

## Mulch – The “Linus Blanket” of the Plant World

In an area untended by a gardener, Nature provides a blanket of leaves, sticks and/or dead grass as a blanket to cover the soil. This blanket provides for warmth in the winter to counteract the freezing and thawing of the soil that causes upheaval of the roots of plants. In the summer, the blanket keeps the ground cool and moist protecting the roots from the summer heat. At the same time, this blanket composts slowly and provides nutrients for the plants growing in the area.

The wise gardener takes this suggestion from nature and applies it to their managed garden. The use of a good layer of mulch improves the appearance and the health of the plants in the garden. There are two categories of mulches, natural and synthetic, often referred to as organic and inorganic. These two types of mulches have different properties and different uses. Gardeners can choose mulches to accelerate growth, maintain healthy growth on mature plants or to reduce the need for weeding and mulch replacement. Thus, selection of a particular type of mulch depends upon the gardener’s preference in terms of cost of the mulch, availability of a type of mulch, plants to be mulched, the demands of the environment to be mulched, and even the color of the mulch.

When choosing a mulch with optimum properties, it is necessary to contrast the desirable characteristics of mulch. Consider the difference between a bark- wood chips mulch and a gravel or stone mulch. A 2- to 3- inch layer of bark provides good weed control, decomposes slowly and will stay in place. However, if it contains ground wood chips, the mulch may have a high carbon-nitrogen ratio, so that decomposition microbes (see article about composting), must scavenge nitrogen from the soil, leaving less available for plants and thus reducing growth. A 1 -inch layer of rock will provide fair weed control. Rocks are fairly permanent, although they do weather eventually. They do not provide nutrients for the plants and may be difficult to keep neat during the fall and winter when leaves and sticks may blow into the mulched bed.

Many garden shows on TV recommend compost as a mulch. The Ohio Agricultural Research and Development Center, Wooster, OH 44691, showed in research trials that composted yard trimmings have a low carbon-nitrogen ratio, hence a higher nitrogen content providing enough nitrogen for both plants and decomposition microbes. The drawback with compost is that it may contain weed seeds if not completely composted and could introduce weeds into the garden bed.

A detailed discussion of the many types of mulch, organic and inorganic, is included in the VCE Environmental Horticulture publication 426-326. Contact the Chesapeake Master Gardener Answer line for a copy of the publication or more gardening information. You can reach them by calling 382-6348 or e-mail at [gardener@agri.city.chesapeake.va.us](mailto:gardener@agri.city.chesapeake.va.us).