THE EFFECT OF ORGANIC REPELLENTS TOWARDS Achatina sp.

NAJWA IZZATI ROSLI

Final Year Project Report Submitted in Partial Fulfillment of the Requirements for the Degree of Bachelor Of Science (Hons.) Biology in the Faculty Of Applied Sciences Universiti Teknologi MARA

JANUARY 2017

This Final Year Project Report entitled "The Effect of Organic Repellent towards Achatina sp." was submitted by Najwa Izzati binti Rosli, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty of Applied Sciences, and was approved by

Nursyazni Binti Abdul Rahim

Supervisor
B.Sc. (Hons.) Biology
Faculty of Applied Sciences
UiTM Negeri Sembilan
Kampus Kuala Pilah
72000 Kuala Pilah
Negeri Sembilan

Ilyanie Binti Hj. Yaacob Project Coordinator Faculty of Applied Sciences UiTM Negeri Sembilan Kampus Kuala Pilah 72000 Kuala Pilah Negeri Sembilan Dr. Nor'aishah Binti Abu Shah Head of School of Biology Faculty of Applied Sciences UiTM Negeri Sembilan Kampus Kuala Pilah 72000 Kuala Pilah Negeri Sembilan

Date : _____

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ABSTRACT

THE EFFECT OF ORGANIC REPELLENT TOWARDS Achatina sp.

Achatina sp. is a common pest that can cause severe damage to plant. This will cause losses of yield and lower the quality of plant. Synthetic molluscicides is a common method in controlling the snails. However, this will cause detrimental effects to the environment and biodiversity. Alternative method in controlling the snails are by using organic repellents such as neem, mint, coffee and garlic. The objectives of the study are to investigate the time taken for snail to response toward different organic repellent and to determine the effectiveness of organic repellent toward the juvenile and adult land snails. All the four repellents used have their effectiveness towards the repelling the snail agriculture pest were compared. Two stages of giant African snail were tested which juvenile and adult with four treatments of neem, garlic, mint and coffee respectively. Two snails were used in each replication. The parameter taken was the time taken for snails to move away from the repellents to the furthest distance in plastic container. The results shows that all four repellents, which are neem, garlic, mint and coffee are effective in repelling the snail and are correlated to the stages of the snails. The younger size of snails with took the fastest time to repel. The most effective repellent are coffee and garlic because snails take the fastest time when the concentration is 50% the repelling time is 173 seconds for adult while the repelling time is 171 seconds for juvenile. The repelling time of adult for garlic when the concentration is 50% is 227 seconds while for juvenile is 203 seconds.