

**UNIVERSITI TEKNOLOGI MARA**

**RODENT INFESTATIONS AND PATHOGENS STUDY  
ON VARIOUS PREMISES IN IPOH OLD TOWN**

**SASZELI BIN BAHARUDIN**

**Project paper submitted in partial fulfillment of the requirements  
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### Declaration by student

Project entitled "*Rodent Infestations and Pathogens Study On Various Premises In Ipoh Old Town*" is a presentation of my original research work. Wherever contributions of others are involved, every effort is made to indicate this clearly, with due reference to the literature, and acknowledgement to collaborative research and discussions. The project was done under the guidance of Miss Siti Rohana Mohd. Yatim as Project Supervisor and Mr. Nasaruddin Abdul Rahman as Co-Supervisor. It has been submitted to the Faculty of Health Sciences in partial fulfillment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

Student's Signature:

.....

(Saszeli Bin Baharudin)

2007238366

731028-08-6213

Date: 31/5/2011 .....

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## Abstract

### RODENT INFESTATIONS AND PATHOGENS STUDY ON VARIOUS PREMISES IN IPOH OLD TOWN

Saszeli Bin Baharudin

From the beginning of human civilization, rodent not only known as a pest, but also as a one of contributor in public health problem. Rodent destroy and contaminate food, ruin the structures and spread diseases that threatening the health and life quality and it can also cause injury and death. Rodent was well known as a destroyer to the agricultural crops, warehouse storage and as a domestic pest. The study was conducted in Ipoh Old Town area in 5 various type of premises. The premises are school, office, residential, stalls and wet market. In this study, rodent trap has been used to catch rodents for detailed ecto-parasites and microbiological study as well as species identification. The study design is cross-sectional study. Sampling data used is number of trapped rodents for rodent index, rodent species, flea index and microorganism result. A statistical analysis using SPSS version 17.0. The microbiological study found that there is several pathogens in the rodent samples sent for analysis, ( N=36 ) from ( N=109 ). Even though the  $p > 0.05$  for significance difference of *Leptospiral* in the rodent sent with 8.3% positive, but the appearance of pathogen of Leptospirosis itself, pose a health threat. *Escherichia coli* with 13.8%, *Pasteruella spp* 5.5%, *Enterobacter spp* 5.5% and the new encounter of Liver Abcess in 47% rodents sent for isolation. All flea index are below 1 in all sampling stations. The highest Rodent Index is Wet Market and Kinta Height Flat , followed by Kinta Height Stalls and MBI Old Office are moderate and the lowest is School. In conclusion, there is the rodent infestations in certain sampling stations and also pathogenic pathogen has been isolated. Thus, action must be taken by the Ipoh City Council to control and minimize the health risks pose by the rodents.

**Key words :** *pathogens, rodent index, flea index,*