

Chapter 6: Mulches

Topics to be covered in this chapter

- I. Why is mulching important?
- II. Types of mulch
- III. Selecting a mulch
- IV. Application of mulch

Introduction

Mulching is a highly beneficial landscape practice. Mulches serve various functional uses, while enhancing the aesthetic appeal of your landscape.

I. Why is mulching important?

Mulches are organic or inorganic material applied to a planting bed as a top-dressing to serve a number of purposes. In addition to serving as an aesthetic element in the landscape, mulches play several important roles in a water-conserving garden. These include the following:

- Maintaining moisture levels in the soil.
- Moderating soil temperatures.
- Inhibiting weed growth, thus reducing competition for water amongst plants.
- Reducing soil erosion, compaction, and water run-off.
- Providing a barrier between the plant and the soil, thus successfully controlling soil-borne diseases that might cause plant stress.

Also keep in mind that aside from occasional weed control and top-dressing with additional mulch, unplanted mulched areas require no water and little routine maintenance.

II. Types of mulch

In general terms, mulches can be anything that covers the soil, including ground cover plants. However, mulch usually is divided into two main categories: organic and inorganic.



Fig. 6.1: A combination of both organic and inorganic mulches.

Organic mulches are derived from plants and their byproducts. Examples of organic mulches include the following:

- Pine straw: excellent mulch for water conservation, but flammable when extremely dry. It fades to a dull gray-brown color with age and decomposes quickly, and thus requires replenishment on an annual basis.
- Bark chips: provide a more durable type of mulch, but also require regular replenishment.
- Leaves: an overlooked and readily available mulch, but not as neat or uniform in appearance as pine straw and bark chips.
- Pine cones: an unusual natural looking mulch that provides a decorative look to the landscape. Can be used for potted plants.

Organic mulches

- Organic mulches weather and decompose with time, and therefore are recycled back into the landscape, thus providing the soil with a natural source of nutrients.
- Non-woody organic mulches break down quickly and thus are best used with seasonal plantings, or as temporary cover.
- Some organic mulches easily can be blown away by strong winds.
- The larger the bark chip pieces, the longer they take to decompose.

Inorganic mulches consist of stone, rock, and synthetic products. Examples of inorganic mulches include the following:

- Gravel
- Marble chips
- Crushed stone
- Decomposed granite
- River run rock
- Pumice stone: known locally as ‘touf’ stone. It retains moisture well because of its highly porous structure.

Inorganic mulches

- Inorganic mulches generally are long lasting, and are available in a wide range of colors and sizes.
- Unlike organic mulches, inorganic mulches do not decompose and therefore cannot be incorporated into the soil, nor do they provide it with any measurable nutrients.
- Some inorganic mulches may absorb and reradiate considerable amounts of heat, thus over-heating the landscape.
- A mulch of shells, pebbles, and sparkling glass nuggets can add a lively touch to potted plants.



Fig. 6.2: Inorganic mulch consisting of river-run rock.



Fig. 6.3: Pumice stone mulch is available in different sizes.

III. Selecting a mulch

- Keep in mind that dark colored mulches retain heat in the landscape, which may result in increased water evaporation. Light colored mulches are highly reflective. This can heat up adjacent structures and result in glare. Often, neutral/beige tones are the most suitable since they reduce glare, heat retention and heat reflection problems.
- Ideally, a mulch should be easy to apply, inexpensive, locally available, aesthetically pleasing, and should last a long time.

- For small areas such as planting beds, organic mulches are best; they include bark chips, compost, and the plant's own leaf litter. Organic mulches are well suited to plants that are naturally found in moist soils, since they preserve moisture in the soil.
- For large areas, inorganic mulches such as river run rock and decomposed granite are very suitable, since they are more permanent. They also serve to reduce the dust coming out of the soil.

IV. Application of mulch

- Spring is usually the best time to apply mulches, as the soil is still damp and has not yet been dried by the summer sun. Apply about 7 - 10 cm of mulch under ornamental plants in the landscape. Avoid applying greater amounts of mulch, because it retains moisture in the upper levels of the soil and therefore encourages shallow roots.
- Once the mulch is in place, pull it away 12 to 20 cm from the trunk of trees and shrubs, to prevent wood rotting diseases.
- Organic mulch should be watered immediately after it is installed, to better bind together its pieces.
- If the mulch is near a path, provide a raised edge or curb to prevent the mulch from spilling onto the path.

Mulch suppliers:

For a list of mulch suppliers in Jordan, see the Suppliers list in the Water Conserving Landscapes section of the CSBE web site (<http://www.csbe.org>).