

# 3. Mechanical control

- Use of mechanical devices or manual forces for destruction or exclusion of pests.
  - A. Mechanical destruction: Life stages are killed by manual or mechanical force
    - a) Mechanical force
      - i. Hand picking large insects such as caterpillars, grasshoppers, beetles etc.
      - ii. Beating: swatting house fly and mosquito
      - iii. Sieving and winnowing: Red flour beetles, bruchids
      - iv. Shaking the plants: Dislodge large insects like beetles
      - v. Crushing: Bed bugs and lice
      - vi. Combing: Delousing method for Head louse
      - vii. Brushing: Woolen fabrics for clothes moth, carper beetle.

# Mechanical control cont.

## b) Mechanical force

i. Tillage implements: soil borne insects

ii. Mechanical traps: rat traps of various shapes

## B. Mechanical exclusion-mechanical barriers prevent access of pests to hosts

i. Wrapping the fruits: covering with polythene bag

ii. Tin barrier: Timber building structures with tin band to prevent rat damage

iii. Netting: mosquitoes, vector control in greenhouse

iv. Banding: Banding with grease or polythene sheets e.g. mango mealybug

v. Trenching: Trapping maturing larvae of the African armyworm

vi. Sand barrier: Protecting stored grains with a layer of sand on the top

# Mechanical control

## **Advantages**

- Low equipment cost
- Ecologically safe
- Home labour utilization
- High technical skill not required in adopting

## **Disadvantages**

- Limited applications
- Rarely highly effective
- Labour intensive