REVIEW ON THE CONTROLLING APPROACH FOR DIFFERENCE EFFECTIVENESS BETWEEN BIOLOGICAL (BARN OWL) AND CHEMICAL CONTROL OF RODENTS IN OIL PALM PLANTATION

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Final Year Project Report Submitted in Partial Fulfilment of the Requirements for the Degree of Bachelor of Science (Hons.) Plantation Management and Technology in the Faculty of Plantation and Agrotechnology
Universiti Teknologi MARA

JULY 2016
DECLARATION

This Final Year Project is a partial fulfilment of the requirement for a degree of Bachelor of Science (Hons.) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, UniversitiTeknologi MARA.

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ACKNOWLEDGEMENT

Assalamualaikum w.b.t

First of all, I would like to thank Allah S.W.T. because with HIS blessing, I finally manage to complete this final year project successfully on the time given.

I would like to express my sincere thanks to the following people who made this report possible. Firstly, I would like to say thank you to my supervisor, Prof. Madya Dr. Mohd Rasdi B. Zaini for his continuous support during completing my study, for his effort, inspiring guidance, timely advice, helpful critics and immense knowledge. Thanks to our coordinator, Pn. Wan Natasya for giving guidelines to complete this final year project report. Not to forget, to all lecturer that have shared their knowledge with me regarding this final year project.

Secondly, I also would like to wish special thanks and deepest appreciation to my family members especially our beloved parents for supporting us morally and financially.

Last but not least, I would like to thank to everybody especially my friends for their support by sharing their ideas and enable me to complete this report.
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ABSTRACT

Oil palm (*Elaeis guineensis*) is widely planted in South East Asia such as Malaysia. Since early 70s, oil palm have been severely attacked by rat. In oil palm plantation, *Rattus tiomanicus* constitutes a major pest and followed by *Rattus argentiventer* and *Rattus rattus diardi*. These pests problem are well researched and the techniques to control are well established but until today rats still pose as a problem as before, and causing losses if no proper control measures are taken. Many methods of rats control have been applied in oil palm plantation in the past. These also include trapping and hunting but both of methods are undoubtedly impractical. Biological control by using barn owl are recommended as a biological control agent of rats in Malaysian Oil Palm Plantation. Snakes and birds also considered for biological control agent but both of them was not effectively reduce the rat population below economic damage level. The use of rodenticides in reducing rat population is susceptible. However, the usage of rodenticides require high cost, great attention to follow the schedule, resistance problems and environmental problems.