

Traditional Uses of Medicinal Plants by Ethnic Peoples of Salboni Block in the Paschim Medinipur District, West Bengal, India

Subir Kumar Samanta

Department of Botany, Netaji Mahavidyalaya, Arambagh, Hooghly, West Bengal, India

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ABSTRACT

This survey was aimed to find out the ethno-medicinal plants of Salboni Block in the Paschim Medinipur District, West Bengal, India. These ethno-medicinal plants are used by the tribal communities like Santal, Lodha, Bhumij and Munda etc. to treat various disorders and diseases. In this study, forty-two medicinal plants belonging to twenty-five families used as ethno-medicine have been identified. The information about the traditional knowledge of uses of medicinal plants was collected by interaction with the tribal old-aged people, local herbal drug sellers etc. in this rural area. These ethno-medicinally important plants can be used as common cough and cold, asthma, antiseptic, stimulant, stomachic, dyspepsia, antifungal, antibacterial, carminative, abdominal pain, amoebic dysentery etc. by ethnic peoples. The sustainable utilization of medicinal plants in this area may open up a new avenue for getting new ethnomedicine for the society in future.

Key words: *Ethno-medicine, Medicinal Plants, Traditional Knowledge.*

Introduction

The ethno-medicinal plants are the potent source of medicines for different ethnic people of Salboni Block of Paschim Medinipur District. The traditional knowledge is very important for sustainable utilization of medicinal plants as natural medicines. The utilization of medicinal plants has become an important source of daily life despite modern and pharmaceutical research. The study of traditional or folk medicines of tribal peoples from plant parts is called as ethno-medicines. Approximately, three thousand plant species are known to have medicinal properties in India (Prakash *et al.*, 2010). The tribal peoples are highly knowledgeable about the medicinal plants and their ethno-medicinal values. These tribal peoples possess the traditional knowledge of herbal

remedies in the treatment of many diseases. Approximately, six thousand inhabitants live throughout the different panchayats of this area. In Salboni Block, the ethnic peoples are very poor. This block consists of some panchayats namely Bankibundh, Bhimpur, Bishnupur, Debagram, Germal, Karnagarh, Kashijora, Lalgeria, Salboni and Satpathi. The different panchayats of this block are of great importance for the exploration of ethno-medicinal plants. This block area is rich in biodiversity of medicinal plants. The many tribal peoples like Santal, Bhumij, Munda, and Lodha etc. are living in this area since long. These tribal peoples collect the ethno-medicinal plants from fields and consume as food as well as medicinal values. It is very important to conserve the indigenous knowledge of tribal peoples for future generations.

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Materials and Methods

The investigation mainly based on the continuous field survey in the Salboni Block area inhabited by ethnic peoples such as Lodha, Munda, Bhumij and Santal etc. The medicinal plant parts used by the ethnic peoples for their primary healthcare system are recorded through personal observation and interviews with the local traditional healers and old aged peoples during the field survey in this area. A pre-prepared questionnaires are used for their primary healthcare purpose. The different ethnomedicinal plants are also collected during the field works. The collected plant specimens are preserved and worked out by following standard taxonomic methods and authentic literature (Prain, 1903) for proper identification. The local tribal peoples as well as traditional healers are the primary informants during oral interviews and the data has been recorded from them.

Results and Discussion

The different ethno-medicinal plants growing in Salboni Block and their uses are given in Table 1.

Table 1.

Serial no.	Local name (In Bengali)	Scientific name	Family	Useful parts	Uses
1	Chhatim	<i>Alstoniascholaris</i> (L.) R. Br.	Apocynaceae	Leaves, bark etc.	Bark is used against stomach trouble, Latex is applied in allergy and abscesses, leaf is used against headache etc.
2	Bael	<i>Aegle marmelos</i> L. Correa.	Rutaceae	Leaves, fruits, barks etc.	Treatment of dysentery, loss of appetite and other gastrointestinal disorders etc.
3	Babul	<i>Acacia arabica</i> (Babool)	Caesalpiniaceae	Leaves, barks etc.	Treatment of dysentery, diarrhoea and other intestinal ailments etc.
4	Siris	<i>Albizia lebbeck</i> (L.) Benth.	Mimosaceae	Fruit,	Treatment of asthma cold, cough and other allergic diseases etc.
5	Muktajhuri	<i>Acalyphahispida</i> Burm. f.	Euphorbiaceae	Leaves	Laxative, diuretic and used in the treatment of leprosy and gonorrhoea, pulmonary problem, and as an expectorant in asthma etc.
6	Sialkanta	<i>Argemone Mexicana</i> L.	Papaveraceae	Leaves and stems	Treatment of several diseases including tumours, warts, skin diseases, inflammations, rheumatism, jaundice, leprosy, microbial infections, and malaria etc.
7	Ayapan	<i>Ayapana triplinervis</i> Vahl.	Asteraceae	Leaves	Antibacterial and antifungal activity, antiseptic, laxative, haemorrhagic, cardiac stimulant and amoebic dysentery etc.
8	Kantanote	<i>Amaranthus spinosus</i> L.	Amaranthaceae	Leaves, roots and whole plants.	Laxative, blood purifier, diuretic etc.
9	Brahmi	<i>Bacopa monnieri</i> (L.)	Scrophulariaceae	Leaves, and roots	Helps to improve in brain functions by preventing brain cell damage, brain tonic for kids etc.
10	Rehri	<i>Ricinus communis</i> Linn.	Euphorbiaceae	Leaves and seeds	Headache, boils and purgative, abdominal disorders, arthritis, backache, muscle aches, etc.

The present study shows that a total of 42 ethno-medicinal plants belonging to 25 families are in common practice in the traditional healthcare system by ethnic peoples in the Salboni Block of Paschim Medinipur District, West Bengal, India. All these plants are very popular among the tribal communities. The ethno-medicinal plants are mostly used as different diseases like common cough and cold, stomachic and antiseptic, asthma, dyspepsia, and epilepsy etc. Out of 42 medicinal plants, thirty-eight ethno-medicinal plants are distributed maximum in this area used by the ethnic peoples. The remaining plants with families contributed less use of ethno-medicinally important plants by the tribal communities. Chakraborty and Bhattacharjee (2006) reported 57 plants species belonging to 57 genera and 40 families are used as ethno-medicinal plants in Purulia, the Western most district of West Bengal. However, the present study region resulted in 42 ethno-medicinal plant species belonging to 25 families. Scientific awareness of sustainable use of ethno-medicinal plants meant for proper utilization for further generation in this block. Among these, some plants are smaller in size and others are larger in size. But the production of ethno-medicine from

11	Bantulsi	<i>Croton bonplandianus</i> Baill.	Euphorbiaceae	Roots	Ring worm infection, amoebic dysentery, to cure the swelling of body etc.
12	Aparajita	<i>Clitoria terntea</i> L.	Fabaceae	Leaves and flowers.	Fever, diarrhoea, gastritis, nausea, vomiting, in schizophrenia and neurological disorders etc.
13	Bathuasak	<i>Chenopodium album</i> L.	Amaranthaceae	Leaves, flowers, and fruits etc.	Cardiotonic, carminative, digestive, diuretic and laxative, peptic ulcer, dyspepsia, ophthalmopathy etc.
14	Nayantara	<i>Catharanthus roseus</i> (Linn.)	Apocynaceae	Leaves	Anti-diabetic, antioxidant, antifungal, antibacterial and anticancer properties etc.
15	Chhagalboti	<i>Chrozophora rottileri</i> (L.)	Euphorbiaceae	Leaves and fruits	Treatment of various diseases like cough and cold, wound healing, jaundice and to purify blood etc.
16	pergularia	<i>Pergularia daemia</i> (Forsk.)	Apocynaceae	Leaves and flowers	Treatment of arthritis, anti-diabetic, wound healing, anti-inflammatory, and diuretic disorders etc.
17	Chalta	<i>Dillenia indica</i> L.	Dilleniaceae	Fruits	Used in the treatment of diseases like fever, diabetes, diarrhoea, food poisoning etc.
18	Gimesak	<i>Dentella repens</i> (L.) J.R. Forst. & G. Forst.	Rubiaceae	Leaves	Blood clearing,
19	Keshut	<i>Eclipta alba</i> (L.) Hassk.	Asteraceae	Leaves	Jaundice, tonic, hair dye, pain clearing etc.
20	Kalmegh	<i>Andrographis paniculata</i> (Burman.f.) Wallich ex Nees.	Acanthaceae	Leaves and stems	Liver troubles, Constipation, scabies, irregular stools and in worm problems in children etc.
21	Banyan	<i>Ficus benghalensis</i> L.	Moraceae	Aerial roots leaves	Piles, purgative, and leprosy gastrointestinal, respiratory and cardiovascular disorders and as anti-inflammatory and antispasmodic remedy etc. etc.
22	Kurchi	<i>Hollarhena antidiysenterica</i> (L.) wall. Ex A. DC.	Apocynaceae	Bark and seed	Intestinal worms, fever and dysentery etc.
23	Nunesak	<i>Hybanthus enneaspermus</i> (Linn.) F. Muell.	Violaceae	Leaves	Stammering, poisonous sting.
24	Kulekhara	<i>Hygrophila articulata</i> (Schum.) Heine.	Acanthaceae	Leaves, stems and entire plants.	Jaundice, rheumatism, children mental problem, urogenital diseases.
25	Hatisur	<i>Heliotropium indicum</i> Linn.	Boraginaceae	Leaves	Conjunctivitis, typhoid.
26	Basak	<i>Justicia adhatoda</i> Linn.	Acanthaceae	Leaves	Cough and cold, diabetes, piles, leprosy.
27	Sensitive plant	<i>Mimosa pudica</i> L.	Mimosaceae	Leaves	Diarrhoea, constipation, leprosy, dysentery, tumour, various urogenital infections etc.
28	Banalata	<i>Mikania micrantha</i> (L.) Kunth ex HBK.	Asteraceae	Leaves	Antimicrobial, anti-inflammatory, and analgesic etc.
29	Kola	<i>Musa paradisiaca</i> L.	Musaceae	Leaves, fruits.	Skin diseases, cough and cold, bronchitis, insect bite.
30	Seuli	<i>Nyctanthes arbor-tristis</i> Linn.	Oleaceae	Leaves	Cough and cold, malaria, bilious fever, rheumatism.
31	Tulsi	<i>Ocimum sanctum</i> L.	Lamiaceae	Leaves	Cough and cold, parasitical skin diseases, anticancer, antifungal, antimicrobial etc.
32	Gadal	<i>Paederia scandens</i> (Lour.) Merrill.	Rubiaceae	Leaves	Dyspepsia, stomach problems.
33	Ganda	<i>Tagetes erecta</i> L.	Asteraceae	Leaves	Carbuncles, piles and boils, digestive tract problems including poor appetite, gas, stomach pain, colic, intestinal worms, and dysentery etc.
34	Ashok	<i>Saraca asoca</i> (Roxb.) de Wilde.	Caesalpiniaceae	Bark and seeds	Worms, urinary problems.
35	Tamarind	<i>Tamarindus indica</i> L.	Fabaceae	Leaves and fruits	Digestive, treatment in inflammation, stomach pain, throat pain, refrigerants etc.
36	Kolke	<i>Thevetia peruviana</i> (Pers.) K. Schum.	Apocynaceae	Leaves and fruits	Treating the external wounds, infected area, ring worms, tumours etc.
37	Tagar	<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.	Apocynaceae	Leaves and stems	Treatment in snake and scorpion poisoning, stomach disorders, wound infection etc.

38	Arjun	<i>Terminalia arjuna</i> (Roxb. ex. DC) Wight and Arn.	Combretaceae	Bark	Tuberculosis, broken bones etc.
39	Kulke	<i>Zizyphus mauritiana</i> Lam.	Rhamnaceae	Fruits	As foods, anti-cancerous activity, antioxidant, helps in vasodilation and maintain blood pressure etc.
40	Punarnava	<i>Boerhavia diffusa</i> Linn.	Nyctaginaceae	Leaves and roots	Liver troubles and jaundice, anaemia, blood impurities etc.
41	Nishinda	<i>Vitex negundo</i> L.	verbenaceae	Leaves	Fever and asthma, extract of leaves of plant is taken as a diuretic, muscle pain, insecticidal activity etc.
42	Thankuni	<i>Centella asiatica</i> (Linn.)	Apiaceae	Leaves	Cough and cold, diabetes, constipation, blood related problems etc.

smaller as well as larger has medicinal value to make herbal ethno-medicine. The leaves of the ethno-medicinal plants are used in very minimum. The highest ethno-medicinal utility of leaves (54 percent) has been reported by Alagesaboopathi (2014) in Dharmapuri District, Tamilnadu. The ethno-medicinal plants are very important for curation by ethnic peoples distributed throughout the different areas of this block. These ethnic peoples prevent themselves from diseases and disorders by these plants without money. They remain eco-friendly not using artificial medicines. They maintain the local biodiversity of this Salboni Block as well as in the world. Thus, the ethnic peoples protect themselves as well as the world life.

Conclusion

The present investigation recorded 42 ethno-medicinal plants belonging to 25 families of angiosperms. The tribal peoples collect plant parts from fields and use for their curation. They also protect plants from destruction. It is very important to conserve the medicinal plants. The conservation of medicinal plants are very beneficial for future use. The tribal communities conserve their traditional knowledge. If, their knowledge spread throughout the world, it is a great achievement for society.

Conflict of Interest: None

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