## Solid Waste Management Fact Sheet No. 2

The composting process involves the decomposition of organic materials by naturally occurring bacteria and fungi. One of the purposes of adding soil to the compost pile is to serve as a source of these microorganisms. However, for the organisms to build in large populations, it is also necessary that nitrogen be available to the micro-organisms and this needs to be supplied, in some cases, with an addition of an activator material. If you are attempting to compost primarily brown materials such as leaves, wood chips, or related products, supplemental nitrogen will need to be applied by using either commercial fertilizer sources or a naturally occurring source of nitrogen. Examples of naturally occurring nitrogen containing materials include blood meal, previously made compost, fish meal, manure, or alfalfa meal.

## Amount to Use

The amount of activator necessary is dependent upon the concentration of nitrogen in the activator material. For concentrated materials such as commercial fertilizer, using 1 to 2 cups of fertilizer per 10 square feet of compost bed area should be sufficient. If you are using material such as blood meal, alfalfa meal, or concentrated manure, use 1 to 2 pounds of this material per 10 square feet of compost bed area. If you are using previously made compost, apply 4 to 5 pounds of compost per 10 square feet compost pile area. Following the addition of the activator, continue to build the pile by adding another 6 to 8 inches of organic material, a light sprinkling of  $\frac{1}{2}$  to 1 inch of soil, and an additional application of activator.

After the pile is completed and moistened, blend the contents of the pile, soil, and fertilizer by stirring the pile with a pitch

fork or rake. The nutrient contained in the activator will be absorbed in the bodies of the microorganisms as they build in large populations to break down organic materials in the compost. After the composting process is completed, these nutrients, plus any additional nutrients available in the organic materials, are released back into the compost as the microorganisms die, accounting for the high nutrient value of a wellmade compost.

## **Bacterial Activators**

You can purchase products known as compost activators which contain fungi and bacteria necessary to start the composting process. Purchasing these types of activators is not necessary if you are able to use garden soil in the compost pile since soil contains a wide range of these organisms that occur naturally. However, if you prefer to purchase the activators rather than adding soil, follow the label directions on how much activator to add per unit of compost volume or area.

> Prepared by Charles W. Marr Extension Horticulturist, Vegetable Crops

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