

Study on ethnomedicinal plants of Sherpas of Sikkim, Himalayas

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Abstract

History of the use of medicinal plants is believed to be as old as the history of humankind. The Modern sciences recognizes that, multitude of ethnic cultures across the world often possess often unique knowledge on use of medicinal plants for the physical well being of humankind. Sherpas of Nepal and Sikkim, who otherwise are renowned all over the world as exceptional mountain-climbers have remained beyond the purview of any study of their knowledge on medicinal plants. This study attempts to fill this gap. In all, ten medicinal plants that which are used by Sherpas in the region under study have been identified along with the parts of plants used, and as also the in disease conditions for which they are employed. The study is preliminary, but it succeeds in establishing the existence of Sherpa in ethno-medicinal traditions.

Keywords: *Sherpa, Ethnic, Ethnomedicinal. Sikkim, Darjeeling*

Introduction

History of use of medicinal plants is believed to be as old as the history of humankind. In India, this knowledge has been documented around 2500 years back in the Rigveda. The Vedic era was replete with use of over 100 medicinal plants (Mitra et al (1991). Today, the modern sciences recognizes that multitude of ethnic cultures across the world often possess often unique knowledge on use of medicinal plants for the physical well being of humankind. And Consequently, a large amount of research is focused onto identifying this knowledge of the indigenous people all over the world.

Due to enormous bio-cultural diversity, central and eastern Himalayas encompassing Nepal and Northeast India have emerged as a happy hunting ground for the ethno-botanical scientists. There has been an overwhelming effort to record the ethno-medicinal plants of the north-east India and Nepal. Many researchers have made meaningful

contribution in this respect.

Mao *et al.* (2007) have made a detailed study on the ethno-botany of North-east India.

Devi *et al.* (2005) have made important observations on the medicinal plants of the sacred groves of Manipur identifying 120 plant species belonging to 106 genera. A meticulous study of the plants found in Manipur having antidiabetic properties was undertaken by Warjeet Singh (2011). He mentions 28 plant species as having effect on blood sugar levels. Yumnam *et al.* (2012) also studied the medicinal plants used by Meities of Manipur.

Arunachal Pradesh also harbors abundant flora and hence has been favored by researchers of ethno-medicinal plants. Hynniewta in 1984 recorded the ethno-botanical plants of a few tribes of this state. Baruah *et al.* (2013) have made important contribution by documenting 31 ethno medicinal plants used by the Adi-Minyong people of Arunachal Pradesh. Before them, in 2006, Das *et al.* undertook

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an important study that identified 45 medicinal plants used by the Khamti tribe in northern Arunachal Pradesh.

Herbal medicines have been recorded from Meghalaya also (Dolui, 2004). Raut (2012) made a detailed study on the medicinal plants used by Dimasa people of North Cachar hills of Assam. Medicinal plants of Nagaland too have been documented (Megoneitso, 1983).

Notable studies on ethno-medicinal plants have been conducted in Nepal also. Chherti (2007) undertook a meticulous survey and identified medicinal plants used for folk-medicine in Sunsai district of Nepal. Later Joshi *et al.* (2011) studied the traditional medicinal plants of Macchegaun, Nepal. Singh *et al.* undertook a survey of ethno-medicinal plants of Terai regions of western Nepal.

Sikkim, Himalayas too have attracted many researchers with its vast ethno-medicinal wealth. Jha *et al.* (2004) recorded medicinal plants frequently used by the Lepcha people of Sikkim. Badola (2013) documented traditionally useful medicinal plants of the Limboos residing in southwest of Khangchendzonga Biosphere Reserve. Important contributions in this respect have come from Darjeeling district of Sikkim, Himalayas too (Rai *et al.* (1999).

Our literature survey establishes that Sherpas of Nepal and Sikkim, who otherwise are renowned all over the world as exceptional mountain-climbers, have remained beyond the purview of any study of their knowledge on medicinal plants.

Sherpas are a member of a traditionally Buddhist people of Tibetan descent living on the southern side of the Himalaya Mountains in Nepal and Sikkim. Historical evidences suggest that Sherpa clan leaders probably migrated from Kham in eastern Tibet in the 1600's, perhaps under pressure of famine or feudal warfare. After settling down in the eastern Himalayas, they developed a unique Nyingma

(Tibetan) Buddhist culture based on trade, animal herding, and subsistence agriculture. In modern times, Sherpas are known for their inevitable help in Himalayan mountaineering expeditions.

They are poor, but simple and honest people. Their cultural norms are benign and environment friendly. Their understanding of nature is appreciable. Though they are much influenced by Tibetan and modern medicinal systems, yet their ethno-medicinal traditions have not died out completely. This paper is based on a few ethno-medicinal plants of Sherpas residing in state of Sikkim and mountainous areas of Darjeeling district.

Methodology

The study is based on information collected mainly from the Sherpa guides during the mountaineering course (By Himalayan Mountaineering Institute at the Rathong Glacier) undertaken by the authors in years 2012 and 2015 as also by visiting people residing in Sherpa villages and house-holds in rural areas. The plants mentioned were identified with support from Botanical Survey of India, Sikkim Office.

Result and Discussion

In all, 10 medicinal plants that are used by Sherpas in the region under study have been identified. The plants are known in Tibetan as well as modern medical systems. However, the way they are collected and administered is slightly different with Sherpas. The result of the survey has been shown in the Table-1.

Certain other observations made in this regards are:

1. Younger generation of Sherpas has practically no such knowledge. Neither they know the use of various plants, nor can they identify them.
2. Most people of the region under study now prefer to depend upon modern allopathic system. Thus faith on traditional system is waning.
3. When modern system fails people turn back to traditional medicines that are administered with shamanistic rituals.

Table-1: List of medicinal plants

Ethnic Name	Scientific Name	Part Used	Used As/For
Chhupra	<i>Sapindus mukorossi</i>	Fruits	Epilepsy
Cyurcha	<i>Rheum emodi</i>	Roots	Stomacachic; Tonic
Hockling	<i>Picrorhiza scrophulariiflora</i>	Rhizome	Stomacachic, Fever
Kerpak*	<i>Berberis aristata</i>	(a)Roots (b) Bark	Jaundice, Malaria; Fever
Kobi*	<i>Asparagus racemosus</i>	Roots	Laxative, Diarrhea
Ongu *Lakpa	<i>Orchis incarnata (Synonym)</i> <i>Dactylorhiza incarnata</i>	Root Tubers	Expectorant
Pang bu	<i>Nardostachys</i>	Rhizome	Epilepsy
Sang kaba	<i>Ephedra gerardiana</i>	Whole Plant	Asthma
Takpa	<i>Betula utilis</i>	Bark	Antiseptic
Yerma	<i>Zanthoxylum armatum</i>	(a) Fruit (b) Seed	(a) Stomach ache (b) Controls vomiting

* are consumed as food also.

4. Some medicinal plants are edible and are used as vegetables or fruits.

Conclusion:

The study is preliminary but it succeeds in establishing the existence of Sherpa ethnomedicinal traditions. Thus it accords due credit to the cultural norms of a marginalized group of people, which were ignored so far. It recognizes the contribution Sherpas have made by way of identifying use of important natural resources.

Future Study:

Future researchers may;

1. Undertake a more comprehensive study and identify other medicinal plants used by Sherpas of this region.
2. Experimentally establish the scientific validity of Sherpa beliefs identified in here.

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