



# HOME & GARDEN

Home and Garden information center • 12005 Homewood Road • Ellicott City, MD 21042 • 1-800-342-2507

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## Soil, Fertilizer, Mulch and Compost Tips

### Soil Improvement

- Avoid the temptation to turn over or dig into wet soil. This can cause long-term damage to the structure of your soil. Poor, compacted soils can be improved through the generous addition of organic matter. Spade or till in a 6-8 inch layer of leaf compost or well-rotted manure.
- Earthworms are a sign of healthy soil and are normally seen in the greatest numbers in fall and spring. Adding organic matter in the form of composted leaves, manure, grass clippings, etc. will improve soil structure and attract earthworms.
- Now is a good time to have your soil tested if you have not had your lawn or garden soil tested for the past 3-4 years.

### Fertilizer

- Fertilize plants according to their specific needs based on soil test recommendations. Trees are typically fertilized after they drop their leaves in the fall, not in the spring. Mature shade trees do not typically need to be fertilized at all. Bluegrass and fescue turf is fertilized in the fall as well.
- Avoid the temptation to fertilize ornamental garden plants that appear to be healthy and productive. Over-fertilization, especially with fertilizers high in nitrogen, can lead to overly-succulent, weak growth and encourage sucking insect pests like scales, aphids and adelgids.
- To prevent nutrient pollution of groundwater and the Chesapeake Bay keep fertilizers off of hard surfaces like driveways and sidewalks. Be cautious when fertilizing areas of your yard that border these hard surfaces.

### Mulch

- Maryland summers typically include hot, dry weather. A good mulch covering will help plants survive the stress of summer and keep weeds in check. To be effective mulches should be applied only 2-3 inches deep around ornamental plants and kept away from shrub and tree trunks. Mature trees do not benefit from being mulched except to keep lawnmowers and string trimmers at bay.
- Select pine bark mulches for use around your home to minimize the possibility of attracting termites. Avoid any hardwood mulches that contain wood. If soil pH is very low, hardwood bark mulches may be a problem around azaleas, rhododendrons and mountain laurel because they may leach toxic amounts of manganese.
- Avoid buying or using mulches that have been stored in large, high piles and smell of alcohol or methanol. Very large mulch piles may undergo anaerobic digestion leading to the formation of compounds like ethanol and methanol that can damage plants. Break these piles up and allow them to dry out before using the mulch.
- Various slime molds, like “dog-vomit fungi and stinkhorn fungi, may also be observed now growing in mulch. These are unsightly and can be broken up, turned under or removed.

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## **Compost**

- If your pile is overly wet and smelly, tear it apart and mix in some dry materials high in carbon, like shredded newspaper, straw or shredded leaves. Contrary to popular belief, it is not at all helpful to layer different ingredients when building a pile. Mixing together materials of different textures will promote faster decay. Many kinds of invertebrates live in a compost pile including manure worms, centipedes, millipedes, pill bugs, and pseudoscorpions. They are part of the composting ecosystem and should be appreciated, not feared or destroyed. You may see large numbers of soldier fly larvae in your compost pile, especially if the pile is wet. These large, beige colored maggots are part of the compost food web. The adult flies are beneficial insects.
- Compost piles should be at least one cubic yard in volume to heat up properly. An even mixture of green, high nitrogen and brown, high carbon materials is necessary for rapid composting. Grass clippings and spent plants from the flower and vegetable garden provide a good source of high nitrogen, green materials for the compost pile. Fallen leaves and old straw mulch are good sources of high carbon, brown materials. Shred your materials with a lawnmower, string trimmer or machete to speed-up the breakdown process.
- Keep sticks, roots and woody stems out of your compost pile. They take too long to breakdown and make it difficult to turn the ingredients. It is not necessary to buy a bioactivator to add to the compost pile. Finished compost is the very best starter material for a compost pile because it contains nitrogen and a huge number of microbes. It is also not necessary to add soil or lime to a compost pile. Consider placing a tarp or lid over your pile to prevent water logging during wet periods, conserve moisture during dry periods, and prevent nutrient leaching. Kitchen scraps thrown on top of compost piles may attract pest animals. It is best to bury these scraps in the middle of your compost pile or in garden soil.

**Have a pest or gardening question?**

**Call the Home and Garden Information Center**

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