

# SHEET MULCHING YOUR WAY TO A NO-DIG GARDEN

Sheet mulching is a type of passive composting and a great way to prepare garden beds for planting in the spring without digging the soil. At the same time you will get rid of unwanted vegetation (eg. weeds) without a lot of work and the soil will be teeming with life within a few months.

Although it doesn't require too much work, it takes some time for the layers to completely break down. Therefore, we start preparing the garden beds in autumn, at the end of September or beginning of October, just before the rainy season.

## SHEET MULCHING

Sheet mulching builds soil fertility from the bottom up – by accumulating organic matter and feeding microbial communities. We imitate the conditions necessary for the decomposition of biowaste (composting) on a smaller scale, on an individual garden bed.



\* In order to reduce the growth of weeds and save time, energy and your back, it is important that the fresh grass clippings, biowaste, compost and mulch that you add above the cardboard layer do not contain seeds. This way you'll spend less time maintaining the garden beds and more time enjoying the yield!

Note: the processing of biowaste by compost worms does not destroy the seeds, therefore vermicompost may contain weed seeds.

By spring time, the cardboard will probably completely decompose, as will the manure, biowaste, grass clippings and other nitrogen-rich components that were added under the thick layer of straw. Carbon-rich materials will still be present, but the soil underneath will be moist, loose and ready for planting!

Seedlings can be planted by gently spreading the remaining mulch, making a hole in the soil and adding high-quality microbiologically active compost. Cover the soil around the seedling back with mulch, but leave a little space around the stem to prevent rotting.

In case you want to sow seeds directly in the garden bed, spread the mulch slightly to form a narrow row, add compost to it and sow the desired seeds.

## BENEFITS

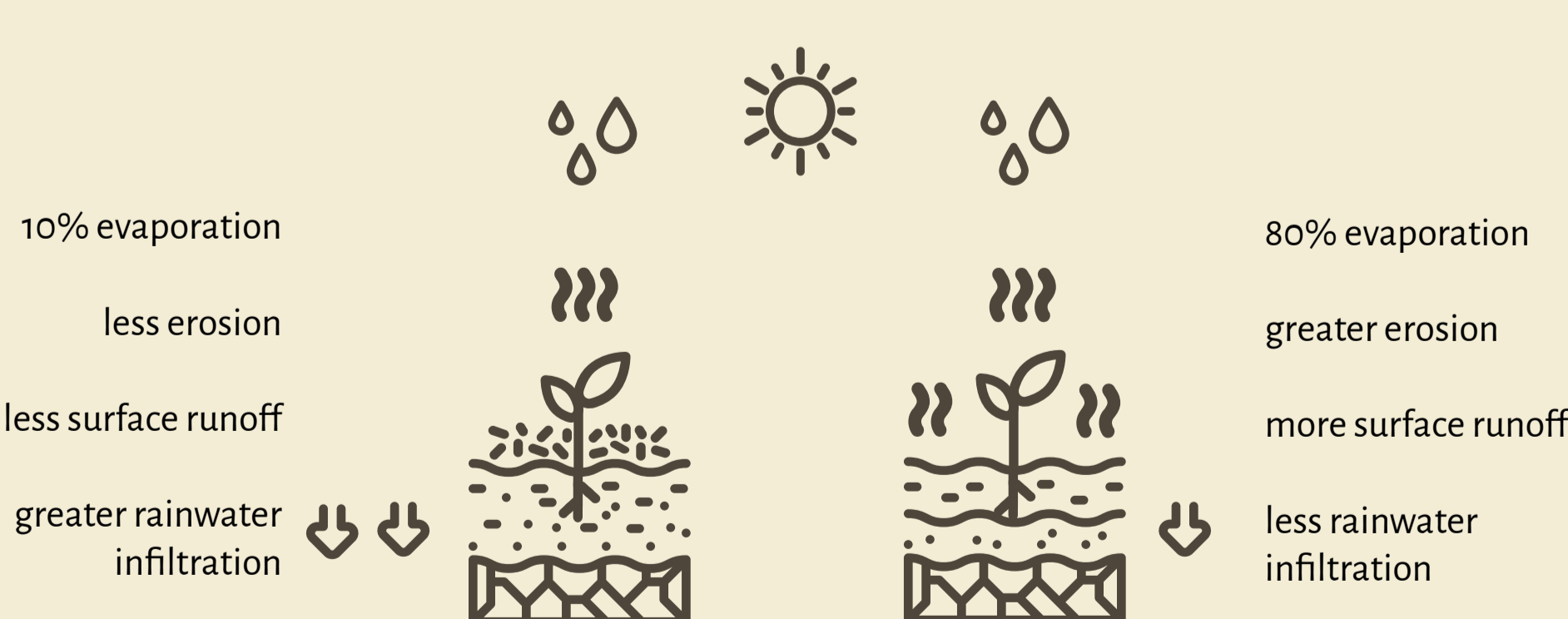
Sheet mulching has multiple functions in protecting soil and building soil fertility:

- Suppresses weed growth
- Prevents evaporation and helps retain moisture
- Protects the soil from erosion and compaction and prevents the formation of crust
- Protects soil from overheating and maintains favorable soil temperature
- Adds organic matter to the soil
- Reduces the need for fertilization
- Improves growth and health of the root system
- Improves soil structure
- Provides habitat for micro, meso and macrofauna
- Stimulates microbiological activity

Vegetable crops don't require deep soil preparation, so for the roots to penetrate into the deeper layers it's enough to lightly aerate the soil, even when it is compacted. Instead of tilling the soil, accumulated organic matter and microbiological activity will loosen the soil and prepare it for planting.

The increase in organic matter also increases the capacity of the soil to retain water. During the summer months you will notice that more moisture is retained under the mulch, so there will be less need for watering!

## MULCH vs. NO MULCH

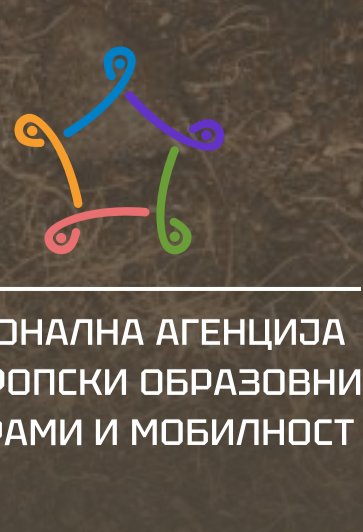


The amount of organic matter in the soil plays a key role in soil's capacity to retain and supply plants with water and nutrients. For every 1% increase in organic matter the soil can absorb and retain up to 30 liters more water per m<sup>2</sup>. For this reason we say that there is never enough compost!

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Co-funded by the European Union



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

