

Observation on Ethnomedicinal Herbs of Dantewada, Chattishgarh, India

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Abstract

The traditional knowledge prevailing among tribes of Dantewada region regarding use of various herbs plants as in various ailments have been studied and described. The present study is result of documentation of indigenous knowledge about medicinal herbs from few tribes of study area. The documentation of traditional knowledge from tribes has been gathered during ethno botanical surveys. The information was collected by interviewing local vaidya and local herbal-healers prevalent in the area. A total of 44 plant species representing 23 families have been reported to be in use among in Geetham block of Dantewada. Family wise distribution of medicinal plants shows Fabaceae, Cucurbitaceae, was most speciose family with 6 species each and Asteraceae was co- dominant family with 4 species. Medicinal herbs species has been briefly described along with botanical names, vernacular name, family, used plant parts and their dosages.

Key words: Herbal drugs, Ethnobotany, Tribal, Traditional knowledge, Dantewada.

Introduction

Ethnobotanical research can provide a wealth of information regarding both past and present relationships between plants and the traditional societies. Investigations into traditional use and management of local flora have demonstrated the existence of extensive local knowledge of not only about the physical and chemical properties of many plant species, but also the phenological and ecological features in the case of domesticated species. Plant have a vital role in human welfare and are continued to be valued industrial, economic, commercial and medicinal resources and some subcontinent with its wealth and variety of medicinal, many of which are even today in common uses much of which is steadily being eroded [Schulted, 1960, Mitra, 1922, Dastur, 1951]. Tribal people are the ecosystem people who live in harmony with the nature and maintain a close link between man and environment. Plants are the basis of life on earth and central to people's livelihoods. The need for the integration of local indigenous knowledge for a sustainable management and conservation of natural resources receives more and more recognition [Posey, 1992].

* Corresponding Author Email : sahu.pankaj1@gmail.com The earlier studies on the ethnobotany in central India on traditional health care were done by numerous ethno botanists such as [Bhalla et. al., 1992, Jain, 1963, 1975, 1981; Maheshwari, 1989, 1996; Maheshwari and Dwivedi, 1988]. The botanical names, vernacular names, family and method of treatment and Plant part of herbs have been documented. The dictionary of Indian Folk medicines [Jain, 1991] and Indian Materia Medica [Nadkarni, 1992] were consulted to find out the medicinal use of plants mentioned in the present paper and their documentation by different ethno-botanists who were in this field.

Methodology

The present work was carried out in the different villages of Geedam block of Dantewada district of Chhattishgarh. This study area is very significant for ethno-botanical studies showing to the dominance of different tribal communities, like Muriya, Bhatra, Gond etc. The extensive studies were conducted with the help of tribal people and village medicine-men of the area and information's gathered local name, used plant part and medicinal importance of plants. Plants were collected from the fields, given noted by the informants and were preserved as voucher specimens. Information on plant parts used and local uses were recorded on the labels of herbarium sheets. This information collected was verified by cross-checking with tribal living herbal medicine practitioners of various ethnic groups though interviews, personal contacts and keen observations. The study includes Plant collection, preparation of herbarium, and documentation of Ethno botanical plant.

Observation & Result

A large number of traditional herbal healers exist belonging to the tribal community are utilizing local plants in ethno-medicinal practices prevalent in Geetham block of Dantewada with 17 sites of the area and a total of 44 plant species representing 23 families and 40 genera have been reported to be in use among in the study area. Family wise distribution of medicinal plants shows Fabaceae, Cucurbitaceae, was most speciose family with 6 species each and Asteraceae was co-dominant family with 4 species has been briefly described along with botanical names, vernacular name, family, used plant parts and their dosages. **Table 1** Checklist of ethnomedicinal used plants in Geetham block of Dantewada C.G.

S.N	Botanical Name	Local Name	Family	Plant	Ethnobotanical Uses	Sites/
			-	Parts		Localities
1	Achyranthes aspera Linn.	Khoruch	Amaranthaceae	Whole	The whole plant extract is given	Barsoor
				plant	orally as antidote in snakebite	
				root	and used in fever and cough.	
					Seeds are used in skin disease.	
2	Aloe vera Linn.	Kataban	Liliaceae	Leaf	The pulp is used to cure piles,	Nayapara,
				pulp	cough, constipations, menstrual	Gadhpara,
					disorders and also as blood	Thodapara
					purifier.	
3	Anacyclus pyrethrum DC.	Akarkara	Asteraceae	Root &	Root paste used in headache and	Gadhpara,
				seed	seeds powder used in toothache.	Basantrai
4	Andographis paniculata	Bhui Neem	Acanthaceae	Whole	The whole plant is used as	Basantrai,
	(Burm.f) Wall. ex Ness			plant	blood purifier in skin diseases,	Mavliguda,
					malaria and also as anti snake	Hitamata
					venom.	
5	Argemone mexicana Linn.	Chitricar	Papaveraceae	Leaves,	Latex is used in jaundice, skin	Barsoor
				seeds	diseases, wound healing and	
					leprosy.	
6	Barleria prionitis Linn.	Itola	Acanthaceae	Leaf	Plant decoction is given in	Nayapara,
				Juice,	cough, toothache and dropsy.	Thodhapara
				Bark,	Leaf juice is given in fever and	Sargiguda
				Root	wounds. Root paste is applied	
					over boils.	
7	<i>Basella alba</i> Linn.	Poi	Basellaceae	Leaves	Leaves are used in constipation	Gadhpara
				Root	and gonorrhea. Root decoction	Sargiduda,
					is given in intestinal disorders.	Mavliguda
8	Bryophyllum pinnatum	Pathar-chatta	Crassulaceae	Leaves	Leaves paste used as an	Schoolpara,
	(Lam.) Oken.				antiseptic in wounds.	Sargiguda.
9	Capsicum annum Linn.	Miri /	Solanaceae	Fruit.	Oil is used in skin diseases and	Barsoor
-		Lal marcha		Oil	wounds.	
10	Cassia obtusifolia Linn.	Chrota	Fabaceae	Seeds	Seeds are used in skin diseases,	Nayapara,
_				Leaves	leprosy, and eczema. Leaves are	Hitameta.
					used in constipation.	Basantrai,
					L	Mavliguda
11	Chrysanthemum indicum	Sevanti	Asteraceae	Bark	Bark is used as purgative and	Gadhpara,
	Linn.				used as insecticide.	Thodhapara
12	Citrullus colocynthis (L.)	Boda	Cucurbitaceae	Fruit,	Fruits are used in constipation.	Madhernala,
	Schrad.			Root	Root is used in skin diseases.	Gothpara,
						Mavliguda
13	Clitoria ternatea Linn.	Syahiful	Fabaceae	Roots	Root is used in headache,	Schoolpara,
				leaves	cough, fever, and as an antidote	Gadhpara,
					to snake bite. Powdered leaves	Basantrai
					are used in urinary troubles.	
14	Coccinia grandis (L.) Voigt.	Kunuru	Cucurbitaceae	Leaves	Paste of leave is used in high	Mangulpot,
					fever. Also used in diabetes,	Satdhar,
					jaundice, and skin diseases.	Mavliguda
15	Coriandrum sativum Linn.	Thane	Apiaceae	Whole	Leafs are used to digestion,	Barsoor
				plant	vomiting and dysentery.	

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16	Cucurbita moschata (Duchesne ex Lam.)	Kumhda	Cucurbitaceae	Fruits Seeds	It is ant diabetic, anti oxidant, anti inflammatory, other digestive	Barsoor
17	Duchesne ex Poiret <i>Curcuma angustifolia</i> Roxb.	Tikhur	Zingiberaceae	Rhizome	It is nutritive and is used in chronic diseases, in irritations of the alimentary canal or urinary apparatus.	Muchnar, Malumunda
18	Curcuma longa Linn.	Kamka	Zingiberaceae	Whole plant	Used in cough, skin diseases, diabetes and worm affliction. Also used as blood purifier and liver tonic.	Mavliguda, Nayapara, Madhernala
19	Cuscuta reflexa Roxb.	Podha tonda	Convolvulaceae	Whole plant	Plant paste warmed with mustard oil and wheat flour is applied on joint pain and applied externally to cure headache.	Thodhapara Sargiguda Gadhpara
20	Cynodon dactylon L.	Doob ronda	Poaceae	Root	Treatment of urinary tract infection, diabetes, fever, and headache.	Barsoor
21	Cyperes rotundus Linn.	Motha	Cyperaceae	Whole plant, Root	Used in skin diseases, fever, wound healing, Tuber powder mixed with cow butter is given in snake bite.	Basantrai, Mavliguda Sargiguda
22	Datura metel Linn.	Nelakarka	Solanaceae	Leaves seed	Leaves are used in treatment of asthma and cough. Seed powder is used in fever, skin diseases and rheumatism.	Hitamata, Madhernala Sargiguda
23	Desmostachya bipinnata (L.) Explains	Kush	Poaceae	Grass, Root	Roots are used in diuretic, and dysentery.	Ashrampara Hitameta
24	Eupatorium triplinerve Vehl.	Ayapan	Asteraceae	Leaves	Leaves are used to wound healing and fever.	Schoolpara, Sargiguda
25	Euphorbia ligularia Roxb.	Thuhar / Udhangulla	Euphorbiaceae	Whole plant	Plant twig is used in purgative, diuretic and in piles.	Gadhpara, Satdhar
26	Euphorbia thymifolia Linn.	Dudhi	Euphorbiaceae	Leaves Root	Leaf juice is used as expectorant in skin diseases, fever, and bronchial asthma. Roots are given in leucorrhoea.	Temruphata Gadhpara, Sargiguda
27	Hemidesmus indicus R. Br.	Suganti Jad	Asclepiadaceae	Leaves	Leaves used as an antidote to snake bite, scorpion sting and wound healing.	Madhernala, Satdhar, Hitameta
28	<i>Ipomoea cornea</i> Jacq.	Besrum	Convolvulaceae	Leaves	Leaves used in treatment of paralytic condition.	Gadhpara, Mavliguda Sargiguda
29	<i>Lablab purpureus</i> (L.) Sweet.	Semi	Fabaceae	Leaves	Leaves are used in cough and skin diseases.	Barsoor
30	Luffa acutangula (L.) Roxb.	Torai	Cucurbitaceae	Fruit Tendril	Tendrils are used as an antidote to snake bite.	Mavliguda, Nayapara, Sargiguda
31	Mentha spicata Linn.	Podina	Lamiaceae	Leaves	Leaves are used in gastro intestinal disorders, cough, cold and fever.	Godhpra, Nayapara
32	Mimosa pudica Linn.	Uskadpoda	Fabaceae	Leaves Root	Roots are used as antidote to snake bite and toothache. Leaves are used in piles, and wound healing.	Gudhpara, Basantrai, Mavtiguda
33	Momordica charantia Linn.	Karel	Cucurbitaceae	Fruits	Fruits and its juice reduce blood sugar level used for treatment of diabetes.	Barsoor

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34	<i>Momordica dioica</i> Roxb. ex Willd.	Kheksi	Cucurbitaceae	Roots	Tuber for diabetes used in diarrhea, dysentery and asthma, headache. Roots are used in piles and fever.	Barsoor, Malumunda Muchnar
35	Nelumbium nucifera Gaerth.	Kamal	Nelumbonaceae	Seeds Roots	Seeds are given in pregnancy. Root also used for asthma and heart diseases.	Gudhpara, Ronje
36	Oxalis corniculata Linn.	Tinpatiya	Oxalidaceae	Leaves	Used in diarrhea, fever and wounds. Leaf decoction is given in fever and dysentery.	Barsoor
37	Phyllanthus amarus Linn.	Bhui korma / Jipa	Euphorbiaceae	Root	Roots are used to jaundice and fever.	Barsoor, Malumunda
38	Piper nigrum Linn.	Kalimircha	Piperaceae	Seeds leaves	Seeds are used in wound healing and skin diseases. Leaves are used as toothache.	Muchnar, Godhpara
39	Solanum surattense Burm. f.	Kanta jhati	Solanaceae	Whole plant	Fruit pulp is applied over gums, used in toothache and mouth ulcer.	Basantrai, Sargiguda, Thodhapara
40	Sphaeranthus indicus Linn.	Molal phaji	Asteraceae	Whole plant	Whole plant is used in jaundice, piles, dysentery vomiting and in uterus pain.	Barsoor
41	<i>Tephrosia purpurea</i> (Linn.) Pers.	Sarpunkha	Fabaceae	Seed Whole plant	Seed oil is applied externally in skin diseases. Whole plant extract is used in liver disorders.	Barsoor
42	Tinospora cordifolia (Willd.) Miers	Guduchi	Menispermaceae	Whole Plant	Decoction of whole plant is given in fever and heart problems.	Basantrai, Mavliguda
43	Tribulus terrestris Linn.	Gukhru	Zygophyllaceae	Fruits	Fruits are used as diuretic and aphrodisiac tonic.	Gadhpara, Satdhar
44	Trigonella foenum Linn.	Menthi	Fabaceae	Seeds	Seeds are used in rheumatism and diabetes.	Barsoor

Discussion

Ethno botanical investigation has led to the documentation of a large number of wild plants used by tribal for meeting their multifarious requirements [Anonymous 1990]. In the last two decades there has been an upsurge of such activities in search of ethno medicinal drugs used for control of human population in different tribal regions [Jain et al., 1996]. Some of the ethno-botanists have earlier made attempts to document information on plants which are used in preparing antifertility drugs by using roots of plants for edible purpose which acts as food in Abujhmarh region of Bastar district by abujhmaria tribe, the most primitive tribe of Bastar region in Chhattisgarh state [Maheshwari & Dwivedi 1985; Sahu, 1996; Sahu et al., 2002]. The present work will give good documentation/ information's for about knowledge of tribal people and helpful in different ailments in short duration.

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References

- Anonymous, 1990. Ethno biology in India: A Status Report. Ministry of Environment & Forests, Govt. of India, New Delhi, 1-68.
- 2. Bhalla S., Patel J.R., Bhalla N.P. 1992. Ethno medicinal studies of Genus *Indigofera* from Bundelkhand region of M.P. *Jour. Econ. Tax. Bot. Addl. Series* 10: 221-332.
- Chopra R. N., Chopra I. C., Handa K. L., Kapur L. D. 1982. Indigenous Drugs of Ind*ia*. Second edition (Reprinted) Academic Publishers, New Delhi.

http://www.ijddhrjournal.com.

- Dastur, J.F. 1951. Useful Plants of India and Pakistan.
 D.B. Tara porewala Sons & Co. Ltd. Bombay, India 1951.
- Jain S. K. 1975. Ethno botany of Central India Tribal. J. Indian. *Botanical Society Abstract*. 1 (6): 63.
- 6. Jain S.K. (edited). 1981. Glimpse of Indian Ethno botany. New Delhi: Oxford and I.B.H Pub.
- 7. Jain S.K. 1963. Observation on Ethno botany of tribal's of M.P. *Vanyajati* 11(4): 177-187.
- 8. Jain S.K. 1975. Ethno botany of Central India Tribal. *Jour. Indian. Bot. Soc.* Abstract. 1 (6): 63.
- 9. Jain S.K., Sinha B.K., Gupta D.C. 1996. *Notable plants on ethno-medicine of India*. Deep Publications, New Delhi, 291-222.
- 10. Jain S.K.1991. Dictionary of Indian Folk Medicines and Ethno botany, Deep Publications, New Delhi.
- 11. Maheshwari J. K., Dwivedi R.P. 1985. Some lesser known oral herbal contraceptives in folk claims as anti-fertility and fertility induced plants in Bastar region of Chhattisgarh. *Journal of Indian Botanical Society*, 64: 53-56.
- 12. Maheshwari J.K. 1989. Case study of three primitive tribes of M.P. (Abujhmarias, Baigas, and Bharias) of Central India. In Methods and Approaches in Central India. *Society of Ethnobotanists*, Lucknow, 187-188.

- Maheshwari J.K. 1996. Ethno botanical documentation of primitive tribes of Madhya Pradesh. *Journal of Economic &Taxonomic Botany*, Add. Series 12: 206-213.
- 14. Mitra, S.C. 1922. On the Cultivation of the treegoddess in Eastern Bengal. *Man in India*, 5: 115-131.
- 15. Nadkarni A.K. 1992. *Indian Materia Medica* Vol. I & Vol. II (Reprinted) Popular Prakashan, Bombay.
- 16. Posey, D. 1992. Traditional Knowledge, Conservation and the Rain Forest Harvest. In: Sustainable Harvest and Marketing of Rain Forest Products, Plot kin, M. and L. Famolare (Eds.). Island Press, Washington DC, pp 46-50.
- 17. Sahu T. R., Sahu P., Dubey G. 2002. *Ethno botany* Deep Publications, New Delhi.
- 18. Sahu T.R. 1996. Life support promising food plants among aboriginals of Bastar (M.P.) In: Jain SK. (Ed.) *Ethno biology in Human Welfare*, Deep publication: New Delhi; 26-30.
- 19. Schulted, R.E. 1960. Tapping our Heritage of Ethnobotanical Lore. *Economic Botany*, 14: 257-262.