



Centurion
UNIVERSITY

PESTS OF SUNFLOWER

LEAF EATING CATERPILLARS

Spodoptera litura, *Helicoverpa armigera*

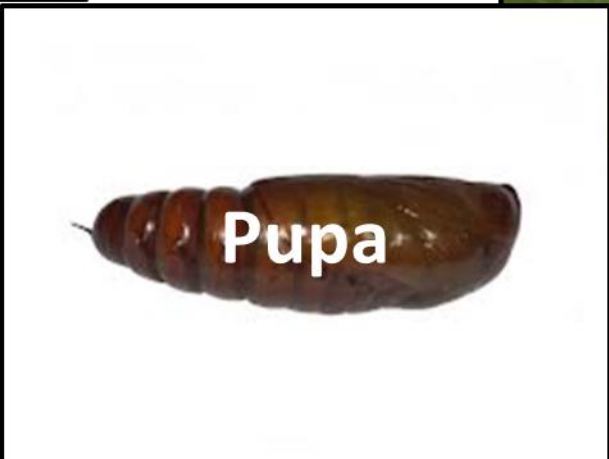
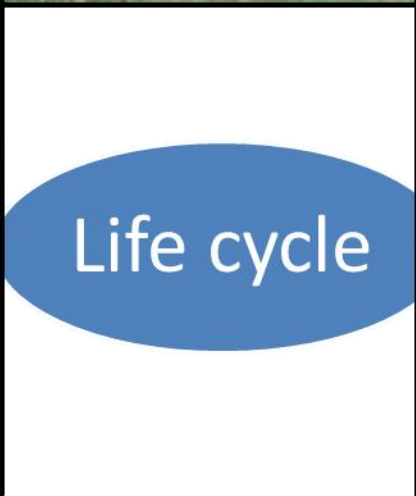
Noctuidae: Lepidopter

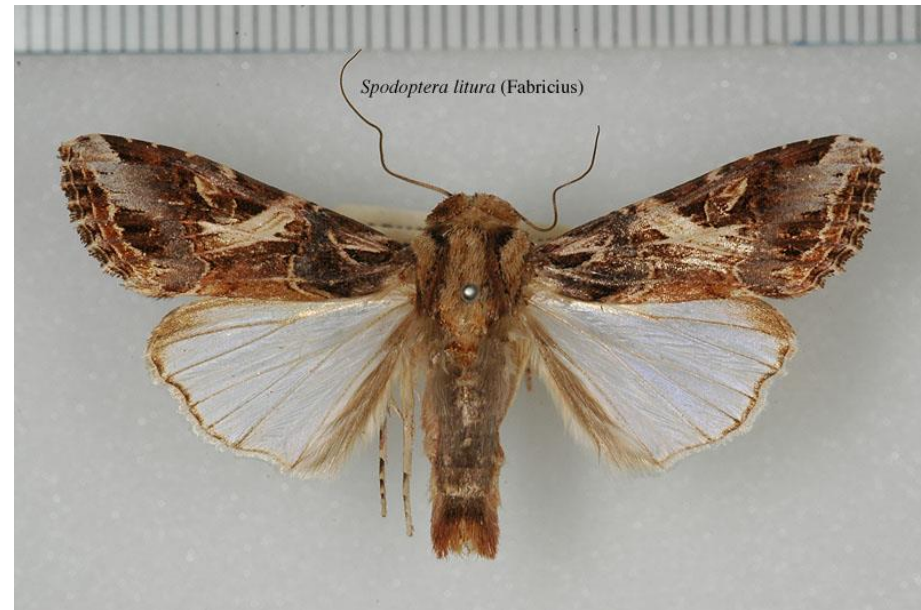
- They are polyphagous pests. Caterpillars eat leaves and soft portions of the stems.
- *H. armigera* feeds on foliage and tender flower heads and developing seeds. In severe cases there will be Plants without leaves.
- Their life histories, damage and management have been detailed under cotton pests.
- Dusting leaves and flower heads with methyl parathion 2D or spraying with quinalphos 2 ml/l or thiodicarb 1 g/l or acephate 1.5g/l or endosulfan 2 ml/l is effective.



Head borer damage



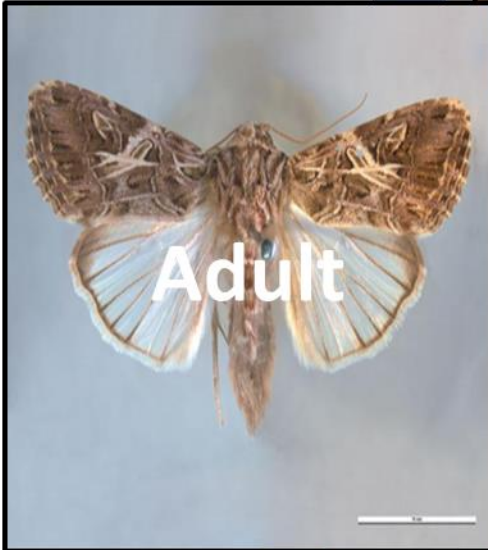




***S. litura* damage**



Egg



Adult

Life cycle



Larva



Pupa

LEAFHOPPER

Amrasca biguttula biguttula

Cicadellidae: Hemiptera

- Greenish yellow adults, pale greenish, translucent nymphs suck sap from undersurface of leaves injecting toxins which result in curling of leaves and ultimately hopper burn symptoms.
- Leaves dry up and drop down.
- Seed treatment with imidacloprid 5 g/kg seed or foliar sprays with monocrotophos 1.6 ml/l or dimethoate 2 ml/l or endosulfan 2 ml/l are recommended.



BIHAR HAIRY CATERPILLAR

Spilosoma obliqua

Arctiidae: Lepidoptera

APPEARANCE

- ✓ The adult is dull yellow with oblique line of black dots on hind wings. The dorsal side of the abdomen is red with dull yellow ventral side
- ✓ The full grown larva is darkened with yellowish brown abdomen having numerous pale white brown and black hairs and measures about 43 mm

LIFE HISTORY

- The larva defoliates the plants and move from one field to another.
- It pupates in soil



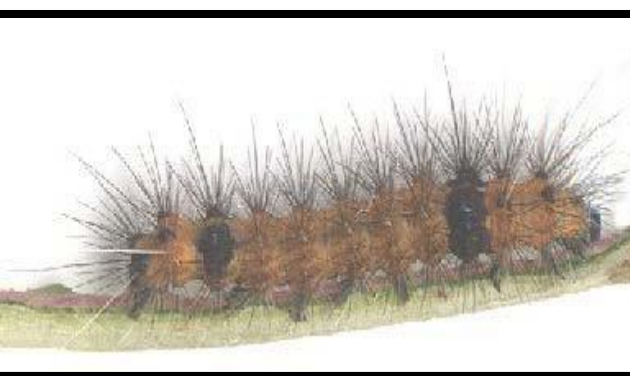
2nd instar



3rd instar



4th instar



5th instar



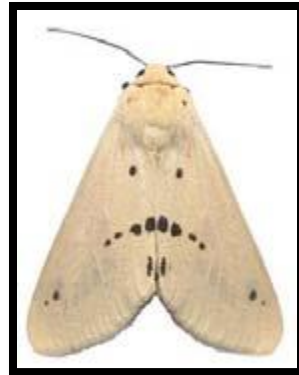
6th instar



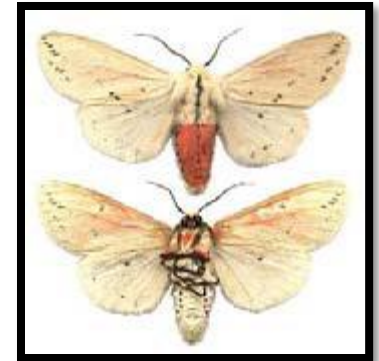
cocoon

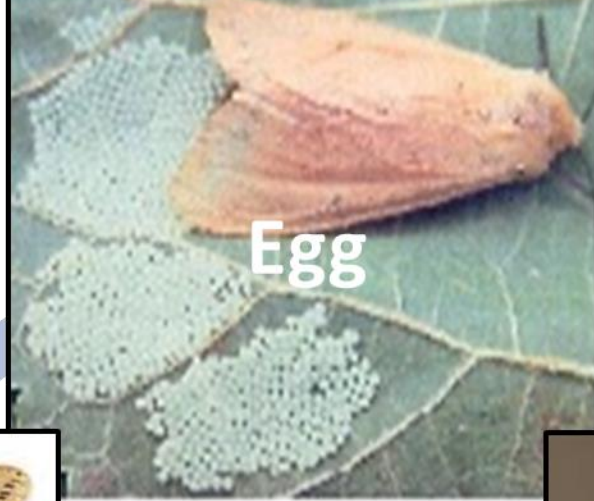


pupa

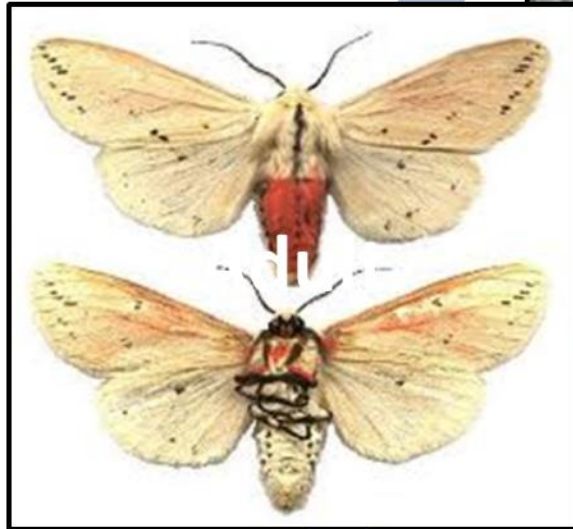


adult





Egg



Life cycle



Larva



Pupa



Larvae feed gregariously under surface of the leaves



Drying up of infected leaves

MANAGEMENT

- Collection and destruction of egg masses and gregarious larva, application of NSKE 5 % and foliar sprays particularly for grown up larva with endosulfan 2 ml/l or chlorpyriphos 2 ml/l or dichlorvos 1 ml/l are effective measures

THRIPS

Scirtothrips dorsalis *Frankliniella dampfii*

Thripidae: Thysanoptera

- *S. dorsalis* infests lower surface of leaves which curl as a consequence, while *F. dampfii* damages capitulum and floral parts.
- Seed treatment with imidacloprid 5 g/kg seed is a better option for conservation of natural enemies. Foliar sprays with monocrotophos 1.6 ml/l or imidacloprid 4 ml/10l two or three times are effective measures





THANK YOU