PENGENDALIAN HAMA KUTU TANAMAN PADA TEBU

• Kutu Sisik *Aulacaspis tegalensis*
• Kutu Berlilin *Saccharicoccus sacchari*
• Kutu Bulu Putih *Ceratovacuna lanigera*

SYMPTOMS OF DAMAGE

- Nymphs and adults feed by sucking the juice and cause shrivelling up and stunting of canes.
- Nodal region is more infested than internodal region.
- Infested crop losses its vigour, canes shrivel, non-opening of leaves & ultimately cane dries up
- Such canes when slit open appear brownish red
IPM strategy for Sugarcane Scale

**CULTURAL PRACTICE:**
- Stripping of cane leaves may minimize attack
- Select and plant the scale insect free setts
- Avoid water stagnation for the longer period
- Detrash the crop at 150th and 210th day of planting.
- Give hot water treatment before planting

**CHEMICAL CONTROL:**
- Presoak the setts in 0.1% solution Malathion 50 EC
- Spray 1.25 litres of Malathion 50 EC or 2 litres of Di-methoate 30 EC in 1250 litres of water per ha
- Spray methyl demeton 25 EC @ 2ml/lit of water
SYMPTOMS OF DAMAGE

- Nymph and adult suck juice from cane in group & reduces vigour of the plant
- It also attack roots
- Honey dew secretion leads to development of Sooty mould which gives blackish appearance to canes.

IPM strategy for Sugarcane Mealy bug

- Use resistant varieties like CO 439, CO 443, CO 720, CO 730
- Drain excess water from the field
- Detrash the crop on 150 and 210 Days After Planting.
- Apply methyl parathion 50 EC 1000 ml.
- Rubbing of setts with gunny bag pieces dipped in Malathion (0.1% solution.)
- Biocontrol agents
  Brumoides suturalis
  Leptomastix dactylopii
  B. suturalis (Predator)
  L. dactylopii (Parasitoid)
SYMPTOMS OF DAMAGE

- Nymphs and adult feed in groups and weaken cane
- Leaves turn yellow color because of sucking sap by these aphids
- Sooty mould growth on lower leaves of woolly aphid infested plant.

(Affected plant leaves)
IPM strategy for Sugarcane Woolly Aphid

- Removal of water shoots
- Detrashing of canes in woolly aphid prone areas.

**Biocontrol agents**

- Release of *M. igorotus* @ 2600 grubs/ha
- Release of *Dipha aphidivora* @ 1000 larvae/ha

**OTHER NATURAL PREDATORS**

- *Synonycha grandis* (Thunberg)
- *Megalocaria dilatata* (Fabricius)
- *Coelophora biplagiata* (Swartz)

**CHEMICAL CONTROL:**

- Soil application of phorate 10G @ 10 kg or carbofuron 3G @ 30 kg /ha in
- Foliar application of dimethoate 30 EC @ 0.05% acephate 75 SP @ 0.1% at 15-20 days interval depending on pest population.