

# MIRACLE MULCH

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The IDEA Garden is a joint project of  
Smith County Master Gardeners,  
Smith County Extension Service and  
City of Tyler Parks & Recreation,  
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# WHAT IS MULCH?

Mulch is a protective ground covering that saves water, reduces evaporation, prevents erosion, controls weeds, and in the case of organic mulches, enriches the soil. Mulching is a long-established horticultural practice that every gardener should use, whether you have one small flower bed or a yard full of plants. It can save you time, work and money!

Mulches can be classified as organic or inorganic. The organic mulches are most popular and include straw, leaves, bark, pine needles, compost and similar materials. Inorganic mulches include rocks, rock chips, synthetic fabrics, and other non-plant materials.

A big advantage of mulching is it reduces soil moisture loss through evaporation by up to 70%. By reducing the soil's exposure to wind, less water is lost through evaporation, and the insulating quality of mulch helps to keep the soil cooler in the summer and warmer in the winter. By keeping a more even soil moisture and temperature, mulch promotes better root growth and plant health.

Mulching also suppresses the growth of many weeds. The mulch prevents sunlight from reaching the soil, reducing the chance of weed growth. Any weed seedlings that manage to germinate, are easily pulled.

Last but not least, mulch has aesthetic value. It can be purchased in a range of colors and textures, adding a carpet-like quality to your garden.

Unfortunately, mulching does not perform instant miracles, but it encourages better plant growth and development, and makes landscape maintenance much easier.

Conserving moisture, reducing pesticide use, healthier plants, fewer weeds, saving money, recycling materials-- and on and on. We still have not yet discovered all the benefits of mulching, but we have discovered that the proper use of mulches can help us and our plants make it through the hot, dry times ahead! Mulching is about saving...plant life, resources, environment, time, labor, money...now and forever!

## **ORGANIC MULCHES:**

**BARK:** This mulch is the most popular and widely available. Barks are available in bags or can be purchased in bulk. It is easy to apply, but some types can float away in heavy rains, the most popular are pine, cypress and redwood. (Cypress is best for resisting floating.)

**CHIPPER DEBRIS:** A mixture of shredded bark, wood chips and leaves from tree-trimming operations. It is non-uniform, so is not as attractive as other types, but can add a rustic effect where fine texture may not be important, such as in outlying areas. May cause a nitrogen deficiency as

it breaks down unless composted first.

**PARTIAL DECOMPOSED COMPOST:** This makes excellent mulch. You can make your own or buy it. It is slightly less attractive, and may contain some weed seeds that can be a problem.

**LEAVES:** Readily available and inexpensive, leaves work best if shredded before applying as a mulch. Large, unshredded leaves can form a "mat" that repels water.

**PINE NEEDLES:** This is a great mulch, especially for acid loving plants. They are slow to decompose, so they last a long time. Avoid using near wood fences or walls due to potential fire hazard.

## **INORGANIC MULCHES:**

**RIVER STONES, PEBBLES AND GRAVEL CHIPS:** Though they do nothing to improve soil quality, these materials can be striking. Be sure to use carefully so they enhance rather than take away from the overall landscape design. A benefit is they do not require replenishing as frequently as organic materials, but fallen leaves and other debris can be difficult to clean out from garden area and take away from appearance.

**LANDSCAPE FABRICS:** These are special woven fabrics that allow air and water to pass through while reducing weeds and evaporation. These materials can be used along with other mulches. Fabric is laid on the soil and an organic mulch is placed on top. (Do not use solid sheet plastic. This will inhibit air and water movement and promotes root rot.)

## **APPLYING & MAINTAINING YOUR MULCH**

Apply mulches in a layer 2 to 6 inches thick. Thickness depends on mulch material, e.g. coarser mulches are applied more thickly. Thicker layers are applied around trees and shrubs than in flower or vegetable beds. The finer the particle size, the thinner the layer needs to be. Add organic materials regularly to maintain the desired layer thickness. Apply mulch over entire area of soil containing roots.

## WATERING WITH MULCH

While mulches do retain moisture in the soil, it will still be necessary to water plants growing in mulched soils. Water should be targeted beneath the mulch at the root zone of desirable plants.

Drip irrigation is the most efficient and effective water technique. It allows for watering until the soil is thoroughly and deeply wet, but not saturated. Growth and production of plants is greater with uniform watering (kept moist - not too wet or dry) rather than being subjected to wet and dry cycles which normally occur with other irrigation methods.

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Check the Smith County Master Gardener web site for information about the IDEA Garden and upcoming gardening events:

<http://aggie-horticulture.tamu.edu/county/smith/mg/mg.html>

Educational programs conducted by the Texas Agricultural Extension Service and the Master Gardeners of Smith County serve people of all ages regardless of socio-economic level, race color, sex, religion, handicap or national origin.