

UNIVERSITI TEKNOLOGI MARA

**THE PRESENCE OF PATHOGENIC
BACTERIA ON EXTERNAL BODY
OF HOUSEFLY (*MUSCA
DOMESTICA*)**

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Project submitted in fulfillment of the requirements for
the degree of
**Bachelor in Environmental Health and Safety
(Hons.)**

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DECLARATION BY STUDENT

Project entitled “The Presence of Pathogenic Bacteria on External Body of Housefly (*Musca domestica*)” is a presentation of my original research work. Whenever contributions of others are involved, every effort is made to indicate this clearly, with due reference to literature, and acknowledgement of collaborative research and discussions. The project was done under the guidance of Project Supervisor, Tuan Haji Mohd Pozi b Md Tahir. It has been submitted to the Faculty of Health Sciences in partial fulfilment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

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In the name of Allah, The Most Gracious, The Most Merciful.

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ABSTRACT

Housefly (*Musca domestica*) is a mechanical and biological vector for a lot of pathogenic bacteria that can cause health problem and it also a nuisance. Houseflies can transmit more than one pathogenic bacterium. The aim of this study was to identify the presence of the pathogenic bacteria from external body of houseflies that are collected from residential areas and university areas. The aim of this study also, to identify the density of housefly's population at both sampling points and to compare bacteria load from the external body of houseflies between the university areas and residential areas. In this study, fly index has been calculated at every sampling point and the highest number was selected to get the mean. Fly index has been calculated in this study to calculate the population of the houseflies. 200 houseflies were collected to isolate their bacteria. 100 samples were collected from residential areas and 100 samples were collected from university areas. Isolation of bacteria was examined by three difference media agar and the best growth of colony was selected for colony morphology appearance and staining. The most common pathogenic bacteria at the residential area were *Escherichia coli* with 22% (701076 cfu) and for university areas, *Escherichia coli* 20% (642746 cfu). The results have no significance difference between residential areas and university areas. It was confirm that a housefly can cause potentially health problem and nuisance. As a preventive measure, the population of the houseflies must be controlled.

Keywords: *Housefly, Musca domestica, pathogenic bacteria, Fly index, external body.*