

Implementation of Complete Management Practices in Managing the Cocoa Pod Borer

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Abstract : Cocoa *Theobroma cacao* (Linnaeus) (Malvales: Sterculiaceae) is subjected to be infested by various numbers of insect pests, and *Conopomorpha cramerella* Snellen (Lepidoptera: Gracillariidae) is the most serious pest of cocoa in Malaysia. The pest was indigenous to the South East Asia. Several control measures have been implemented and the chemicals have been a major approach if not unilateral, in the management of CPB. Despite extensive use of insecticides, CPB continues to cause an unacceptable level of damage; thus, the combination of several control approaches should be sought. The study was commenced for 12 months at three blocks; Block 18C with complete management practices which include insecticide application, pruning, fertilization and frequent harvesting, Block 17C was treated with frequent harvesting at intervals of 7-8 days, and Block 19C was served as control block. The results showed that the mean numbers of CPB eggs were recorded higher in Block 17C compared with Block 18C in all sampling occasions. Block 18C shows the lowest mean number of CPB eggs in both sampling plots, outside and core plots and it was found significantly different ($p \leq 0.05$) compared to the other blocks. The mean number of CPB eggs was fluctuated throughout sampling occasions, the lowest mean number of eggs was recorded in January (17C) and November (18C), while the highest was recorded in April (17C) and December 2012 (18C). Frequent spraying with insecticides at the adjacent block (18C) helps in reducing CPB eggs in the control block (Block 19C), although there was no spraying was implemented Block 19C. In summary, the combination of complete management practices at Block 18C seems to have some effect on the CPB population at Blocks 17 and 19C because all blocks are adjacent to each other.

Keywords : cocoa, *theobroma cacao*, cocoa pod borer, *conopomorpha cramerella*

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