## Lecture No. 17. Mid-semester Examination

## Lecture No. 18. COTTON FOLIAR FEEDERS

## **DEFOLIATORS**

1. Leaf roller, Sylepta derogata, Pyraustidae, Lepidoptera

Symptom: Leaves rolled in the form of trumpets and fastened by silken threads, defoliation.

<u>Nature of damage</u>: Larva remain within the fold and eat away the leaves. A single larva can damage several leaves.

Egg: Round, yellowish green, laid singly on undersurface of the leaves.

Larva: Green, glistening with dark head and prothoracic shield.

<u>Pupa</u>: Naked, obtect, pupates within leaf roll / under fallen leaves / debris.

Adult: Medium sized, yellowish wings with brown wavy markings.

**2. Semiloopers** : Anomis flava, Xanthodes graellsi, Tarache nitidula:Noctuidae , Lepidoptera

Symptom of attack: Defoliation, leaves with midribs, presence of larva

Nature of damage: Larvae defoliates the plant.

Egg: Singly laid.

<u>Larva</u>: *A. flava*– Green with five white longitudinal lines and red prolegs; *X.graellsi* – Green with a pair of horse-shoe shaped black mark on each segment and black warts on the abdomen; *T.nitidula* – Dark brown caterpillar.

<u>Pupa</u>: *A. flava*-obtect, pupates within leaf folds; *X.graellsi* – pupates in soil.

Adult: A. flava- medium sized, brown moth; forewings reddish-brown provided with dark coloured zig-zag bands. Hindwings are light brown; X.graellsi - yellowish with a brown streak; T.nitidula - Stout and white moth with black spots.

**3. Ash weevil**, *Myllocerus* spp., Curculionidae, Coleoptera

Symptom of attack: Holes in the leaves, leaf margins notched, roots eaten up, plants wilt and they come off easily when pulled

Nature of damage: Grubs remain underground and feed on the root system. Adults they damage the above ground parts

Egg: White, laid in the rhizosphere.

Grub: White apodous.

Pupa: Exarate, pupates in soil.

Adult: Green / Brown / Grey with or without markings on the elytra.

**4. Cotton grasshopper**, *Cyrtacanthacris tatarica (=ranacea)*, Acrididae, Orthoptera <a href="Symptom of attack">Symptom of attack</a>: Defoliation.

Nature of damage: Nymph and adult defoliate the plant.

Nymph: Nymph with broad yellowish stripes on prothorax.

Adult: Pale brown, stout elongated grasshopper.