



ISSN : 0973-7057

Ethnomedicinal plant of santhal communities at some villages of Sahibganj district in Jharkhand, India

Sanjay Kumar Hembrom* & Jyoti Kumar

University Department of Botany, Ranchi University, Ranchi, Jharkhand, India

Received : 25th November, 2017 ; Revised : 27th December, 2017

Abstract : An ethnomedicinal survey (2016–2017) was conducted in five villages of sahibganj district of, India. The Survey involved various steps like field study in which questionnaire was filled by the tribals and personal interview was organized, collection of plants specimen, preparation of herbarium and identification of plants with the help of flora were done. The methodology of the present work was adopted from some of the earlier workers like Jain (1987,1988)^{1,2} and Jain and Mudgal (1999)³. The herbal practitioners in the study area were interviewed and information on medicinal plants, their local names, habitat and their seasonal availability was collected. Information on medicinal plants with their parts used, mode of preparation and mode of administration were also carefully recorded. The survey revealed the utilization of 20 species of plants belonging to 13 families used to cure and treat different infectious and non-infectious diseases. The present study shows that the indigenous santhal communities have very good knowledge on the medicinal plants used for various ailments.

Keywords : Santhal, Ethnomedicinal, Herbarium, Medicinal Plants

INTRODUCTION

According to study reports, it is found that about 85% of traditional medicines used for primary healthcare derived from plants globally.⁴ A diverse array of utilization of medicinal plants has been reported by many researchers from India^{5,6,7,8,9}. In the Rigveda there are documentation of about 99, the Yajurveda 82 and the Atharvaveda 28 medicinal plants to cure different ailments¹⁰. At national level, documentation work on ethnomedicinal plant were carried out by many researchers, scientists. in the areas of Santhal Pargana by Bodding (1925)¹⁰; in Santhal pargana by Srivastava and Verma (1996)¹¹ in Dumka district (Jharkhand) by Mondal S and Rahman (2012)¹²; Kirtikar and Basu (1933-1935)¹³. Documentation of

different ethnomedicinal plants used by different tribes of Jharkhand was also done by different workers such as by Bondya *et.al* (2002)¹⁴; Singh and Kumar (2003)¹⁵; Sahu *et.al* (2004)¹⁶; Kuiri *et.al* (2006)¹⁷; Kumar and Kumar (2009)¹⁸; and similar work were also carried out in Purulia district of west Bengal by Kuiri and Kumar (2006)¹⁷. Hence, there is an urgent need to document the medicinal and aromatic plants associated traditional knowledge of santhal tribes, because this knowledge orally passes on from one generation to the next; thus, have vulnerability to be wiped out. Use of plants as a source of medicine has been inherited and is an important component of the health care system of santhals in Sahibganj district, Jharkhand by Keeping the traditional inherent knowledge now also. In present modern world Santhal tribe of district Sahibganj still depend on medicinal plants for there primary health care needs.

*Corresponding author :

Phone : 8084080001

E-mail : sanjaymartein@gmail.com

Proceedings of 7th International Conference on -"Global Scenario of Life Science, Agriculture, Nursing & Medical Research for the Welfare of Rural & Urban Folk(GOSLANRUF, 3-5 December, 2017)" held at METAS College of Nursing, Ranchi, Jharkhand & Organised jointly by MSET-ICCB & METAS.

There is a need of documentation of medicinal plants prioritized by the local people, as well as their understanding of possible biodiversity loss and strategies of conservation and some of the under explored aspects in ethnobotanical studies in the santhal region.

MATERIALS & METHODS

A survey was carried out during the period 2016-17 to collect information on medicinal plants used by the santhal tribes of Sahibganj district of Jharkhand. The study was done in 7 villages: Logay, Dumkita, Majhkola, Khijurkhal, Samdanala, Amjora & Bansjori. Ethnomedicinal data were collected by following the standard method (Jain, 1987; Jain and Mudgal 1999)^{1,3} from 16 tribal villages with the help of availability of traditional healers. The information was collected from the medicine men, village dwellers, women, village herbalists, village headmen, and the aged and experienced people. Information was collected through questionnaires, bilateral discussion and open ended interviews on plants used by the santhals people. The santhal name of the plant, part used, preparation and mode of administration of the drug, which disease is being cured etc were recorded in detail. The language for the interview was santhali. Plants parts were documented and later on

identified and cross-checked with the help of different localities record and several books of plant taxonomy like flora of Bihar and Orissa. Photographs of knowledgeable persons, local persons as well as living plants were taken. Herbaria were prepared adopting standard practice and preserved in the university department of Botany, Ranchi University, Ranchi for reference.

RESULTS & DISCUSSION

The present study reveals that santhal rural tribal people along Rajmahal hills of Sahibganj district are well versed with nature and natural resources around them. These people in order to get rid of various problems and diseases etc depend on plants products. Rural santhal tribal at some villages of Rajmahal hills in Sahibganj district were found to be utilizing 20 different species of plants belonging to 13 families used to cure and treat different infectious and non-infectious diseases. The present study also reveals that the investigated villages of Rajmahal hills of Sahibganj district are rich in ethnomedicinal diversity and the santhal tribal people use locally available plant species for the treatment of human as well as livestock ailments and various diseases also.

Table 1. Plants used traditionally by Tribes of three districts of Sahibganj region.

Sl. No.	Botanical name	Family	Local name in santhali	Parts used	Medicinal uses
1.	<i>Acacia catechu</i> (L.f.) Willd.	Fabaceae	Khayarr	Bark	The decoction of bark used to cure skin disease especially eczema.
2.	<i>Acacia nilotica</i> (Linn.) Willd. ex Delile	Fabaceae	Kablaa	Gum of bark and fruits (pods)	The decoction of bark yields spongy gum which is used in sore throat, for washing ulcers, to stop bleeding from wounds, skin diseases, as an astringent for diarrhoea and leucorrhoea.
3.	<i>Aegle marmelos</i> (Linn.) Correa ex Roxb.	Rutaceae	Sinja	Leaves and fruits	The roots are astringent and febrifuge, useful in diarrhoea, dysentery, dyspepsia, seminal weakness, uropathy, vomiting, intermittent fever and gastric irritability in infants. The unripe fruit is astringent, stomachic, antiscorbutic and digestive.
4.	<i>Albizia lebbek</i> (Linn.) Benth	Fabaceae	Hende siris	Bark of stem and shoots, leaves, flowers and seeds	The plant is considered an alternative, aphrodisiac, astringent, expectorant, restorative and tonic. It is effective in asthma, reduces enlargement of cervical gland; in cough and colds.

Hembrom & Kumar: Ethnomedicinal plant of santhal communities at some villages of Sahibganj district in Jharkhand, India

5.	<i>Annona squamosa</i> Linn.	Annonaceae	Madargom	Bark	The bark powder is applied externally in wound healing.
6.	<i>Bauhinia racemosa</i> Lam.	Fabaceae	Sinnzgc	Stem, bark, leaves	Stem bark used in dysentery, decoction of leaves used in malaria, leaves crushed with onion for diarrhea.
7.	<i>Buchanania lanzan</i> Spreng.	Anacardiaceae	Sosso	Bark and Seeds	Sosso Bark is used in cut and wounds, skin diseases and snake bite. Also used in diarrhoea. Seeds are used as tonic.
8.	<i>Cassia fistula</i> Linn.	Fabaceae	Sasann haru baha	Leaves, roots and fruits	The leaves are emollient, paste prepared from its juice proves a useful dressing for ringworm, for relieving irritation, rheumatism & facial paralysis.
9.	<i>Azadirachta indica</i> A.Juss.	Meliaceae	Neem	All the plant parts are used as medicine.	The bark is astringent, refrigerant, demulcent, insecticidal, liver tonic and urinary astringent. Leaves are useful in burning sensation, leprosy, skin diseases, leucoderma, dyspepsia, ulcers, tuberculosis, eczema, malarial and intermittent fever.
10.	<i>Dalbergia sissoo</i> Roxb.	Fabaceae	Shheesaam	Seeds, leaves, bark and roots	The leaves are used to cure eye diseases and gonorrhoea. The wood oil relieves the burning sensation of the body. The oil is also used in the treatment of scabies and leprosy.
11.	<i>Diospyros melanoxylon</i> Roxb.	Ebenaceae	Tirill	Leaves	Chewing of leaves gives relief from cough.
12.	<i>Phyllanthus emblica</i> Gaertn. Fruct	Phyllanthaceae	Amla	Fruits	The fruit is used in form of powder as a cooling and refrigerant. An infusion of seeds is given in fevers & diabetes.
13.	<i>Ficus benghalensis</i> Linn.	Moraceae	Barii	Bark, latex, aerial roots, leaves and buds	The bark is an astringent. Its infusion is a specific cure for diabetes, diarrhoea, leucorrhoea and dysentery. The latex is commonly used locally for rheumatism, lumbago, sores, ulcers, pains, cracked and inflamed soles and toothache. The bark & roots are used against snake bites.
14.	<i>Ficus glomerata</i> Roxb.	Moraceae	Gular	Bark, fruit, latex and roots.	It is used for external burning, skin inflammation, diarrhoea, dysentery and leucoderma. It is used locally to relieve inflammation of skin wounds.
15.	<i>Ficus religiosa</i> Linn.	Moraceae	Hesak	Bark, fruits and seeds.	The bark is astringent and its decoction is given in gonorrhoea, scabies and snake bite. Its juice relieves toothache and strengthens the gums.
16.	<i>Madhuca longifolia</i> J.F.Macbar.	Sapotaceae	Matcoom	Mahua Seed and Fruits Seed	Oil applied externally on affected part to cure from rheumatism. Fresh fruits are taken in morning for relief from stomach pain.

Biospectra : Vol. 12(2), December, 2017 (Spl. Issue)

An International Biannual Refereed Journal of Life Sciences

17.	<i>Mangifera indica</i> Linn.	Anacardiaceae	Ool	Leaves, bark, fruit, seeds, and gum exudates	Powder of the tender leaves is given in diarrhoea and diabetes. The smoke from burning leaves is inhaled for the relief of throat diseases; their ash is a popular remedy for burns.
18.	<i>Moringa oleifera</i> Lam.	Moringaceae	Moongaa	Leaves, bark of stem, roots, flowers, fruits, seeds	The tender leaves are useful in scurvy and catarrhal diseases. The leaf juice acts as an emetic. The bark of the stem acts as stimulant, diuretic and used as a cardiac stimulant. Juice is used as a diuretic, digestive and antiasthmatic.
19.	<i>Syzygium cumini</i> Linn.	Myrtaceae	Kood	Bark, leaves, fruits and seeds	The bark is useful in diabetes, haemorrhage, dysentery, leucorrhoea, fever, dermatopathy, burning sensation, dyspepsia, cough and asthma. The tender leaves are used for vomiting. Powdered seeds are used in diabetes.
20.	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Combretaceae	Arjun	Bark and leaves	It is applied as a paste on pimples and other minor skin eruptions. The pulverized bark gives relief in symptomatic hypertension, cardio tonic and as a diuretic in cirrhosis of liver. Fruits and seeds are used as children's anathelmatic for ascaris. Roasted seeds used in diarrhoea and fever.

CONCLUSION

The survey of the ethnomedicinal plant used by the santhal tribe in some of the villages along Rajmahal hills in Sahibganj district shows that the role of the indigenous medicine for the treatment of various diseases and disorder among the tribe is very crucial. They used many different forest plant, weed, flower, seed, bark in there indigenous treatment mode. The collected informations not only shows that many preperations are made from single plants but rarely mixture of several plants is also used.

ACKNOWLEDGEMENT

The authors are thankful to santhal tribal traditional healers and the persons who helped us by sharing the valuable information of their traditional herbal wisdom. We are also thankful to Dr. S. K. Sinha, Head, University Department of Botany, Ranchi University, Ranchi for providing all the necessary facilities in the department.

REFERENCES

1. Jain, S.K., 1987: A Manual of Ethnobotany Scientific Publishers, Jodhpur.
2. Jain AK. 1988: Tribal clans in central India and their role in conservation. Environ Conserv ;15:368.
3. Jain, S. K. & Mudgal, V. 1999: A hand Book of Ethnobotany.
4. J. P. Yadav, S. Kumar & P. Siwach, 2006; Folk medicine used in gynecological and other related problems by rural population of Haryana, *Indian J. of Traditional Knowledge*, vol. 5(3), 323-326.
5. Y. Kumar, F. Scarlet, & R. R. Rao, 1987; Further contribution to the ethno botany of Meghalaya, plants used by the people of Jayantia Hills Districts, *J. Econ Tax Bot*, , vol. 99(11), 65-70.

Hembrom & Kumar: Ethnomedicinal plant of santhal communities at some villages of Sahibganj district in Jharkhand, India

6. **R. R. Rao, 1990;** *Ethno botanical studies on some adivasi tribes of Nagaland in Northeast India, in contribution to Indian Ethno botany*, edited by S K Jain, (Scientific publisher, Jodhpur India), 215-230.
7. **Kohli. Y. P, 1992;** *Some prominent medicinal plants of Arunachal Pradesh*, Arunachal Forest News, vol. **11(1)**, 35-38.
8. **D. Khumbongmayum, M. L. Khan & R. S. Tripathi, 2005;** An ethnobotanical study of medicinal plants in sacred grooves of Manipur, Northeast India, *Indian J. Traditional knowledge*, vol. **4(1)**, 21-32.
9. **Kala CP., 2005;** Current status of medicinal plants used by traditional Vaidyas in Uttaranchal state of India. *Ethnobot Res Appl*; **3**:267-278.
10. **Bodding P.O., 1925;** Studies In Santhal Medicine and Connected Folk-Lore-I, Santhal and Disease. *Mem. Asiatic Soc. Bengal*. **10 (1)**:1-132.
11. **Srivastava D. K. and Verma S.K., 1981;** An Ethnobotanical Study on Santhal Pargana, Bihar. *Indian Forester* **107**:30-41.
12. **Mondal S & Rahman C.H., 2012;** Medicinal plants used by the Tribal people of Birbhum district of West Bengal and Dumka district of Jharkhand in India. *Indian Journal of Traditional Knowledge*. **11(4)**:674-679.
13. **Kirtikar K.R and Basu B.D., 1994;** (1993-1935). Indian Medicinal Plants.(1933-1935). *Indian Medicinal plants*. vol.I to VIII (4 Vols.Text and 4 Vols. Plates). Reprint . Dehradun U.P.
14. **Bondya S.L, Sharma H.P, Kumar J. and Sahu H.B., 2002;** Native medical Uses of Plant for Anthelmensis (Kirmi) at Ranchi District of Jharkhand. *J.Phytol. Res.* **15 (1)**:109-110.
15. **Singh C.T.N and Kumar J., 2003;** Allmania Nodiflora (L.)R.B.R., A less Known Medicinal Plant of Hazaribagh, Jharkhand. *Ad.Plant.Sci.* **16(2)**:403-404.
16. **Sahu H.B, Bondya S.L, Kumar J and Sharma H.P., 2004;** Plant used For Gastro-Intestinal Disorder By Ethnic Tribes in Ranchi District. *Geobios*. **31**:149-151.
17. **Kuiri I, Kumar K and Kumar J., 2006;** The Edible Ethnomedicobotanical Plants of Purulia District, W.B., India. *Int.J.Mendel.* **23**:3-4.
18. **Kumar M and Kumar J., 2009;** Conservation of Traditional knowledge of Hazaribagh Wild Life Sanctuary, Hazaribagh District, Jharkhand, India. *Biospectra*. **4(2)**:445-448.

Biospectra : Vol. 12(2), December, 2017 (Spl. Issue)

An International Biannual Refereed Journal of Life Sciences

