

**UNIVERSITI TEKNOLOGI MARA**

**EFFECT OF TIMING OF CHEMICAL  
APPLICATION ON CONTROL OF *ORYCTES*  
*RHINOCEROS* IN OIL PALM PLANTATION**

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Final year project report submitted in partial fulfillment of the requirement for  
the degree of

**Bachelor of Science (Hons.) Plantation Technology  
and Management**

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In the event that my Final Year Project is found to violate 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 regulations of Universiti Teknologi MARA.

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## ABSTRACT

*Oryctes rhinoceros* was the major pest in most oil palm plantation in Malaysia. As to control it, there are several ways and one of them is chemical control application. An experiment had been done in Felda Maokil 1 Oil Palm Plantation in determining the effect of timing of chemical application to control *Oryctes rhinoceros*. 3 different sections had been marked in a one plot of oil palm area. The different timing of chemical application was applied which were control, 2 weeks interval and 4 weeks interval. Data collection of *Oryctes rhinoceros* was done using the pheromone trap once a week. The result shows that 2 weeks interval chemical application give the lowest amount of *Oryctes rhinoceros*. The population also fluctuated for every week and there is a significant difference ( $P < 0.05$ ) in the number of beetle population over the timing of chemical application. The rest factor that affect the *Oryctes rhinoceros* population might be abiotic factor and natural enemies. As timing of chemical was very important to control the major oil palm pest *Oryctes rhinoceros*, the suitable and effective timing should be followed by the field management in order to control the severity of this major pest. It is impossible to eliminate the pest but it is advisable to control it in order to preserve the oil palm tree and for the sake of high production of oil palm.

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