

- **Can I use cedar chips for mulch on raspberries to control weeds?**

## **About raspberries**

Raspberries belong to a large group of fruits known as brambles, all in the plant genus *Rubus*. They have perennial roots and crowns, but their canes (branches) live for only two summers. Raspberries are not just another tasty berry; they are loaded with healthful attributes. They're high in fiber and contain vitamin A, folate, antioxidants, and numerous minerals. The juice contains vitamin C, and those sometimes-annoying little seeds contain vitamin E.

Most raspberry plants bear fruit in summer and prefer rich, well-drained soil. A few inches of compost mixed into the soil prior to planting will create a good root environment. Raspberry plants need a significant amount of nitrogen to grow to their full height of 6 or 7 feet but withhold any applications of high-nitrogen fertilizer as the fruiting time approaches.

In subsequent years, remember to top-dress the freshly pruned plants with several inches of manure or compost and if necessary, a sprinkling of lime to reduce the acidity of the soil. The soils of the Pacific Northwest tend to be acidic.

To keep your plants healthy and productive, make sure they don't dry out in the summer. This is where mulch is so important. Surround your newly planted canes with a dense layer of mulch, approximately 3 inches thick, to help retain moisture.

## **Reasons Why Mulching Is Good for Your Garden**

Nature will cover any bare patches of soil. Initially with small plants (weeds and grasses), then bigger ones and so forth. When the soil is not covered, it deteriorates. Rainfall, wind and dry conditions impoverish the soil by causing the loss of nutrients and organic matter. To have fertile soil, you need covered soil. Mulch keeps the moisture in the soil. This is why if you go to organic gardens, even vegetable farms, you will find plants growing in beds of straw (mostly) or other mulches. The optimal depth of mulch will vary depending on soil texture, climate, type of mulch, age of plants, and management objectives. In most cases, a layer 2 to 4 inches thick works well. When choosing which organic mulch to use, consider availability, cost, appearance, function, and durability.

Mulch keeps the soil temperature steady; as it forms a barrier between the earth and the air, it keeps the soil's temperature higher. In the soil, there are microorganisms that work all the time, and they produce heat. If the heat does not disperse into the atmosphere, your plants' roots will be kept warmer.

Mulch is a way of controlling weeds; grasses find it hard to grow in the dark, and mulch is a cheap and permanent way of having fewer unwanted weeds in your garden.

Mulch preserves the nutrients in the soil; that very top layer of soil where microorganisms decompose organic matter needs protection from wind, dry weather and direct sunlight.

Mulch can act as a pest control method; not all mulch is equal at this, and cedar mulch is the best in some circumstances.

Mulch can also be used for decorative purposes.

### **When to apply:**

Mulches, including compost, can be applied at any point during the growing season. Although it is most convenient for gardeners to do it in early spring before planting or before plants emerge, or in the fall as plants start to go dormant but before the ground freezes.

For early spring applications, it is typically best to wait until the ground starts to warm and the perennials are emerging as putting down a layer of mulch too early can further insulate the ground and slow plant emergence. Plus, the mulch pile may still be frozen anyway! For late-season applications, the mulch can help protect newly planted perennials or other plants from harsh cold temperatures. Ideally, apply mulch after plants go dormant in the fall. Do not place the mulch on too early, as it can slow plants from going dormant and make them more susceptible to damage from cold temperatures.

### **Mulches to consider:**

Compost, grass clippings and leaf mold: Compost can be layered on top of the soil as a mulch or used in conjunction with other materials such as leaves, grass clippings (fresh or composted) or newspaper. While this mulch material will not have the same level of weed suppression as other organic mulches, it can help to improve soil structure and drainage, as well as increase soil fertility. Compost and leaf mold can be used in nearly all garden settings, including perennial and annual beds, vegetable gardens, fruiting plants and around trees and shrubs. Leaf mold is partially decomposed leaf matter. A pile of leaves around 3 feet tall and wide will transform into leaf mold over a period of one to two years. Leaves are an excellent mulch for vegetable gardens, annual flower beds, raspberry plantings, and around perennials, trees, and shrubs. It is better to leave leaves whole and not shred them, as many eggs and cocoons of beneficial insects overwinter on the leaves and are destroyed when the leaves are shredded.

Cedar mulch: Made from clippings and shavings of the bark of cedar trees. The mulch itself can be natural or dyed; this is for aesthetic purposes; while the natural color is reddish brown, it is often dyed black, yellow, dark brown or red, which adds to the decorative value of flower beds and gardens when you use it.

### **Benefits of using cedar mulch:**

Cedar mulch has specific qualities that can be an advantage for your garden.

Cedar mulch lasts well especially compared with other organic mulches like straw, for example, but also other materials like pine mulch. It deteriorates slowly, lasting for several years.

Cedar mulch is an insect repellent, one of the reasons why it is a favorite for many gardeners. Cedar mulch offers good ground cover, a key quality in any type of mulch.

Cedar mulch has a nice natural color.

Disadvantages of cedar mulch:

Cedar mulch does have downsides which may limit how you can use it in your garden:

Cedar mulch repels pollinators and beneficial insects; this is the negative side of its pest control qualities.

Cedar mulch can release acetic acid if the mulch has not received enough oxygen when it is stored after production (known as 'sour' mulch). This can affect your plants.

Cedar mulch loses color fast; this means that the decorative effect will soon diminish.

Cedar mulch has a strong smell when first laid on the beds. Some people find this unpleasant.

It is better to use something other than cedar mulch in vegetable gardens and around fruit-producing plants where you want to invite pollinators. The best use of cedar mulch is to cover paths and for large flower beds or around trees. It is durable and pleasant to look at, but it can be expensive to buy, and you may want to keep it for the most decorative elements of your garden.

Other wood mulches: Pine bark mulch is made from the shredded bark of pine trees. In some cases the bark of other evergreens, like fir and spruce, may be added into pine bark mulch. Pine bark mulch in gardens tends to last longer than most organic mulches, whether finely shredded or in nugget form. The natural red-dark brown color of pine bark mulch also lasts longer than other wood mulches, which tend to fade to grey after a year.

Some commercially available mulches may contain wood from numerous industrial sources. This product is inferior to those processed directly from tree material, as it often contains low quality wood that will break down quickly and may contain chemicals or other compounds. Some wood chip mulches are processed from this inferior wood source and colored or dyed to mask it. The dye uses chemicals that will end up in the ground and ultimately even inside your plants. This is bad for the environment, of course, but also for your plants and, if you intend to harvest them to eat, for yourself and your family.

The wood mulch environment:

Mushrooms, Fungus, Slime Molds: As hardwood chips decay, all manner of fungi can produce some interesting mushrooms and the plants growing in a decaying mulch may require additional nitrogen application for optimal growth. When fungus appears, in most cases it can be raked or scooped up and disposed of. Management strategies are preventive in nature. Dry mulches (moisture content less than 34 percent) that are high in wood content cause most problems since fungi are the primary colonizers of dry wood. Moisture levels greater than 40 percent foster the growth of bacteria, which compete with nuisance fungi, reducing their potential to cause problems. To keep mulch from souring, store it in smaller piles (no more than 10' high) on a crowned surface so that rainwater drains away. Turning the pile regularly is also helpful. Composting woody mulch before use and thoroughly soaking mulches after they have been applied helps to avoid any problems.

Insects: Mulches provide shelter, moisture, or food for many different insects and related organisms. However, most insects found in mulch are not destructive or harmful. Most mulch inhabitants are beneficial or innocuous. The presence of insects in mulch generally is not a cause

for alarm or treatment and rather suggests the existence of an environment like natural ecosystems. Mulch provides a habitat for beneficial insects that are important predators of insect pests, including rove beetles, ground beetles, firefly larvae, and centipedes. Other beneficial organisms are “recyclers” that feed on fungi and decaying plant debris. The decomposition of organic mulch by recyclers, such as decay fungi, ants, sowbugs, millipedes, springtails, and mites, converts the mulch into valuable organic matter that improves soil tilth.

### **Specifically for raspberries:**

Straw, compost, leaves, and grass clippings, individually or combined, provide a more appropriate mulch around both newly planted and mature raspberries (hay can be used too but tends to sprout a lot of grass seeds creating more weeding). These offer a better choice than cedar for this purpose and will maintain ideal conditions and a healthy soil environment for the plants.

Note: Soil Nitrogen and Oxygen Depletion:

Organic mulches can influence soil microbial activity and nutrient availability. Mulches with a high carbon-to-nitrogen (C:N) ratio, such as hardwood bark, ground wood pallets, straw, and sawdust, may induce nitrogen deficiency in plants by stimulating microbial growth, which depletes underlying soils of available nitrogen. Some mulches, such as cypress, are resistant to decomposition and thus have a much lower effect on nutrient availability, despite having a higher C:N ratio. The potential nitrogen-depleting effect of mulch diminishes over time as mulch decomposes. Nitrogen immobilization by microbes will have a greater impact on herbaceous plants and newly transplanted woody plants than on well-established trees and shrubs. Avoid the extensive use of high C:N ratio mulches around these plants. Alternatively, these products can be blended with composted materials with a low C:N ratio, such as yard waste and animal manure. If possible, composting wood chips before use will further decrease their C:N ratio, making them safer to use around sensitive plants.

Sources:

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My own June bearing raspberry patch