

**UNIVERSITI TEKNOLOGI MARA**

**DIVERSITY OF INSECT PESTS IN SEGAMA'S  
OIL PALM NURSERY**

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Final year project report submitted in a partial fulfilment of the  
requirements for degree of  
**Bachelor of Science (Hons.) Plantation Technology and  
Management**

**Faculty of Plantation and Agrotechnology**

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## APPROVAL SHEET

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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. The final year project has not been submitted to any other academic institution or non academic institution for any other degree or qualification.

In the event that my Final Year Project is found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my bachelor degree and agree to be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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## ABSTRACT

### DIVERSITY OF INSECT PESTS IN SEGAMA'S OIL PALM NURSERY

It is an important to provide the vigorous and the healthy plant material during nursery stage as initial step to get high profitability and to obtain high yield in oil palm plantation. However, like the others crop, oil palm industry also faced pest and disease attack. Thus, this study was carried out to indicate biodiversity of insect pests and to assess abundance of insect pests in oil palm nursery. This study was conducted in oil palm nursery in Segama Estate of Tamaco Plantation Lahad Datu, Sabah. Pitfall traps, yellow sticky traps, hanging sticky trap, insects bait and light trap were installed randomly in the main nursery plot. By using CRD, the insect collection was taken for 6 sampling date by weekly basis. The insect number were calculated and analyzed using one way ANOVA, t-test, correlation test, Shannon index, Margalef's index and Pieleou's Evenness index. This study obtained 570 individuals of insects collected. There were 7 orders and 22 family were recorded. There is no significant difference of insects' abundance between all insects' family and sampling week. The abundance of the insect in week 3 recorded as the highest number. Some insects have significant difference abundance of insect between day and night. Scarabaeidae was the dominant family and followed by Gryllidae, Vespidae and Tettigonidae. The findings of this study also demonstrated that family of Scarabaeidae and Vespidae has no significant relationship.