

Mulching

Mulching is the practice of covering the soil around the plants to make conditions more favourable for growth and conserve the available soil moisture. In this management system the open soil is put under loose cover of straw, hay, crop residue, leaves, saw dust and plastic. It is essentially a surface barrier against evaporation and checks weed growth reducing competition for nutrients.

Advantages

- (a) Conserves moisture by suppressing weed growth, regulating soil temperature and protection from sun and wind.
- (b) Improves soil structure.
- (c) Reduces soil temperature fluctuations.
- (d) Increases soil organic matter level.
- (e) Controls erosion.
- (f) Improves water infiltration rate.
- (g) Improves nutrient availability through better soil condition micro flora.
- (h) Avoids competition for nutrient and moisture with main crop.
- (i) Controls weed growth.

Disadvantages:

- (i) High cost.
- (ii) Transportation.
- (iii) Disease and pest infestation through dead plant material.
- (iv) Fire hazards.
- (v) Roots grow shallow due to the effect through soil temperature and moisture.

Therefore, in first year mulching may not be advisable.

Among all the mulching materials, plastic mulches are becoming popular especially black polythene mulch, where weed control is desired. Mulching is common in tropics especially in crops like banana, citrus, pineapple.