

Insects Associated with Coffee Berries in Ghana

B. PADI

Cocoa Research Institute of Ghana, P.O. Box 8, Tafo-Akim, Ghana

SUMMARY

In a study aimed at identifying the natural enemies of the coffee berry borer, *Hypothenemus hampei* (Ferrari), coffee berries were collected from several localities in Ghana within the period January 1997-February 1998. The berries were thoroughly inspected for insects before being kept in lampshades covered with fine nylon mesh for the emergence of insects. Insects recorded were of the orders *Hymenoptera* (families *Braconidae*, *Bethylidae*, *Pteromalidae* and *Eupelmidae*); *Diptera* (families *Cecidomyiidae*, *Ceratopogonidae*, *Chironomidae*, *Drosophilidae*, *Muscidae*, *Phoridae*, *Sciaridae*, *Tephritidae*); *Coleoptera* (families *Anthribidae*, *Corylophidae*, *Dermestidae*, *Laemophloeidae*) and *Lepidoptera* (families *Lycaenidae*, *Gelechiidae*). Among these, the berry borer *Araecerus coffeae* (Coleoptera: Anthribidae) and a suspect parasitoid *Opius* sp. (Braconidae: subfamily Opiinae) are new records to Ghana. Other insects included an unidentified berry feeder of the family Gelechiidae (*Lepidoptera*), *Leptophloeus* sp. (Coleoptera: Laemophloeidae) and an unidentified *Diptera* both of which might be predatory. Other insects associated with the berries were *Antherigona orientalis* (Diptera: Muscidae), *Attagenus* sp. (Coleoptera: Dermestidae) and unidentified Sciaridae which were probably mere scavengers.

The majority of insects, *H. hampei* and the *Drosophilidae* being the exception, occurred in very low numbers. Thus, the proportional representation of insects recorded during the study period were, *H. hampei* (59.1%), *Drosophilidae* (32.5%), *Gelechiidae* (3.1%), *Virachola lorisona* (2.1%), *Araecerus coffeae* (0.3%), *Thriphothrum coffeae* (0.3%), *Antherigona orientalis* (0.2%), *Attagenus* sp. (0.4%), *Opius* sp. (0.3%), *Leptophloeus* sp. (0.2%) and 0.5% for the remaining insects. The study is being continued to confirm the roles of identified insects, particularly the suspect parasitoids and predators, with the aim of manipulating them for biological control of *H. hampei*.