

Illustration of Plates

Plate I

- A – Cotton Plant
- B – Field sown with cotton plants during the initial stage of its growth
- C and D – Cotton Fields of Vadodara district
- E – Wilted cotton plant found in Jamnagar district
- F – Leaf Spot disease in Cotton Plant

Plate II

- A – Isolation of Soil Mycoflora from the rhizospheric soil of Jamnagar cotton Fields
- B – Soil Mycoflora isolated from the cotton field soils of Bharuch
- C – Cotton Fields of Area Padra in Vadodara district

Plate III

- A – Conidia of *Alternaria alternata* (400x)
- B – Macroconidia and Microconidia of *Fusarium oxysporum* (1000x)
- C – Spores of *Tricothecium roseum*
- D – Conidiophores of *Aspergillus terreus* (400x)
- E – Perithecia of *Cheatomium globosum* (400x)
- F – Fungal spores of *Cladosporium cladosporoides* (1000x)

Plate IV

- A – Conidia of *Penicillium* sp.(400x)
- B – Conidial head of *Aspergillus flavus* (400x)
- C – *Rhizopus stolonifer*
- D – Conidia of *Penicillium citrinum* (400x)
- E – Conidiophore and Conidial head of *Aspergillus niger* (400x)
- F – Fungal spores of *Trichoderma viride* (1000x)

Plate V

- A – *Glomus aggregatum*
- B – *Glomus mosseae*
- C – *Glomus fasciculatum*
- D – *Glomus glomerulatum*
- E – *Glomus hoi*
- F – *Glomus macrocarpum*

Plate VI

- A – *Glomus geosporum*
- B – *Glomus etunicatum*
- C – *Glomus claroides*
- D – *Glomus fuegianum*
- E – *Glomus microcarpa*
- F – *Glomus rubiformis*

Plate VII

- A – *Glomus convolutum*
- B – *Glomus monosporum*
- C – *Glomus caledonium*
- D – *Glomus segmentum*
- E – *Glomus tenerum*
- F – *Glomus formosanum*

Plate VIII

- A – *Glomus intraradices*
- B – *Acaulospora laevis*
- C – *Gigaspora albida*
- D – *Gigaspora ramisporophora*
- E – *Gigaspora candida*
- F – *Glomus fecundisporum*

Plate IX

Plate showing biomass study of cotton plants of the variety Ajeet-11 and Vikram-5 treated with AM fungi along with control.

Plate X

Plate showing biomass study of cotton plants treated with two different organic manures
A and B – Growth of Cotton plants at 15th day treated with vermicompost and dried leaf litter
respectively
C and D – Cotton plants after 30 days of the sowing with vermicompost and dried leaf litter
respectively
E and F – Cotton plants at 90 days with vermicompost and dried leaf litter
Respectively

Plate XI

A to C- Biomass study of cotton variety treated with different fungi viz. A. *Aspergillus niger*, B. *Gliocladium virens* and C. *Trichoderma viride*
D and E- Root colonization in roots of cotton plants treated with AM fungi

Plate XII

A – Fungal Filterate of different fungi

B and C – Effect of *Fusarium oxysporum* on seeds of Non Bt and Bt variety

D and E – Effect of *Trichoderma viride* on seeds of Non Bt and Bt variety

F and G – Effect of *Gliocladium virens* on seeds of Non Bt and Bt variety

Plate XIII

List of Plants used for the experiment of Biological Control against three pathogenic fungi

A – *Annona reticulata* L.

B – *Balanites roxburghii* Planchon

C – *Cochlospermum religiosa* (L.) Alst

D – *Limonia acidissima* L.

E – *Sapindus emarginatus* Vahl.

F – *Tephrosia jammagarensis* Sant.

Plate XIV

A – Growth of *F.oxysporum* in methanolic extract of *Annona reticulata*

B – Growth of *F.oxysporum* in methanolic extract of *Balanites roxburghii*

C – Growth of *F.oxysporum* in methanolic extract of *Cochlospermum religiosa*

D – Growth of *F.oxysporum* in methanolic extract of *Feronia acidissima*

Plate XV

A – Growth of *A.alternaria* in methanolic extract of *Tephrosia jammagarensis*

B – Growth of *F.oxysporum* in methanolic extract of *Cochlospermum religiosa*

C – Growth of *F.oxysporum* in methanolic extract of *Balanites roxburghii*

D – Growth of *F.oxysporum* in methanolic extract of *Feronia acidissima*