

## Session 11: MULCHING

### Objective

1. To know why and how to mulch.

### What is mulching?

Mulching means covering the ground with organic material such as crop residues, straw, leaves, or compost. Because organic matter is good for the soil and plants, we will concentrate on mulch made from organic material. Mulching reduces the evaporation of moisture from the soil by keeping it protected from the direct rays of the sun. If you examine a mulched soil, you will find that it is both cooler and damper than the surrounding exposed soil. When mulch decays on the surface it increases the humus content of the soil.

Mulching performs a number of important functions like:

- Reducing wind and water erosion of the soil.
- Improving infiltration of water.
- Increasing the moisture level in the soil.
- Increasing or retaining the level of organic matter in the soil.
- Increasing useful micro-organisms in the top soil.
- Reducing weeds by restricting growth and thereby reducing competition from weeds for moisture and nutrients.
- Protecting the soil from compaction during heavy rain by breaking the impact of rain droplets on the soil.
- Preventing capping (the formation of a hard layer on the soil surface).
- Regulating ground temperatures.



*Soil with mulch can improve your production*

## How to mulch

The layer of mulch must be thick enough, about 5 - 10 cm. Remember that any plant material can be used. When combining manure and mulch, the soil will stay wet for a longer time. There are possible dangers from mulching to consider. Mulching can encourage rodents like mice and rats, slugs, termites and snails that may damage the crop. If diseased material is used for mulching, it can transmit plant diseases. If you experience these problems it could be better to look for an alternative such as combining the use of compost with steps to protect the soil from water and wind erosion.



## When is it a good time to mulch?

In a dry climate a layer of mulch should cover all soils. The mulch has to be applied before the rainy season begins, because the soil is then most vulnerable. The seeds can be sown through the mulch layer by making small openings in the mulch through which the seeds are planted. After planting each seed the opening must be closed, otherwise birds will become aware of the presence of the seed. During this period, the mulch layer should not be too thick. A sufficient amount would almost completely cover the soil from sight. If the layer is too thick, it will be difficult for the sprouted plants to reach the surface. The seeds can also be sown in rows that have been cleared by ripping or removing the mulch.



**What is your experience with mulching?**

**Please share your experience with the group. It is likely that your soils are similar and that you can help your friends to succeed instead of making the same mistakes.**