

**ISOLATION AND CHARACTERIZATION OF GRAM  
NEGATIVE BACTERIA THAT MAY CAUSE UTI FROM  
STUDENT TOILETS IN UITM KUALA PILAH**

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**Final Year Project Reported Submitted in  
Partial Fulfilment 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 **“Isolation and Characterization of Gram Negative Bacteria that may Cause UTI from Student Toilets in UiTM Kuala Pilah”** was submitted by Nooradila binti Anzeli, in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the Faculty of Applied Sciences, and was approved by

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## ABSTRACT

### ISOLATION AND CHARACTERIZATION OF GRAM NEGATIVE BACTERIA THAT MAY CAUSE UTI FROM STUDENTS TOILET IN UITM KUALA PILAH

In general, most of gram negative bacteria known as pathogenic and may spread due to the lack hygiene of the toilet. This problem can develop into serious illness like urinary tract infection (UTI). By using a sterile cotton swab, swabbing method was performed to swab different part of the toilet surface include of bowl, floor and seat. Samples were inoculated first on Nutrient agar before re-inoculated on MacConkey and Blood agar. All the samples were incubated at 37°C for 24 hours. Biochemical tests such as catalase, oxidase, IMViC and TSI proceed for bacterial identification. Results showed gram negative bacteria which are *E.coli*, *Pseudomonas spp.* and *Klebsiella spp.* were isolated from the students' toilets. The result of this study indicates high presence of gram negative bacteria on students' toilet in UiTM Kuala Pilah.