

COFFEE FARMING TOPIC 09: MULCHING COFFEE TREES

Why mulching?

Mulch helps the soil retain moisture, increase soil fertility, assist in controlling or reducing erosion, and suppress weeds in the field. There are different types of mulching materials. Some are **decomposable**, such as dried grass like Tameda, Terebusakumu, or crop residues.

Others are **non-decomposable**, such as planted grasses that cover the soil (e.g., Mucuna, Vesse, Desmodium, Mimosa, Arachis Pintoï).

Non-decomposable mulch (cover crops) has the particular advantage of adding minerals to the soil, such as nitrogen, while also significantly reducing the cost of coffee weeding.

When using decomposable mulching materials, the farmer applies a sufficient amount, at least reaching 15–20 cm in height above the soil. Between the tree and the mulch, there should be at least 20 cm of space to prevent it from becoming a habitat for pests that damage coffee, such as termites, coffee berry borers etc....

When using cover crops or green manure crops, the farmer ensures that they do not grow and compete with the coffee. They must be cut when mature and prevented from encroaching on the coffee trees.

Definition of mulching



Mulching is covering the soil surface with a material, preferably an organic material which protects the soil.

Example of mulching materials are: Grass, sorghum/maize stems, banana stems/leaves (chopped up), bean husks, rice husks, etc

Importance of mulching is:



- Retention of soil moisture
- Prevention of soil erosion.
- Improves water infiltration into the soil,
- Maintenance of soil fertility through high organic material inputs as mulch decomposes
- Suppression of weed species
- Prevents soil-borne diseases
- Mulching with cover crop some species which can fix Nitrogen has an added benefits

The best time of mulching is:



- **Before the soil dries out completely**, so that the mulch retains the moisture needed by the coffee roots.
- **After applying fertilizer**, to prevent nutrients from being washed away.

Mulch should be placed at least 10 cm away from the coffee stem, to prevent termites and other pests that may damage coffee trees

