Spodoptera sp Outbreak

Maize Crops
By Stewart Wilson



"Window Paning" caused by small caterpillars on early growth stage (epidermis of leaf remains)

Caused by 1st or 2nd instar Spodoptera larvae



Window Paning, early maize



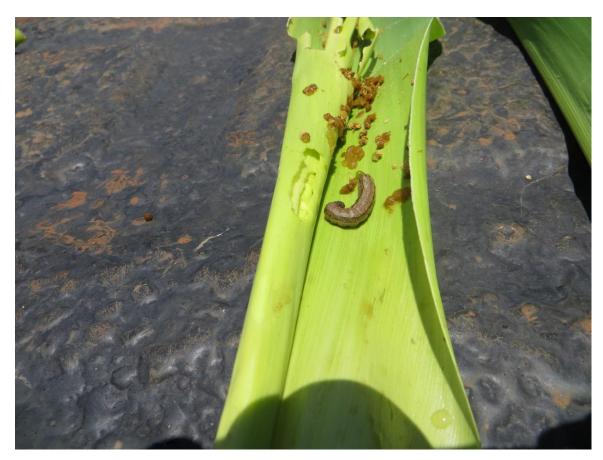
Early Instar *Spodoptera* sp larvae, showing size, from Maize at 4 LS



Leaf Damage on emerging leaves



Damage to youngest Emerging Leaf damage



Spodoptera sp larva from inner-most leaf, feeding damage to unfurled leaf



Spodoptera sp larvae feeding in centre of leaf whorl, leaves unfurled and separated out



Spodoptera sp damage to leaf whorl



Spodoptera sp damage to early leaves



Spodoptera sp intensive window paning



Spodoptera sp damage to leaf whorl, feeding on successive leaf layers



Spodoptera sp larva



Spodoptera sp green and brown forms

Spodoptera sp Outbreak

- West Africa: recent outbreak of Spodoptera frugiperda (Fall Army Worm in USA),
 - could be same insect.
- Very damaging to maize,
 - feeds during the day
 - mandibles adapted to tough maize leaves.

Spodoptera sp Control

- Must start early, around 4 leaf stage
- Scout for Window Paning, Shotholes
- Spray at 3 5 % above symptoms
 - Repeat when new Worms / Shotholes appear
- There is little experience of what chemicals work, but alternate:
 - Synthetic Pyrethroids (Decis, Karate, Fortis) with
 - Carbamates (eg Carbaryl, Carbosulfan) and OPs (eg, Acephate, Malathion, Methomyl)

Spodoptera sp Control

- Worms can feed on the cobs.
- Would infest from the stem to cob, whereas
 Heliothis would infest from the silks, so there
 is likely to be confusion as both worms look
 similar.