

Intercropping banana with beans using zero tillage

Zero tillage has many advantages in banana plantations and is achieved by mulching of the plantation. Intercrops like beans can also be planted without removing the mulch.

Mulch is rich in nutrients particularly potassium. Mulching a plantation with grasses or crop residues at 2cm can add up to 300kg/ ha of potassium but incase mulch is limited, it is better to apply a thin layer of mulch over a large area than apply a thick layer over a small area.

Conserve water

Mulch conserves water by preventing evaporation and reducing runoff during heavy storms. This helps to improve the amount of water available in the soil and consequently to the plants since bananas need a lot of water.

Reduces soil erosion so the rich top soil is not lost hence maintaining soil fertility and also suppresses weeds which negatively affect growth due to their competition with crops for water and nutrients hence reducing the amount of labour needed for weeding.

Save roots

Keeps banana roots intact since banana roots do not grow dip and tilling the land damages the banana roots. Zero tillage improves on soil structure and keeps the banana root system healthy. Intercrops like beans can be planted using a stick without removing the mulch and both the banana and beans benefit from the mulch.