

Composting:

What is Compost?

Compost is the end product of the process of decaying organic materials. It is made by billions of microbes like bacteria and fungi that digest the waste (food) you give them. Worms and insects also help this process. In nature composting happens when leaves pile up on the forest floor and decay, leaving the soil enriched.

What do you need for compost?

Compost requires

1. Good air flow, without air decomposition will slow down and make the compost smell bad. Air can be put in the compost pile by turning it or breaking it up with a spade or fork then piling it back up.
2. Water for moisture, because the microbes need water to live and disperse themselves. Generally the compost should be as wet as a wrung out towel. If the pile is too wet or too dry the process will slow down.
3. "Food" or the waste that is added to keep it going. A good mix of 75% "browns" and 25% "greens" is best for the microbes. "Browns" being dead and dried plant material and "greens" are the fresh plant material. These two balance each other in the pile, the browns give good air flow and the greens give moisture.

What waste is concerted to be "browns" and "greens"?

Browns are:

1. Hay – should be moistened before being added to the pile. But keep in mind that grass hay has a lot of seeds and can re-sprout in your garden.
2. Dead leaves – should be used in thin layers or be broken up so they don't clump together blocking air.
3. Straw – needs to be wet because otherwise it will decompose very slowly.
4. Wood chips – should be mixed in the pile in very thin layers since they take longer to decay. You also need to make sure they have not come from chemically treated wood.
5. Sawdust – must be stirred in thoroughly and should not come from treated wood.

Greens are:

1. Fresh grass clippings – should be mixed in thin layers as they tend to become slimy.
2. Green leaves – again just like the dead leaves they should be broken up or be put in the pile in thin layers.
3. Weeds and old garden plants – AVOID using any weed that has begun to seed, any diseased plants, and any invasive plant as they will remerge in the compost pile and the garden
4. Kitchen waste – like peels, rinds, tea bags, eggshells, coffee grounds, and other fruit or vegetable matter. Even old ripen vegetables or fruits are ok to be composted.

What should not be put in compost?

Do not add:

1. Chemically treated wood products – can leach toxins into the compost then infecting the garden.

2. Diseases plants – should not be used because they will re-infect the garden when the compost is used.
3. Pernicious weeds or invasive plants – can re-sprout from their roots, stems, or shoots and will return to the garden via the compost.
4. Pet or human waste – carry disease organisms that can make humans sick.
5. Meat products – like bones, the fat, milk, or cheese. These break down too slowly and attract pest.

#### How do you start the compost?

To start: place the “food” under a pile of top soil then moisten with water. Continually add the “food” to the pile and turn it weekly. Just make sure the pile continues to stay moist.

#### When is the compost done decomposing?

Finished compost looks like dark rich top soil and smells just like soil. You should not be able to see the “food” that was added. Although sometimes bits of wood chips, leaves, or hay can be seen. This is ok because they will eventually rot in the soil.

#### How do you use compost?

Compost can be used as:

1. Soil amendment – it adds organic matter into the soil. Compost improves sandy soils by helping to keep water where the plants roots can reach it. It helps clay soils by adding tiny holes so the soil can drain better. It also keeps clay soils from drying into hard brick like forms. Incorporate, at most, a 1 inch layer into your garden bed in the spring.
2. Mulch – to protect from erosion and help save water by shielding the soil from the wind and sun drying it out.
3. Liquid fertilizer – when mixed with equal amounts of water and allowed to sit in a continuously aerated container, it becomes a “tea”. This can then be used to feed plants quickly giving them a boost of nutrients.

#### Side Notes to keep in mind:

1. Compost can be kept in open piles (which is not recommended because of pest) or in containers with holes for air & drainage. Metal, wood, or plastic containers can be used.
2. One misconception of composting is that the pile must have a high internal temperature to work which is not true. Good air flow, moisture, and the proper balance of food is all that is needed. However the hotter the compost is the faster it will decompose. And that’s only because higher temperatures indicates there is more microbes.
3. During the winter the compost will go dormant, but it will start back up aging in spring.