

INSECT PEST OF CASHEW- *Anacardium occidentale*

(a) Mirids - *Helopeltis* spp - The feeding injury of these piercing and sucking insects cause leaves to become spotted and curl downward. Fruits become spotted and do not develop properly.

(b) Red-banded Thrips - *Selenothrips rubrocinctus* (Giard) – Cause leaves drying and discolouration.

© **Fruit piercing moths -*Achaea lienardi* (Boisd)** - Moth puncture ripening fruits enhancing the entry of rot organism causing fruit drop.

(d) Flower beetle - *Pachnoda* spp. Beetles feed on buds, blossoms, leaves and fruits. A large robust beetle is about 23cm long. Their larva is a white grub. Eggs are laid in the soil and larvae or grubs feed on decaying vegetable matter and plant roots.

J. INSECT OF KOLA - COLA SPP.

(i) Brown Cocoa Mirids - *Sahlbergella singularis* (Hagl) - The piercing and sucking feeding injury of this insect causes yellow and die back of new growth and distort pod growth.

(ii) Cocoa mosquitoes - *Helopeltis bergrothi* (Reut) - Their piercing and sucking feeding injury cause yellowing and die black of new growth.

(iii) Green Shield Bugs - *Nezara viridula* (L) - They feed on the developing new growth causing yellowing and withering of plant parts.

(iv) Red-Banded Thrips - *Selenothrips rubrocinctus* (Giard) - Their feeding injury cause leaves to wilt and drop.

(v) Mealy bugs - *Planococcoides njalensis* (Laing). The piercing and sucking injury of large colonies of mealy bugs causes yellowing of plants and reduce yield.

(vi) Kola Pod Borers - *Bolanogastriis kolae* (Desbr) and *Sophrorhinus insperatus* (Faust). Female weevils insert their eggs singly in the pods causing them to crack. They are field to store insect pest

(vii) Kola Stem Borer - *Phosphorus virescens* (Olivier) and *P. gabonator* (Thomson)

Adults are long horn beetle, 20-35mm long. Eggs are deposited in shoot. The beetles are found on leaves, shoots chupon and young branches.

(viii) Defoliator – *Anaphe venata* (Btlr). Moths are large with a wing spread of 55- 65 mm. Eggs are deposited on leaves of the host plant and hatch in about 1 month. Pupation takes place in large communal cocoons about mid-August. Other insect pest of kola are:

- ***Oecophylla* spp,**
- **Tailor ants**
- ***Zonocerus variegatus* (Variegated Locust)**
- **Termites**
- ***Characoma stictograpt*. (Pod Husk Miner)**
- ***Anomis leona* - Defoliators e.t.c.**