

Mulching (A Blanket on the soil)

Introduction

The technique of mulching is the easiest practice that you can undertake for your garden that will produce unimaginable results. Mulch comes in two basic forms; organic and non-organic. The most frequent items used in organic mulching are grass, straw and bark. While the most frequently used items in non-organic mulching are stones, small chips of brick and even plastic. Taking the mulching task into your own hands can save you huge costs compared to having it done professionally. The materials that are required for organic mulching can be created without any cost to you so all you are really paying for is the labour to spread the mulch.

What is mulch?

Mulch is a layer of decaying organic matter on the ground. Mulch occurs naturally in all forests; it is a nutrient rich, moisture absorbent bed of decaying forest leaves, twigs and branches, teeming with fungal, microbial and insect life. Natural mulch serves as a "nutrient bank," storing the nutrients contained in organic matter and slowly making these nutrients available to plants. All forms of plant life from the ground layer to shrubs and trees thrive, grow, shed organic matter, die off and decay, in a complicated cycle of nutrients.

Why mulch?

Agriculture with mulch in the tropics promotes plant health and vigour. Mulching improves nutrient and water retention in the soil, encourages favourable soil microbial activity and worms, and suppresses weed growth. When properly executed, mulching can significantly improve the well-being of plants and reduce maintenance as compared to bare soil culture. Mulched plants have better vigour and, consequently, have improved resistance to pests and diseases.

Types of mulch

- Wood chips—are a byproduct of the pruning of trees by arborists, utilities and parks; they are a means to dispose of bulky waste.
- Leaves—Leaves from deciduous trees, which drop their foliage in the fall. They tend to be dry and blow around in the wind, so are often chopped or shredded before application.
- Straw—comes from the leftover stems of harvested grain crops.
- Grass clippings—come from mowed lawns, are sometimes collected and used elsewhere as mulch.
- Peat moss or sphagnum peat—is long lasting and packaged, making it convenient and popular as mulch. When wetted and dried, it can form a dense crust that does not allow water to soak in.

What materials to use for mulching?

- Organic residue: grass clippings, leaves, hay, straw, comfrey, shredded bark, whole bark nuggets, sawdust, shells, woodchips, shredded newspaper, cardboard, wool, but also manure (cow), etc.
- Compost: This should be fully composted material to avoid possible phytotoxicity problems, and weed seed must have been eliminated, otherwise the mulch will actually produce a weed cover.
- Rubber mulch: made from recycled tyre rubber.
- Plastic mulch: crops grow through slits or holes in thin plastic sheeting.

Advantages and disadvantages

Advantages:

- Mulching improves nutrient and water retention in the soil.
- Encourages favourable soil microbial activity and worms.
- Suppresses weed growth.
- Mulching reduces evaporation.
- Mulch also helps to retain moisture, prevent soil erosion, control weeds and it adds nutrients to the soil.

Disadvantages:

- Heavy mulching over a period of years may result in a build-up of soil over the crown area of plants.
- The cost of some materials can be a drawback to large-scale mulching.
- Also, some mulch are not readily available.
- When using sawdust and woodchips as mulch, nitrogen starvation sometimes occurs.

Uses

Mulching can be used anywhere plants are grown in the ground. Mulching may be used either in establishing a new garden or tree planting, or to enrich existing plantings. In both cases, mulch is applied to bare soil or on top of weeds. New plantings are made through the mulch, and a small area is left open to accommodate established plants and trees.

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Acknowledgements

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<http://en.wikipedia.org/wiki/Mulch> * <http://ezinearticles.com/?Different-Types-of-Mulch---Advantages-and-Disadvantages&id=1235265> * <http://www.agroforestry.net/>

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