

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

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

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Leaf Damage on emerging leaves

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Damage to youngest Emerging Leaf damage

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

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

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***Spodoptera* sp damage to leaf whorl**

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***Spodoptera* sp damage to early leaves**

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***Spodoptera* sp intensive window paning**

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

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***Spodoptera* sp larva**

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Spodoptera sp green and brown forms

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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.