

Common Spices Plant Used as Medicine by the Tangkhul Tribe of Ukhrul District, Manipur, India

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Abstract- Ukhrul district which is one of the nine districts of Manipur, is a hilly region predominantly inhabited by the *Tangkhul* tribe. Since time immemorial many useful plants have been handled by human societies for both medicinal and food purposes. The *Tangkhul* people of this hilly region are mainly dependent on the forest, as forest plants are gather for food ,medicinal, spices, fuel, etc, which have built up their socio-economic and cultural life. An extensive survey was conducted on the usage of various spices plant as medicine by the *Tangkhul* community in the Ukhrul district, Manipur. They collected a good number of spices plant from the surrounding forest and few are domesticated in their kitchen garden for daily consumption as well as for herbal remedies, also selling in local markets and represent the main source of cash for villagers.

Index Terms- Tangkhul Naga, spices, Ukhrul, Manipur.

I. INTRODUCTION

Since time immemorial many useful plants have been handled by human societies for both medicinal and food purposes. The *Tangkhul* people of this hilly region are mainly dependent on the forest, as forest plants are gather for food ,medicinal, spices, fuel, etc, which have built up their socio-economic and cultural life. *Tangkhul* community of this region used many spices for their local delicacies and also for their primary healthcare. It is true indeed that spices not only play an important role in the kitchen but also a major role in healing health disorders. Hence, traditionally, spices used as part of the diet, have holistic effects on human health. Thus the present study is aimed at providing data on the use of spices in traditional medicine system by the *Tangkhul* tribe in the Ukhrul district, Manipur

II. STUDY AREA AND METHOD

Ukhrul, the main homeland of *Tangkhul Naga* tribe lies between 23°13'N and 25°68' N latitudes and 94°20' E and 94°25' E longitudes, having an area of 4,544 km² of which forest occupied about 2,600 km². It is a hilly region, surrounded by Myanmar in the east, Nagaland state in the north, Chandel and Senapati districts of Manipur respectively in the south and west with the population of 1, 83,115. (as per 2011 Census). The Climate of the district is temperate nature with a minimum and maximum degree of 3⁰ C to 33⁰ C. The soil ranges from laterite to sandy loams with general red colour and have moderate fertility.

The *Tangkhul Naga* tribe is one of the largest tribe among the Naga tribes of Manipur. The *Tangkhuls* are non-vegetarians, Rice (*Zhat*) is the staple food of the community. Mostly they depend on various wild edible plants, which obtained necessary food values of a balanced diet. Most of the food is taken in boiled form. Leafy spices locally known as *Namra*, *Namrei*, *Hanam*, *Somri*, *Lam sachikhong*, *Sachikhong*, etc are commonly used in the preparation of meat. These people have their own culture, tradition and have a wide knowledge about the various uses of plants around their inhabitation.

Significant contribution has been made by some workers on various aspect of ethnobotanical and ethnomedicinal plants in Manipur state (Rao & Jamir, 1982 a and b Sinha, 1987; Singh *et al.* (1988); Jamir & Rao, 1990; Singh *et al.* (1992), Borthakur & Goswami 1995; Bora 1999; Khan,2005; Chaturvedi & Jamir 2007; Salam *et al* (2009). However, Singh & Sundriyal, reported 38 common spices plants and their use in traditional medicinal system of ethnic groups of Manipur state, for the first time (2003).

III. MATERIALS AND METHODS

An extensive ethnobotanical survey was conducted during (2009-2010) among the *Tangkhul-Naga* tribe for gathering information on spices plant traditionally used by them in Ukhrul district . A total of 58 household *Tangkhul* tribes including the traditional healers (*Khanong*) were surveyed and collected ethnobotanical data using questionnaire, interviews and discussions in their local dialect, for gathering information on common spices plant traditionally used by them for the treatment of various ailments. Information regarding vernacular name, mode of use, part used, amount and periodicity of dosage were also collected. Classification and identification were done by referring to flora books, herbarium and literatures (Jain and Rao 1977, Deb (1961a, b), Kanjilal *et al.*1934-1940). The questionnaires were designed following the methods of Parabia and Reddy (2002). Herbarium specimens were prepared and have been deposited in the herbarium of the Department of Botany, Nagaland University Headquarters: Lumami and in the Centre of Advanced Studies in Life Sciences, Manipur University, Imphal.

Common spices plant and their uses

As much as 30 species of spices plants are recorded during the present survey. These are enumerated below alphabetically in Table 1 with their scientific names along with family and references to voucher specimens followed by the vernacular

names, plant parts and mode of uses by *Tangkhul* Nagas. (Table 1)

Table 1: Common spices plant species used for the treatment of various ailments by the *Tangkhul* tribe in Ukhrul district, Manipur

Botanical name	Family	Vernacular Name	Part used	Ailments cured
<i>Allium ascalonicum</i> L.	Alliaceae	Onion <i>Meitei-Tarui</i>	Leaves, Bulb	Boils, Dysentery
<i>Allium cepa</i> L.	Alliaceae	Onion <i>Tarui</i>	Leaves, Bulb.	Earaches, Boils
<i>A. chinense</i> G.Don.	Alliaceae	Japanese Scallion <i>Somri</i>	Leaves, Bulb.	Heart diseases
<i>Allium hookerii</i> Thw.	Alliaceae	Hooker Chives <i>Namrei</i>	Leaves, Bulb, root.	Stomach Complaints, Cough, B.P
<i>Allium tuberosum</i> L.	Alliaceae	Garlic chives <i>Namra</i>	Leaves, Bulb.	Urinary tract stone
<i>Allium sativum</i> L.	Alliaceae	Garlic <i>Hanam</i>	Leaves, Bulb.	Cough, Stomach Complaints, B.P
<i>Alpinia galanga</i> willd.	Zingiberaceae	Greater Galangal <i>Hirui</i>	Shoots, tender leaves	Stomach complaints, Cough, Fever, Intestinal worm
<i>A. nigra</i> (Gaertn.) Burt.	Zingiberaceae	Tora <i>Nonishon</i>	Rhizome	Cough, Fever
<i>Apium graveolens</i> L.	Apiaceae	Celery <i>Sirai kahui</i>	Leaves	Blood circulation
<i>Cinnamomum tamala</i> T.Nees&Eberm.	Lauraceae	Bay leaf <i>Sakomna</i>	Leaves	Tonsilitis
<i>Cinnamomum zeylanicum</i> Breyne	Lauraceae	Cinnamon <i>Sakomthing</i>	Fruit, flower, bark	Asthma, Cuts and Wounds
<i>Citrus macroptera</i> Lour	Rutaceae	Khasi Papeda <i>Heiribob</i>	Fruit	Cough, Urinary tract stone
<i>Costus speciosus</i> (Koen.) Smith	Zingiberaceae	Crepe Ginger <i>Makeiri</i>	Rhizome	Earaches, Kidney problem
<i>Cucurma angustifolia</i> Roxb.	Zingiberaceae	Hidden Ginger <i>Koktuiwon</i>	Rhizome	Stomach complaints, Dog bite
<i>Curcuma cassia</i> L.	Zingiberaceae	Black Turmeric <i>yaimu</i>	Rhizome	Stomach complaints, Cuts and Wounds
<i>Curcuma longa</i> L.	Zingiberaceae	Turmeric <i>Yaingang</i>	Rhizome	Cough, Malaria, Skin Infection,
<i>Esholtzia blanda</i> Benth.	Lamiaceae	<i>Ngarikna</i>	Whole plant	Tonsilitis, Body pain
<i>Elsholtzia communis</i> (Coll.& Hemsl.)Diels	Lamiaceae	Lomba <i>Yongpa</i>	Young shoot, leaves, inflorescence	Tonsilitis, Fever, Cough, Menstrual disorder
<i>Eryngium foetidum</i> L.	Apiaceae	Long Coriander <i>Lam sachikom</i>	Leaves, inflorescence	Diarrhoea, Tonsilitis
<i>Hedychium coronarium</i> Koenig	Zingiberaceae	White ginger lily <i>Tontairui</i>	Rhizome	Diabetes, Urinary tract stone
<i>Hedychium marginatum</i> C.B. Clarke	Zingiberaceae	Red ginger lily <i>Tontairuikahunga</i>	Fresh rhizome	Pile bleeding and Urinary tract stone
<i>Houtynia cordata</i> Thunb.	Saururaceae	Chameleon <i>Ngayung</i>	Whole plant	Skin Infection
<i>Mentha spicata</i> L.	Lamiaceae	Wild Mint <i>Suiruihan</i>	Young twig.	Menstrual disorder, Liver complaints
<i>Ocimum americanum</i>	Lamiaceae	Hoary basil	Young twig,	Diabetes, Indigestion

L.		<i>Sari</i>	flower	
<i>Oenanthe javanica</i> DC.	Apiaceae	<i>Hanchamhan</i>	Leaves	Stomach complaints
<i>Persicaria posumbu</i> Buch.-Ham.	Polygonaceae	Smartweed <i>Kamsa</i>	Tender shoots	Apetizer
<i>Zanthoxylum acanthopodium</i> DC.	Rutaceae	Prickly Ash <i>Mangnangthei</i>	Fruit, young twig, leaves inflorescence.	Sinusitis
<i>Zingiber cassumunar</i> Roxb.	Zingiberaceae	Tiger Ginger <i>Huira</i>	Rhizome	Menstrual disorder
<i>Zingiber officinales</i> Rosc	Zingiberaceae	Ginger <i>Hui</i>	Rhizome	Cough, Rheumatic
<i>Zingiber zerumbet</i> (L.) Smith	Zingiberaceae	Wild Ginger <i>Ram hui</i>	Rhizome	Tonsilitis

IV. RESULTS AND CONCLUSION

In the present study, a total of 30 spices plant belonging to 8 families 17 genera were collected and recorded for its medicinal values. Zingiberaceae represented the maximum of (11) species followed by Alliaceae with (6) species, Lamiaceae with (4) species, Apiaceae with (3) species, Lauraceae and Rutaceae with (2) species, and the rest 2 families represented by single species. Among the diseases, cough and stomach upsets are more common, and other more prevalent diseases are dysentery, blood pressure, cough, menstrual disorder, diabetes, cuts and wounds, piles, asthma, boils, tonsilitis, muscular pain, malaria, urinary tract stone, skin diseases and earaches. Among the plant parts, leaves are predominantly used followed by whole plant, bark, root, seeds and rhizome. The plant parts are commonly used in the form of decoction, paste, juice, etc. The data collected shows that the majority of the remedies are taken orally, mode of preparation are drawn from a single plant; mixtures of other plants are rarely used by this community. However, it is desirable to undertake further detailed ethno-botanical study in the district and that may lead to the recognition of many more spices plant used by the *Tangkhal* tribe for the treatment of minor ailments. The modern *Tangkhal* people have very little idea of this valuable instinct. So, they do not domesticate the wild leafy spices plant and do not try even to explore new spices plant from the district. So, it is highly desirable to under-take cultivation of the above said plants to meet the demands of the people living in the district that knew and used the wild species. Hence, the author(s) stresses upon the urgent conservation and protection of the precious wealth of medicinal plants from the region.

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REFERENCES

- [1] Anonymous, 2011. Census of Manipur 2011. Directorate of Census Operations, Government of Manipur.
- [2] Bora, P.J. A study on ethnomedicinal uses of plants among the Bodo tribe of Sonipur district, Assam. *J. Econ. Tax. Bot.* 22 (2): 609-614. 1999.
- [3] Borthakur, S.K. & Goswami, N. 1995. Herbal remedies from Dimasa of Kamrup district of Assam in North-Eastern India. *Fitoterapia* 66 (4): 333-339. 1995.
- [4] Chaturvedi, S.K. & Jamir, N.S. Some ethnomedicinal plants of Nagaland, India. *Advances in Ethnobotany*. Pp 83-93. 2007.
- [5] Deb, D.B. Monocotyledonous Plants of Manipur Territory. *Bull. Bot. Surv. India.* 3(2) 1961a. : 115 – 138.
- [6] Deb, D. B. Dicotyledonous plants of Manipur Territory. *Bull. Bot. Surv. India* 3 (3) 1961b. : 253 – 350.
- [7] Jain, S.K. & Rao, R.R. A hand book of Field and Herbarium methods. Today and Tomorrow's publication, New Delhi. 1977.
- [8] Jamir, N.S. & Rao, R.R. Fifty New or interesting medicinal plants used by the Zeliangs of Nagaland (India). *Ethnobotany* 2 1990. : 11-18.
- [9] Kanjilal, U.N., Kanjilal, P.C., Das, A. & Bor, N.L. Flora of Assam.1-5 Vols. Govt. of Assam, Shillong. (1934-1940).
- [10] Khan, H.M. Study of Ethnomedicinal plants in Thoubal District of Manipur. Ph.D.Thesis, Manipur University, Canchipur. (2005).
- [11] Parabia, M. & Reddy, M.N. Protocol for ethnomedicinal studies in Ethnobotany. Avishkar publishers, Distributors 807, Vyas Building, Chaura Rasta, Jaipur 302003 (Raj) India. 2002. p. 383-393.
- [12] Rao, R.R. & Jamir, N.S. Ethnobotanical Studies in Nagaland-I. Medicinal Plants. *Econ. Bot.* 36 (2) 1982a, 176-181.
- [13] Rao, R.R. & Jamir, N.S. 1982b. Ethnobotanical Studies in Nagaland –II; 54-Medicinal plants used by Nagas. *J. Econ. Tax. Bot.* 3 1982b, 11-17.
- [14] Salam, S., Jamir, N.S. & Singh, P.K. Traditional uses of medicinal plants by the Tangkhal – Naga tribe in Manipur, India. *Pleione* 3(2): 2009, 157-162.
- [15] Singh, P.K., N.L., Singh, & L.J., Singh. Ethnobotanical studies of Wild Edible Plants in the markets of Manipur. *J. Econ. Bot.* 12 (1): 1988, 113-119.
- [16] Singh, J.P., Suchita, K. & Devi, Th. P. 1992. Medicinal plants of Manipur-1. *J. Econ. Tax. Bot.* 10: 1992, 233-239.
- [17] Singh, H.B. & Sundriyal, R.C. Common spices and their use in traditional medicinal system of ethnic groups of Manipur state, Northeastern India. *Indian Journal of Traditional Knowledge* Vol 2(2) 2003, 148-158.
- [18] Sinha, S. C. 1987. Ethnobotany of Manipur Medicinal Plants. *Front. Bot.* 11987. 123-152.

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