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ETHNOBOTANICAL STUDIES ON MEDICINAL FLORA IN THARU TRIBAL POCKETS IN KUMAON REGION IN UTTAR PRADESH

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Ethnobotanical studies coupled with incidental medicare programme was carried out in the tribal belt inhabited by Tharu community in The Nainital district in Kumaon region of Uttar Pradesh Information regarding the flora of the area, people and their medical practices through herbal resources were recorded. In this tribal region 12 villages were surveyed and collected 179 plants out of which 42 have been recorded to be of importance in Ayurveda System of medicine. Details of the studies are presented in this paper.

Introduction

There are about 212 types of scheduled tribes presently surviving in India which infact are living remains of far primitive tribal culture of the land. In the state of U.P. has as many as 23 types of tribals are living, out of which Tharus are important tribals living in foot hills of Himalayas-the tarai of Nainital, Gonda, Gorakhpur, Baharaich, Kheri and Pilibhit districts numbering over 2 lakhs as per 1981 census. Ethno-medico-botanical survey was carried out under the aegis of IIADR, (erstwhile Amalgamated Units) Tarikhet during March 1982. The course of study, method and data obtained have been analysed and the present material is contributing a new field of some aspects of tribal culture preserved by them.

The Tharu pockets in Nainital district are scattered beyond Nanakmatta and eastwards of Sharda river in Khatima tehsil lying in between 28°45'-29°00' N and 79°40'-80°00' E of Greenwich.

Ethnographic History

Tharus claim to be Panwar Rajputs and assert that their chief, Udiyajit, was driven from house and home in a quarrel with his brother Jagatdeo, the raja of Dharanagar and came to dwell with a few dependents at Banbasa on the banks of

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river Sharda. Udiyajit had not there been long before his aid was solicited by the Raja of Kumaon, whose territories required defence against some of the neighbouring powers. Success attended the efforts of the Panwar, and gratitude of the Raja induced him to offer an asylum in his territories.

There is yet another history that in the remote past when the King of Dharanagar was defeated by the forces of an invader, the women of the royal palace rather than fall into the hands of the foe fled into jungles with the servants belonging to palace: from these sprang the indigenous race of Tharu.

Ethno-cultural features

In the tribal region 12 villages were surveyed to collect ethnocultural details of Tharu tribes. These are tribals of Mongoloid stock inhabiting in the tarai of Nainital (U.P.). They are essentially shy and ignorant jungle folks and never happy when separated from forest and rivers. They are great hunters and great fish-eaters, a simple, cherry people appear to be an aboriginal race having matriarchal society in which ladies dominate. Consequently they are, like all forest-dwelling races, intensively superstitious. A more haunted, devil-ridden race could not be found; and this is a perfect curse to them. They have their own priests or *bhararas* who must be consulted on every occassion- a practice which involves a heavy expenditure for the unfortunate Tharu. From habituation and from a long course of natural selection, the Tharu has become almost immune from the deadly malarial fever of tarai; it is not true that the Tharu never suffers from fever; but it is an undoubted fact that he is able to live and flourish in a climate which is generally fatal to immigrants from the other districts.

The main occupation of almost all Tharu families is agriculture. They also carry on fishing for their own consumption. There are no cottage or subsidiary industries except *chatai* and basket making at some places. Education is negligible and continuous influx of foreign elements in their area have gradually demoralised them. Frequent theft of bullocks and buffaloes as also of standing crops at some places have terrified them to such a degree that they are reluctant to keep sufficient numbers of bullocks and milch cattle. This is affecting their agriculture and their future development.

These tribals strictly adhere to their ethnic and traditional system of treatment through local harbal resources for curing a number of ailments, psychically more attached to Indian system.

Material and Method

The present study particularly deals with the survey of the flora, folklore claims of plants prevalent among Tharus, incidental medical care given to patients of Tharu tribals and various aspects of life.

(a) Details of Medicinal plants collected:- The survey of medicinal plants collected in the different rural and interior forest areas in Tharu tribal region has recorded. Ample data, informations and allied observations on medico-botanical

aspects of flora and collection of 179 plants was made out of which the medicinal plants of Ayurvedic importance are being enlisted with necessary field informations. The field book nos. of plant specimens have been mentioned with each plants in the order of collectors in the team (SCP & GP) for authenticity and exact locality of availability and taxa occurrence of various medicinal species selected in present context. The plants collection made during the present field study have been lodged in the herbarium of IIADR, Tarikhet.

Abrus precatorius Linn. (Papilionaceae), Gunja, a leafless climber, Barakoli range W-N, 27215, 22.3.1982.

Abutilon indicum Sw. (Malvaceae), Atibala, an undershrub, Bandia, 27038 & 27706, 14.3.1982.

Achyranthes aspera Linn. (Amaranthaceae) Apamarg, erect herb, Khatima range, 27008 & 27685, 12.3.1982

Acacia catechu Willd. (Mimosaceae), Khadir, a tree, Sitargunj, 27232, 21.3.1982.

Adhatoda vasica Nees (Acanthaceae), Vasak, a shrub, Bidora-Nanakmatta, 27204 & 27776, 18.3.1982.

Aegle mermelos Correa (Rutaceae), Bilva, a spiny tree, Barakoli range E-W, 27235, 21.3.1982.

Alstonia scholaris R. Br. (Apocynaceae), Saptparna, a tree with milky latex, Nanakmatta area, 27078 & 27750, 17.3.1982.

Astercantha longifolia Nees (Acanthaceae), Kokilaksa, a shrub, Digrabag, 27050 & 27725, 15.3.1982.

Baliospermum montanum Muell.-Arg. (Euphorbiaceae), Danti, a shrub, Barakoli range W-N, 27254, 22.3.1982.

Boerhavia diffusa Linn. (Nyctaginaceae) Raktapunarnava, a creeping herb, Nanakmatta, 27215 & 27789, 19.3.1982.

Butea monosperma (Lamk.) Taub. (Papilionaceae), Palash, a moderate sized tree, Nanakmatta, 27071 & 27753, 17.3.1982.

Calotropis procera R. Br. (Asclepiadaceae), Ark, a shrub, Nanakmatta, 27079 & 27754, 17.3.1982.

Cassia occidentalis Linn. (Caesalpiniaceae), Kasmard, an undershurb, Sunkharikalan, 27229 & 27912, 20.3.1982.

Centella asiatica (L.) Urban (Umbelliferae), Mandookparni, a prostrate herb, Lohiahead, 27397 & 27656, 12.3.1982.

Chenopodium album Linn. (Amaranthaceae), Vastuk, a herb, Lohiahead, 27391 & 27657, 12.3.1982.

Cissampelos pareira Linn. (Menispermaceae), Patha, a climbing herb, Barakoli range E-W, 27241, 21.3.1982.

Cordia myxa Linn. (Boraginaceae), Sleshmtaka, a tree, Jhankat, 27020 & 27684, 13.3. 1982.

Dalbergia sissoo Roxb. (Papilionaceae), Shinshipa, a large tree, Khatima range, 27014 & 27677, 12.3.1982.

Desmodium gangeticum DC. (Papilionaceae), Salparni, a shrub, Barakoli range E-W, 27237, 21.3.1982.

Eclipta alba Hassk. (Compositae), Bhringraja, a herb, Khatima range, 27046, 14.3.1982.

Euphorbia hirta Linn. (Euphorbiaceae), Dugdhika, a prostrate herb, Bandia, 27046, 14.3.1982.

E. neriifolia Linn. (Euphorbiaceae), Snuhi, an undershrub with milky latex, Jhankat, 27022 & 27687, 13.3.1982.

Ficus benghalensis Linn. (Moraceae), Vata, a large tree, Bidora-Nanakmatta, 27207 & 27778, 18.3.1982.

F. glomerata Roxb. (Moraceae), Udumbar, a large tree, Barakoli range E-W, 27235, 21.3.1982.

Hiptage madablota Gaertn. (Malpighiaceae), Madhawilata, a climbing shrub, Barakoli W-N, 27250, 22.3.1982.

Leucas cephalotes Spreng. (Labiatae), Dronpushpi, a herb, Bandia, 27042, 14.3.1982.

Lawsonia alba Lam. (Lythraceae), Madyantika, a shrub, Bankatia, 27027 & 27692, 13.3. 1982.

Melia azedarach Linn. (Meliaceae), Mahanimba, a small tree, Nanakmatta, 27230 & 27913, 20.3.1982.

Mallotus philippinensis Muell.-Arg. (Euphorbiaceae), Kampillak, a tree, Khatima range, 27009 & 27672, 12.3.1982.

Moringa pterygosperma Gaertn. (Moringaceae), Shigru, a tree, Jhankat, 27021 & 27686, 13.3. 1982.

Lannea grandis Engl. (Anacardiaceae), Jingan, a moderate sized tree, Bidora, 27089 & 27764, 18.3.1982.

Ricinus communis Linn. (Euphorbiaceae), Erand, a shrub, Lohiahead, 27400 & 27665, 12.2.1982.

Salmalia malabarica (DC.) Sch. (Malvaceae), Shalmalli, a large tree, Bandia-Muhammadpurbhuria, 27047 & 27705, 14.3.1982.

Sesbania aegyptica Poir. (Papilionaceae), Jayanti, a shrub, Bidora, 27085 & 27784, 18.3.1982.

Sida cordifolia Linn. (Malvaceae), Bala, a shrub, Bidora-Nanakmatta, 27202 & 27774, 18.3.1982.

S. rhombifolia Linn. (Malvaceae), Mahabala, a shrub, Bidora-Nanakmatta, 27202 & 27774, 18.3.1982.

Solanum indicum Linn. (Solanaceae), Brahati, an undershrub, Khatima range, 27006 & 27669, 12.3.1982.

Sphaeranthes indicus Linn. (Compositae), Mundi, a herb, Khatima, 27060 & 27728, 16.3.1982.

Tamarindus indica Linn. (Caesalpiniaceae), Chincha, a large tree, Sunkharikalan, 27227, 20.3.1982.

Tectona grandis Linn. f. (Verbenaceae), Shak, a large tree, Khatima, 27061 & 27727, 16.3.1982.

Tinospora cordifolia Miers. (Menispermaceae), Guduchi, a large climber, Bidora-Nanakmatta, 27208 & 27779, 18.3.1982.

Vernonia cinerea Less. (Compositae), Sahdevi, a herb, Bandia, 27039 & 27707, 14.3. 1982.

(b) Incidental medical care:- This programme was carried out in the belt of tribal pocket of Tharu population inhabited in about 12 villages by the team after selecting main rural areas having importance in regard to density of population, tribals predominance and incidence of diseases. The methods. process and results have been statistically given in the Table-I.

(c) Details of ethno-botanical claims:- Tharu tribals are still following their traditional system of medicine for treatment of certain ailments through local herbs growing in the neighourhood. Information on 20 such folk claims were collected and summerised in the Table-II.

Conclusion

The ethnobotanical studies coupled with incidental medicare programme carried out in the tribal belt inhabited by Tharu communities have yielded very encouraging resulting in the terms of plants collection, recording of observations, gathering field data on various aspects relating flora, peoples and diseases as tangible outcome of the field explorations undertaken by present investigations in continuation of medico-ethno-botanical project of tribal communities in the hilly region of Uttar Pradesh i.e. Kumaon and Garhwal zones, and other areas in Uttar Pradesh state under the survey of medicinal plants research programme of C.C.R.A.S. implemented by I.I.A.D.R., Tarikhet which has credit to launch ethnobotanical study prgrammes in various tribal areas and bringing into light most useful and many new information-hitherto unknown of scientific and common interest, paving the investigatory path and wide scope for further studies with interdisciplinary approach, with a view to acquaint, conserve, develop and harness the immense potentials of regional, cultural and floral importance, with reorientation of ancient medical knowledge horizons of newer developments and contribution towards search of effective plant remedies of tribal sources in their traditions.

Table. I
Statement of Incidental Medicare Programme in Tharu Tribal Pockets in Nainital District During the Month of March, 1982.

Villages with date	Agnim andya	Amla pitta	Adhm ana	Ama vata	Atis ara	Aji rma	Bhra ma	Dad ru	Da ha	Gran thi	Jirna kasa	Jva ra	Jvarat isara	Kasa
Jhankat Deri-Bankatia 12.3.82	3		1		1		2				10	3	3	6
Bandia-Muhammed-Pur Bhria 14.3.82	2										1		1	3
Dighrabag 15.3.82					2			1		1	9	3	1	29
Bhurh-Khatima 16.3.82	3													
Taperha-Bidora 18.3.82	1	1			2							1	1	6
Balkherha-Nanakmatta 19.3.82	4	5	1	1	3	2	1	1	2		5	1	4	18
SunkhariKalan 20.3.82	1				1									3
Ailment-wise Total	14	6	2	1	9	2	3	2	2	1	25	8	10	65

(Contd.)

Villages with date	Kandu	Krimi	Kati sula	Pan du	Parsv asuta	Pratis yaya	Pram eha	Rakta tisara	Sot ha	Udar ikara	Udar asula	Vra na	Yakrta vikara	Vatavy adhi
Jhankat Deri-Bankatia 12.3.82	2	2	2					1					1	2
Bandia-Muhammed-Pur Bhria 14.3.82			1							1	2			2
Dighrabag 15.3.82	8		3		1	1				1			1	1
Bhurh-Khatima 16.3.82		1								1				
Taperha-Bidora 18.3.82	10	4							1		1			2
Balkherha-Nanakmatta 19.3.82	15	1		2			1				6	2	1	9
SunkhariKalan 20.3.82														
Ailment-wise Total	35	8	6	2	1	1	1	1	1	3	9	2	2	16

Total ailments-28, Total patients-240 (M159 + F81), Total villages covered-12.

Table-II.

Details of Ethno-botanical claims collected

Sl. No.	Local name	Botanical name	Information collected	Source
1	3	4	5	6
1.	Gandhi	*Pterocarpus marsupium* Roxb.	Bowels made of wood is used to store water. This water is given to the patient of gastric trouble for regular use.	Sh. Kalika Prased. Khatima
2.	Marson Kateela	*Amaranthus spinosus* L.	Pounded root with Black pepper & butter milk is given to a patient of spermatorrhoea, twice a day.	Sh. Prem Singh, Vill. Bankatia, Khatima
3.	Neem	*Azadiracta indica* A. Juss.	Decoction made of leaves is said to be febrifuge.	-do-
4.	Tamakhu	*Nicotiana rustica* Linn.	Fresh Juice of leaves of both plants dropped in eyes when there is pain.	-do-
5.	Besaram	*Ipomoea crassicaulis* (L.) Robins.	Warm leaf applied with oil & ghee is tied over boils to maturate.	-do-
6.	Chirchira	*Achyranthes aspera* Linn.	Paste of the root applied externally on scorpion sting.	-do-
7.	Bhant	*Clerodendrun infortunatum* L.	Root bark is pounded along with black pepper to make a paste. This paste is given a patient suffering from stomachache.	-do-
8.	Karanj	*Caesalpinia crista* L.	Decoction made of leaves is given in malarial fever	Sh. Prem Singh, Vill. Bankatia Khatima
9.	Masapindi	*Pogostemone plectranthoides* Desf.	Leaves of the plant is made into paste & applied over cuts & wounds of cattle.	-do-

Table-II (Contd.)

1	3	4	5	6
10.	Gilojia	*Murraya koenigii* Spreng.	Twig is kept under pillow of a patient having anorexia	Sh. Prem Singh Vill. Bankatia Khatima
11.	Bel Gular	*(i) Aegle marmelos* Correa *(ii) Ficus glomerata* Roxb.	Leaf of (i) & leaf & fruit of (ii) made into paste & given with water	-do- in diarrhoea.
12.	Gular	*Ficus glomerata* Roxb.	Unripe & ripe fruits mixed into paste given with water during measels to maturate rash.	-do-
13.	Akashbel	*Cuscuta reflexa* Roxb.	Plant is made into paste with black pepper used to cure worts.	-do-
14.	Haldu	*Adina cordifolia* Hook, f.	New leaves pounded with black pepper to extract juice. This juice is used as nasal drop to cure hemicrania.	-do-
15.	Bhangro	*Eclipta alba* Hassk.	Juice of the plant is applied externally in between the toe to cure foot rot.	Sh. Anup Singh, Vill. Balkhera, Nanakmatta.
16.	Menhdi	*Lawsonia alba* Lam.	-do-	-do-
17.	Baboo!	*Acacia nilotica* L. sub. sp. *tomentose* (Benth.) Brandis while there are maggots.	Stem bark made into decoction applied on the foot of cattle pistor, Nanakmatta.	Sh. Chintemani, Vill. Pippalia,
18.	Masur	*Lens culinaris* Medic	Dal is given to cattle for 3 days to bring them in heat	-do-
19.	Akowa Gandhi	*Calotropis procera* R.Br. *Pterocarpus marsupium* Roxb.	Root of both mixed with black pepper applied over ribs in bronchopneumonia.	-do-
20.	Suin	*Euphorbia neriifolia* L.	Roasted gramseeds touched with its latex is used as purgative.	Sh. Bandhu Ram, Vill, Anjania, Sitarganj.

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हिन्दी सांराश

उत्तर प्रदेश के कुमाऊ क्षेत्र की थारू जनजाति बहुल्य क्षेत्र की वनौषधियों का वानस्पतिक अध्ययन

एस. सी. पन्त एवं ज्ञानेन्द्र पाण्डेय

उत्तर प्रदेश में लगभग 23 जनजातियां निवास करती है जिन मे से थारू जनजाति के लोग मुख्यत: नैनीताल, गौण्डा, गोरखपुर, बहराइच, खीरी तथा पीलिभीति की जनपदों में रहते हैं तथा इन की संख्या 2 लाख से भी अधिक हैं। कुमाऊ क्षेत्र की थारू जनजाति द्वारा विभिन्न औषध पादपों का स्थानीय व्यक्तियों के रोगोपचार में किया जाता है। इन से सम्बन्धित एवं अन्य सूचनाओं का विवरण प्रस्तुत लेख में किया गया है।