



Organic Mulches

Why mulch?

Organic mulches serve several important functions in gardens and landscape plantings. Mulches help

- control annual weeds;
- conserve soil moisture;
- reduce soil erosion by reducing the impact of raindrops and water runoff;
- reduce the severity of some diseases, such as blights on tomatoes;
- keep fruits, vegetables, and flowers free of rain-spattered soil;
- reduce fruit and vegetable spoilage;
- moderate soil temperatures; and
- provide an attractive background for plantings.

When choosing which organic mulch to use, consider availability, cost, appearance, function, and durability.

Bark

Bark mulches may be sold in bags or bulk. They can be purchased in various particle sizes varying from fine to large-size chunks. Some are colored/dyed for decorative purposes. Bark mulches are attractive, weed free, and decompose slowly. (Cedar and cypress are slowest to decompose.) Use bark mulches around trees, shrubs, and roses, and in perennial beds.

Cocoa-bean shells

Cocoa-bean shells are a by-product of chocolate production. They are light, easy to handle, and have an attractive brown color. They also have a delightful aroma. (Unfortunately for chocolate lovers, the aroma lasts for only a few days.) They are somewhat expensive, but a mulch depth of 1 to 2 inches is sufficient. Cocoa-bean shells are excellent mulches for annuals, perennials, and roses. They generally last only one growing season.

Dog owners should be aware that dogs may develop signs of chocolate poisoning, such as vomiting, if they eat large amounts of cocoa bean shell mulch. Owners of dogs with indiscriminate eating habits should use alternate mulches.

Corncobs

Ground corncobs gradually darken as they age, becoming an attractive mulch. They are generally weed free, lightweight, and easy to handle. Corncobs decompose slowly and are most often used around trees and shrubs. They also are an excellent mulch for raspberries. Unfortunately, ground corncobs are no longer widely available.

Grass clippings

Allow lawn clippings to dry before applying to gardens. Fresh, green material may settle and form a dense mat or produce an unpleasant odor. If the lawn has been treated with a broadleaf herbicide, don't use the clippings until the lawn has been mowed two or three times after the application. The best source of lawn clippings is a well-maintained lawn. Grass clippings from a weed-infested lawn will undoubtedly contain a large amount of weed seed. Grass clippings do not last long and are best used in vegetable gardens or annual flower beds.

Leaves

Leaves should be shredded or composted before applied as a mulch. Shredded or composted leaves do not mat down as readily as whole leaves, are less likely to blow away in the wind, and decompose more quickly. Shredded or composted leaves are an excellent mulch for vegetable gardens, annual flower beds, raspberry plantings, and around trees and shrubs. Even though the leaves of some trees, such as oak, are acid in reaction, they can be safely used in the yard and garden. The small amounts used by home gardeners have little effect on soil pH. Leaves are a poor winter mulch for strawberries and herbaceous perennials.

Newspapers

Shredded newspapers or whole sheets may be used in the vegetable garden. Most newspapers use organic inks so gardeners need not worry about lead contamination. When using newspaper sheets, place a layer of 2 or 3 sheets between plant rows in the garden. Water the sheets so they stick to one another and to the soil surface, then weigh them down with soil to prevent them from blowing away in the wind.



Pine needles

Pine needles are light, airy, decompose slowly and make an attractive mulch. They may last several years and may be easily removed if necessary. Pine needles are acid in reaction and are excellent mulches for acid-loving plants. However, they also can be safely used in the vegetable garden and elsewhere in the home landscape. The best source of pine needles is a large, established windbreak.

Sawdust

Sawdust is easy to apply, weed free, and decomposes slowly. Generally, sawdust should be allowed to age or weather for a year before being applied. If fresh sawdust is used, apply only a 1-inch layer and make sure the sawdust doesn't crust over, reducing water infiltration. Do not use sawdust from treated lumber in the yard and garden.

Straw

Straw that is free from crop and weed seed is an excellent mulch for the vegetable garden and strawberry bed. Suitable materials include wheat, oat, and soybean straw. Straw may provide a winter habitat for mice and other rodents, so avoid using straw around trees and shrubs.

Wood chips

Wood chips are an excellent mulching material that may be available from local arborists, or municipal or private yard waste sites. The material is obtained by passing tree and shrub trimmings through a mechanical chipper. Wood chips are best used in landscape plantings, such as around trees, shrubs, and roses, and in perennial beds.

How much mulch?

The type of mulch and site determine the depth of the material. A 2- to 4-inch layer is appropriate for most organic mulches.

Mulch choices at a glance

Annual flower beds

Cocoa-bean shells
Grass clippings
Leaves
Pine needles

Perennial flower beds

Bark
Cocoa-bean shells
Pine needles
Wood chips

Raspberries

Corncobs
Grass clippings
Leaves
Sawdust
Wood chips

Roses

Bark
Cocoa-bean shells
Wood chips

Strawberries

Straw

Trees and shrubs

Bark
Corncobs
Leaves
Pine needles
Sawdust
Wood chips

Vegetable gardens

Grass clippings
Leaves
Newspapers
Pine needles
Straw



For more information

Horticultural information is available from your local Iowa State University Extension office and from these Web sites.

<https://store.extension.iastate.edu/>
www.yardandgarden.extension.iastate.edu
www.reimangardens.iastate.edu

Call ISU's Hortline at 515-294-3108 (Monday- Friday, 10 a.m.-noon and 1-4:30 p.m.).

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