

Lecture No. 13. PESTS OF GINGELLY AND SUNFLOWER

GINGELLY

1. Leaf webber, Leaf roller, Sesame webworm, Til leaf roller, Simsim webworm, pod caterpillar, *Antigastra catalaunalis*, Pyraustidae, Lepidoptera

Symptom of damage: Top leaves rolled and webbed together and damaged in vegetative phase; flowers and young capsules bored at reproductive phase.

Nature of damage: Larvae start attack from 15th day of sowing. In 1st instar stage, acts as *leaf miner*, in later stage, comes out of the mine and acts as *webber* by webbing the top leaves or tip of shoot, by remaining within epidermis results in drying of webbed portion. When the flowers are formed, it bores into flowers and feeds on reproductive parts. When capsule formed, it acts as *capsule borer*. By suitably adjusting its feeding habit, it attacks throughout the crop period. Pest is active during rainy season.

Egg: Eggs are oblong, shining pale green, laid singly on the tender leaves or flowers at night.

Larva: Dirty white with dark prominent head. Grown up larva are greenish white in colour with black warts and fine hairs all over the body. Hibernates as caterpillar within pods.

Pupa: Pupates in silken cocoon under fallen leaves or in soil crevices. Pupa is slender, greenish brown in colour.

Adult: Forewings are reddish-yellow colour with zigzag indistinct reddish decorative markings on them; hindwings are pale yellow and rather transparent.

2. Gall fly, *Asphondylia sesami*, Cecidomyiidae, Diptera

Symptom of damage: Gall formation.

Nature of damage: Maggots feed on floral parts and cause malformation like galls (tumors) on the buds, which fail to develop.

Egg: Eggs laid singly on buds, flowers and capsules.

Maggot: White, found inside the flowers.

Pupa: Pupation occurs inside the galls.

Adult: Minute sized flies with bright coloured wings bearing superficial resemblance to mosquitoes.

3. Sphinx, Death's head moth, hawk moth, *Acherontia styx*, Sphingidae, Lepidoptera

Symptom of damage: Defoliation.

Nature of damage: Massive larva is voracious feeder on leaves defoliating the whole plant.

Egg: Large yellowish eggs are laid singly on leaves.

Larva: Stout, sturdy and greenish with dark green or yellow oblique lines on its sides also decorated with pleasant mixture of soft colours; measures 90-100 mm long and 12-15 mm broad and bears a curved caudal horn.

Pupa: Pupates in soil.

Adult: Large, robust, greyish brown insect, which is an active flier. Forewings have dark-brown and grey patterns with dark wavy markings and a prominent yellow spot