Pest and Disease Management in Cotton

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Land Preparation

1. Select soils that can contain water (medium and heavy soil); black cotton soil is ideal
2. Deep Ploughing – 25 to 30 Cm.
3. Application of FYM
4. Traditional and Improved varieties
Cotton – Pest and Disease Management

Seed Treatment with cow urine and Ash. Azotabacteria is also useful.
Inter-culture operations

- Spacing of 60X30 cms between plants
- Hoeing, application of Biodynamic compost and neem solution after 21 days
- Weeding after 25 days
- Application of vermi-compost after 45 days
Pest Management

Boll Worm in Early Stage

Aphids

Boll Worm
Early Stages of Boll Worm

- Makes the buds to droop and rot.

Treatment -

- Identify and destroy the infested buds.
- Mixed cropping
- Use Marigold and Tulsi as trap crops
Boll Worms

- Dropping of flowers and buds.
- Identified when holes appear in buds and when buds start to droop.

Treatment -
- Use okra, cowpea, and pigeonpea as trap crops
- Timely inter-cultural operations
- Destroy infested buds and flowers.
Aphids

- Sucking insects

Treatment

- Application of ash
- Application of jaggery
- Application of boiled rice and puffed rice.
Beneficial Insects

Lady bird Beetle

Big-eyed Bug

Praying Mantis

Trichogramma
Ladybird beetle

- Feeds on Aphids, insects, worms, and white bugs that are considered pests.
Praying Mantis

- Camouflages with the crop.
- Feeds on larvae and small worms
- Adult praying mantis feeds on small and big worms
Big-eyed Bug

- Feeds on all worms and insects that are harmful to crops
- Feeds on eggs of boll worms
Trichogramma

- Lays its eggs among the eggs of flying insects.
- Parasites on eggs of enemy insects during entire life cycle.
Diseases of cotton

- Root rot
- Bacterial Blight
- Leaf Curl
Root Rot

- Root rots
- Whole plant seems to dry

Treatment
- Prevent water logging to avoid this disease
- Destroy infected plants
- Apply solution of garlic.
Bacterial Blight

- Bacterial infection causes this disease.

Treatment -
- Destroy infected leaves.
- Application of crushed datura plants.
Leaf curl

- Bacterial infection
- Leaf curls inwards

Treatment
- prevented by application of native cow milk
- prevented by application of jaggery solution
Harvesting of cotton

• Separate cotton from identified selected healthy plants for seed purpose.

• Separate mature healthy buds from infected and immature buds.
Thank You.