

June 2009

Soil, Fertilizer, Mulch and Compost Tips

Soil Improvement

- Bare soil is very prone to erosion from summer thunder storms and should be covered with mulch, groundcovers or turf. Avoid the temptation to turn over or dig into wet soil. This can cause long-term damage to the structure of your soil. If you want to grow vegetables, flowers or herbs next spring and your soil is especially poor, consider building a raised bed and filling it with a purchased mixture of topsoil and leaf compost.

Fertilizer

- Applying a granular fertilizer following labeled instructions during the summer can greatly enhance the bloom and vigor of flowers and vegetables. To prevent burning of the foliage sweep granular fertilizers off plant foliage. The “reddy mix” liquid feed applicators are not as damaging as they are specially formulated to be applied directly to the foliage. To help prevent nutrient pollution of groundwater and the Chesapeake Bay sweep fertilizers off of hard surfaces like driveways and sidewalks. Avoid the temptation to over-fertilize ornamental garden plants that appear to be healthy and productive. Over-fertilization, especially with fertilizers that are high in nitrogen, can lead to overly succulent, weak growth and encourage sucking insect pests like scales, aphids and adelgids.

Mulch

- Various slime molds, like “dog-vomit” fungi and stinkhorn fungi, (<http://plantdiagnostics.umd.edu/level3.cfm?causeID=657>) may be observed now growing in mulch. These are unsightly but harmless and can be broken up, turned under or removed.
- Mulches should be applied only 1-2 inches deep around ornamental plants and kept away from shrub and tree trunks. Mature trees do not benefit from being mulched. Don't lay down mulches containing wood chips around your home. These may attract termites. Bark mulches do not attract termites like wood chips.
- Avoid buying or using mulches that have been stored in large, high piles and smell of alcohol or methanol. The alcohol in the mulch will damage or possibly kill your plants. If you get a load of mulch delivered that has a strong alcohol smell, simply spread open the pile and let it air out for a few days to permit the alcohol to evaporate out. Avoid the excessive use of hardwood mulches around acid-loving plants, like azalea and blueberry. Hardwood mulches can contribute to manganese toxicity problems in these plants.

Compost

- If your compost 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. Be sure to bury kitchen scraps deep inside your outdoor compost pile. Contrary to popular belief, it is not necessary 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.

Educating People To Help Themselves

Local Governments - U.S. Department of Agriculture Cooperating

- 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

800-342-2507 www.hgic.umd.edu