Appl. Ent. Phytopath.
Vol. 75, No. 2, March 2008

Investigation on the possibility of co-mass trapping of the populations of red palm weevil, *Rhynchophorus ferrugineus* and date palm fruit stalk borer, *Oryctes elegans* using pheromone traps

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ABSTRACT

Red palm weevil (RPW), *Rhynchophorus ferrugineus* is one of the most important pests of different palms in Asia, North Africa and Europe. At present, it is an internal quarantine pest in Saravan region (Sistan & Balouchistan province, Iran). Also date palm fruit stalk borer (DPFSB), *Oryctes elegans* is one of important pests of palm in Iran and Asia.

Several experiments on the possibility of mass trapping of two beetles, RPW and DPFSB with their pheromone traps, have been carried out in infested date palm groves during 2004-2005 in Saravan region. The results showed that the traps baited with separate dispensers of aggregation pheromone of two beetles in comparison with traps baited with pheromone mix (50:50 ratio) in one dispenser significantly attracted more *O. elegans.* But all bait types were equally attractive for *R. ferrugineus*. Also there was not any significant difference between the means of *O. elegans* catched by traps placed in different heights (ground surface, 1.5 and 4 m heights). The traps placed on the ground surface significantly attracted more *R. ferrugineus* in comparison with traps placed about 1.5 and 4 m above the ground surface. The effect of date palm core aging on the catching of two beetles was similar. Captures of traps that the date palm core replaced every week, were significantly greater than those with baits replaced every 2 or 3 weeks. So the number of captured insects decreases with time. These results indicated that pheromone traps with separate dispensers of

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pheromone of *R. ferrugineus* and *O. elegans* to place on the ground can be used for mass trapping of these two beetles.

Key words: *Rhynchophorus ferrugineus*, *Oryctes elegans*, Aggregation pheromone, Dispenser

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