

UNIVERSITI TEKNOLOGI MARA

**RODENTS DENSITY AT FOOD PREMISES IN
KAJANG SELANGOR**

MOHD ASRUL BIN AHMAD

**BACHELOR IN ENVIRONMENTAL HEALTH AND SAFETY
(HONS.)
FACULTY OF HEALTH SCIENCES**

JUNE 2015

Declaration by Student

Project entitled “Rodents density at food premises in Kajang Selangor” is a presentation of my original research work. Wherever contributions of others involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement of collaborative research and discussions. The project was done under the guidance of Associate Professor Rodziah Haji Ismail as Project Supervisor and assisted by Mr Mohd Razi ikhwan bin Md Rashid as Project Co-Supervisor. It has been submitted to the Faculty of Health Sciences in partial fulfillment of the requirement for Degree of Bachelor in Environmental Health and Safety (Hons).

Student’s Signature:

.....

Mohd Asrul Bin Ahmad

2011262674

860404-26-5583

Date :

TABLE OF CONTENTS

TITLE	
PAGE	
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF APPENDICES	xi
LIST OF ABBREVIATION	xii
ABSTRACT	xiii
ABSTRAK	xiv

CHAPTER ONE: INTRODUCTION

1.1	Background of the study	1
1.2	Problem statement	4
1.3	Study justification	8
1.4	Objectives of study	
1.4.1	General objective	9
1.4.2	Specific objective	9

1.5	Research hypothesis	9
1.6	Conceptual framework	10
1.7	Conceptual and operational definition	
1.7.1	Conceptual definition	11
1.7.2	Operational definition	12

CHAPTER TWO: LITERATURE REVIEW

2.1	Law and legislation	15
2.2	General information	18
2.3	Rodent species and identification	19
2.4	Rodent infestation	23
2.5	Ectoparasites	25
2.6	Diseases spread directly from the rodents	29
2.7	Diseases spread directly from the ectoparasites	32

Rodents Density at Food Premises in Kajang Selangor

Mohd Asrul Bin Ahmad

Abstract

This study was conducted at Pusat Hentian Kajang and Section 15 Bandar Baru Bangi in Kajang, Selangor. The study involved Ready to Eat (RTE) food premises at commercial area. The total of RTE food premises involved in this study (n=20). The study design of this study is cross-sectional study. Rodent's infestation at indoor RTE food premises and factor's that attract rodent's infestation were obtained. The caught rodents (n=29) species were identified based on their physical appearance and ectoparasites were collected by combing. The analysis of rodent species caught shows *Rattus norvegicus* (n=29) and none other species was caught by live trap. The total catchment at Pusat Hentian Kajang RTE food premises (n=12), while for the Section 15 Bandar Baru Bangi RTE food premises (n=17). None *Xenopsylla cheopis* were obtained on *Rattus norvegicus*, but other type of ectoparasite was found on caught rodents (n=5,17.24%). Total ectoparasite index presence on rodent is 0.172 (<1). Food premises inspection was conducted at the selected RTE food premises at both area. The rating's mark was between 50.6% to 90.8% when the study's inspection was carried out. In conclusion, the detection of rodents and it's infestation at indoor RTE food premises will increase risk to public health. The effective rodent's control must conducted to minimize the density of rodents at the both areas.

Keyword : RTE food premises, Premise score, Rodent, Ectoparasite,