D75 A PRELIMINARY STUDY ON THE PHEROMONES OF *HYBLAEA PUERA* AND *HAPALIA MACHAERALIS:* THE TWO MAJOR PESTS ON TEAK *(TECTONA GRANDIS)*

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A preliminary study was undertaken to investigate the presence and the nature of pheromones present in Hyblaea puera and Hapalia machaeralis, the defoliator and the skeletoniser of teak, respectively. A modified olfactometer[1] was used to determine attractivity of males/females towards a variety of baits. Virgin female equivalents (crushed pheromone glands) of varius age groups (freshly emerged, 1 day, 2 day, 3 day), mated female equivalents and live males were used as baits. Sets of 7 to 10 experiments were carried out with 5 to 9 insects per experiment., and the percentage mean of insects selecting the baited and non-baited arms were compared.

In the case of Hyblaea puera, males selecting the baited arm was significantly different ($P < 0.05$, two tailed) from those selecting the non-baited arm, when the baits are freshly emerged, 1 day and 2 day old virgin female equivalents. In contrast, males of Hapalia machaeralis selecting the baited arm was significantly different only when 1 day and 2 day virgin female equivalents were used. These findings indicated the presence of a female produced attracant in both pests and that the virgin female of Hyblaea puera produced the attractant for 2 days since emergence while that of Hapalia machaeralis remained attractive only during 1st and 2nd days.

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Reference

1. Wayne A. Hershberger and Maurice P. Smith, (1967) Animal Behav. 15 259