Mulch Benefits and Concerns

— Written By Danny Lauderdale

One of the most important components of a landscape is mulch. Mulch is any material placed on the soil surface to cover and protect it. By protecting the soil, mulch helps valuable plant material grow well.

When mulch is applied we change the microclimate around the plants. Mulch conserves soil moisture in many ways. Mulch reduces evaporation from the soil surface and reduces weeds that use water. Mulch holds water near where it falls, reducing runoff, so that it can soak into the soil. Mulch breaks the impact of water droplets and slows down water movement to prevent soil erosion.

Soil fertility is increased as organic mulch breaks down and releases valuable nutrients. Beneficial microorganisms that improve soil health help mulch breakdown. Weeds have a difficult time growing in areas with mulch. A thick layer will reduce weed germination by eliminating light from the surface. Wee that do germinate will be discouraged from reaching the surface. Plant health will be improved since weeds compete for water and nutrients.

Soil structure is improved with organic mulch. This is done through improved aeration, moisture conditions, and the biological activity involved with breakdown of organic materials. Compaction is less since mulch reduces water impact and disperses weight of vehicles, people, and animals. Mulch improve surfaces for traffic especially during wet weather. They reduce mud when it is wet and dust when it is dr One of the main benefits mulch also provides is to improve the appearance of landscape plantings.

Mulch moderates soil temperature. There are a couple of benefits here. In the summer, organic mulches keep the soil cool, which may prevent stress, particularly on newly set plants. Mulch keeps soil temperatures warmer in the winter. This may limit alternate freezing and thawing that could cause injur to young roots.

Many organic materials may be used as mulch. The most common are leaves, pine straw, pine bark, cypress, hardwood chips and shredded hardwood bark. Inorganic materials like woven weed barriers, gravel, crushed rock, and lava rock may also be used.

Mulch can be applied at any time of the year. The best time to apply it is right after planting and once a year to improve color and maintain thickness. Get the plants started off right by conserving moisture,

preventing weeds, reducing compaction, and giving them all the other benefits discussed above. Mulche should be applied 2 to 4 inches deep on a clean, weed free soil around trees and shrubs, 1 to 2 inches around perennials, and 1 inch around annuals. Don't cover Bermuda grass, nut sedge, or other perennia weeds with a layer of mulch without eliminating them first. Use a directed spray of the appropriate product for the weeds you have and make sure they are dead before applying mulch. Even though mulc is good, too much of a good thing can be bad. Do not pile mulch against the stems of plants. Excess moisture held there may cause stem rots or attract insects or voles that may damage plants.

Every year we get a number of calls about molds and mushrooms in mulched areas. Mushrooms come i various shapes and sizes. Some mushrooms are soft and fleshy and disappear soon after they appear ar others may remain for a few days, months, or even an entire growing season. Mushrooms growing in mulch cause no problems to plants however, certain types may be poisonous if eaten so keep curious pe or children away just to be safe. If you don't like the way they look or are concerned about children and pets then remove the mushrooms.

Slime mold gets the most attention in the landscape. Callers usually say they have a clump of yellow mol that looks like dog vomit or radioactive waste. Slime molds are brightly colored slimy masses that are several inches to more than a foot across. As they dry the molds turn brown or black and eventually become a white, dry powdery mass. Slime molds are feeding on bacteria that grow in the mulch and are temporary nuisance. The fungus will not attack plant material. It can be left in place to decompose, rake to break it up, discarded in a compost pile, yard waste, or somewhere else in the yard out of view.

Termites feed on many of these mulch products. Mulches do not attract more termites than are already the area. Be careful not to cover over the slab height on slab construction, especially with vinyl or wood siding. In our area you should confirm structure treatment when purchasing and inspect yearly for term activity. If so you have nothing to worry about.

If you have gardening questions give the Pitt County Master Gardener Extension Volunteers a call at 902 1705 or email pittcomgv@hotmail.com. More gardening information is available at **http://pitt.ces.ncsu.edu (http://pitt.ces.ncsu.edu)**, **www.pittcountyarboretum.blogspot.com (http://www.pittcountyarboretum.blogspot.com)** , **www.twitter.com/pittgardening (http://www.twitter.com/pittgardening)** , or on facebook at pitt county gardening.

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