

Reviewing the taxonomy of major borer species

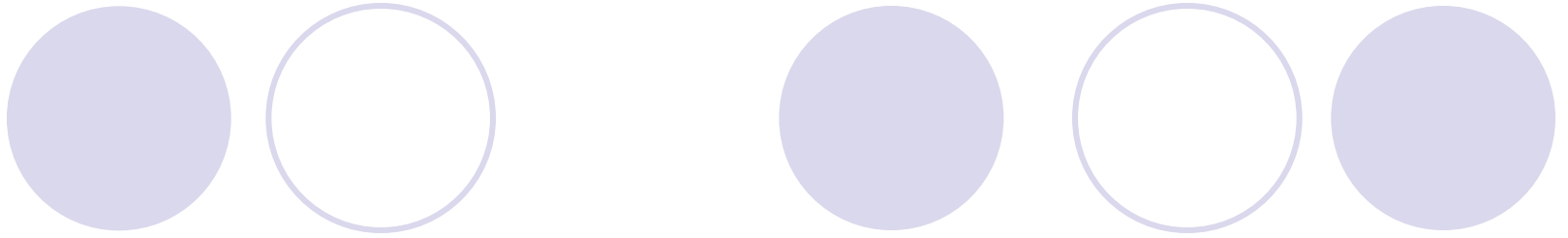
African Cereal Stem Borers

Economic Importance,
Taxonomy, Natural Enemies
and Control

Edited by
A. Polaszek

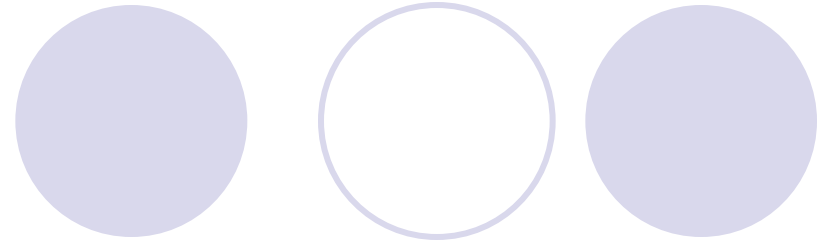
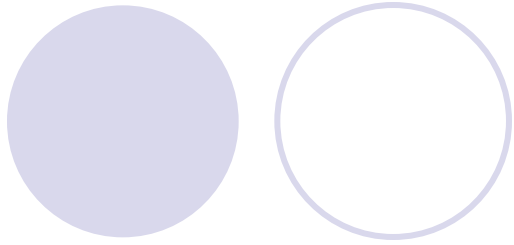


CAB INTERNATIONAL



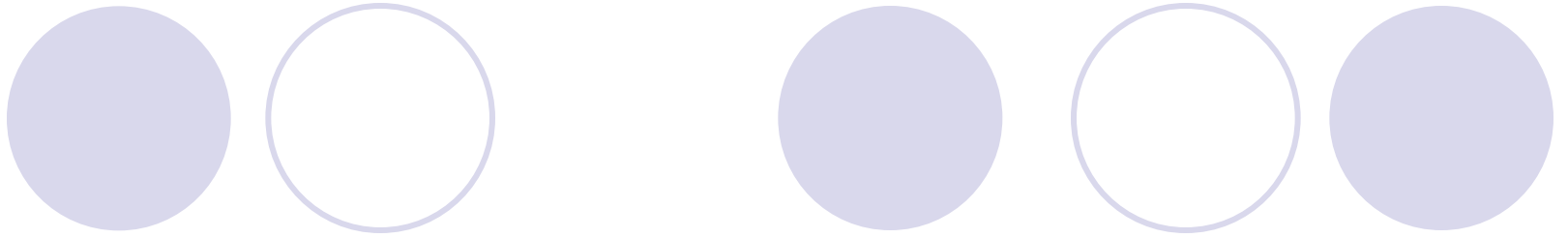
Biosecurity collaboration

- Moth borer taxonomy and classification
 - Collaborative funding
 - Training for young scholars
 - DNA phylogeny
 - Conventional taxonomy
 - Diagnostics and remote microscopy
 - Links with quarantine organizations



Ambiguous taxa

- *Chilo sacchariphagus* (Bojer)
- *Chilo infuscatellus* Snellen
- *Chilo polychrysus* Meyr.
- *Chilo suppressalis*



Ambiguous taxa..

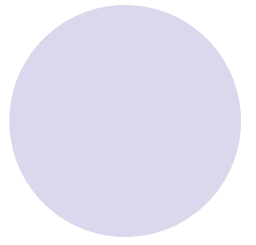
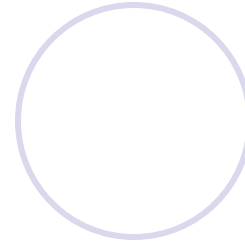
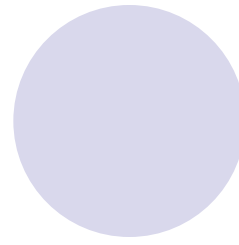
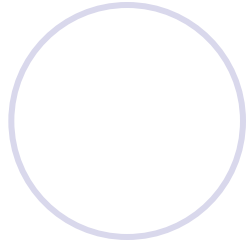
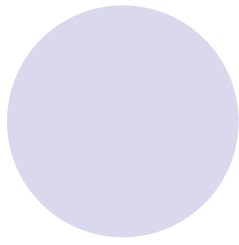
- *Sesamia inferens* Walker
- *Sesamia cretica cretica* Lederer
- *Sesamia uniformis* (Dudgeon)
- *Sesamia arfaki* Bethune -Baker

Sesamia inferens.. one species??

Host Plants

Andropogon nardus, *Andropogon schaeenathus* (lemon grass), *Avena sativa* (oats), *Beckmannia syzigachne* (American sloughgrass), *Calamagrostis epigejos*, *Coelorachis glandulosa*, *Cyperus japonicus*, *Cyperus rotundus* (nutgrass), *Echinochloa crus-galli*, *Echinochloa frumentacea* (barnyard millet), *Echinochloa stagnina*, *Echinochloa villosa*, *Elaeis guineensis* (oil palm), *Eleusine coracana* (finger millet), *Eleusine* spp., *Eragrostis major*, *Erianthus arundinaceus*, *Eriochloa annulata*, *Eriochloa villosa*, *Hordeum vulgare* (barley), *Hymenache* sp., *Ischaemum rugosum*, *Miscanthus sacchariflorus* (reed), *Miscanthus sinensis* (eulalia), *Musa paradisiaca* (banana), *Oryza latifolia*, *Oryza sativa* (rice), *Panicum maximum* (Guinea grass), *Paspalum scrobiculatum* (scrobic), *Paspalum thunbergii*, *Phragmites karka* (narkat, tropical reed) *Phragmites communis* (*P. australis*), *Rottboellia compressa* (jove grass), *Rumex crispus* (curled dock), *Saccharum spontaneum*, *Saccharum* spp. hybrids (sugarcane), *Sacciolepis* sp., *Scirpus affinis* (sedge), *Scirpus grossus* (sedge), *Setaria italica* (foxtail millet), *Setaria rubiginosa*, *Sorghum halpense* (Johnson grass), *Sorghum sudanensis* (Sudan grass), *Teosinte* sp., *Triticum aestivum* L. (wheat), *Zea mays* (maize), other wild and cultivated grasses (Azuma & Oshiro 1969; Rao & Nagaraja 1969; Kalshoven 1981; Hasan & Cervancia 1986; Shah & Garg 1986; Garg 1988; David *et al.* 1991; Jacob 1995, Li 1993).

Jacob & Kochu (1995) recorded *S. inferens* damaging 8 to 10 month old seedlings of oil palm in Karnataka, India, which is the first report on oil palms in India.

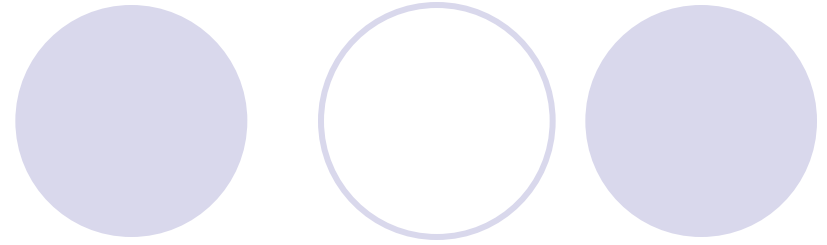


Cont...

Sesamia genus in Asia..

- *Sesamia cretica cretica* Lederer
- *Sesamia uniformis* (Dudgeon) Rao & Nagaraja 1969.
- *Sesamia arfaki* (??) (Kuniata 1994)

Work to propose....



- Under the umbrella of ISSCT, we may be able to start collaborative work.. But..
 - What NEEDS to be done?
 - What CAN be done?
 - How can it be done?