

## Enriching Garden Soil

### Why compost?

Soil conditioning and fertilization – soil needs organic matter and nutrients to support vegetative life. Adding decaying organic material (compost) to soil provides the necessary micro-organisms that produce the required nutrients for plants, helps retain moisture and makes it more arable (soft and loamy). All soil types are improved and compost helps regulate soil pH to optimum levels for nutrient availability for plant life.

### What is compost?

Composting is the decomposition of organic materials such as fruits, vegetables, pruning's, grass, leaves, etc. Sufficient water to moisten the compost along with mixing and turning the pile to allow aeration will speed the process. Once the compost is a dark brown color, resembling forest soil, and the organic materials no longer have their characteristic look or smell, the compost is ready for use.

### What is needed?

- Composting requires approximately a 1-by-1-meter space convenient to the garden where the organic material can be placed in a pile. The pile can also be placed in a container, if need be.
- Add layers of brown and green organic material in equal proportions. A small amount of good soil or compost should be added to a new pile to supply the micro-organisms.
- As needed, wet the pile to keep moist, and mix the pile, turning it to bring material on the bottom to the top of the pile and to provide aeration. As the organic matter decomposes, the pile will become smaller.

### Rapid composting

To compost more rapidly, cut the organic material in smaller pieces and turn the pile once or twice a week, adding water to keep the pile moist. To avoid slowing the process, do not continue to add fresh material, but instead use this material to start a new compost pile.

### Slow composting

After assembling the layers of green and brown organic matter, left untouched, the compost will be ready in about a year. To speed the process, spray the pile with water (1-2 times a month) and mix with a shovel or pitch fork to assist with the aeration.

Fresh organic matter can be added by making a hole in the pile, adding the material and covering it with a layer of the existing compost.

### Containers for composting

It is not necessary to use a container for composting, but they can be used if a more orderly appearance is desired. Some containers can actually speed up the process. There are various containers that can be built or used:

- Cubicle composting – using bricks, wood, or whatever material is available, assemble a 1-meter square to hold the compost. During rainy seasons, a cover can be placed over the compost to prevent it from becoming too wet.
- Barrels or plastic drums – drill 24 to 48 holes of 1 cm to obtain good aeration. Because there is no contact with the soil, add a small amount of old compost or garden soil to begin the composting process.
- Wire container composting – using a piece of screen or wire about 3.5 meters long by one meter high, tie the ends together, and fill with organic material. To mix the compost, remove the wire, turn the compost and then refill the wire container.

### Placement of the compost pile

Prepare the compost pile on level, well-drained soil, locating it near the garden for convenience.

### What materials can be used in composting?

In general, all organic matter from the garden can be used, along with all yard waste such as leaves, straw, twigs and grass clippings. Any material larger than 2 ½ cm in diameter can be cut into smaller pieces before adding to the pile. Kitchen scraps from fruit and vegetables, coffee grounds, and egg shells can be added. Animal manure (from animals that do not eat meat) can also be added to the pile to add nutrients and speed up the decomposition. **DO NOT ADD** feces from humans, cats or dogs because it could transmit diseases. **DO NOT ADD** meat, bones, grease, milk or cheese to the pile because it could attract animals to the site.

### Points to consider

The decomposition of organic matter in the compost pile will be dependent on the activity of microbes. This activity is dependent on adequate aeration, the amount of moisture, the size of the organic material and the nutrients available. A well prepared and maintained compost pile in a warm climate can provide organic fertilizer or soil amendment within 2 months.

### When is the compost ready?

When the pile of compost has completed its decomposition, remove any sticks, rocks and debris that remain. The final product should be a uniform, brown, loamy, organic product that can be used as a fertilizer.

### How to use compost in the garden

Fill planting stations or rows with compost and mix with the soil. It is now ready to plant.

When planting in containers, use equal parts of compost and garden soil.

**If you have any questions about this topic, please reach out to CompassionLink at [info@compassionlink.org](mailto:info@compassionlink.org). We will be happy to answer your questions.**

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