# THE STUDY OF EARTHWORMS DIVERSITY IN UITM CAWANGAN NEGERI SEMBILAN KAMPUS KUALA PILAH, NEGERI SEMBILAN

#### **NORAINMUNI BT HAMID**

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

**JULY 2017** 

The Final Year Project entitled "The Study of Earthworms Diversity at UiTM Cawangan Negeri Sembilan Kampus Kuala Pilah" was submitted by Norainmuni Bt Hamid, in a partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Biology, in the faculty of Applied Science and was being approved by

Syazuani Mohd Shariff
Supervisor
Faculty of Applied Sciences
UiTM Negeri Sembilan
Kampus Kuala Pilah
Pekan Parit Tinggi
72000, Kuala Pilah
Negeri Sembilan

Lili Syahani Rusli Project Coordinator Faculty of Applied Sciences UiTM Negeri Sembilan Kampus Kuala Pilah Pekan Parit Tinggi 72000, Kuala Pilah Negeri Sembilan Dr. Nor' aishah Abu Shah Head of Biology School Faculty of Applied Sciences UiTM Negeri Sembilan Kampus Kuala Pilah Pekan Parit Tinggi 72000, Kuala Pilah Negeri Sembilan

Date:			
-------	--	--	--

### TABLE OF CONTENT

ACKNOWLEDGEMENTS TABLE OF CONTENTS LIST OF TABLES LIST OF FIGURES LIST OF ABBREVIATIONS ABSTRACT ABSTRAK			PAGE iii iv vi vii viii ix
СНА	APTER 1	: INTRODUCTION	
1.1	_	round of Study	1
1.2		m Statement	2
1.3	_	cance of the Study	3
1.4	Object	ive of the Study	3
		: LITERATURE REVIEW	4
2.1	Soil	CF 41	4
<ul><li>2.2</li><li>2.3</li></ul>		ity of Earthworm ology and Type of Earthworms	5 8
СНА	PTFR 3	: METHODOLOGY	
3.1		ing site	12
3.2	-	e Collection	12
3.3	Preserv		14
3.4	Identif	ication of the Specimen	14
3.5		nalysis	15
	3.5.1	The Shannon's Diversity Index (H)	15
	3.5.2	Evenness Index (E)	16
	3.5.3	Richness Index (R)	16
СНА	APTER 4	: RESULTS AND DISCUSSION	
4.1	Compe	etition of Earthworms	17
4.2	Eccolo	gical Indices	24

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	27
CITED REFERENCES	29
APPENDICES	34
CURRICULUM VITAE	40

#### **ABSTRACT**

## THE STUDY OF EARTHWORMS DIVERSITY IN UITM CAWANGAN NEGERI SEMBILAN KAMPUS KUALA PILAH, NEGERI SEMBILAN

The study of earthworms diversity was be done in UiTM Cawangan Negeri Sembilan Kampus Kuala Pilah. UiTM Cawangan Negeri Sembilan Kampus Kuala Pilah is nearby to the forest reserve and it is considered as Tropical Rainforest which has the humid climate and has the higher potential for the abundance of the earthworms to live. Unfortunately, there is lack of study about the population of earthworms in UiTM Cawangan Negeri Sembilan Kampus Kuala Pilah. Thus, this study that being done is to provide more data and information about the diversity of the earthworms exists in UiTM Cawangan Negeri Sembilan Kampus Kuala Pilah. The present study was carried out during March until April of 2017 at the small part in UiTM Cawangan Negeri Sembilan Kampus Kuala Pilah focusing about the diversity of the earthworms. The earthworms were collected using hand sorting method and being preserve with 10% diluted formalin solution. For six day being sampling, only 119 individuals were being found. 114 individuals is contribute by the Pontoscolex corethurus and the other 5 individuals is comes from Amynthas gracilis. The value for the Shannon Diversity Index (H') is 0.17 while the value for Evenness Index (E) is 0.25. The value of Richness Index (D) is 0.20. All of the index shows that the habitat is low in diversity and dominated by the presence of *Pontoscolex corethurus*.