**INSECT PESTS OF COWPEA**

**1.Pod Sucking Bugs:** There are several species of pod sucking bugs that are frequently found on cowpea plants. The most important ones are:

**(a) *Anoplocnemis curvipes*.**  The insect is a black fairly large coreid; fully grown bugs are about 3.0cm long. Adult bugs suck the sap of the green pods and it shrivel and dry prematurely.

**(b) *Clavigralla tomentosicollis*.** Adult bugs are light brown, sluggish and about 1.2cm long with males generally smaller than female. Eggs are laid in batched of 10-70 and on the average about 200 eggs are laid by each female on the cowpea plants. The bug has five instars which are similar and the total nymphal period is about 14days.

 **(c) *Riptortus dentipes*.** The insects are brown, about 2.0cm long, cylindrical coreid buys with a characteristic whitish or yellow line on both sides of the ventral surface.

**(d) *Nezara viridula* (Green Sting Bug).** The entire life cycle takes 30 - 60 days. Adults suck the sap from pods, causing premature drying and hindering seed formation. The bugs also inject a fungus *Nematospora coryli* into the developing seed.

**(e) *Aspavia armigera* (Fabricius).** The insect is a sporadic pest of cowpea in Africa. Adults are brown with large scutellum and three white or orange angular spots. They mostly lay their eggs on cowpea.

**2. FOLIAGE BEETLE**

**(a) *Ootheca mutabilis.*** The beetle is about 6mm long, oval and light brown or black. The adult lays eggs in the soil; larvae feed on the plant roots and pupate in the soil and adult emerge immediately after rains. The beetle is the most important vector of Cowpea mosaic Virus (CPMV).

**3. stem and pod borer**

**(a) *Maruca testulalis*.** The moth is light brown with whitish markings on forewings and nocturnal in habit. About 150 eggs are laid by female. There are five larval instars and the larval instars period varies between 8 - 13 days.

**4. LEGUME BUD THRIPS**

**(a) *Megalurothrips sjostedti.*** The thrips are shiny black and are found easily in cowpea flowers. They have two larval instars, a pre pupa and a pupa stage. The nymphs and adults feed on flower buds and can completely suppress flower production.

**5. LEAF HOPPERS**

(a) ***Empoasca dolichi-*** Leafhoppers are greenish and are found feeding on the underside of the leaf. Life cycle takes about 20days. Characteristic damage symptoms are leaf cupping or curling and later the leaves dry and fall off.

**6. STORAGE INSECT PEST**

**(a) *Callosobruchus maculatus*** is a small beetle with dark markings on elytra. Adult lay eggs on the seeds surface. The larvae after hatching in about 6days enter the seeds and spend the rest of the life cycle inside. The adults have a short life span of 5 - 8days. The entire life cycle takes about 30days.