## UNIVERSITI TEKNOLOGI MARA

# STUDY OF TRUNK INJECTION FOR CONTROLLING AND MONITORING OF BAGWORMS IN OIL PALM PLANTATION

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Final year project report submitted in partial fulfilment of the requirements for thedegree of

Bachelor of Science (Hons.)Plantation Technology and

Management

Faculty of Plantation and Agrotechnology

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#### CANDIDATE'S DECLARATION

I declare that the work in this Final Year Project was carried out in accordance with the regulation of Universiti Teknologi MARA. It is original and is the result of my own work, unless otherwise indicated or acknowledge as referenced work. The final year project report 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 violet the conditions mention above, I voluntarily waive the right of conferment of my bachelor degree and agree to be subjected to the disciplinary rules and regulation of Universiti Teknologi MARA.

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### **ABSTRACT**

Trunk injection is the effective application for controlling and monitoring the bagworms in oil palm plantations. The existence of trunk injection application in the oil palm plantation essentially gives a good impression to controlling and monitoring the bagworms in terms of crop growth and yield improvement. A study was conducted in Estate Sime Darby, Bukit Paloh on 12 year old palms to determine the population dynamic of immature bagworms, to assess the effectiveness of trunk injection on the immature stage of the bagworms and to determine the relationship between the immature stages of the bagworms with the rainfall. In general, the result showed that the trunk injection was highly effective (p<0.05) against bagworms with the best population eradicated following the trunk injection application. Result from this study also showed that the rainfall has no interaction to the population of bagworms but trunk injection most affected the population of bagworms. The trunk injection application is the most suitable to control the bagworm outbreak in mature oil palm plantations.