a “cure all” for garden soils or garden problems. The benefits of composting certainly outweigh the limitations. It certainly is possible, however, to over-do applications of compost.

The high nutrient content of some composts may provide too much nutrient, if excessive applications are made. Lush, rapid growth often at the expense of good fruit production, can be the result. Compost that is not completely decomposed may continue to decompose as it is added to soil in large amounts and remove or tie up soil nutrients until the decomposition slows down. This is a particular concern with spring applied compost and where compost is incorporated into the soil.

Creating a dark, cool environment at the soil surface may provide an ideal area for certain types of insect problems, such as sowbugs or squash bugs. There are specific control measures for each of these insect problems that might need to be followed. (Consult your County Agent or garden dealer for control measures). Some types of compost applied to the soil surface can pack to a dense, tight layer that may be almost impervious to water. This is frequently an indication of poorly made compost. Using more soil with the compost or mixing soil with compost prior to use can correct this problem.

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