

**A STUDY OF THE BIO ENZYMES EFFECT ON RESERVOIRS
OF UiTM KUALA PILAH CAMPUS**

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**Final Year Project Report Submitted in
Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science (Hons.) Chemistry
in the Faculty of Applied Science
Universiti Teknologi MARA**

JULY 2017

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Date: 07-08-2017

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ABSTRACT

A STUDY OF BIO ENZYME EFFECT ON RESERVOIR OF UiTM KUALA PILAH CAMPUS

This study was conducted to explore the effectiveness of using homemade fruit enzyme to treat reservoirs. The enzyme was prepared from fruit peels, kitchen waste, molasses and water. This homemade fruit enzymes had proved capable for cleaning process. In this study, water sample was collected from two big reservoirs at UiTM Kuala Pilah that namely as Reservoir A and Reservoir B. This two reservoirs not managed properly by the management of campus Kuala Pilah in terms of the potential of the reservoirs for income generation. Therefore, this research is proposed to analyze the quality of the reservoirs whether they follow the environmental quality regulation or not. Water sample that collected were analysed for Dissolved Oxygen (DO), Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), pH and heavy metals. Based on the result obtained, the optimum concentration of bio enzyme to act effectively in treating water samples of the reservoirs for DO, BOD, pH, COD and heavy metals was 1:100 (v/v) where it showed most suitable for aquatic life. This research conclude that this bio enzyme can acts as alternative method to reduce DO, BOD, COD, pH and heavy metals in these two reservoirs and can be best for aquatic life and recreation activity for income generation.