

B-39 Control of the red palm weevil (*Rhynchophorus ferrugineus*) population using a pheromone baited trap

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Efficacy of Ferrugineol, the synthetic analogue of the aggregation pheromone (4-methyl 1-5-nonanol) was tested as lure for trapping of red palm weevil, *Rhynchophorus ferrugineus* (Coleoptera: Curculionidae) a major pest of coconut. Different types of traps baited with ferrugineol were tested to find a low cost, efficient trap to replace the currently recommended coconut petiole baited metal trap.

Response of weevils to ferrugineol was compared with the response to naturally emitted aggregation pheromone.

Significantly high number of weevils in both sexes were attracted to ferrugineol and its activity remained constant for longer periods (150 days) in the field. Ferrugineol was equally effective as the naturally emitted aggregation pheromone to attract weevils thus keeping the weevil population under control. It was apparent that the ferrugineol is a potential attractant which can be effectively used in the field to attract the weevils.

A bucket trap filled with soap water, baited with ferrugineol caught the highest number of weevils than the other traps tested. It caught an average of 3 - 5 weevils/trap/week. This simply designed bucket trap could be recommended for use in coconut plantations to control the weevil population. A funnel fixed bucket trap baited with ferrugineol was another type of trap that could be recommended. This trap caught an average of 2-3 weevils/trap/week. The other two types of traps which were made with polyethylene and metal, caught a significantly less number of weevils. The number of weevils caught in the polyethylene trap and the metal trap was 0-2 weevils/trap/week.