

## **Occurrence of invasive fall armyworm, *Spodoptera frugiperda* (J.E. Smith) (Lepidoptera: Noctuidae), on maize and other fodder crops**

The fall armyworm (FAW) *Spodoptera frugiperda* (J.E. Smith) (Lepidoptera: Noctuidae) is a highly polyphagous, migratory pest native to the tropical and subtropical region of America. The FAW has a very wide host range and recorded on more than 80 plant species but clearly prefers grasses over other plants. The most frequently damaged plants include field maize, sorghum, rice, millet, soybean, sugarcane, cabbage, peanut, cotton, alfalfa, potato, onion, wheat, tomato, turf, sudan grass and fodder crops (Prasanna et al 2018).

### **Damage symptoms**

- Young larvae damaged fodder maize plants showed characteristic pin holes or shot holes symptoms on the leaves.
- Late instar larvae were mostly confined to the deep whorls and caused a distinctive symptom of ragged appearance.
- A moist sawdust-like faecal matter in the form of lumps was accumulated within the whorl.



**Shot holes symptoms**



**Matured larvae feeding on central Whorl of Fodder maize**

**Biology and identification**

- The mature larva had a white inverted “Y” line on the head with distinct black spots on the body.
- The four black spots on the 8<sup>th</sup> abdominal segment were arranged in a square pattern and on 9<sup>th</sup> segment arranged in a trapezoidal pattern.



Fig 4. Life cycle of FAW. A) Egg mass B) 1<sup>st</sup> instar larva C) 4<sup>th</sup> instar larva D) Pupae E) Adult- Male F) Adult- Female



**Mature larva**

### **Management**

- It is important to monitor the crop frequently after germination for presence of the pest and or signs/damage symptoms. Early detection of the pest allows quick and timely response which will help minimise damages to your maize crop and reduce harvest losses.
- Collection and destruction of visible larval stages from infested plants wherever possible
- Early application of plant products like azadirachtin or neem oil to prevent oviposition and larval feeding
- Use eco-friendly botanicals like neem formulations 4ml/litre to reduce infestation and encourage natural enemies
- Use emamectin benzoate @ 0.04gm/lit spray targeted to whorls under situations of severe infestations

### **Further details contact**

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