

INSECT PESTS OF VEGETABLES

ENT-202

Applied Entomology

CABBAGE BUTTERFLY

T.N. *Pieris brassicae*

Family: Pieridae

Order: Lepidoptera

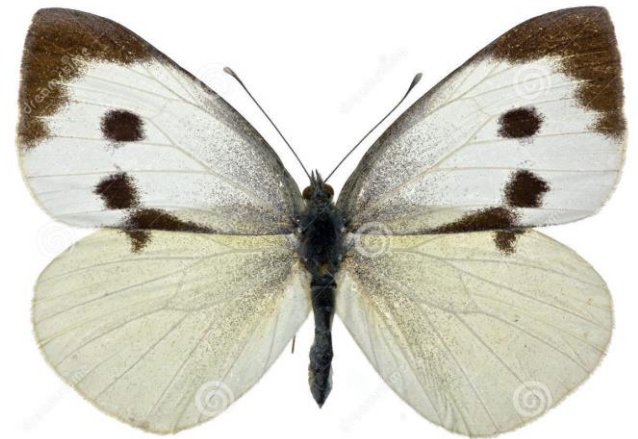
IDENTIFICATION

Adult

- Large body blackish
- Wings yellowish white with a black patch on apical angle of each forewing
- Female bears two black spots on the upper side of each forewing.

Larvae

Larvae are pale yellow or greenish yellow





**Female lay eggs in cluster
underside the leaves
Egg hatching = 2 weeks
200/female**



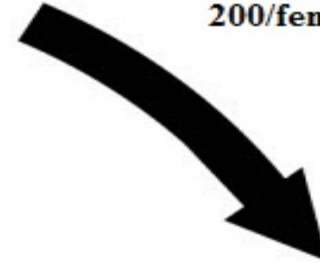
Larval Period = 3 weeks



**Pupal Period = 2 weeks
Dotted with black and yellow marking**



Adult longevity = 1-2 weeks



DAMAGE

- Larvae feed and damage the leaves by making the big holes in them
- Reduce the photosynthetic area of the plant



CONTROL

- Collection and destruction of egg clusters and larvae
- Catch adults by hand nets
- *Apantelese spp.* is a larval parasitoid of cabbage butterfly
- Insecticidal spray
- Lufenuron EC 200 ml/acre
- Spinosad SC 80 ml/acre

RED PUMPKIN BEETLE

T.N. *Aulacophora foveicollis*

Family: Chrysomelidae

Order: Coleoptera

IDENTIFICATION

Larvae

Larva yellow-white, head dark-brown



Adult

- Adult beetles are oblong
- Dorsal body surface is orange and the ventral surface is black
- Short white hairs are present on the body



300 eggs - oval yellow
Singly or 8-10 batches

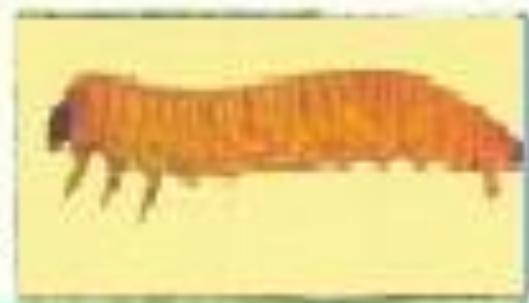


Hatching = 2
weeks

Grub period = 4
weeks

Adult = 2 months

Pupate in chamber in soil
Pupal period = 3 weeks



DAMAGE

- Beetles are very destructive to cucurbitaceous vegetables, particularly during March-April when the creepers are very young
- The grubs damage the plants by boring into the roots, leaves, underground stems and sometime in to the fruits touching the soil



CONTROL

- Deep ploughing to kill grubs in the soil
- Dusting
 - Ash
 - 5% pyrethrum
 - BHC 2.5%
- Insecticidal spray
 - Dimethoate 0.02%
 - Malathion 0.05%