

A Look at Organic Mulch Products

By Susan Camp

We recently planted several blue lobelias (*Lobelia siphilitica*) in a narrow bed between Jim's office and our parking area. The soil is good, but the summer sun beats down on that area, making it a problem spot for new plants. We hope that a good layer of mulch will keep these little plants from withering away in the afternoon heat.

Mulch makes the garden look neat and well-kept, but it also has numerous other benefits, so decide what you want to accomplish with your mulch purchase. Mulch helps decrease or prevent weed growth. It also helps the soil retain moisture, prevents water evaporation, and keeps plant roots cool in the summer. In winter, mulch slows down soil freezing and prevents ground-heaving. Other benefits include a decrease in the occurrence of soil-borne disease and prevention of mechanical damage to trees.

Organic mulches decompose and improve the soil by adding nutrients like nitrogen, sulfur, phosphorus, and calcium. While soil improvement is a benefit, the decomposition means you will need to replenish the mulch at intervals.

Since most of the plants native to or popular in our region are acid-loving, one of the best and least expensive mulch products is pine straw. If you have pine trees growing on your property, or a friendly neighbor who has more pine straw than he can use, your mulch needs are easily and freely met. Pine straw decomposes slowly, does not compact, and makes an attractive, natural appearance around the bases of trees and shrubs. Pine straw is acidic and will decrease soil pH over time. It can cause nitrogen deficiency, leading to yellowing foliage and stunted growth.

Sawdust is another product that is beneficial to acid-loving plants, but it can cake or crust, allowing water to run off rather than penetrate plant roots. Fresh sawdust is composed primarily of carbon, with very little nitrogen content. As microorganisms decompose it, they rob the soil of nitrogen, which must be replaced in the form of fertilizer. Weed seeds sprout easily in sawdust.

A 6 to 8-inch layer of straw makes a good temporary cover for annuals or for grass seed germination. Like pine straw, straw has a low nitrogen content and may contain crop seeds and insects that will attract small, furry critters that will eventually nibble on the bark of the trees the straw is supposed to protect. Straw will work in a vegetable garden, but it doesn't present an attractive appearance in a flower bed.

Avoid using hay as mulch. Hay contains many weed seeds that will sprout and keep you weeding much more than you had anticipated. Straw, hay, sawdust, and pine straw are all flammable and should not be used near buildings.

A 2-inch layer of dry grass clippings will control weeds and decompose rapidly, adding nitrogen to the soil. Wet clippings will smell bad as they decompose.

Partially decomposed leaves, 2 to 3 inches thick, will control annual weeds and add nutrients to the soil as they decompose. Avoid using the leaves and other parts of black walnut trees, as black walnut contains the chemical juglone, which is toxic to many plants.

Pine, cypress, and hardwood bark mulches are commonly used products. They are relatively inexpensive or even free from local community resources. Bark mulches decompose slowly, but must be replenished annually. They resist compaction and present a neat appearance. Wood chips also resist compaction and age to a silvery-gray. Wood chips must be aged or partially decomposed to prevent organic acids formed during decomposition from harming plants.

Information on several other products that can be used as mulch is available in VCE Publications 430-019 “Selection and Use of Mulches and Landscape Fabrics”; 426-326 “Mulches for the Home Vegetable Garden”; and “Mulching for a Healthy Landscape.”

The one mulch product on the market I would never recommend is the red-dyed mulch, which is composed of indeterminate junk wood like old pallets. It looks awful, and it might contain chemicals that will kill your plants.

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