

TILLAGE

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Tillage

1. "Till" mean to cultivate, to loose, to cut or to open the soil.
2. Opening of soil.
3. A practice of working the soil to provide conditions favorable to growth of plants.



Objectives or purposes or benefits of tillage

- To control weeds.
- To destroy hibernation insects live either in soil or on plant residues/strubbles. (Cereals: Wheat, Rice, Oat, Barley)
- To improve soil physical condition (structure, infiltration or water holding capacity)
- To shatter the hard pan.



Tillage objectives

- To aerate the soil.
- To increase microbial activity. Faster decomposition of organic matter and release of nutrients.
- To loosen the soil so that seedlings can penetrate.
- To incorporate soil residues into the soil.
- To prepare the land surface for irrigation
- To aid in erosion control (contour ploughing)



Different tillage operations

- Fallow cultivation or primary tillage
- Secondary tillage or seed bed preparation
Wattar ?
Rauni ?
- Inter tillage or hoeing



Advantage of intertillage

- Soil loose, facilitate penetration and extension of roots
- Plant able to absorb nutrients and water from more area.
- Hoeing results in breakdown of capillary action
- Water holding capacity of soil increase and remain in Watter condition for longer period of time
- More aeration and biological activities.
- Removal of weeds



Earthing-up

Rauni

Wattar

