

**THE USE OF INSECT SEX PHEROMONES IN PEST SURVEILLANCE AND CONTROL,
WITH PARTICULAR REFERENCE TO THE TEA TORTRIX, *HOMONA COFFEARIA***

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Caged virgin female moths of the tea tortrix, *Homona coffearia*, have been found to serve as an effective bait to attract large numbers of male moths. Such baits have proved to be useful to monitor moth activity in tea fields (Sivapalan & Vitarana, 1975). The sex pheromone emitted from female moths has now been identified and has also been successfully synthesized, impregnated on small polyethylene caps and used to monitor moth activity in tea fields (Kochansky *et al.*, 1978). By correlating the numbers of male moths trapped in pheromone baits with the subsequent incidence of caterpillars in the field, it has now become possible to forecast an economic damage in tea fields, on the basis of the number of trapped male moths (exceeding 200 males per trap).

Experiments are presently under way to uniformly distribute pheromone baits in capillary fibres, to cause confusion in mating signals and to prevent successful matings. A direct control of the pest is also thus possible.

References :

1. Sivapalan, P. & Vitarana, S. I. (1975). Assessments of sex pheromone activity in virgin female moths of the tea tortrix (*Homona coffearia*, Lepidoptera: Tortricidae) and its utilization in monitoring moth populations in tea fields. *Tea Quart.* 45: 24-28.
2. Kochansky, J. P., Roelofs, W. L. & Sivapalan, P. (1978). Sex pheromone of the tea tortrix moth (*Homona coffearia* Nietner). *J. Chem. Ecol.* 4: 623-631.