

Buying and Using Organic Mulch

Ecology's Beyond Waste Plan, www.ecy.wa.gov/beyondwaste calls for improving the quality of recycled organic products such as soil blends, mulch and compost. This focus sheet provides general information on mulch for landscapers, gardeners and contractors, with a focus on how to choose high-quality organic mulches to better meet their needs.

What is mulch?

Mulch is a protective covering of materials applied around trees, shrubs, garden beds and bare ground. In general, two categories of mulches exist: inorganic and organic.

Inorganic mulch includes crumb rubber, sheet plastic, gravel or crushed rock in different sizes, shapes and colors.

Organic mulch is made from recycled organic materials such as yard waste and woody waste. Commonly used organic mulches include coarse compost, bark, chopped or shredded tree trimmings, or processed wood waste. Also, organic mulches may be available in their natural colors or colored (red, black or brown) with chemical solutions (for example, iron oxide).

What are the benefits of using mulch?

Landscapers and gardeners buy mulch primarily to reduce soil moisture loss and suppress weeds. Other benefits of using both inorganic and organic mulches include:

- Saving time and money needed to water and control weeds.
- Reducing mechanical injury to trees and shrubs from lawn mowers.
- Keeping soil cooler in the summer and warmer in the winter.
- Providing a more pleasing appearance to the landscape.
- Minimizing soil erosion from heavy rains.
- Preventing crusting (mineral build up) of the soil surface.
- Improving water drainage.

Additional benefits of using organic mulch include:

- Preventing soil compaction.
- Increasing soil organic matter.
- Improving soil structure and drainage.
- Promoting healthy plants by improving soil health.

Learn More...

Washington State permitted composting facilities list and home composting information: www.ecy.wa.gov/programs/swfa/compost/

Natural Yard Care guide to improving soil and growing healthy landscapes: www.ecy.wa.gov/biblio/0807064.html

Natural Resources Conservation Service recommendations on using mulch: www.nrcs.usda.gov/FEATURE/backyard/mulching.html

Soil best practices for builders and new development: www.buildingsoil.org

Washington State University's Soils and Soil Testing: www.puyallup.wsu.edu/soilmgmt/Soils.htm

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Special accommodations

To ask about the availability of this document in a version for the visually impaired, call the Waste 2 Resources Program at 360-407-6900.

Persons with hearing loss, call 711 for Washington Relay Service. Persons with a speech disability, call 877-833-6341.

What qualities should I look for in an organic mulch?

Many companies produce organic mulch for sale in bulk or bags. Because no specific labeling or quality standards exist for these products in Washington State, it is important for you to be able to identify high-quality mulches.

Organic mulch *should* have the following qualities:

- Pleasant, “earthy” or “woody” smell.
- Uniform shape.
- Particle size between ½ and 3 inches.

Quality organic mulch *should not* contain large amounts of:

- Stones, metals, glass, plastics or other solid waste.
- Chemical contaminants like petroleum residues.
- Heavy metals like cadmium or lead.
- Viable weed seeds.
- Pesticide and herbicide residues.
- Plant, animal and human pathogens.

What questions should I ask to help me identify a high-quality organic mulch?

If the product label or information sheet does not give enough information or if you cannot inspect the mulch, here are some questions you may ask to help identify a quality mulch:

- What materials were used to produce the mulch and where did they come from? Diseased trees, pressure treated-wood, composite wood or painted pallets may add unwanted diseases and chemicals to your soil.
- Does the bagged mulch have large amounts of physical contaminants such as glass, metals or plastics? Mulch containing these materials could damage your plants.
- Does it have an unpleasant pungent, sour or oily smell? “Sour or acid” smell may indicate mulch with toxic substances that are produced under anaerobic conditions. Oily smells may indicate petroleum residues. If a mulch product smells bad, it may damage your plants.

How should I use organic mulch?

Using organic mulch provides many benefits. However, improper application may harm your plants. Follow these general tips when adding mulch to your landscape:

- For well drained sites, apply a 2-4 inch layer of your chosen mulch material around trees, shrubs and bedding plants. Use a thinner layer for sites with drainage problems.
- Spread mulch around trees beyond the drip line (the diameter of the plant’s outermost branches). Leave a minimum of a 4-inch space between the trunk of the tree or shrub and the mulch. Excessive mulch piled on the trunk can reduce air to the roots, attract rodents and retain excess water, which leads to insect damage, diseases and water damage.
- For flower beds and vegetable gardens, spread the mulch on the soil surface and keep it away from the base of each plant. Raise the depth of the mulch around the outer edge of flowerbeds to prevent erosion.
- Do not till or incorporate mulch into soil. Tilling or incorporating woody mulch into garden beds can rob nitrogen from the soil. This may reduce available nitrogen supplies to your plants.
- Add organic mulch every 2-3 years to maintain a total depth of 2 to 3 inches. Before doing so, stir up the old mulch layer. This helps break up compacted layers and improves drainage.
- Make mulch from your own yard debris such as leaves, grass and shrub clippings. This saves the time and cost to transport plant debris to the landfill, as well as the expense to buy and transport mulch.



Drawing courtesy of Missouri Dept of Conservation