## **Mulch Types**

## By Candace Mullen, Bell County Master Gardener

Everyone knows the benefits of using mulch and what it does for our landscape plantings and gardens, especially here in Texas. We use mulch to control weed growth, to maintain uniform moisture conditions, to maintain optimum soil temperature, to protect plant roots in winter, to add nutriments to our soil, and to create a uniform aesthetic look to our landscaping. But when it comes to choosing a mulch type to use, that's where the questions need answering! It is difficult to choose when faced with the variety of bags at the local nursery, and if you don't do your research ahead of time you could make the wrong choice for your yard.

Mulches are divided into two categories: organic and inorganic. By definition, mulch is any material that provides protection and improves the soil when applied to the soil surface. The ideal mulch does not compact readily. It does not retard water and air movement into the soil, it is not a fire hazard, and it breaks down slowly. In addition, the ideal mulch is uniform in color, weed-free, attractive and it does not blow or wash away. The selection of mulch depends on its intended use. The criteria must be determined before you choose your mulch. For example, ask yourself questions such as: Is appearance most important? Is soil improvement a major goal? Is it an annual bed or permanent perennial site? When you have determined the usage, choice becomes easier.

Lets talk about organic mulches first. An organic mulch is any derived from a former living plant. Organic mulches add nutrients and humus to the soil as they decompose, improving its tilth and moisture-holding capacity. Most organic mulches should be applied after plants are well established (4 to 6 inches tall.) Apply organic mulches when there is reasonably good soil moisture and before the weather turns hot. Water the ground thoroughly or wait for a good soaking rainfall before applying your mulch. Infiltration of rainwater may be slowed somewhat by the mulch so it is important to water beforehand and not put mulch over dry soil to start. Organic mulches also act as insulation, helping keep soil temperatures cooler. Make sure your mulch is applied at least 3- 4 inches or deeper. That really helps the Texas gardener maintain our plants!

Organic mulches include cocoa-bean hulls, crushed corncobs, grass clippings, hops, leaves (composted), leaves (fresh dried), manure (strawy), newspaper, peat (sphagnum), pine needles, shredded bark, bark chips, bark chunks, straw, wood chips, shavings, peelings, and sawdust. As you can see, a wide variety exists. Again, research will provide comparisons to help you choose which is right for you.

Sawdust is an inexpensive mulch. Best used for garden paths and around permanent plantings. A 2 inch layer provides good weed control but it is necessary to add ½ lb of actual nitrogen per 10 cubic feet of sawdust to prevent nutrient deficiencies. A very thin layer of sawdust is useful (¼ inch) in starting seeds because it helps keep moisture in; be sure nutrients are adequate. Don't use treated lumber sawdust.

Hay or straw is also good mulch, but it decomposes quickly and must be replenished to keep down weeds. They both stay in place and will improve the soil as they decay. Avoid hay that is full of weed seed and brambles. Use fresh legume hay such as alfafa, which supplies nitrogen as it breaks down. Straw is usually readily available at most garden centers. Both of these are recommended for fruit and vegetable plantings, annual beds, and gardens.

Pine needles are an excellent mulch around shrubs, trees and other places where long lasting mulch is desirable. It is attractive and does not compact but could be a fire hazard in some cases. Good for winter protection.

Grass clippings are a good mulch and an excellent solution to disposing of them in your yard instead of to the landfills. Establish a spot to allow clippings to dry and then use them about 2 inches thick around your plantings. If you use green clippings in a thick layer you will get excessive heat and some foul odors as they decompose, so a thin layer of fresh green is ok. Grass clippings also provide an extra dose of nitrogen and humus to the ground and plants! They will also heat up that compost pile we all have and are excellent around vegetables and fruit plants. And we all have a never-ending supply every time we cut the lawn!

My favorite organic mulch is newspapers. Use 3 to 6 sheets in a layer around plants and then use other organic mulch on top of that. Don't use color inserts or the red ink, but what a great way to recycle and keep the weeds out! They eventually break down and add to the composition of our clay soil. I usually use a TX native hardwood shredded mulch about 3-4 inches thick on the top of the newspapers.

Many barks are long lasting, attractive, and readily available. Some will float, and others don't have uniform color so the choice will be yours. Cost is also an important consideration. You can combine several different types depending on your purpose. Just do your research before you buy, a price bargain may end up to be a disaster if you are not careful!

Inorganic is the second category of mulch available. Inorganic mulch is anything made from inert materials. These include plastics, clay aggregates, weed barrier fabrics, gravel, stone, and rocks. Again, you must decide what the purpose of the mulch will be and how it will look. Some of these are expensive and may have to be used in combination with other mulches. Water will also not go through some of them so that would be a factor also.

Using either black, red, or clear plastic in garden rows has become a proven thing. Research has shown that the plastic will increase the soil temperature and encourage growth. Black is now available with a white reflective side and you can even buy a porous type, too. Red plastic boosts tomato yield up to 20 percent, conserves water, and controls weeds. The scientists also say it improves strawberry flavor by changing the fruit chemistry!

Clear plastic is an excellent weed control. It is most often used to warm the soil temperature early in the spring. It will raise the temperature by 10 degrees or more! All the plastics can be covered with organic mulch, like grass, to help prevent their breakdown.

Weed barriers have become popular recently. They are porous to allow water and air to circulate, but aesthetically need another mulch over them to look attractive. If you want to change or add plants to the beds it is a real pain to cut and dig through, so take that into consideration.

Of course, rocks and gravel need to have a weed preventive layer under them to prevent weed growth, but they are effective and pretty if installed correctly. They do not as a rule conserve water and do reflect heat so foundation plantings may need more water. They may also cost a great deal more that other types but are definitely low maintenance because they don't decompose.

Remember to analyze your needs and usage and do your research before you decide to buy!