

5. Red cotton bug/cotton stainer, *Dysdercus cingulatus* Pyrrhocoridae, Hemiptera

Symptom of attack: Young bolls are affected, which turn dark brown and fail to burst, Lint stained red. Seeds shrivel.

Nature of damage: Nymphs and adults suck the sap from the plant and bolls, reduce the vigour of the plant, produce poor quality lint.

Egg: Ovoid, yellowish eggs are laid in loose masses in the soil and protected with soil/dry leaves.

Nymph: Reddish with white band on the abdomen.

Adult: Red and black with white stripes ventrally on the abdomen.

6. Dusky cotton bug, *Oxycarenus hyalinipennis*, Lygaeidae, Hemiptera

Symptom of attack: Presence of nymphs and adults on the bursted bolls, lint gets discoloured; seeds shrivel and fail to germinate.

Nature of damage: Nymphs and adults suck the sap from the bursted / open bolls.

Egg: Cigar shaped white eggs, laid in clusters within half opened bolls or on the bolls, flower or buds.

Adult: Small flat, dusky brown bugs with pointed head and hyaline wings.

7. Scales : Black scale : *Saissetia nigra* ,

Yellow scale: *Cerococcus hibisci*,

White scale: *Pulvinaria maxima* , Coccidae, Hemiptera

Symptom of attack: Presence of scales on the tender shoots, leaves, stem and bolls, stunting of the plants and bears only few bolls. Movement of ants seen. Sooty mould development also seen.

Nature of damage: Nymphs and adults remain in group and suck the sap from leaves and shoots.

Adult: *S.nigra* - full grown female scale is black in colour.

8. Mealy bug, *Ferrisia virgata* , Pseudococcidae, Hemiptera

Symptom of attack: Presence of mealybugs on tender shoots, leaves, stem and bolls. Yellowing of leaves initially and later the plants die. Leaves and bolls fall prematurely.

Nature of damage: Nymphs and adults remain in-group and suck the sap. Generally the damage is noticed towards the end and in places where ratooning is practiced.