

Much Ado About Mulch

Every gardener knows that mulch is beneficial for their trees, shrubs and ornamental plantings, right? But how accurate is your knowledge of mulch? Test yourself by answering the following questions.

1. Mulch is applied in the fall to keep the plant and the underlying ground warm.
2. Plants that die during the winter are usually killed by cold temperatures.
3. A one-inch layer of mulch is adequate for winter protection of most plants.

The answer to question #1 is false. Mulch is applied to moderate soil temperatures, and prevent large soil temperature fluctuations during the winter. If mulch is applied too soon in fall, when soil temperatures are still warm, plants may fail to harden off sufficiently and early freezing temperatures may cause tissue damage. Mulch should not be applied to plants in the fall until the ground has cooled. Wait until after several hard freezes with temperatures dipping into the 20's. All new perennials planted this summer would benefit from an application of mulch.

A layer of mulch about three inches thick is best. Good organic mulches include wood or bark chips, shredded bark, pine straw, evergreen boughs, clean straw or ground corncobs. Ideally mulch should not compact too easily. Tightly compacted mulch can obstruct water and air movement in the soil, which often happens when green grass clippings are used, and may result in poor water drainage and increased disease development, such as crown or root rots.

The answer to question #2 is false. Newly planted trees, shrubs and perennials damaged or killed during the winter usually are not injured directly by cold temperatures, but indirectly by frost heaving or desiccation. Frost heaving occurs when the soil alternately freezes and thaws, resulting in damage to the dormant crown and root system. This action can be reduced by mulch, which helps prevent rapidly fluctuating soil temperatures.

The answer to question #3 is false. Mulch should be applied to a depth of 3-4 inches. With fine organic mulches, such as compost or shredded leaves, maintain a 3-inch layer. For coarse materials, like wood chips, maintain a 4-inch layer. Remember a 4-inch layer will compact to 3 inches. Mulches decompose in time; their rate of decomposition depends on particle size and composition.

Plan to add more mulch occasionally, but don't exceed the recommended thickness. Excessively deep mulch will stimulate root growth in the mulch layer and can encourage millipedes. Plants rooted in the mulch layer are more likely to experience winter and drought injury than those growing in soil, due to the poor water holding capacity of loose, non-compacted mulch.