

UNIVERSITI TEKNOLOGI MARA

A STUDY ON THE INSECT PESTS INTERACTION IN OIL PALM PLANTATION

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DECLARATION

This final year project is a partial fulfillment of the requirement for a degree of Bachelor of Science (Hons.) Technology and Plantation Management, Faculty of Plantation and Agrotechnology, UniversitiTeknologi MARA.

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ABSTRACT

A STUDY ON THE INSECT PESTS INTERACTION IN OIL PALM PLANTATION

A study was conducted on the insect pests interaction in oil palm plantation at UiTM Melaka, Jasin campus. The objective of this study is determined the composition of the insect pests and relationship with the abiotic factor such rainfall and temperature. The malaise traps and yellow pan traps was used to collect the insects. The field experiment has design and layout in Completely Randomized Design with 2 replications for each trap. The data of number of insect, species of insect and the relative humidity was recorded weekly. The total study was conducted for 2 months. A total of 1762 insect from 28 families were recorded. The Cicadellidae and Cixiidae were the most dominants family at this composition with 708 and 429 individually respectively. Moreover, the Bruchidae, Coreida, Lygaeidae and Acrididae have the relationship with the rainfall and only one family have relationship with the temperature which is Tiphiidae. This study also found interaction of insect pests analysis were showed only 25% of family was influenced with the environment factor; rainfall and temperature. Another 75% of insect family are not considered.