

# Bark Mulch

Several types are available. Which do you need?

Charlie Nardozzi  
Staff Horticulturist  
National Gardening

The advantages of using organic mulches to blanket soil around trees, shrubs, and perennial plants are many: Mulches moderate soil temperature and make a more favorable environment for roots. They reduce evaporation of moisture, helping to conserve water. They reduce splashing from rain or irrigation water, reducing the spread of disease, and they block the germination of many weed seeds. Beyond all that, a mulch dresses up your garden, giving it a more finished look.

This article explores the kinds of bark mulches you can buy and their advantages and disadvantages. Several bark and wood mulches are available — bark nuggets, mini-nuggets, hardwood mulch, and shredded mulch. Some come in bags, some in bulk. A chief advantage of these mulches compared with other organic mulches is that they remain attractive and functional for a couple of years. That's why gardeners mulching around trees, shrubs, and other long-lived plants are wise to choose a long-lasting bark mulch.

## The Difference Between Wood and Bark

According to the National Bark & Soil Producers Association, any mulch with "bark" in the name must be at least 85 percent bark of the named tree. A "mulch" material, on the other hand, need be only 70 percent of the named material, and it may be either bark or wood. In both cases, the remaining 15 or 30 percent can be just about anything, but it is usually wood.

The primary difference is how long the mulch will last before breaking down. "Wood breaks down quicker and is more susceptible to insect damage and discoloring than bark," explains Bob LaGasse, executive director of the NBSPA.

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## Nitrogen deficiency

Decomposing wood requires nitrogen. If you add a quantity of, say, fresh sawdust to your garden soil, chances are your plants will suffer from a lack of nitrogen. In this case, the soil isn't necessarily deficient, but the breakdown of the sawdust "induces" nitrogen deficiency in your plants. Wood and bark mulches can also induce nitrogen deficiency, but it isn't likely because they decompose at such a slow rate. It's also unlikely because they are on top of the soil, not incorporated at root depth. But if this concerns you, or if your plants show the signs of nitrogen deficiency, add a 2-1-1

ratio fertilizer, such as 20-10-10, before mulching (2 to 5 pounds per 500 square feet).

## Agricultural by-products

Exotic mulches are usually agricultural by-products and are often (or only) available in bulk. One big advantage is their very low cost. Most are available only seasonally and only in certain areas of the country. Some examples of these include cottonseed, buckwheat, corncobs, grape pomace, pine straw, and pecan, walnut, and rice hulls.

Although many exotic mulches are attractive and less expensive to use, they can be hard to find and may attract insects, such as ants. Plus, they tend to break down quickly. Ask your local Extension agent or garden center about the availability of these mulches in your area.

## Cost of bark and wood mulches

Of course prices vary across the country, depending largely upon your distance from the source, the specific type of mulch, and local promotions. In general, expect to pay anywhere from \$1 to \$3 per 2-cubic-foot bag, or \$3 to \$6 per 3-cubic-foot bag. Buying in bulk saves money, but you'll need to have your own truck. One pick-up-truck load (about 1 cubic yard) costs \$14 to \$25.

## How to Mulch

Two good rules of thumb are to mulch with 3 to 4 inches of bark mulch each season and to avoid mulch layer buildup (and potential nutrient deficiency problems) by removing old layers of undecomposed mulch before adding new layers. Coarse-textured mulches,

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## Bark Mulch

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such as shredded bark, can be applied thicker than fine-textured mulches, such as cocoa hulls. However, there are variations and exceptions related to the type of plants you're mulching and your landscape situation.

## Mulching Your Plants

Whatever the type of plant, it's rarely advised to mulch more deeply than 6 inches. Mulch layers thicker than that might reduce air circulation in the soil, which will retard plant growth. Also, don't pile mulch around the main stem of a plant where it enters the soil. The added moisture and insect haven that results could damage the plant you're trying to help. Spread the mulch so that it covers the "dripline" of your plant.

## Annuals and perennials

To avoid encouraging stem rot diseases, use a 2- to 3-inch layer of mulch around soft-stemmed annuals and perennials.

## Trees, shrubs, and vines

Even around older plants with thick bark, don't crowd mulch around their bases. Most won't succumb to stem rot as quickly as soft-stemmed perennials, but it can happen just the same.

## Vegetables

Vegetable gardeners usually prefer to use mulches that decompose more rapidly than wood and bark and add nutrients to the soil in the process. A common example is a thin layer of grass clippings. Because vegetables grow fast and prefer optimum soil conditions, a bark mulch that is tilled into the soil before it is decomposed might steal nitrogen from roots and so is best avoided. However, a bark mulch can give well-tended vegetable gardens a much more refined look.

## Landscape Situation

Which mulch you choose depends on the site.

### AMOUNT OF MULCH TO COVER 100 SQUARE FOOT AREA

Inches of Mulch (depth)	Amount of Material Needed
4"	34 cubic ft.
3"	25 cubic ft.
2"	17 cubic ft.

1 cubic yard = 27 cubic feet = one small pickup load of bulk mulch. Bark mulch bags are commonly sold at garden centers in 2- or 3-cubic foot units.

## Areas prone to flooding

Nuggets last many years without breaking down, but they're not useful in wet areas or on steep slopes because they float and wash away easily. Similarly, don't use fine particle mulches, such as cocoa hulls, in windy or seasonally flooded areas since they can blow or float away easily. Of course, aesthetics may weigh heavier in your final decision. Although cocoa hulls float, you may be willing to reapply them because you like their dark, rich color and chocolate smell.

## Slopes

On steep slopes, shredded mulch is best and hardwood holds better than softwood. However, hardwood mulch tends to break down faster than softwood and may need to be reapplied sooner.

## Pathways

For easiest walking, use shredded bark or pathway bark. The irregularity of shredded bark and the small particle size of pathway bark are better for walking compared with mulches with large particle sizes. ■

*Credit: Divots, May 1996*

Midwest Regional Turf Foundation of Purdue University

## 1996-1997 Calendar of Events

### Nov. 19-21 / Turfgrass and Ornamental Seminar Lafayette, IL

This three-day workshop features down-to-earth information for the beginning professional as well as more advanced topics for the seasoned professional. Includes turf and ornamental topics with CCHs in both Category 3a and 3b awarded. Split sessions for golf course turf and lawn/landscape maintenance allow more attention to individual aspects of the lawn and golf course industries.

### Dec. 17 / Golf Turf Workshop Evansville, IN

### Dec. 20 / Golf Turf Workshop Indianapolis, IN

This workshop is for those with golf course experience but with little formal instruction on turfgrass science. Ideal for foremen, crew members, and owners and managers of smaller golf courses. This day-long workshop promises practical information on plant physiology, fertilization, irrigation, greens management, and pest control.

### Jan. 21-23 / 1997 Midwest Turf Expo Indianapolis, IN

The Midwest Turf Expo promises to be the largest turf show in the state. An outstanding trade show complements excellent educational programs, making it an event with special interest to every area of the turfgrass industry.

### Feb. 24-28 / 1997 Indiana-Illinois Turfgrass Short Course St. Charles, IL

This week-long intensive course is designed for those who are employed or are considering employment in the turf industry. The short course will provide basic information and hands-on instruction on turfgrass management, including soils, fertility, calibration, math concepts, establishment, pest management, and much more.

### Feb. 26-27 / 1997 Indiana-Illinois Advanced Turfgrass Short Course St. Charles, IL

A two-day course designed for golf course superintendents, sports turf managers, lawn care professionals, sod growers, and other turf managers with some background in introductory plant physiology, soil science, and turf management activities. The seminar will address turfgrass growth responses to weather conditions, light quantity and quality, traffic, soil conditions, management activities, and pest control.

### July 29 / Midwest Regional Turf Field Day West Lafayette, IN

See the latest in turfgrass research taking place at Purdue, including cultivar trials, pest management studies, and turf management studies. Also features a trade show, equipment exhibits and demonstrations, and everyone's favorite barbecue lunch.

Call Bev Bratton at 317/494-8039 for more information.  
Midwest Regional Turf Foundation  
PO Box 2285  
West Lafayette, IN 47906-2285  
317/494-8039