Mass Pheromone Trapping on Red Palm Weevil, Rhynchophorus ferrugineus (Coleoptera: Curculionidae) in Oil Palm Plantations of Terengganu

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Abstract : Malaysia houses a broad range of palm trees species and some of these palm trees are very crucial for the country's social and economic development, especially the oil palm trees. However, the destructive pest of the various palms species, Rhynchophorus ferrugineus (Coleoptera: Curculionidae) or known as Red Palm Weevil (RPW) was first detected in Terengganu in 2007. Recently, the pattern of infestation has move from coastal lines toward inland areas. After the coconut plantations, it is presumed that the RPW will be a serious threat to the oil palm plantations in Malaysia. Thus, this study was carried out to detect the presence and distribution of Red Palm Weevil (RPW) in selected oil palm plantations of Terengganu. A total of 42 traps were installed in the three oil palm plantations in Terengganu and were inspected every week for two months. Oil palm plantation A collected significantly higher adults RPW compared to the other locations. Generally, females of RPW were significantly higher than male individuals. Females were collected more as the synthetic aggregation pheromone used, ferrugineol was synthesized from the male aggregation pheromone of adult RPW. Oil palm plantation A collected the highest number of RPW might be due to the abundance of soft part in the host plant as the oil palm trees age ranged between 6 to 10 years old. As a conclusion, RPW presence was detected in some oil palm plantations of Terengganu and immediate action is crucially needed before it is too late.

Keywords : red palm weevil, pest, oil palm, pheromone

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