

An ethnobotanical study of *Chirus*- A less known tribe of Assam

Singh *Vivek Narayan, Chanu L Ibemhal, *Chiru* Community[§] & Baruah[#] MK

Botanical Survey of India, Eastern Regional Centre, Shillong-793 003, Meghalaya,

[§]Chiru community members of Kamranga village, Cachar district, Assam,

[#]Cachar Degree College, Assam University, Silchar, Assam

E-mail: drvivekonline@gmail.com

Received 08.04.09; revised 11.02.10

In present paper the first hand information is given about the ethnobotanical study of *Chiru* tribe of Lakhipur sub-division of Cachar district, Assam. Fifteen plant species belonging to 12 families are found to be utilized in 27 diseases. Out of 31 ethnobotanic remedies reported, 11 modes of uses are reported for the first time. Leaves are found to possess maximum therapeutic property over any other part.

Keywords: Ethnic group, *Chiru* tribe, Kamranga village, Assam, Therapeutic uses

IPC Int. Cl.⁸: A01D 11/00, A01D 12/27, A01D 16/02, A01D 7/12, A01D 14/06, A01D 7/35, A01D 12/34, A01D 13/00, A01D 7/31

The Northeastern region of India is inhabited by many ethnic groups. Being the thickly populated state of North east, Assam is the home place of more than 25 ethnic groups of diverse racial origin¹. About 80% population of Assam reside in remote areas, and is totally dependent on plants for their day to day life. Not only for food, fodder, cloths, house making necessities but their medical requisites are also fulfilled by the wild plants growing in their vicinity. These tribes possess sufficient ethnic knowledge of medicinal plants to cure their health problems.

Many ethnobotanical studies on various tribes of the state have already been done by several workers²⁻⁷ to find out the traditional knowledge of Assam but unfortunately a tribe which is far from the fast running world is left so far. This tribe came to Manipur and Cachar district of Barak valley of Assam around 70 yrs ago from Myanmar and is known as *Chiru*. Though, Manipur has a sizeable population of *Chirus*, the Kamranga village of Cachar district of Assam has only ca 200 members, who live in quite remote hilly areas and are facing abject poverty and scarcity of basic social amenities. This tribe speaks its own *Chiru* language. Their relation with the plants can be easily estimated by the meaning of the word

Chiru in their language, which stands for, the seed of the plant. *Chiru* people practice shifting cultivation and grow a variety of fruits like banana, orange, lemon, and papaya for their consumption and selling. However, they belong to very old ethnic group but they have not been officially recognized as scheduled tribe of the state, while their counterparts in Manipur have got the same. The Kamranga village of *Chiru* is located in Lakhipur sub-division of Cachar district of Assam, ca 45 km from Silchar town and situated at 24°55' N latitude and 92°58' E longitudes.

Methodology

The present study is based on the field survey of Kamranga village of Cachar district of Assam during 2005-06. The voucher specimens of ethnomedicinal importance were collected and documented with their ethno-therapeutic data. The information was collected from herbal practitioners or *kavirajs*. Experienced persons were also interviewed for local names, plant parts used, method of preparation of drugs, dosages and their mode of administration. The voucher specimens were mounted on herbarium sheets following standard method⁸ and were lodged in the Herbarium of Department of Botany, Cachar College, Assam University. The ethnomedicinal information collected during the survey is also cross checked from available literatures^{1-7,9}.

*Corresponding author

Enumerations

The collected plant samples were identified with the help of standard literatures¹⁰⁻¹³. Botanical names are arranged in alphabetical order with their families; local *Chiru* names and voucher specimen number are given respectively. Diseases or purposes, plant parts used with mode of preparations and administration of drugs are also given Table 1.

Results & discussion

It is revealed that 15 plant species belonging to 12 families are used in 31 therapeutic modes to cure 27 diseases / problems by this ethnic group. It is also found that some problems are cured by more than one

plant species, viz. gastric trouble is cured by maximum 04 species; cough, fever and skin diseases by 03 species followed by bleeding, boils and urinary tract infections by 2 species.

Most important finding of the study is the report of 11 new therapeutic uses which have not been reported earlier from any other ethnic group. In terms of uses of plant parts, it is observed that leaves are much important from therapeutic point of view with 37% uses under the study, as utilized in 15 different ways; followed by fruits, bulbs, rhizomes and twigs (10% each); seeds, flowers and inflorescence (3% each). Besides this five diseases (12% in this study) are cured by whole plant.

Table 1—Ethnomedicinal uses reported from *Chiru* tribe of Cachar district, Assam

Botanical name (family)- collection Number	Vernacular name	Diseases, mode of preparation and administration
<i>Adhatoda vasica</i> Nees (Acanthaceae)- LIC1185	<i>Chikpa</i>	Twenty leaves of the plant are boiled in 1 cup of water and decoction is taken twice a day for the treatment of cough, fever and itching. *Three twigs are chewed per day before morning tea for treating diabetes. *Fresh leaves of plant with equal no. of leaves of <i>Azadirachta indica</i> are ground to make capsules, and 3 capsules are taken orally per day for one year to develop resistance against poison. One tea spoon paste of bulb is taken with warm water three times a day to cure gastric troubles.
<i>Allium sativum</i> L. (Liliaceae)- LIC1106	<i>Thingkh</i>	Bulb paste is applied on injuries to remove pus. Bulb is cooked regularly with vegetables to maintain blood pressure. Bulb + seeds of <i>Ferula asaefotida</i> + butter are pasted and massaged on paralysed body part. *One teaspoon fresh extract of tender portion of leaf base mixed with honey (1:1 ratio) is given daily to cure dysentery, gastric troubles and stomach worms.
<i>Ananas comosus</i> (L.) Merr. (Bromeliaceae)- LIC1125	<i>Kutteira</i>	Ripe fruit is consumed to cure cough. Extract of young leaves and honey is taken ½ - ½ spoon once a day for breathing problems.
<i>Andrographis paniculata</i> (Burm.f.) Nees (Acanthaceae)- LIC1058	<i>Bhugati</i>	Either 3 twigs are chewed or 10 twigs are boiled in a cup of water and decoction is given before breakfast in fever, cough and liver troubles.
<i>Bambusa tulda</i> Roxb. (Poaceae)- LIC1077	<i>Ruo</i>	*Wax and hairs are applied directly on the injured body part to check bleeding.
<i>Calotropis procera</i> (Aiton) W.T. Aiton (Asclepiadaceae), LIC1143	<i>Khoi rouk boo</i>	Latex of leaf (25ml) + turmeric (15gm) + mustard oil (5gm) is mixed and applied externally in skin diseases. Half cup plant juice with 10 drops of honey is taken orally in morning for gastric problems, diarrhoea, stomach ulcers and urinary tract infections.
<i>Centella asiatica</i> (L.) Urb. (Apiaceae)- LIC1098	<i>Sevon pui</i>	Ten plants each of <i>Centella asiatica</i> and <i>Oxalis corniculata</i> is boiled with 10 leaves of <i>Ocimum sanctum</i> and decoction is given for dysentery and digestive problems. Leaves (10-12) are chewed empty stomach in early morning for blood purification. Powder of dried leaves is applied on skin infections.
<i>Curcuma longa</i> L. (Zingiberaceae)- LIC1119	<i>Aiang</i>	*Crushed rhizome of the plant + ginger + mustard oil (4:4:2) is warmed after packing in bamboo leaves and applied on fractured bone to get early relief. *Half cup of rhizome juice is given regularly once a day to cure piles and urinary tract infections. Crushed rhizome is mixed with mustard oil (4:1) and paste is applied on wounded area for its antiseptic property.

(Contd.)

Table 1—Ethnomedicinal uses reported from *Chiru* tribe of Cachar district, Assam—*Contd.*

Botanical name (family)- collection Number	Vernacular name	Diseases, mode of preparation and administration
<i>Lagenaria siceraria</i> (Molina) Standl. (Cucurbitaceae)- LIC1126	<i>Oomboo</i>	*Warm leaves are wrapped on the boils to make pus out.
<i>Mikania micrantha</i> Kunth. (Asteraceae)- LIC1079	<i>Rifugi</i>	Crushed leaves are applied on the cut area to stop bleeding. Fresh leaf paste is applied in ring worm and other skin infections. Five teaspoon leaf juice with 5 drops of honey is given orally to bring down fever.
<i>Momordica charantia</i> L. (Cucurbitaceae)- LIC1127	<i>Chengkha</i>	Fried fruit with meal is helpful in fever.
<i>Musa balbisiana</i> Colla (Musaceae)- LIC1138	<i>Changphai</i>	*Inflorescence is boiled with 4-6 crabs in 500 ml of water and decoction is given once daily for 7-10 days to cure jaundice.
<i>Parkia timoriana</i> (DC.) Merr. (Mimosaceae)- LIC1122	<i>Yong-chak</i>	*Boiled or fresh seeds are taken with rice for easy removal of intestinal gas. *Four to five tender pods are taken orally in intestinal disorder.
<i>Solanum melongena</i> L. (Solanaceae)- LIC1132	<i>Mantaboo</i>	*Leaves are warmed and wrapped on the body of sick dog. Half cut and warmed fruit is place on boil, it sucks out the unwanted materials from boil.
<i>Spilanthes calva</i> DC. (Asteraceae)- LIC1048	<i>Napu lei</i>	Fresh flower is rubbed and kept near the gums to cure the toothache.

*New therapeutic uses reported.

From this study it is clear that this tribe has sound knowledge about the medicinal values of plants available in their area. Hence, there is an urgent need of their protection so that this ethnic knowledge and their bearers, who are straggling for their existence, can be saved.

Acknowledgement

Authors are thankful to Dr (Mrs) SJ Phukan, Joint Director, Botanical Survey of India, Eastern Circle, Shillong and Director, BSI, Kolkata for providing facilities. Thanks are also due to local *Chiru* people who helped during collection of data. The authors (LIC & MKB) are also thankful to Head of Department, Botany and Principal, Cachar College, Assam University, Assam for their encouragement and suggestions during the present study.

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