

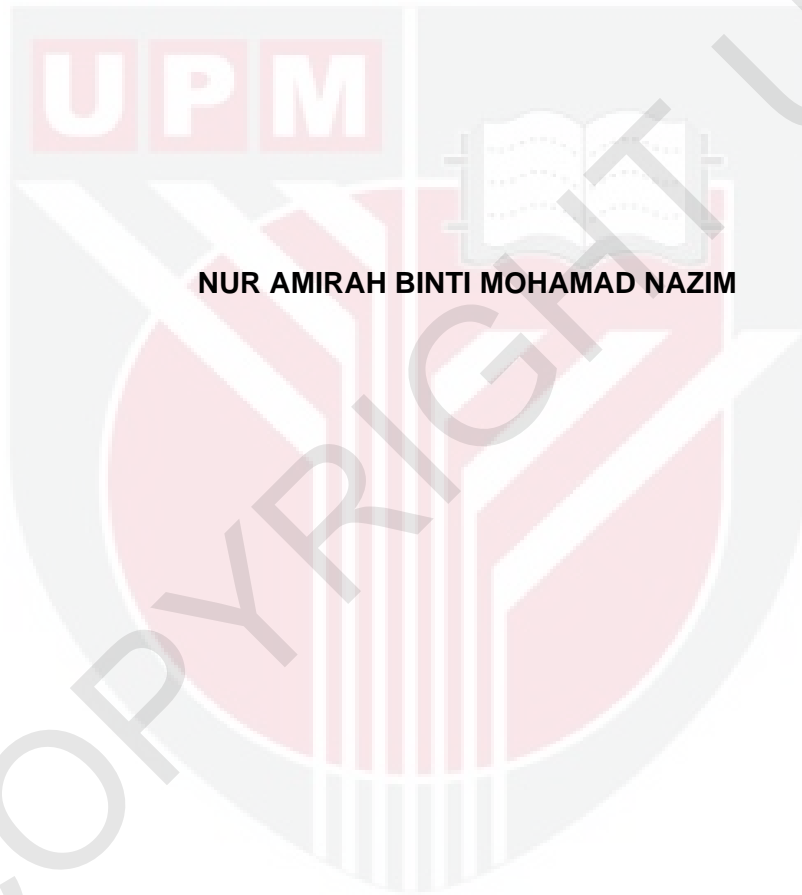


***TRADITIONAL USES OF MEDICINAL PLANTS AMONG TEMIAR
COMMUNITY IN KUALA BETIS, KELANTAN***

NUR AMIRAH BINTI MOHAMAD NAZIM

FH 2019 22

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**FACULTY OF FORESTRY
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COMMUNITY IN KUALA BETIS, KELANTAN**



By

NUR AMIRAH BINTI MOHAMAD NAZIM

A Project Report Submitted in Partial Fulfilment of the Requirements

for the Degree of Bachelor of Forestry Science in the

Faculty of Forestry,

Universiti Putra Malaysia

DEDICATION

Specially Dedicated to:

My beloved family:

Mohamad Nazim bin Mahmud, Anita bt Ismail and also my siblings.

To all my friends,

Interviewers and residents that I had done my interview

Thank you for your encouragement, support and the sacrifices that you have given.

Last but not least,

I dedicated this project to Prof Madya Dr Pakhriazad, my supervisor

Who has encouraged me, helped and give so much support during conducting this research and in my study.

Thank you for everything. May Allah bless all of us.

ABSTRACT

Medicinal plants are important to Indigenous people as their place were far from city. However, by human activities such as logging and agriculture it have give bad impact to them. A study on the traditional use of medicinal plants was carried out in Kuala Betis, Kelantan from June 2018 to November 2018. The study was conducted through surveys and interviews using questionnaires. The respondents were selected by convenience sampling. The results showed there are 32 species of medicinal plants from 25 families which identified as common plants used by Temiar community in Kuala Betis in their daily lives. Each species has its own purpose. They are used to treat external illness such as fever, wounds, cough, insect bites and also for women after childbirth. Most of them get to know about the medicinal plants from their older generation (46%). Usually they use medicinal plants when needed (51%) and some of them also use the medicinal plants as food preparation.

ABSTRAK

Tumbuhan ubat adalah penting kepada masyarakat Orang Asal kerana tempat mereka jauh dari bandar. Walau bagaimanapun, dengan keaslian manusia seperti pembalakan dan pertanian, ia memberi impak buruk kepada mereka. Kajian mengenai penggunaan tumbuhan perubatan tradisional di Kuala Betis, Kelantan dari Jun 2018 hingga November 2018. Kajian ini dijalankan melalui tinjauan dan temu bual menggunakan soal selidik. Responden dipilih melalui persampelan kemudahan. Keputusan menunjukkan terdapat 32 spesies tumbuhan ubatan dari 25 keluarga yang dikenalpasti sebagai tumbuhan biasa yang digunakan oleh komuniti Temiar di Kuala Betis dalam kehidupan seharian mereka. Setiap spesies mempunyai tujuan tersendiri. Mereka digunakan untuk merawat penyakit luaran seperti demam, luka, batuk, gigitan serangga dan juga untuk wanita selepas melahirkan anak. Kebanyakan mereka mengetahui tentang tumbuhan ubat dari generasi tua mereka (46%). Biasanya mereka menggunakan tumbuh-tumbuhan perubatan apabila diperlukan (51%) dan sesetengahnya juga menggunakan tumbuhan ubatan sebagai penyediaan makanan.

APPROVAL SHEET

I certify this research project report entitled “Traditional Uses of Medicinal Plants by Temiar Community in Kuala Betis , Kelantan “ by Nur Amirah binti Mohamad Nazim has been examined and approve as a partial fulfillment of the requirements for the Degree Bachelor of Forestry Science in Faculty of Forestry, Universiti Putra Malaysia.

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Date: JANUARY 2019

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Malaysia is one of the countries that rich with a diversity of flora and fauna. Because of that, there are many forest types in Malaysia are lowland dipterocarp forest, hill dipterocarp forest, upper hill dipterocarp forest, oak-laurel forest, montane ericaceous forest, peat swamp forest, and mangrove forest. So there are many types of plants that can be used and essential to human life such as medicinal plants. Malaysia is known with its green tropical vegetation and forest. Its diverse nature and uses are claimed to possess medicinal value. Out of a total of 422,000 flowering plants reported from the world (Govaerts, 2001), more than 50,000 are used for medicinal purposes (Schippmann et al., 2002). Approximately 16% are claimed to be used for medicinal purposes from about 10,000 species of higher plants and 2000 species of lower plants available in Peninsular Malaysia (Lattif et al., 1984). More than a hundred plant species in Malaysia are reported to have medicinal properties. Some of these plants are commonly used and have been used by people as a folk medicine for hundreds of years (Herbal Medicine Research Centre,2005). About 25% of modern herbal medicine from forest resources is believed to have been formerly used by the Orang Asli (Globin, 2011). From what we see only Orang Asli have to keep using the medicinal plant in the forest, this because their homes are near with forest. Indigenous people make use the biological diversity available to them for fulfilling various needs.

1.2 Problem Statement

Nowadays, we can see that forest in Malaysia has been threatened by any threat such as deforestation, overgrazing and for development area. But in recent year, logging has become the main cause of deforestation. The logging activity can give highly disruptive to our biodiversity loss such as fauna and flora. In other ways, we also can see that still have people that depend on the medicinal plant on the forest although have modern medicine especially 'Orang Asli' to cure a certain disease. This is because for them the medicinal plant is something that used by the older generation and passing for them to continue the traditional uses. However, because this scenario, the supply for medicinal plants became very limited and it gives some difficulties for some 'Orang Asli'. Since indigenous knowledge is unwritten and much of its remain unrecorded, it is imperative that the scientific community records and publishes this knowledge (Schultes and Von Reis,1995).

1.3 Objectives

This research is botanical documentation on common traditional use and practice of medicinal plants by Temiar Community in Kuala Betis, Kelantan.

The objectives of this study are:

- 1) To determine the traditional use and practice of medicinal plants among Temiar Community in Kuala Betis, Kelantan.
- 2) To know perception of uses of traditional medicinal plants among Temiar Community

REFERENCES

Carey I (1976). *Orang Asli the Aboriginal Tribes of Peninsular Malaysia*. Kuala Lumpur: Oxford University Press.

Chin SC (1981). *A guide to ethnobotanical collection with reference to Malaysia*. Sarawak Mus J, 29 (50), 227-238

Farnsworth, N.R., & Soejarto, D.D. (1991). *Global importance of Medicinal Plants*, In: O.Akerele, V. Heywood, & H.Synge (Eds), *The conservation of Medicinal Plants*. Cambridge: Cambridge University Press

Latiff, A.and Kamaruddin Mat Salleh. (2002). *Tumbuhan Ubatan Malaysia*. Kuala Lumpur: Universiti Kebangsaan Malaysia Press.

GlobinMed. (2014).*The Utilization of Medicinal Plants by The Aborigines in Peninsular Malaysia*. Retrieved March 2018, from <http://www.globinmed.com>.

Hammilton AC (2004). *Medicinal Plants, Conservation and Live hoods*. *Biodiversity and Conservation*, 13,1477-1517.

JHEOA (2010). *Pecahan Penduduk Orang Asli Mengikut Kumpulan Kaum Dan Etnik Bagi Tahun*. Kuala Lumpur :JHEOA.

JHEOA. (2010). *Annual report of Department of Orang Asli Affairs 2006*. Kuala Lumpur: Jabatan Hal Ehwal Orang Asli.

Jitendra ,S.,Lambert, J., & Vietmeyer ,N (1996). *Medicinal plants: An expending Role in Develpoment*. Washington, DC: World Bank Publications.

Martin GJ (1995). *Ethnobotany: A People and Plants Conservation Manual*. London: Chapman and Hall.

Mohamad Bin Zakaria. (1994) .*Traditional Malay Medicinal Plants*. P.176. Malaysia: Penerbit Fajar Bakti Sdn.Bhd.

Ong HC, Ahmad N, Millow P 2011a.*Ethno-medicinal plants used by the Temuan Villagers in Kampung Tering, Negeri Sembilan, Malaysia* .Ethno Medical, 5 (3) ;169-173.

Ong HC,Faezah A.W, Millow P 2012. *Medicinal Plants Used by The Jah Hut Orang Asli at Kampung Pos Penderas, Pahang,Malaysia*. Ethno Medical ,6 (1);11-15 (2012).

Ong HC, Rosnaini M.Z, Millow P (2011). *Traditional Knowledge of Medicinal Plants among the Malay Villagers in Kampung Mak Kemas, Terengganu, Malaysia*. Ethno Medical, 5(3); 175-185 (2011).

Ridley HN (1967) *The Flora of the Malay Peninsula* (Reprint).Vol.5 Amsterdam.

WHO. (2014). *Tradional Medicine*. Retrieved March 2018, from <http://www.who.int>.