

Laboratory Evaluation of the Relative Preference by *Epicampoptera ivoirensis* Watson (Lepidoptera: Drepanidae) on Five Coffee Types

B. PADI

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

SUMMARY

An insectary host-choice experiment involving five coffee types viz. a local *Coffea canephora*, *Coffea arabica*, and three promising high- yielding introduced *C. canephora*, code-named A129, B170 and E152, was conducted to determine the relative preference by the coffee defoliating caterpillars of *Epicampoptera ivoirensis* Watson. The experiment was replicated three times under two treatments in which the experimental insects were raised either on local *C. canephora* or on *C. arabica* seedling. In each replicate experiment, the subsequent distribution of 70 caterpillars from the *C. canephora* or *C. arabica* seedling placed at the centre of a metal tray onto seedling of the test coffee types packed closely around and touching the central seedling, was observed daily. The numbers of caterpillars and their feeding behaviour on each coffee type were recorded.

E. ivoirensis showed a clear preference for the local *C. canephora* followed by *C. arabica* and the introduced clones A129, E152 and B170 in descending order of preference. Feeding was also most intensive on the local *C. canephora*. Information from this and similar future experiments on promising coffee types could be incorporated into coffee breeding and selection programmes.