Research Paper

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Home Remedial Plants Used by the Thadou-Kuki Tribe of Manipur, India- A Case Study

Life Sciences

KEYWORDS : Ethno-medicinal, Thadou-Kuki tribe, primary health, Manipur.

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ABSTRACT

Thadou-Kuki tribe of Manipur is known for their rich traditional knowledge on native plant resources. The paper describes a case study conducted on the nature of relationship of the tribe with the plants and the extent of their dependence on them for healthcare. In the present paper 27 species of plants belonging to 21 families which are used for home remedies for the treatment of 10 primary health ailments were recorded.

1. Introduction

Manipur, one of the eight Northeastern states of Indian subcontinent falls under the Indo-Myanmar hotspot region which ranks 8th amongst the 34 biodiversity hotspots region of the world (Myers *et al*., 2000). It is one of the richest reservoirs of plant diversity supporting nearly 50% of India's biodiversity (Mao, Hyniewta & Sanjappa, 2009). The state is inhabited by 33 schedule tribes and sub tribes with a rich heritage of traditional knowledge systems of the different ethnic groups associated with native plant resources. The different ethnic groups utilize plants in their own traditional way and consume different plant parts according to their own science developed through ages.

A literature survey revealed that there are some publications (Ahmed *et al*., 2007, Lokho, A. 2012, Khatoon *et al*., 2012, Salam *et al*., 2012) on folkloric treatment with herbal medicine by various indigenous communities of Manipur, but very few studies are available on home remedies for health care from Manipur.

The Thadou tribe belongs to Kuki community. They settled in almost all parts of the state. Plants have been an integral part of the life and culture of the Thadou tribe since time immemorial. The relationship between plants and the tribe is not limited for food, clothing and shelter but also for medicinal purposes. The Thadou tribe prefers their traditional medicinal knowledge to a large extent which is still in practice inspite of the advancement and availability of allopathic treatment (Nanda *et al*., 2013). Although there are no reports that the Thadou tribe view self-care practices such as taking home remedies as a viable option and, in some cases, the only option for care, information needed to evaluate home remedy use among the tribe is not readily retrievable, available or disseminated.

The use of home and herbal remedies by some specific ethnic groups has been well documented (Murphree & Barrow 1970). Additional research is needed to determine the prevalence of home remedies use by the ethnic groups taking into consideration all the variation between ethnic groups and the regional variations within the groups. A case study has been conducted to identify and document the plants that are used by the family and individual use of home remedies by Thadou tribe of Manipur and the results are presented below.

2. Methodology

Field tours were conducted in various months during 2014 -2015 in the Thadou inhabited areas of Manipur to interact and gather information of ethno-medicinal plants for treatment of primary health care. The information was recorded from 41 informants whose age is between 23-75 years including house wives, local healers and knowledgeable persons in the area and through observations following Jain 1987, Martin 1995, Haile *et al.,* 2007 and Isil *et al*., 2004 with some modifications. The survey was focused on the investigation of local name of the species, family, parts used, mode of preparation, mode of administration and type of health ailment. Diseases are also categorized under 10 major groups 1). Gastrointestinal ailments (dysentry, antidysentric, stomachaglic, piles, bowel tonic, complaints 2). Respiratory problems (common cold, asthma) 3). Dermatalogical problems (burns), 4). Gynecological problems (infection of private part), 5).First aids (cuts & wounds) 6. Dental problems (toothache), 7. Ear and eye problems (ear infection, eye tonic), 8). Bone fracture (enhanced healing). 9. Endocrinology (liver infection), 10). Miscellaneous (Tuberculosis, foot odour, antidandruff). Interviews were conducted in the local language *thadou* dialect. To get an estimate of the presence index for the species in the survey area, each informant was asked whether he/she had at least one individual on their courtyard or kitchen garden and was asked to indicate the part of the plant that was used most frequently. Author name of plants follows Brummit & Powell 1992, plant names index. All the species were thus updated following IPNI, plant list, tropicos in their scientific names. The collected medicinal plants species were introduced in the Medicinal Plant Garden of FEEDS-KVK, Hengbung and are deposited in the same.

3. Results and Discussion

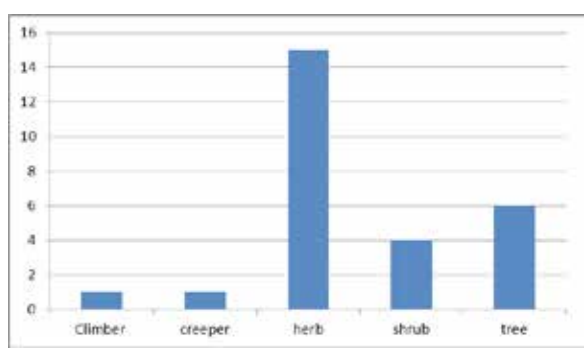
The present study indicated that the Thadou tribe has immense knowledge on the use of plant resources for treatment of various primary health ailments. The current investigation recorded 27 species distributed in 21 families and have been presented below in Table 1. Species are arranged in alphabetical order, family names in parenthesis with their accession number followed by their local names, plant parts used and mode of preparation and uses. It has been observed that certain plants are useful in treating one disease whereas some are for multiple ailments.

Table 1: Plants used as medicine

Sl.No	Name of the species	Local Name	Parts used	Mode of preparation and uses
1	*Allium odoratum* L. [Liliaceae] KVKMP 0023	Louthul jungnei	Leaf	Leaf paste used in bone dislocation

2	*Amomum dealbatum* Roxb. [Zingiberaceae] KVKMP 0027	Aidul	Leaf	Foot is covered with the leaves while wearing shoes. The leaves are replaced daily to cure foot odour
3	*Artemisia nilagirica* (C.B.Clarke) Pamp. [Compositae] KVKMP 0024	Saikang	Leaf	Decoction is anti-dysenteric
4	*Bryophyllum pinnatum* (Lam.) Kurz [Crassulacea] KVKMP 0017	Mei-kahlou	Leaf	Fleshy part is applied as porridge on burns
5	*Calamus floribundus* Griff. [Arecaceae] KVKMP 002	Tiingdon	Young shoots	Cooked with milk to cure Tuberculosis
6	*Callicarpa arborea* Roxb. [Verbenaceae] KVKMP 0022	Nakie	Bark, young twig	Bark paste cures wounds. Young twig is eaten to cure stomachache
7	*Clerodendrum cecil-fischeri* Rajendra & Daniel [Verbenaceae] KVKMP 0016	Belnam	Leaf	Leaf extract applied in ear infection
8	*Crassocephalum crepidioides* (Benth.) S. Moore [Asteraceae] KVKMP 0018	Ham-dong	Leaf	Leaf paste is Styptic, decoction is Hypotensive
9	*Croton caudatus* Giesel. [Euphorbiaceae] KVKMP 001	Thanlou	Leaf	Leaves extract used as anti- dandruff. Leaf paste used in treatment of wounds, decoction taken for bowel complaints, dysentery, liver infection and asthma
10	*Cucumis sativus* L. [Cucurbitaceae] KVKMP 003	Chang-mai	Fruit	Crushed juice is consumed for toothache and fresh fruit as eye tonic
11	*Cymbopogon citratus* DC. [Poaceae] KVKMP 0019	Gam saikang	Leaf	Decoction is anti-dysenteric
12	*Dillenia pentagyna Roxb.* [Dilleniaceae] KVKMP 0021	Nave	Bark, leaf	Bark extract is bowel tonic.
13	*Dendrocnida sinuata* (Blume) Chew [Urticaceae] KVKMP 007	Thahpi	Roots	Root infusion with crab is taken against dysentery
14	*Dysoxylum gaudichaudianum* [Meliaceae] KVKMP 0015	Thingth-upi	Leaf	Decoction of the leaves is anti-dysenteric
15	*Euphorbia hirta* L. [Euphprbiaceae] KVKMP 008	Negeipat-lou	Milky latex	Applied in cheilosis
16	*Euphorbia pulcerrima* Wild.ex Klotzch [Euphorbiaceae] KVKMP 0025	Tang-sambol/ Christmas pah	Leaf	Leaf paste styptic
17	*Fagopyrum esculentum* Moench. [Polygonaceae] KVKMP 0014	An-bongche	Whole plant	Juice is eye tonic
18	*Ficus hispida* L. [Moraceae] KVKMP 006	Khupdo	Leaf	Leaves are stick together where amber is keep in between. The extract oozes out is used in eye infection
19	*Goniothalamus sesquipedalis* Hook. F. & Thoms. [Annonaceae] KVKMP 009	Daikham	Leaf	The smoke of the burnt leaf is inhaled in common cold
20	*Hogsonia macrocarpa* (Blume.) Cong. [Cucurbitaceae] KVKMP 0026	Gam-mai	Fruit peels	Infusion used in curing fever and dysentery
21	*Myrica faya* Dryand. [Myricacaea] KVKMP 0013	Makei	Bark	Bark decoction antidysenteric
22	*Papaver somniferum* L. [Papaveraceae] KVKMP 0010	Kani	Latex	Dried latex mixed with water is used for treatment of dysentery, pile case
23	*Phyllanthus fraternus* G.L. Webster [Phyllanthaceae] KVKMP 004	Sohlhu tolkum	Fruit	The fruit mixed with salt and mustard oil is applied in toothache
24	*Plantago erosa* Wall. [Plantaginaceae] KVKMP 0011	Vohbil che	Whole plant	Boiled and taken as stomachic
25	*Scutelleria discolor* Wall. Ex Benth. [Lamiaceae] KVKMP 0020	Dapthah lou	Whole plant	Decoction is used for infection of private part in female infant
26	*Tacca chantrieri* Andre. [Taccaceae] KVKMP 005	Aikha	Rhizome	Crushed extract is applied as poultice against rheumatism
27	*Vigna unguiculata* (L.) Walp. [Leguminosae] KVKMP 0012	Beloi	Young twig	Eaten raw to cure stomachache

In Manipur, 1/3 of the total geographical area is under the hilly terrain. Inspite of the accessibility to allopathic medicine, the tribe still continues to depend on herbal remedies for treatment of various primary health ailments. The gathered data indicated that out of 27 plants, majority are herbs follows by shrubs, tree, creeper and climber as shown in fig.1.



Most of the plants used as home remedies were used for treatment of gastrointestinal diseases and the least in bone fracture, cardiovascular, gynecological and respiratory ailments as shown in fig.2

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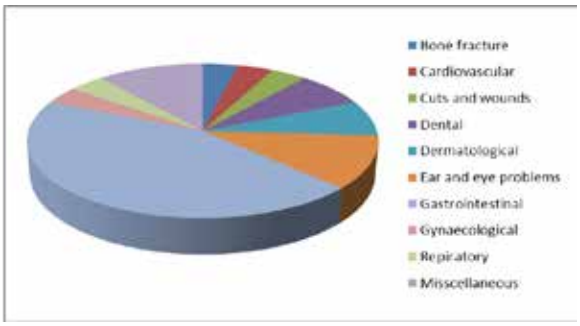

Fig.2: Pie chart showing the major health ailments

Some of the plants which have multiple uses are *Crassocephalum crepidioides*, *Callicarpa arborea*, *Clerodendrum cecilfischeri*, *Croton caudatus*, *Cucumis sativus, Hogsonia macrocarpa, Papaver somniferum.* They are styptic & Hypotensive, used for wounds & stomachache, anti- dandruff, wounds, bowel complaints, dysentery, liver infection & asthma, toothache & eye infection, fever &dysentery, dysentery & piles respectively.

Regarding the mode of preparation the maximum was recorded as decoction (29.63%), followed by extract (18.51%), poultice (14.81%), infusion (11.11%), porridge (7.40%), freshly eaten (7.40%), smoke (3.70%) and as food (3.70%). The mode of administration is explained in table.1, where majority is consumed as internal (62.96%) in the form of decoction, food, infusion and the rest as external use (37.03 %) in form of poultice, smoke, extract etc.

Comparatively, informants who are more than 45 age old have been proved to have more traditional knowledge than the younger ones. Women are more accustomed and have more familiarity with the plants. Analysis of the present study indicates that the Thadou tribe has immense knowledge on the use of plant resources as they have strong connection with nature or forest is their routine life. Inspite of its richness in traditional knowledge by the past generations, the present generations, the present generation hardly know the traditional knowledge. This is due to the scarcity of plants in the nearby surroundings as a result of habitat destruction caused by human activities leading to erosion of the traditional knowledge and even the local names. Moreover, the present generation is not interested in the indigenous treatment.

Documentation of traditional knowledge owned by the old generation has become more necessary. Moreover, majority of the medicinal plants have become rare and endangered in the natural habitats due to habitat loss by human interference on the environment. As a result, the younger generation has lost interest in traditional knowledge and is more inclined towards allopathic system of medicine.

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