

Technology leaflet: Soil fertility management in millet cropping system

From the Cinzana Research Station, Mali

Objectives

- Increase millet yields
- Reduce soil fertility depletion

Features

Rotation Annual alternation of millet by cowpea, both grown as sole crops *Manuring* Annual application of 4 t/ha manure and application of 200 kg/ha phosphate rock of Tilemsi on millet crop

Performance

(information not available)

Application

Sandy soils in area with annual rainfall between 400 and 800 mm

Restrictions

- Growing legume crops requires the roaming cattle to be herded
- Costs of crop protection for cowpea
- Absence of land property rights may withhold farmers to invest in soil fertility management

Recommended practices

Seed treatment Millet: 10 g Apron Plus for 750 g seeds

Cowpea: 10 g Apron Plus for 2000 g seeds

Plant spacing Millet: sowing on ridges at 0.75 x 0.80 m, thinning at 2 plants per hole (33,330 pl/ha)

Cowpea: sowing on ridges at 0.75 x 0.40 m (33,330 pl/ha)

Crop protection Application of insecticide Decis (1 l/ha) to cowpea when flower buds appear, at flowering and at pod formation