

INSECT OF COCOA

(a) COCOA MIRIDS (CAPSIDS)

(i) ***Sahbergela singularis* (Hagl.) Brown Cocoa Mirid**

(ii) ***Distantiella Theobroma* (Dist.) Black Cocoa Mirid**

(iii) ***Helopeltis bergrothi* (Reut) Cocoa Mosquito**

Adult cocoa mirids are 8 -10mm long with distinct humps in the thorax. The eyes protrude and the tip of the antenna are clubbed. Adult female mirid insert her eggs in the green shoots, stems and pod. The egg hatch in 13 - 18days and young nymphs begin to feed on the tree at night. Five nymphal instars are passed in about 4 week. The life cycle is completed in about 40-50days. The feeding injury of these insects allows a die back fungi, *Calonectria rigidiscula* to infect the cocoa tree. The attack of capsid in cocoa plantation leads to capsid pockets and stag head

(b) COCOA MEALYBUGS

(i) ***Planococcus citri* (Risso)**

(ii) ***P. njanlensis* (Laing)**

(iii) ***Ferrisiana virgata* (CkII)**

They are primary important due to their ability to transmit the virus strains collectively called swollen shoots. The females of *P. njanlensis* are commonly parthenogenetic. They lay 30-40eggs which hatch few minutes after being deposited.

© ***Selenothrips rubrocinctus* (Giard) - Red-banded Thrips.** Adult thrips are about 1.5 long and black with fringed wings. Female thrips lay their eggs single on the underside of leaves and cover them with small black spots of excreta. Eggs hatch in 2-3 days. Nymphs develop to adults in about 2weeks.

(d) ***Bathycoelia thalassina* (H. and S.) Cocoa Shied Bugs:** - Female deposit 16 eggs in a circle on the pod. Eggs hatch in about 10days and nymphs feed on the pods.

(e) ***Characoma stictograpt* (Hmps) Pod husk miners.**

Female moths deposit their eggs on cocoa during the dry season. The eggs hatch and larval development is completed in about 1 month. Other insect pests of cocoa are:

- **Scale insect - *Stictococcus sjostedti* (Ckll)**
- **Red-band Thrips - *S. rubrocinctus* (Giard)**
- **Stem Borer- *Eulophonotus myrmeleon* (Fidr)**
- **Spiny Bud Worms - *Earias biplaga* (Wik)**