ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS USED BY Iranun ETHNIC ALONG THE DOWNSTREAM OF KEGURAAN RIVER, KOTA BELUD, SABAH

NORAZIMAH BINTI AWANG SARI

Final Year Project Proposal 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 2018

ACKNOWLEDGEMENTS

First of all, I would like to give my grateful and thankful to Allah S.W.T for all the endless blessing and easiness given along this final year project. With His blessing, I finally completed my study on "Ethnobotanical study of Medicinal Plants used by *Iranun* ethnic along the Downstream of Keguraan River, Kota Belud, Sabah"

I also would like to express my grateful for UiTM Sabah for giving me a precious chance to conduct this project which enables me to apply and broaden my knowledge and skills. Deepest appreciations I give to our project coordinator, Sir Ajimi bin Hj. Jawan, for guiding us throughout this project. To my very kind supervisor, Sir Abdul Manap bin Mahmud, I would like to express my thankful for his endless guidance and advices during completing this project.

Not forgotten to all respondents from Kg. Rampayan Ulu, Kg. Rampayan Laut, Kg. Nanamun and Kg. Kayu Puteh that have been involved in this project, a million thank you for being cooperative and helpful in giving all information I need.

A special thanks to family members especially my parents, for the countless moral and financial support especially during this project. Not forgotten to my fellow classmates who always help me around. Above all, I thank for every single person that has involved either directly or indirectly along this project being conducted.

Norazimah Binti Awang Sari

TABLE OF CONTENTS

		Page
ACI	KNOWLEDGEMENT	iii
TAE	BLE OF CONTENTS	iv
LIS	T OF TABLES	vii
LIS	T OF FIGURES	viii
LIS	T OF ABBREVIATIONS	ix
LIS	T OF APPENDICES	X
	STRACT	xiii
ABS	STRAK	xiv
СН	APTER 1 INTRODUCTION	
1.1		1
1.2	\mathcal{E}	2
1.3		3
1.4	Objectives of Study	5
CHA	APTER 2 LITERATURE REVIEW	
2.1	Ethnobotany	6
	2.1.1 Background of <i>Iranun</i> ethnic	6
	2.1.2 Definition and Origin of Ethnobotany	7
2.2	Medicinal Plants	8
	2.2.1 Medicinal Plants in Malaysia	9
	2.2.2 Medicinal Plants in Sabah	11
	2.2.3 Indigenous Knowledge of Medicinal plants	12
2.3	Data collection of medicinal plants	13
2.4	2.3.1 Semi structured interview	13
2.4	Plant Identification and Classification	14
	2.4.1 Definition of Dichotomous key	14
	2.4.2 Identification2.4.3 Classification	14
2.5		15 15
2.3	Quantitative Ethnobotany approach 2.5.1 Use Value (UVs)	15
	2.3.1 Use value (UVS)	13
CHA	APTER 3 METHODOLOGY	
3.1	Materials	18
3.2	Methods	18
	3.2.1 Study sites	18
	3.2.2 Respondents of study	22

	3.2.3	Data collection	22
	3.2.4	Sample Collection	24
		Sample Preparation	25
		i. Short term storage	25
		ii. Long term storage	26
	3.2.6	Sample Preservation	26
		i. Sample Pressing	26
		ii. Sample Drying	27
		iii. Sample Mounting	28
		iv. Sample Labeling	28
3.3	Data A	Analysis	28
		Documentation of Medicinal Plants used by <i>Iranun</i> ethnic	28
		i. Local name	28
		ii. Scientific name	29
		iii. Part used	29
		iv. Method of Preparation	29
		v. Traditional ailments	30
		vi. Mode of Administration	30
	3.3.2	Identification and classification of medicinal plants	30
		i. Plant identification	30
		ii. Plant classification	31
	3.3.3	Construction of Dichotomous key	31
		Use value analysis	32
CHAI 4.1		4 RESULT AND DISCUSSION fication of Medicinal plants used among <i>Iranun</i> ethnic along	
		winstream of Keguraan River, Kota Belud, Sabah	33
	4.1.1	_	
		Downstream of Keguraan River, Kota Belud, Sabah	34
	4.1.2	Types of ailments treated among <i>Iranun</i> ethnic along	
		the downstream of Keguraan River, Kota Belud, Sabah	38
		the downstream of Regulatin River, Rota Defuu, Saban	30
	4.1.3	-	36
	4.1.3	Life form of medicinal plants along the downstream of	41
	4.1.3 4.1.4	Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah	
		Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Harvesting method of medicinal plants along the	
		Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah	41
	4.1.4	Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Harvesting method of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Parts of medicinal plants used as remedies by <i>Iranun</i>	41
	4.1.4	Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Harvesting method of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah	41
	4.1.4 4.1.5	Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Harvesting method of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Parts of medicinal plants used as remedies by <i>Iranun</i> ethnic along the downstream of Keguraan River,	41 42
	4.1.4 4.1.5	Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Harvesting method of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Parts of medicinal plants used as remedies by <i>Iranun</i> ethnic along the downstream of Keguraan River, Kota Belud, Sabah	41 42
	4.1.4 4.1.5	Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Harvesting method of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Parts of medicinal plants used as remedies by <i>Iranun</i> ethnic along the downstream of Keguraan River, Kota Belud, Sabah Preparation method of remedies claimed by <i>Iranun</i> ethic	41 42
	4.1.4 4.1.5	Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Harvesting method of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Parts of medicinal plants used as remedies by <i>Iranun</i> ethnic along the downstream of Keguraan River, Kota Belud, Sabah Preparation method of remedies claimed by <i>Iranun</i> ethic along the downstream of Keguraan River, Kota Belud,	41 42 43
	4.1.4 4.1.5 4.1.6	Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Harvesting method of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Parts of medicinal plants used as remedies by <i>Iranun</i> ethnic along the downstream of Keguraan River, Kota Belud, Sabah Preparation method of remedies claimed by <i>Iranun</i> ethic along the downstream of Keguraan River, Kota Belud, Sabah	41 42 43
	4.1.4 4.1.5 4.1.6	Life form of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Harvesting method of medicinal plants along the downstream of Keguraan River, Kota Belud, Sabah Parts of medicinal plants used as remedies by <i>Iranun</i> ethnic along the downstream of Keguraan River, Kota Belud, Sabah Preparation method of remedies claimed by <i>Iranun</i> ethic along the downstream of Keguraan River, Kota Belud, Sabah Administration routes of remedies claimed by <i>Iranun</i>	41 42 43

ABSTRACT

ETHNOBOTANICAL STUDY OF MEDICINAL PLANTS USED BY Iranun ETHNIC ALONG THE DOWNSTREAM OF KEGURAAN RIVER, KOTA BELUD, SABAH

This ethnobotanical study was conducted to document the medicinal plants that used to treat various ailments among *Iranun* community along the downstream of Keguraan River in Kota Belud, Sabah. There were four villages selected as the study area includes Kg. Rampayan Ulu, Kg Rampayan Laut, Kg. Nanamun and Kg. Kayu Putih which majorly lived by *Iranun* ethnic. The ethnobotanical data were collected through guided field walk and semi-structured interview with the practitioners and knowledge-able elders. A total of 53 plants species were discovered useful to local *Iranun* traditional includes their life form, harvesting methods, plants parts used, preparation method, administration routes and ailments they treated. The identified plants were constituted of 1 Phylum, 2 Classes, 9 Sub-classes, 26 Orders, 31 Families and 51 Species. The Use Value (UVs) index was employed to determine the relative importance of each medicinal plant. The results obtained from this study are worth being further investigated to validate the local *Iranun* indigenous knowledge scientifically and assist in conservation priorities.