

## **Compost – The Inside Scoop**

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### **What is compost?**

Simply put, compost is a soil amendment of organic material that has partially decomposed to a point that plants can use the nutrients. It also provides nutrients to soil dwelling bacteria, fungi, and worms so they can further breakdown organic material. It helps clay soil aeration and water retention in sandy soil. The beauty of compost is in the value it adds to gardens, the reduced cost of gardening by reducing the amount of fertilizer needed, and the reduction of materials going to a landfill.

### **How and when is compost used?**

Compost needs to be mixed into the soil, preferably early in the season before planting. How much to use and when depends on where it is being used and results of a recent soil test. Soil testing will also identify other soil amendments may be needed. For new gardens, apply 3 to 4 inches of compost and other amendments as recommended by soil test results. Mix in to 8 to 12 inches of soil. For new lawns, apply 1 to 2 inches of compost and mix into the soil. Then add ¼ to ½ inch of compost over the lawn seed.

For existing gardens, only ¼ to 1 inch of compost should be applied and worked into 8 to 12 inches of soil. For existing lawns, apply ¼ inch of compost over actively growing grass in the spring and work into the soil. An aerator machine can help incorporation.

When planting landscape plants, spread 3 to 4 inches of compost over the area and work into the soil as deeply as possible before installing the plants.

Detailed information is available: “How to Use Compost in Gardens and Landscapes”, <https://extension.oregonstate.edu/sites/default/files/catalog/auto/EM9308.pdf>

### **How is compost made?**

You can make your own compost. It’s easy and costs almost nothing! A good mix for making compost is using “green” and “brown” materials in a ratio of 2 parts brown to 1 part green for the right mix of carbon and nitrogen. “Green” materials include vegetables and their trimmings, fruit and peels, lawn clippings, house plant leaves, and dead flowers. “Brown” ingredients include twigs and branches, dried leaves, sawdust from deciduous hardwood trees, newspaper, and office paper. Do not use sawdust from treated wood. North Carolina State University has an extensive list of compostable materials. See “Backyard Composting of Yard, Garden, and Food Discards” at [https://content.ces.ncsu.edu/show\\_ep3\\_pdf/1678821225/22094/](https://content.ces.ncsu.edu/show_ep3_pdf/1678821225/22094/).

A few examples of things that should NOT be composted include meat, fish, bones, fats, dairy products, plant materials treated with pesticides, diseased plants, walnut leaves or shells, pig, dog or cat manure, or weeds that have gone to seed.

Compost can be left to decompose naturally but it will take about a year or two to reach a point where it can be used in the garden. Speed the process up by turning the pile over weekly to help aerate it and add adequate water to produce useable compost in about 4 months.

Compost is ready to use when it is no longer warmer than 10 degrees above ambient temperature, it is dark brown or black, and it smells “earthy”. The original materials used should not be recognizable.

### **What about manure?**

Many different animal manures can be composted. Certain precautions are needed to ensure the manure is safe to use. Manures may contain pathogens and must be composted properly to ensure vegetables are safe to eat. See resources below for details about proper composting of manures. Herbicides may also be present in manures and can inhibit seed crop germination. It can take several years for herbicides to breakdown. Be sure to ask the manure supplier about the possibility of herbicides in the manure. Be aware that different manures contain differing amounts of potassium, phosphorus and nitrogen. For example, chicken manure is very high in nitrogen and can burn seedlings. Cow and horse manure may contain a lot of weed seeds.

Once the basics are understood, composting can give your gardens a nice boost and is a great way to use “green” and “brown” materials that otherwise fill up landfills. Give it try!

### **Resources for additional information**

“How to Use Compost in Gardens and Landscapes,”

<https://extension.oregonstate.edu/sites/default/files/catalog/auto/EM9308.pdf>

“The Tennessee Vegetable Garden - Stewardship in Soil Management,”

<https://extension.tennessee.edu/publications/Documents/W346-G.pdf>

“Home Composting: A Guide for Home Gardeners,” <https://extension.psu.edu/home-composting-a-guide-for-home-gardeners>

“Wise Use of Manure in Home Vegetable Gardens,” <https://extension.psu.edu/wise-use-of-manure-in-home-vegetable-gardens>

“Guidelines for Using Animal Manures and Manure-Based Composts in the Garden,” [https://extension.unh.edu/sites/default/files/migrated\\_unmanaged\\_files/Resource002114\\_Rep3119.pdf](https://extension.unh.edu/sites/default/files/migrated_unmanaged_files/Resource002114_Rep3119.pdf)

“Use Manure Safely in Vegetable Garden,” <https://site.extension.uga.edu/fannin-gilmer/2021/03/use-manure-safely-in-vegetable-garden/>

### **How do I ask a question?**

If you have a question for the Master Gardeners, submit them to us on our website at [www.netmga.net](http://www.netmga.net). Click the link at the top of the page, “ASK A MASTER GARDENER” to send in your question. Questions that are not answered in this column will receive a response from a Master Gardener to the contact information you provide.