

### **How long does it take to reach a finished product?**

Generally, a compost pile that contains a good mixture of finely chopped materials, is turned regularly and kept moist, will be ready in about 2 to 4 months. A compost pile composed of non-shredded materials that is left unattended may take a year or longer to decompose. Piles prepared in late fall will not be very well decomposed by spring. When the compost is finished, the pile will be about half its original size and have a pleasant, earthy smell.



### **Of what value or use is the finished compost product?**

Compost is used as an organic amendment to improve the physical, chemical and biological properties of soils. For example, adding compost to garden soil will increase the moisture holding capacity of sandy soils and improve the drainage and aeration of heavy clay soils. Over time, yearly additions of compost will create desirable soil structure making the soil easier to work.

### **Will compost eliminate the need for commercial fertilizers in my garden?**

To a limited extent, compost is a source of nutrients. However, nutrient release from compost is slow and the nutrient content is often too low to supply all the nutrients necessary for plant growth. Compost should not be considered a substitute for fertilizer, but rather a supplement. Compost increases the ability of the soil to hold and release essential plant nutrients, especially in sandy soils. This may reduce the amount of fertilizers needed.

### **For more information**

Horticultural information is available from your local Iowa State University Extension office and from these Web sites.

ISU Extension Distribution Center—  
[www.extension.iastate.edu/store](http://www.extension.iastate.edu/store)

ISU Horticulture—  
[www.yardandgarden.extension.iastate.edu](http://www.yardandgarden.extension.iastate.edu)

Reiman Gardens—  
[www.reimangardens.iastate.edu](http://www.reimangardens.iastate.edu)

Prepared by Linda Naeve, former extension horticulturist; Richard Jauron, extension horticulturist; and Diane Nelson, extension communication specialist.

File: Hort and LA 1

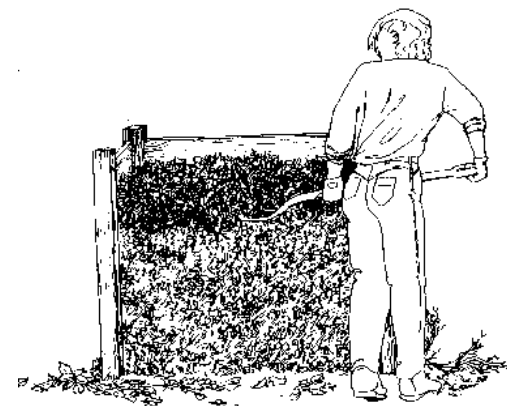
Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Jack M. Payne, director, Cooperative Extension Service, Iowa State University of Science and Technology, Ames, Iowa.

... and justice for all

The Iowa Cooperative Extension Service's programs and policies are consistent with pertinent federal and state laws and regulations on nondiscrimination. Many materials can be made available in alternative formats for ADA clients.

REIMAN  
GARDENS  
IOWA STATE UNIVERSITY

# Questions About Composting



IOWA STATE UNIVERSITY

University Extension

The Iowa Waste Reduction and Recycling Act of 1989 prohibited the disposal of yard wastes in sanitary landfills. This encouraged many gardeners and homeowners to try composting their leaves, grass clippings, and garden refuse. Although the process of composting is not difficult, some gardeners simply created “organic trash heaps” and became discouraged because the plant material in their pile did not readily decompose.

Below are a few of the commonly asked questions about composting.

### **What kinds of materials can be composted?**

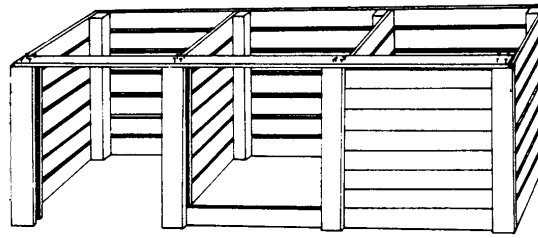
Yard and garden residues and other organic materials are suitable for composting. This includes leaves, grass clippings, straw and hay, sawdust, and finely chopped or shredded tree and shrub prunings.

### **Can kitchen scraps be added to a compost pile?**

Certain kitchen scraps can be added to the compost pile, such as fruit and vegetable trimmings (including rhubarb leaves), coffee grounds and eggshells. Bury them in the pile to prevent odors and flies. Do not add meat scraps, bones, grease, whole eggs, or dairy products to the compost pile because they decompose slowly, cause odors, and can attract rodents.

### **What other things shouldn't be added to a compost pile?**

Because of the possibility of the transmission of certain diseases, human, dog, and cat feces should not be placed in compost piles. Also, diseased plant material or weeds that have gone to seed may be undesirable in the compost pile. If the temperature in the pile does not reach 150° to 160°F, neither the weed seeds nor the disease organisms will be destroyed. If diseased plant materials are composted, the end product may be better used in another area of the yard rather than in the garden where they were generated.



**For more information and instructions for building a stationary 3-bin compost turning unit, see “Composting Yard Waste” (PM 683).**

### **What is the optimum size for a compost pile?**

The best size for an enclosed compost pile is between a 3' x 3' x 3' pile and a 5' x 5' x 5' pile. If any smaller, it will dry out too fast; any larger and there will be poor air movement and it will be difficult to turn the pile.

### **Can wood ashes from the fireplace be used in the compost pile?**

Wood ashes act as a lime source and should only be added in small amounts (no more than 1 cup per bushel of compost).

### **If my lawn has been treated with herbicides, can I still use the clippings in my compost pile?**

Composting is an accelerated decomposition process that biodegrades many compounds faster than soil degradation. The faster degradation in an active compost pile is due to the more favorable conditions for decomposition of organic products including herbicides. If yard waste has been composted at least one year, pesticide residues should not be a problem when the compost is used.

### **Can I compost my newspapers?**

Yes. Most newspapers today use soybean-based or other non-toxic inks. To promote decomposition, shred newspapers and mix with other materials.

### **Why doesn't a pile of leaves readily decompose?**

It is best to have a mixture of organic materials together in the compost pile. Dry leaves are a high-carbon organic material. The microbes that do the decomposing require a certain amount of nitrogen for their own metabolism and growth. Without a nitrogen source, the decomposition will be slow. Grass clippings are high in nitrogen. When mixed together, the grass clippings will enhance the decomposition of the leaves.

### **Are commercially available inoculants or activators needed to have rapid decomposition in a compost pile?**

Inoculants are dormant microorganisms. They are rarely needed, since soil, leaves, kitchen scraps, and finished compost already contain ample bacteria that readily work on their own. The only “activator” that may be needed is a nitrogen source since nitrogen is usually the limiting nutrient. Nitrogen accelerates the decomposition process if the materials to be composted are high in carbon, such as dried leaves.

### **How can I avoid problems with unpleasant odors from the compost pile?**

Odors may arise from the addition of excessive amounts of wet plant materials such as fruits or grass clippings, from overwatering the pile, or by not periodically turning an actively decomposing pile. A properly prepared and adequately turned compost pile will generate little, if any, objectionable odor. Good aeration, provided by regularly turning over the materials in the pile, is essential for good, rapid decomposition. Also, keeping the compost damp but not waterlogged will go a long way toward preventing unpleasant odors. Adding lime does not necessarily reduce odors and may result in the loss of nitrogen from the pile.