

**ISOLATION AND IDENTIFICATION OF DINOFLAGELLATES
AT PORT DICKSON, NEGERI SEMBILAN**

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

JULY 2016

This final year project report entitled **“Isolation and Identification of Dinoflagellates at Port Dickson, Negeri Sembilan”** was submitted by Nur Asyikin Binti Roslee, in partial fulfillment 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 IDENTIFICATION OF DINOFLAGELLATES AT PORT DICKSON, NEGERI SEMBILAN

Dinoflagellates are predominantly found at the surface of marine water and these protists are one of the indicators to determine the water quality of marine and freshwater as some of the species of dinoflagellates can cause harmful algal bloom. Studies on the distribution of dinoflagellates in Port Dickson are still lacking and not completely explored. The aims of this study are to isolate and identify dinoflagellates and also to study the effect of physical and chemical factors towards the diversity of dinoflagellates in Port Dickson. The identification of the dinoflagellates is based on the cell morphology, cell coloration, location and the visibility of chloroplast and nucleus under light microscope. Results of this study showed that 9 genera of dinoflagellates were isolated from samples collected at three different stations of coastal area in Port Dickson. The 9 genera are Ceratium, Peridinium, Gymnodinium, Gyrodinium, Ostreopsis, Akashiwo, Coolia, Prorocentrum and Protoperidinium. Ceratium was the major genus from the 9 genera isolated species. According to Pearson correlations, turbidity and phosphate level has significant positive correlation towards the diversity of dinoflagellates at study site. From the results, it can be concluded that the dinoflagellates are diversified at coastal area of Port Dickson Negeri Sembilan. The study will be more effective if 30 μ m plankton net is used as this net can filter the seawater sample from larger zooplankton or any debris that make it easier for observation and identification.