

## The African armyworm (*Spodoptera exempta*)

### Biology

- The African armyworm is a moth, and the larvae (caterpillars) are important pests.
- Fully grown larvae are hairless black caterpillars with thin blue lines running down and middle of the back with yellow-green lines outside the blue lines.
- The caterpillars crowd together and move in the same direction searching for food.
- They attack plants for 10-14 days and then burrow in the ground to pupate
- The adult moves and feeds during the day and night.
- The pest has a short life cycle.



Fig. 1. AAW Larva stage (Infonet Biovision)

### Geographical Distribution

- It is a sporadic pest that occasional occurs in all rice growing areas

### Damage on rice crop

- Green, black or brown caterpillars at the growing tip of the rice plant causing severe defoliation in upland and paddy rice leaving only the plant stem.
- Damages to the upper and lower leaf tissues causing “windows”.
- A ragged appearance due to older caterpillars feeding on leaves starting at the margins and moving inwards,.
- This pest can cause up to 100 % yield loss.

### Management strategies

#### 1. Cultural Control

- Ensure the rice crop is established using recommended agricultural practices (*refer to sheets on rice crop establishment*).
- Monitor regularly the rice crop and check for caterpillars before they damage the crop. Initiate management when eggs are spotted on 2 to 5% of seedling or when 10 to 25% of plants show signs of feeding damage.

### Management Strategies

- Use pheromone traps to control FAW at densities of 2 traps per ha before populations are high.
- Weed regularly to remove alternative hosts.
- Do not move infested rice material to clean areas.
- Plant champion crops (sunflower and castor to attract *Spodoptera*) as trap crops.
- Hand pick and squash or drop caterpillar in hot water. Apply a pinch from a mixture of 50g ground hot pepper + 2 kg wood ash into plant funnel at knee-high stage.
- Put a handful of sand/sawdust or soil in the whorl of the attacked plants to kill the larvae.

#### 2. Biological control

- Spray Bt or botanicals such as neem and pyrethrum extracts at manufacturers recommendation.
- Release egg parasitoid *Trichogramma spp* at a rate of 50,000 to 100,000 eggs per acre

#### 3. Chemical control

- Spray using Lufenuron 50g/l (Match 50ECat rates of 25ml/20l), Gamma Cyhalothrin 60g/l (vantex 60CS at 3.5ml/20l), Alpha-cypermethrin (Bestox at 10ml/20l of water)
- Spray when caterpillars are small. Once mature (3 to 3.5 cm long) they may have caused serious damage.