



# Insect Pests



# Insect Pest of Paddy

# The rice swarming Caterpillar-

*Spodoptera mauratia*



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## *Spodoptera mauratia*

- Pest (Caterpillar) appears sporadically in large swarms of thousands –Swarming caterpillar
- Infests rice from July – Sept

### **Life cycle**

- Eggs laid on wild grasses and rice covered with grayish hairs
- Eggs hatch within a week
- Larva has six instars
- Larva feeds on bits of leaf blades
- Fully grown larva 35-38 mm long & voracious feeder of leaves
- Adult stout built moth dark brown with conspicuous wings

# The rice swarming Caterpillar- *Spodoptera mauratia*

## Damage

- The seedlings are cut and completely eaten up as though they were grazed by cattle
- In plants they strip the leaves off the plants

## Control measures

- Flooding –This brings larvae to surface and are eaten up by birds
- Ducks left into the field will feed on caterpillars
- Dusting a mixture of 10%BHC and 5%DDT controls larva in early instars
- Spraying parathion 0.05% / endrin 0.04% controls fairly grown larva

# Rice bug – *Leptocorisa acuta*



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## Damage

- Insect feeds by sucking the milky contents of tender grain which as a result become chaff.
- Adult appears just before the onset of flowering stage of grain and leave when grain has hardened
- Nymphs feed on juice of the leaves and the stem of the rice

## Life cycle

- Female lays an avg of 100 eggs in single or double rows
- Eggs hatch in about 7 days
- Nymphs green or yellow in colour
- 5 Nymphal instars
- Nymphal period lasts for 15-21 days
- Adult bug is olive brown and green on ventral side (15.5-17 mm long)
- Adult has characteristic buggy odour

# Rice bug – *Leptocorisa acuta*

## **Control measures**

- Dusting of BHC
- Spraying of malathion
- Cleaning the fields off grass and other weeds
- Bugs can be collected in small fields by wep nets and then destroyed





# Insect Pests of coconut

# Rhinoceros beetle - *Oryctes rhinoceros*



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## **Damage**

- Adult beetles cause severe damage to coconut palms
- They live in crevices between leaf sheaths which are near the crown of the palm and burrow into the softer portions.
- The tender fronds in the folded condition are cut up by these beetles.
- When unfolded these fronds bear characteristic clippings or holes in the leaflet.
- Young seedlings are sometimes killed outright when growing points are damaged

# Rhinoceros beetle - *Oryctes rhinoceros*

## **Life cycle**

- Beetle breeds mainly in cow dung ,organic debris or dead coconut logs
- Female lays 140 -150 eggs
- Egg hatches in 8-18 days
- Larvae grow by feeding on decaying organic matter
- Grub lives at a depth of 5- 30 cm in this medium
- Larval stage 99-182 days
- Fully grown grub 9 -10 cm long
- Larvae construct earthen cells at a depth of 30 -90 cm or more and pupate there
- Pupal stage for 10 -25 days
- Adult comes out and flies to trees

# Rhinoceros beetle - *Oryctes rhinoceros*

- Adults 5cm long and are black or reddish black in colour
- Males larger than females
- Adults have a conspicuous blunt horn curved upward on their heads
- The cephalic horn in the female is smaller than in males

# Rhinoceros beetle - *Oryctes rhinoceros*

## **Control measures**

- By using beetle hooks
- Burning of decaying coconut logs which serves as breeding grounds
- Spraying of BHC 5% and sand in equal proportions
- Innermost leaf axils covered with BHC 5% and sand in equal proportions
- Spraying of BHC, carbaryl and aldrin at 0.1 % concentration in their breeding sites control the grub