

FIELD RAT (*Rattus argentiventer*) POPULATION BETWEEN NEAR
WOODED AREA AND FREE SPACE AREA IN PADDY FIELD AT
KAMPUNG BELUKAR, KODIANG, KEDAH DARUL AMAN.

NUR ASSYIFFA BINTI MOHD ROZALI

Final Year Project Report Submitted in Partial Fulfilment of the
Requirement for the Bachelor of Science (Hons). Technology and Plantation
Management in the Faculty of Plantation and Agrotechnology


JULY 2016

DECLARATION

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

It is entirely my own work and has not been submitted to any other University or higher education institution, or for any other academic award in this University. Where use has been made of the work of other people it has been fully acknowledgement and fully referenced.

I hereby assign all and every right in the copyright to this Work to the Universiti Teknologi MARA (“UiTM”), which henceforth shall be the owner of copyright in this Work and that, any reproduction or use in any form or by any means whatsoever is prohibited without a written consent of UiTM.

Candidate’s signature: 

Date: 22 . JULY 2016

Name: **NUR ASSYIFFA BT MOHD ROZALI**

I hereby declare that I have checked this project and in my opinion, this project is adequate in terms of scope and quality for the award of the degree of Bachelor of Science (Hons) Plantation Technology and Management, Faculty of Plantation and Agrotechnology, Universiti Teknologi MARA.

Signature: 

NUR FARHAMIZAH ASKARALI
PENSYARAH

Name of Supervisor: Fakulti Perladangan dan Agroteknologi

Universiti Teknologi MARA (Melaka)
Kampus Jasin, 77300 Merlimau
Melaka

Position: **22/7/2016**

ACKNOWLEDGEMENT



All praise to Allah S.W.T as with the blessing and the permission, I got to complete this thesis on 'The Field Rat (*Rattus argentiventer*) Population between near the Wooded Area and Free Space Area of Paddy Field at Kampung Belukar, Kodiang, Kedah Darul Aman. With the strength and encourage that had been given, I also able to finished almost 2 months research on location that have chosen which is paddy field belongs to farmers at that village.

My special thanks I would like to dedicate to my supervisor, Madam Nur Farhamizah Binti Askarali for all helps and knowledge that you had gave for me no matter before, during even after the process in completing this thesis. All the time, knowledge and everything that you spend to me, I really appreciate it. Not forgotten to all lecturers of Universiti Teknologi MARA (UiTM) Jasin Campus, Melaka for all the opinions and helps.

Besides that, a big thanks also to my families for keep supporting and also contribute in developing the idea in completing this thesis and to my friends, thank you so much to lend yours hand and always being together to finish this all.

Finally, with all my weakness I would like to take this opportunity to apologise if there are something that might hurt and not satisfied all of people either in I'm realise or not. However, with all of my best in completing this thesis, I hope that this will give a big meaning to all of you. Thank you.

NUR ASSYIFFA BINTI MOHD ROZALI

TABLE OF CONTENTS

	<u>Page</u>
ACKNOWLEDGEMENT	II
TABLE OF CONTENTS	III-IV
LIST OF FIGURES	V
LIST OF TABLES	VI
LIST OF PLATE	VII
LIST OF ABBREVIATIONS	VIII
ABSTRACT	IX
ABSTRAK	X
CONTENT	
1. INTRODUCTION	1
1.0 Introduction	
1.1 Background	
1.2 Problem Statement	
1.3 Significant of Study	
1.4 Objectives of Study	
2. LITERATURE REVIEW	4
2.1 Field Rat (<i>Rattus argentiventer</i>)	
2.1.1 Background/Habitat/Life cycle	
2.1.2 Damage and Symptom at Paddy Field	
2.1.3 Establishment of the <i>Rattus argentiventer</i> in Malaysia	
2.1.4 Control and management of <i>Rattus argentiventer</i> in Malaysia	
2.2 Paddy (<i>Oryza sativa</i>)	
3. RESEARCH METHODOLOGY	16
3.1 Study area	
3.2 Duration of Study	
3.3 Size of plot to study	
3.4 Materials and Method	
3.5 Data Analysis	
3.6 General Flow Chart in Methodology Process	
4. RESULTS	24
4.1 The Population of Rat near The Wooded Area	
4.2 The Population of Rat at Free Space Area	
4.3 The Percentage of Male and Female at Paddy Field	

ABSTRACT

Field Rat (*Rattus Argentiventer*) Population Between Near Wooded Area And Free Space Area At Paddy Field At Kampung Belukar, Kodiang, Kedah Darul Aman.

Rattus argentiventer from Muridae family is the common pest that attack the paddy field. This study are investigated about the field rat (*Rattus argentiventer*) population between near woody area and free space area in paddy field. It was conducted at Kampung Belukar, Kodiang, Kedah. This research was carried out by using Complete Randomized Design (CRD) for 5 weeks with 2 times of collection per week. The result from the research show that the population of *Rattus argentiventer* are high in paddy field near wooded area compared to free space area. Supported by SPSS analysis result, the data was not normally distributed ($P < 0.05$) while the Kruskal-Wallis Test result showed that the *Rattus argentiventer* was not significant ($\chi^2 = 9.232$; $df = 9$; $P > 0.05$). Supported by t-test result, the data is no significant difference between near the wooded area and free space area at paddy field.

Keyword: *Rattus argentiventer*, near the wooded area and free space area.