

UNIVERSITI TEKNOLOGI MARA

**INSECT PEST COMPOSITION IN THE
NON –TREATED MATURED
OIL PALM PLANTATION**

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Final Year Project report submitted in partial fulfillment of the
requirements for the Degree of
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CANDIDATE'S DECLARATION

I declare that the work in this Final Year Project was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This Final Year Project report has not been submitted to any other academic institution or non academic institution for any other degree or qualification.

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ABSTRACT

INSECT PEST COMPOSITION IN THE NON- TREATED MATURED OIL PALM PLANTATION

The growth of oil palm can be affected by the infestation of insect pests. So, this research need to be conducted to assess insect pest composition in the non-treated oil palm plantation in order to help the entomologist and local farmers to identify the insect pests existing in this plantation and the interaction among insect pests. This study was conducted for eight weeks at oil palm plantation in Universiti Teknologi MARA, Campus of Jasin, Malacca. Trap used in this study were yellow pan traps which been placed randomly in the oil palm area. A total of 1479 individual insect pests were successfully collected comprising 14 families. Moreover, Cicadellidae was recorded as the most abundant family with 845 individuals followed by the Aphrophoridae, Ricaniidae, Gryllidae, Acrididae, Tetrigidae, Chrysomelidae, Tettigoniidae, Blattellidae, Membracidae, Drosophilidae, Carabidae, Reduviidae and Dictyopharidae. Based on Kruskal-Wallis Test, only Cicadellidae has significant difference throughout sampling date ($p < 0.05$). Based on Pearson's correlation, Aphrophoridae have positive relationship ($p < 0.05$) with families of Ricaniidae, Cicadellidae and Membracidae respectively. Besides that, family of Tettigoniidae has positive relationship with Membracidae, Gryllidae and Tetrigidae respectively. Overall, this study found various insect pests existing in the oil palm plantation and there are interactions among insect pests.

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