

Mulches for the Home Garden

A mulch is any material that is applied over the surface of soil to retard or prevent the growth of weeds, conserve soil moisture, maintain a uniform soil temperature or improve the appearance of a plot of soil. The following information will help you decide which mulch is best and how to apply it.

Selecting a Mulch

Select mulches that are free of insects, diseases and weeds and will not compete with plants for nutrients. Mulches that are to be used around ornamental plants should be permanent or decompose slowly. Stones are an example of a permanent mulch, while composted wood byproducts or pine barks decompose slowly.

Mulches should complement the landscape and be compatible with the plants. For example, never use marble chips around azaleas and related plants because marble is an alkaline stone and azaleas prefer a mildly acidic soil.

Mulches that are to be used in vegetable, fruit and flower gardens should be easily removable or decompose rapidly. Plastic films are easily removable mulches. Compost, paper, leaves and straw decompose rapidly.

Reflective mulches, such as aluminized paper or aluminum foil, are a favorite in vegetable gardens because they help control insects.

Applying a Mulch

Mulches should be applied around ornamental plants immediately after planting. This practice will insure greater success in transplanting and add the final touch to any landscape. Established ornamental plants may be mulched throughout the year. However, fall mulching practices should be delayed until after the ground has frozen, except for new plantings. Yearly mulching with composted wood byproducts and barks should be avoided, because over-mulching will cause suffocation of shallow-rooted ornamental plants and stem decay on trees and shrubs. Simply loosening the existing mulch in the spring with a rake will reactivate the desired properties of a mulch. Many ornamental plants are dying from yearly applications of wood or bark mulches.

Organic mulches or reflective films used in vegetable, fruit or flower gardens should not be applied until the soil is warm and the plants are well established. This rule does not apply to plastic or paper mulches, which must be applied prior to planting. Since these materials do not insulate, they will not prevent the soil from warming.

When using plastic, newspaper or kraft paper mulches, it is important that the soil be thoroughly tilled and raked smooth. Next, spread the plastic, newspaper or kraft paper over the entire area where plants are to be transplanted. If newspapers are used, 10 to 15 layers are necessary and must be soaked with a fine mist to keep them in place and for ease of planting. When using plastic film or kraft paper mulch, cut an "X" 3 to 5 inches long through the film or paper wherever plants are to be planted. Holes can easily be made through soggy newspapers or plastic film with a planting trowel. Plastic film or paper mulches cannot be used on crops that are seeded.

The accompanying table shows examples of organic, inorganic and film mulches and their individual characteristics.

Mulches and their Individual characteristics

Materials	Texture	Color	Depth in inches	Weed control ^a	Rate of decomposition	Comments
Organic Mulches						
Barks						
Fir	nuggets	red brown	1-2	2	slow	stays in place
Pine	nuggets	brown	1-2	2	slow	stays in place
Pine	shredded	dark brown	1-2	2	medium	stays in place
Hardwood	shredded	dark brown	1-2	2	fast	may contain high levels of manganese
Compost ^b	coarse	brown	2-3	3	fast	improves soil
Grass clippings ^b	fine	gray green	2	2	fast	forms a crust
Hay or straw ^b	medium	gray yellow	3-4	2	fast	stays in place
Hulls						
Buckwheat	fine	dark brown	3-4	3	fast	easily blown
Cocoa	fine	dark brown	2-3	3	medium	easily blown
Peanut	medium	yellow brown	2-3	2	medium	stays in place
Leaves ^b	coarse	yellow brown	2-3	2	fast	easily blown
Peat moss						
Horticulture grade ^b	fine	brown	2-3	3	fast	forms a crust
Chunky ^b	coarse	brown	2-3	3	fast	tends to move
Pine needles	fine	brown	2-3	2	medium	stays in place
Wood chips	coarse	yellow gray	2	2	slow	stays in place; causes starvation
Wood fibers	fine	light brown	2	2	medium	tends to crust
Inorganic Mulches						
Gravel	medium	white, gray or yellow	1	2	none	permanent
Marble chips	coarse	white pink	1	2	none	high pH
Sand	fine	yellow white	1	2	none	subject to erosion
Films						
Black plastic ^b	solid	black	1 layer	1	none	
Paper						
Newspaper ^b	solid	gray	10-15 layers	2	fast	
Mulching paper ^b	solid	brown	1 layer	1	medium	
Aluminized	solid	shiny	1 layer	1	medium	repels insects

^a 1 = Excellent; 2 = Good; 3 = Fair.

^b Recommended for vegetable, fruit and flower gardens.

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