

Objectives

1. Survey of different cotton fields in certain districts of Gujarat, to assess the varieties of cotton (Normal / Bt) under cultivation, yield obtained, and associated seed and soil borne diseases.
2. Isolation and identification of different fungi from the rhizospheric and non-rhizospheric soils.
3. Effect of certain fungi like *Trichoderma* sp., *Gliocladium* sp. and *Aspergillus niger* will be observed on percentage germination and growth performance of cotton.
4. Isolation and identification of different AM Fungi from soil associated with roots of Bt and Non Bt cotton plants.
5. Effect of AM fungi on increase in plant biomass/yield.
6. Role of pathogenic fungi both seed and soil borne in cotton and their control *in vitro*.
7. Effect of compost and vermicompost on increase in plant biomass.