

**THE STUDY OF FERN DIVERSITY IN UITM KUALA
PILAH FOREST RESERVE NEGERI SEMBILAN**

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**Final Year Project Report 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

The Final Year Project entitled “**The Study of Fern Diversity in UiTM Kuala Pilah Forest Reserve, Negeri Sembilan**” was submitted by Nuramalina Binti Abdull Wahid, 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

THE STUDY OF FERN DIVERSITY IN UiTM KUALA PILAH FOREST RESERVE, NEGERI SEMBILAN

Fern is a group of seedless vascular plant that are exist on earth for millions of years. UiTM Kuala Pilah Forest Reserve has a humid climate and has led the potential growth of pteridophytes. There are lacks of knowledgement about ferns diversity and this study will provide more data about the diversity of ferns. The aim of this study is to determine the diversity of ferns species in UiTM Kuala Pilah Forest Reserve. The study of fern was conducted for 4 days on the 1, 2, 8, and 15 October 2016. The sampling site of study covered small part in UiTM Kuala Pilah Forest Reserve, Negeri Sembilan. Sampling of the ferns were done approximately from 8:00 a.m. until 12:00 am. The study revealed 9 families of ferns that represent 9 genera and 12 species being found comprises of Gleicheniaceae (1 genus), Nephrolepidaceae (1 genus), Blechnaceae (1 genus), Pteridaceae (1 genus), Hemionitidaceae (1 genus), Aspidiaceae (1 genus), Taenitidaceae (1 genus), Schizaeaceae (1 genus), and Thelypteridaceae (1 genus). The highest genus that was found *Dicranopteris* which have 251 individuals and the lowest genus that were found *Lygodium* and *Syngamma* which have 3 individuals only. *Dicranopteris curanii* is the higher species was found with 126 individuals. The Shannon Diversity Index was $H' = 2.48$ while Richness Index and Evenness Index were $R = 0.65$ and $E = 0.99$ respectively. The three ecological indices shows that the ferns composition are not in high diversity because of number of species collected are lower due to limited study area of study site and limited accessibility to collect and identify more species in this forest reserve.