

“Ethnomedicinal Studies Of Deori Tribes Of Bihpuria Sub Division, Lakhimpur District, Assam”

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Abstract: Ethno medicinal knowledge is very ancient. It provides information regarding the traditional uses of plants which played a key role in the health systems of different ethnic groups living in remote areas of North East India. Ethnomedicinal study of the Deori Community of Bihpuria sub division, Lakhimpur district Assam was done during 2013/2014. In the present study 60 species of plant growing wild in Rural, semi forest, cultivated field and cultivated garden which are commonly used by people of this region. Deori community utilized Ethno medicinal plants for the treatment of diseases and disorders like diarrhoea, dysentery, fever, headache, skin diseases, boils, and blisters, rheumatism and gout, piles, jaundice, ophthalmic diseases, toothache, cut and wounds, cough cold, asthma and other common diseases. The present paper reports the some common plant species and their scientific name, local name, family, distribution, parts used and medicinal used for curing diseases.

Keywords: Ethno medicine, Bihpuria, North Eastern area

I. Introduction

The primitive societies in India have been dependent on herbal medicines from the time immemorial. In fact, all traditional systems of medicine had their roots and origin in folk medicines or ethno medicines. This tradition of man plant relationship give rise to relation between societies and plants which now forms the core of the interdisciplinary science “ Ethno botany”. This branch attracted much attention, not only due to its great academic or historical importance, but also due to many economical applications. All over the world, there has been an increasing interest in the scientific study of man plant interaction in the natural environment which is clearly visible among various indigenous people, commonly designated as aborigines.

The North Eastern area of India is enriched with diversified plant wealth and ethnic culture. The rich floristic diversity is due to its unique geographical location and comprises of forest range from tropical to alpine and has a vast reservoir of plants. But although it is rich in natural resources and ethnic culture the ethno botanical studies cover only 5%-8% of it. Area with rich flora and inherited by tribal communities provide better scope for ethno botanical works (Jain 1967, 1986, 1987). Assam is the gateway to the north east; it is the second largest state of North East India situated between 24°2′-27°6′N latitude and 89°8′-96°E longitude covering an area of 78,438 sq km of which 23,688 sq km area is cover by forest. The upper Assam district Lakhimpur inhabited by the Deoris is covered essentially with tropical vegetation, typical for foot hills and their adjoining plains of eastern Himalayas. It includes semi evergreen deciduous forests.

Selection of Deori tribes of Bihpuria Subdivision of Lakhimpur district for the present study is based on the fact that they are large Secluded from urban culture. This is due to poor communication and transport, and lack of development of resources, which hinder the growth of urban center. The Deori prefer to inhabit in areas in and around forest several isolated habitats are even scattered in deep interior in to the forest. Botanically also the area inhabited by the Deories of Bihpuria sub-division are little known as no floristic work has been done as so far, except the work of (Kangilal *et al.* 1934-1940)

The main aim of the studies is to evaluate the plants used by Deoris of Lakhimpur district Assam for various purposes to record the new and the less known uses of the plants by them.

II. Method Of Study

The present work is based careful planned intensive survey and field studies conducted during 2013-2014 in the village inhabited by the Deories of Bihpuria sub division, Lakhimpur district, Assam. Altogether 60 plants species were identified with the help of standard keys of several workers [15-18]. Several weeks were spent among the local people in each visit in a particular area a close study of the uses and names of plants was made in the field. An effort was made to visit the same locality in different seasons, but it was not always possible for obvious reasons. After Ethnomedicinal surveys, herbariums were prepared following the standard methods [19-20]. The collected specimens have been kept preserved in Botany dept of LTK College, Lakhimpur, Assam for records. Each species is provided with Nomenclature, family, vernacular name (Assamese & Deori), distribution and part/parts used to cure diseases in ethno medicinal practice.

Knowledgeable persons of Deori community and traditional herbal healers were contacted and information was collected through interviews, observations and discussions held during field survey through well prepared questionnaires.

Table 1: Ethnomedicinal used for treatment of various diseases

Sl. no	Scientific name	Local name	Family	Distribution	Parts use	Medicinal use
1	<i>Abrus precatorius</i> Linn	Ass & De Latumoni	Fabaceae	Entire India	Root	Diarrhea, dysentery & tonsillitis
2	Abustilon indicm(L)GDOn	Ass:Asurium De:peripetari	Malvaceae	Entire India found in the study area	Fruit bark	Chronic dysentery
3	<i>Acasia farnesiana</i> (L)wild	Ass & De Taruakadam	Mimosaceae	Entire India, planted in the study area	Branches Bark	Pyorrhea,Dysentery.
4	<i>Acorus calamus</i> .Linn	Ass & De Bosh	Araceae	Entire India, Planted damp Marshy places	Rhizome	Disuria, Cough Dsemenorrhaea.
5	<i>Adhatoda vasica</i> Nees.syn	Ass & De Bahaka tita	Acanthaceae	Common in N. E. India, Also in study area	Leaves	Cough , Asthma.
6	<i>Ageratum conyzoids</i> Linn	Ass :Gonadhwabon Dee:Nasebasi	Asteraceae	Common in Waste places	Leaves	Applied in cut injury to stop bleeding
7	<i>Allium sativum</i> Linn	Ass & de Naharu	Liliaceae	Cultivated as Winter crop in the whole area	Fresh leaves, Bulb.	High blood pressure , Common cold, Diabetes,Gastritis
8	<i>Ananas comosus</i> L. Merr.	Ass: Matikothal Dee: Yatiju	Bormaliaceae	Cultivated Entire India	Leaves	Diarrhea, Tender leave is used as a vermicide of children
9	<i>Anamitra peniculata</i> colehr	Ass- Kumora Dee:Chumu	Menispermaceae	Entire India	Seeds	Skin diseases
10	<i>Alstonia scholaris</i>	Ass-Satina Dee:Satiana	Apocynaceae	Entire India Common in Study area	Bark	Malarial fever,ulcher, Chronic dysentery, Snake bit, diarrhoa
11	<i>Artocarpus integrifolia</i>	Ass- kothal Dee:Tizu	Artocarpaceae	Entire India	Fruits	Asthma,cuts,fever, Wounds,diabetes, Jaundice,snake bit
12	<i>Asperagus racemosus</i>	Ass: Satmul Dee:Shatamuli	Liliaceae	Torpical and Sub-torpical Regions of India,	Root	Nervous disorder, Rheumatic pain, Diarrhea, Dysentery
13	<i>Azadiracta indica</i>	Ass:Mohananim Dee:Kabasi chiya	Meliaceae	Wild in the dry forest of South India	Leaves	Small pox, scabies, Control intestinal worm
14	<i>Aegale marmelos</i> Linn	Ass&Dee: Bel	Rutaceae	Entire India	Fruit,leaves, Root	Dirrhea,piles,jaundice Vomiting,eye disease, fever
15	<i>Bambusa balcoa</i> Roxb.	Ass:Bhaluka bah Dee:Gumade yuwa	Poaceae	N. E. India, Cultivated in study area	Newly grown sucker	Heart weak,insect bite Menorrhagia,use as an antiseptic
16	<i>Bambusa tulda</i> Roxb.	Ass: Jati bah Dee:Jati yuwa	Poaceae	N. E. India, Bengal, Cultivated in The study area	Leaves	Reliving of menstrual Troubles, Use as vermicide
17	<i>Boerhaevia diffusa</i> L <i>Boerhaevia ripens</i> L	Ass:purnanowa Dee:Misgu naharu	Nyctaginaceae	Entire India, Common all Over the Study area	Whole plant	Elephantiasis,dropsy
18	<i>Bassica nigra</i> (L) Kush	Ass&Dee Merlai	Brassicaceae	Cultivated Entire India	Seed	Common cold

19	Bryophyllum Calycinum Salisbysyn	Ass:Dooartenga Dee:Cheta chiya	Crassalaceae	Tropical Regions of India	Leaves	Urinary troubles, Dysentery
20	Caesalpinia bonducella	Ass:Letaguti Dee:Letai chiti	Caesalpinaceae	Temperat Regions of India	Fruit	Pneumonia,Gastric troubles
21	Cassia alata Linn syn	Ass&Dee Khorpat	Fabaceae	Entire India, Common in the study area	Leaves	Ring worm
22	Citrus limon (L)Burm,f. syn	ASS:Jatinemu Dee:Seta chiti	Rutaceae	Cultivated all over India	Fruit	Vomiting,diarrhea
23	Clerodendron Colebrookianum L	Ass:Naphaphu Dee:Napapu	Verbinaceae	Allmost all Over India	Leaves	Hypertension, high blood presure
24	Clerodendrum indicum (L)kunts	Ass:Brahmajasthi Dee:Akolbi	Verbinaceae	All most all Over India	Leaves	Stomachache
25	Coix lacryma Jobi Linn	Ass:Kaurimoni Dee:Katu pomp	poaceae	Warmer parts of India	Root	Waist pain
26	Croton caudatus Geisel	Ass-Lotamahudi Dee:Mahodi	Euphorbiaceae	N.E.India Common in The study area	Leaves	Urinary troble
27	Croton tigilium Linn	Ass:Konibih Dee:Konibi		Assam, Meghalaya, Bengal,and South India	Stem,Bark	Toothache,amoebic dysentery, Constipation
28	Curcuma longa Linn	Ass:Holodhi Dee:Haldi	Zingiberaceae	Cultivated all most entire India	Rhizome	Cut injury, acidity, Chest pain
29	Cissampelos pareira Linn	Ass & De Garialota	Menispermaceae	Tropical & Sub-tropical India	Leaves , stem	Wounds
30	Callipteris esculenta	Ass: Dhekia Dee:Deki	Dipteridaceae	Entire India	Root	Jaundice
31	Carica papaya L	Ass & Dee Omita	Caricaceae	Cultivated Entire India	Fruit,Stem	Liver disorder
32	Capsicum chinense	Ass:Bhut jolokia Dee:Bi-panchu	Solanaceae	Cultivated Entire India	Fruits	Respiratory infction, Stomach problem
33	Centella asiatica	Ass:Bormanimuni Dee:Demasi manimuni	Apiaceae	All over the Plains of India	Leaves,Stem	Blood purifier, skin diseases
34	Chenopodium Album L	Ass:Jilmil sak Dee:Jilimili jubura	Chenopodiaceae	All over the Plains of India,	Leaves, Tender shoots	Stomach pain
35	Dillenia indica L	Ass:Ou-tenga Dee:Chopa	Dilleniaceae	N.E. India	Root,Leaf Fruit	Hair lotion, fever, Dysentery, chest pain
36	Dioscorea alata (L)	Ass:Kath alu Dee:Achuta	Dioscoriaceae	N.E.India	Tubers	Fever,gonorrhoea, Tumors,leprosy.
37	Euphorbia nerifolia	Ass & Dee Sijoo	Euphorbiaceae	Warmer parts of India	Root,Stem	Antidote to snake Poison, To removes warts
38	Ficus hispida L	Ass:Khohota dimoru Dee:Haba dimaru	Moraceae	Entire India, Also study area	Fruits,leaves, Sticky latex	Liver ailments, urinary diseases and inflammatory
39	Garcinia kydia Roxb	Ass:Kujithekera Dee:Tischa	Clusiaceae	N.E. India, Common in the study area	Fruits	Amoebic dysentery
40	Heteropanax fragrans Roxb	Ass & Dee kecheru	Araliaceae	Throughout Sub Himalayan tract	Bark	Blood dysentery
41	Houttuynia cordata Thunb	Ass & Dee Mochendare	Piperaceae	Entire India	Leaves	Dysentery,Colic and Bilious pain.
42	Jatropha curcus L	Ass:Bongali era Dee:Arena	Euphorbiaceae	N.E. India	Leaves, twigh,seed	Ulcer,tumor,scabies, Wound,skin diseases Rheumatism,paralyses
43	Leucas aspera (Wild)SPR	Ass:Doroonban Dee:Durun kawa	Lamiaceae	All over the Plains of India,	Leaves	Pneumonia

44	Litsea monopetala (Roxb) pers	Ass & Dee Sualo	Lauraceae	Foohills of Himalayas And in south India, Common in Study area	Root, Bark	Ulcer, Gastric trouble Diarrhea
45	Mentha spicata syn	Ass:Bonpoduna Dee:Amir poduma	Lamiaceae	Cultivated throughout the plains of India,&also Study area	Leaf	Diarrhea, loss of appetite
46	Murraya koenigii spreng	Ass & Dee Norrasingha	Rutaceae	Entire India Common in Scrub jungles, evergreen forest	Leaf	Abdominal gripe, Intestinal colic
47	Ocimum scantum	Ass:Tulshi Dee:Koliya tulahi	Lamiaceae	Entire India	Fresh leaves Tender shoot	Cold and congestion Of lungs
48	Psidium guajava L	Ass:Modhurim Dee:Moduri	Myrtaceae	Cultivated Entire India	Leaf	Diarrhea,Blood dysentery, Amoebic dysentery
49	Paederia foetida L . syn	Ass:Vadailata Dee:Sepa siya	Rubiaceae	Entire India	Leaf	Dysentery, Diarrhea, Indigestion, Anemia
50	Papaver sominferum L	Ass:kani Dee:Ingi	Pepvaraceae	Grown in U.P.,Punjab Rajasthan, M.P.,N.E. Region	Seed	Relive from pain , Rodent ulcer
51	Piper longum L	Ass: Pipoli Dee: Pipol	Piperaceae	Found in hotter parts Of India	Fruit	Asthma,Pain,Cough, Diarrhea,Jaundice, Feaver ,Piles,Dog bit
52	Piper nigram	Ass:Jaluk Dee:Kuma chiti	Piperaceae	Entire India	Seed	Diuretic,Curminative, Stimulant,malarial fev
53	Phylanthus emblica L	Ass:Amlokhi Dee:Amlaki	Euphorbiaceae	Cultivated Entire India	Fresh&dired fruits	Skin diseases dysentery
54	Saceharum officinarum L	Ass:Kuhiar Dee:Cha	Poaceae	Cultivated Entire India	Stem	Jaundice
55	Terminalia arjuna	Ass:Arjun Dee:Chikuru kusiri	Combretaceae	Greater part Of India	Bark	Heart trouble
56	Terminalia bellarica(Gaertn)	Ass:Bhumora Dee:Bhumura chiti	Combretaceae	Greater part Of India	Bark, Fruit	Gastric ulcer
57	Terminalia chebula (Retz)	Ass:Silikha Dee:Kabega	Combretaceae	Entire India	Bark, Fruit	Pills, Biliary disorder
58	Tinospora cordifolia Miers	Ass:Sogoni lata Dee:Sagan chiya	Menispermaceae	Tropical India	Stem	Jundice,Knee pain, Bone fracture,Waist pain
59	Vitex negundo L	Ass & Dee Posotia	Verbinaceae	Warmer parts of India	Leaves	Rheumatic pain, Tonsillitis
60	Zingiber officinale	Ass:Ada Dee:Yang	Zingiberaceae	Entire India (cultivated Crop)	Leaves, Rhizomes	Stomach disorder, Dyspepsia, Colic and Vomiting

III. Result And Discussion

A total of 60 species belonging to 40 families were identified. (Table1) For each species the scientificName, local name, family name, distribution, part used and medicinal uses were recorded. In the Present study, reveal that most of the plant species used for the treatment of skin and other diseases.

The result of the present study provided evidence that medicinal plants continue to play an important role in the health care system of this Community. Not only Deori Community but people of the

Assam used these plants for well being of their life, general ailments and first aid (Hazarika *et al*, 2012). The general health Problems such as skin diseases, asthma, dysentery, diarrhea, stomach pain, cough, ulcer, and fever are most common in this region. High blood pressure, diabetes, abdominal pain, menstrual problem, bleeding, chest congestion and heart problem are also reported to some extent. Plant such as

Azadiracta indica, *Carica papaya*, *Centella asiatica*, *Phyllanthus embilica*, *Cassia alata*, *Anamitra peniculata* are used for the treatment of skin and liver disorder. *Chenopodium album*, and *Capsicum Chinese* is used for the treatment of stomach problem and respiratory infection. *Leucas aspera* and *Ficus hispida* was used for the treatment of liver, ailments, snake bit, scorpion sting, sinusitis, headache etc. *Tinospora cordifolia* is used for the treatment of irregular fever, chronic fever, cough, eye diseases etc. *Allium sativum* for high blood pressure, diabetes and digestive problems, intestinal worms, constipation, and skin diseases. *Aspergus racehorses* for haemorrhage, diarrhea, piles, hoarse-ness of voice, cough, arthritis, fever, diseases of femal genetal tract, etc. *Abrus plleicatorius*, *Acasia farnesiana*, *Acorus calamus*, *Adhatoda vasica* are used for the treatment of diarrhea, dysentery, tonsillitis, pyorrhoea, disuria, dysmenorrhoea, cough, asthma, etc. *Piper longum*, *Terminalia arjuna*, *Terminalia bellarica*, *Terminalia chebula* are used for the treatment of indigestion, pain, dog bit, Cough, fever, piles, diarrhea, jaundice, heart trouble, gastric ulcer, biliary disorder, consumption, Vomiting, pox, diseases of mouth etc.

The world health organization estimates that about 80% of the population of most developing Countries rely on herbal medicines for their primary health care needs. The finding of the study Envisage that the herbal medicine have great potentiality to care different kind of diseases.

Some species used by the Deori community are also used by the different community from other Places of India as it is evident from earlier works [22-26]. The information generated from the present Study regarding the medicinal plants used by the people of this region need a through photochemical investigation including alkaloid extraction and isolation along with few clinical trials. This could help in creating mass awareness regarding the need for conservation of such plants. The paper highlights the information to conserve these important plant species for sustainable uses for the future generations.

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