

Mulching keeps plants healthy and moist

Mulching beneath ornamental plants is an established practice in today's landscapes.

It is even used as an ornamental feature by itself without the addition of plants. In that situation, there are few (if any) guidelines necessary for applying and using mulch. But there are specific rules to follow when mulching plants to maximize their growth and health.

Mulching around ornamental plants involves covering a portion or all of the rootzone with shredded hardwood bark, bark nuggets, wood chips or other materials. Select a material that features:

- consistent color and texture;
- compaction resistance;
- wind and water erosion resistance;
- fire resistance;
- slow rate of decomposition; and
- ability to reduce weed growth.

The mulch that you select has to do more than just cover up the bare soil.

From the plant's standpoint, mulch must allow for an exchange of gases (oxygen into the soil, carbon dioxide out of the soil) and the penetration and the slow evaporation of water. If mulch slows or stops these processes, plants will decline and eventually die, according to David Whitworth, horticulturist at the Davey Human and Technical Resources Center.

The most important benefit of mulching plants is the conservation of soil moisture. When mulching is done correctly, soil water evaporates slowly and provides plants with a consistent source of water. Over a few



New mulch should be applied when existing mulch is nearly decomposed. Most mulches should be two to four inches deep.

Mulch selection

The National Bark & Soil Producers Association has developed an advisory brochure on mulch product selection.

Aimed at helping landscapers decide what products are best-suited for different lawn and garden applications, the "Mulch Selection Guide" contains a reference table rating nine products (pine nuggets, hardwood mulch, etc.) by six

characteristics, five use benefits and six typical applications.

Additionally, the guide includes five helpful hints on application depth, bed preparation, excessive mulch build-up, nitrogen depletion and wood content.

Individual copies of the "Mulch Selection Guide" are available free from the NBSPA office, 13542 Union Village Circle, Clifton, VA 22024.

years, as organic mulches decompose, the underlying soil's ability to hold water may be improved. In most cases, mulched trees and shrubs survived the drought of 1988 better than those that did not have mulch.

Mulch can actually improve water infiltration into the soil. Raindrops falling on bare soil not only cause erosion but also cause soil surface compaction. Mulch reduces or eliminates erosion and cushions the impact of raindrops. Water can then penetrate to a greater depth, as well as can plant roots.

Two common mistakes in using mulch are applying it too deeply and mounding it up against tree and shrub trunks. Most mulches should be only two to four inches deep. Use the low range for heavy, clay soils and the high range for lighter, sandy soils.

the existing mulch is nearly decomposed and has been lightly incorporated into the soil.

To renew the appearance of mulch in the intervening years, consider using one of the new mulch colorant sprays. Simply raking the existing mulch can be a dramatic improvement.

Mulches will not eliminate the headaches of weed competition, but can reduce the density of undesirable grasses and broadleaf weeds. Maximum weed control can be achieved by applying a pre-emergence herbicide and/or landscape fabric (not sheet plastic!) before spreading the mulch.

Mulches are an integral part of landscaping. Use them the wrong way and expensive plants will die. Use them correctly and your plants will reward you with years of beauty. **LM**

It is not unusual to find landscapes with mulches that are six to eight inches deep or more. Air and water exchange are dramatically reduced and the soil becomes an inhospitable environment for roots. Mulch that buries the base of a trunk encourages the development of decay fungi.

The annual re-application of mulch to a planting bed certainly improves the initial appearance of the landscape, but it can also lead to unattractive, sick plants. Annual mulching causes a build-up that exceeds the maximum recommended depth. One to two inches of mulch applied every two to three years is adequate to maintain the beneficial aspects of the mulch. New mulch should not be applied until