

Expectations of Stem borer,  
*Eulophonotus mrymeleon*  
Fldr. (Lepidoptera: Cossidae),  
pheromone.

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# Occurrence

- Cocoa growing areas in West Africa
- Minor pest until late 1990s (Padi and Acheampong, 2001)
- Occurs sporadically-heavy infestation
- Severe damage
- Picture: courtesy Dr. Lowor



# Damage

- Larva bores into stems and branches
- Entire life (about 150 days) in stem
- Causes premature death of braches and young trees

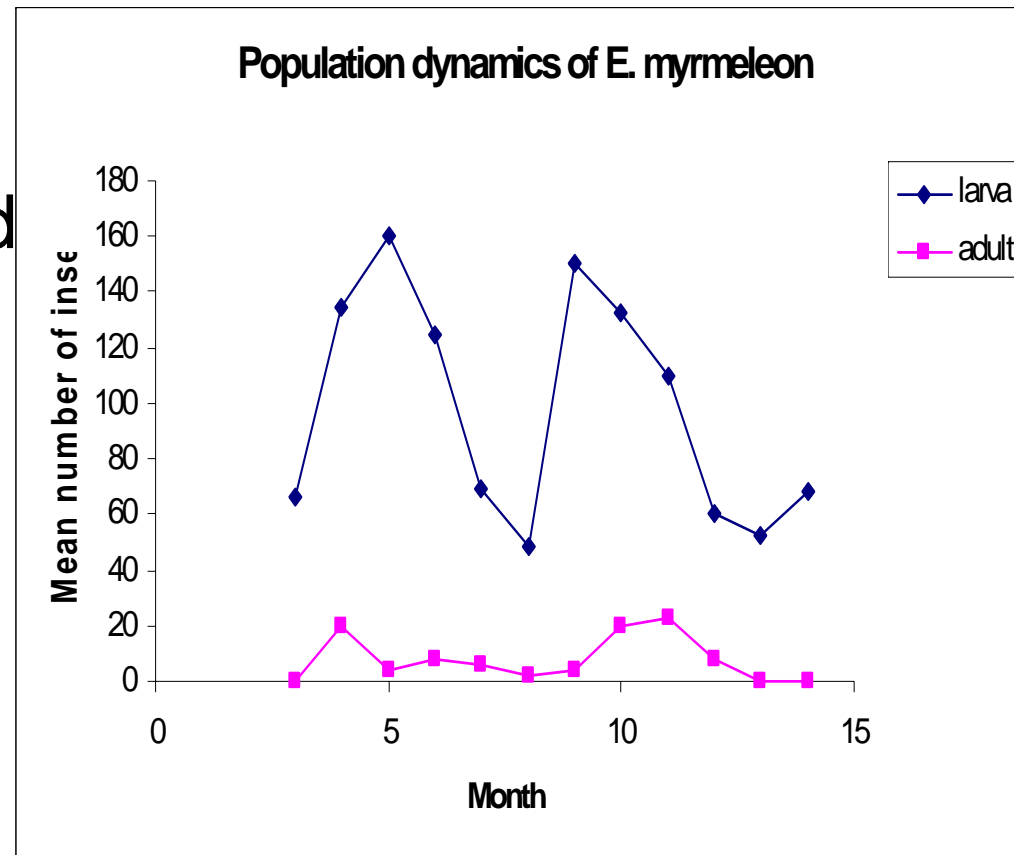


# Biology

- Females mate immediately after emergence
- However, eggs are laid whether female mates or not
- Mated females lay 1628 eggs and unmated, 1359 on the average
- Larvae dispersed by wind
- 2-3% survival to adulthood
- Life cycle about 170 days (Adu-Acheampong *et al.*, 2004)

# Incidence

- Bimodal population
- Larval peaks-May and September
- Adult-April and October/November



# Distribution

- Aggregated

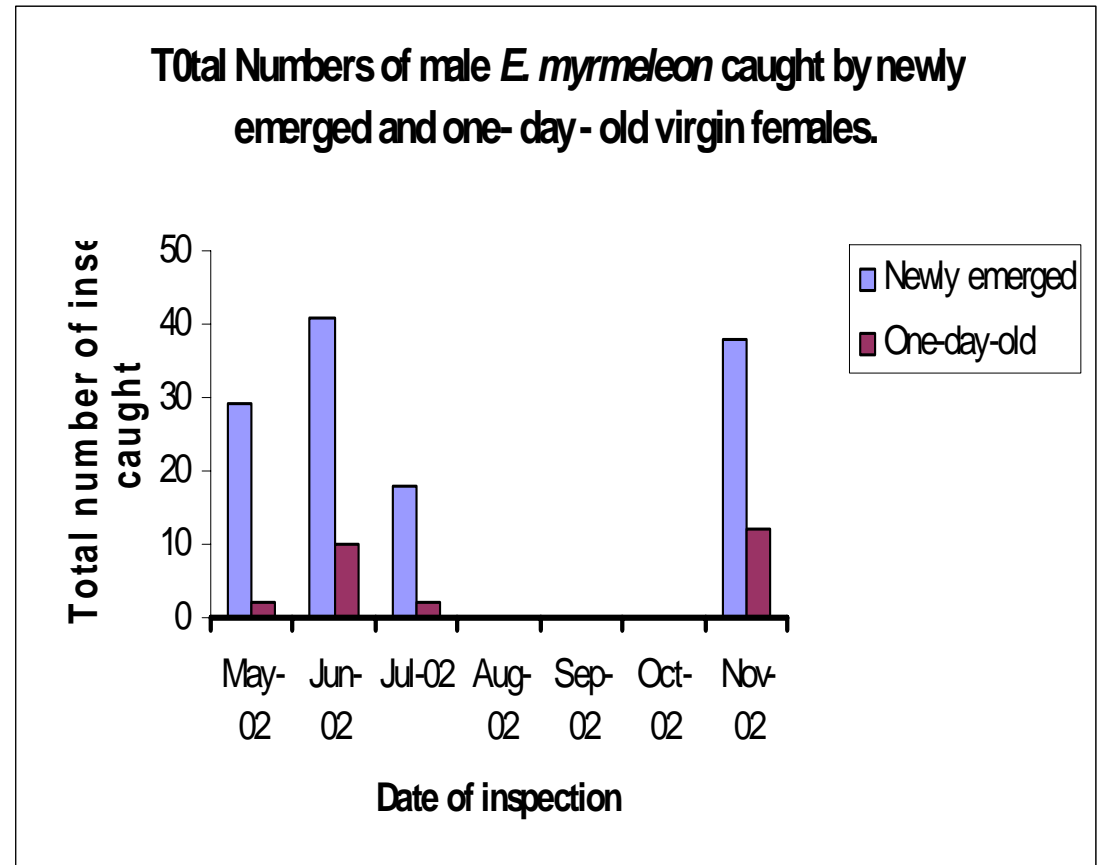
# Management

- Gastoxin  
(Aluminum phosphide)
- Wood plugging



# Sex pheromone mediate mating

- Field observation
- Trapping





# Expectations

- Very attractive sex pheromone, based on the crowding of males around virgin females to mate.
- Effective control
  - low pop. numbers
  - short and possibly fewer trapping ( adult life- 1-4 days)
- Pheromones of related species have been identified ,and so there is good chance of identifying those of *E. myrmeleon*
- Management by sex pheromone through mass trapping (lure and kill) and/or mating disruption

# Conclusion

- Management of *E. myrmeleon* with the moth sex pheromone appears possible, and it is worth investigating.