

PLANTS USED IN TRADITIONAL MEDICINE BY SOME TRIBALS OF
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A B S T R A C T

The paper deals with 30 selected species of plants e.g. *Costus speciosus* (Koen.) Sm., *Drynaria quercifolia* (L.) J. Sm., *Melastoma malabathricum* L., *Mimosa pudica* L., *Pedilanthus tithymaloides* (L.) Poit., *Premna latifolia* Roxb., *Solanum viarum* Dunal, *Thelypteris arida* (D. Don) Morton, etc. which are used as medicine by some of the tribals like Mech, Rabha and Oraon of the Jalpaiguri District of West Bengal in their traditional system of treatment.

Ethnobotanical field study reveals some interesting information about mode of their uses of plants in various ailments either single or in combination with other plant parts. It has been observed that though these tribes are living under same environment and using the same species of plants for curing diseases, their prescriptions are quite different. This indicates that the tribes are still retaining their own tradition so far as treatments are concerned.

INTRODUCTION

Jalpaiguri District (West Bengal) has been taken up for ethnobotanical studies as there are 19 tribes in this district. Amongst these, the important ones are: Kora, Lodha, Mahali, Mech, Munda, Oraon, Rabha, Santal and Bhumij. Of these, three tribes: Mech, Oraon and Rabha whose traditional plant lore has been investigated, have two ethnic origins; Oraon being protoaustraloid, from Chotonagpur, Bihar, while Mech and Rabha are mongoloid and original natives of "terai" (Anon, 1972). Although, these two groups live together, they have adhered to different modes of herbal medicine. After due enquiry and collection of concerned plants the following thirty species have been recorded with notes on their traditional use by the tribe concerned. The voucher specimens are on deposit in the Economic Botany Herbarium of Central Botanical Laboratory. Only

the field numbers are indicated from each locality (Loc.). The tribal name of the plant as also the concerned tribe (abbreviated to M=Mech, O=Oraon & R=Rabha) is given.

Alstonia scholaris (L.) R. Br., (Apocynaceae); *Chatiani* (O), *Buchong* (R).

Loc.: Barodabari, 20803, 20863.

Barks are made into a paste and applied on chest for pain due to cough and cold (O).

Barks and leaves are made into a paste and given with salt to cows in gastric disorders and for good health (R).

Bombax ceiba L., (Bombacaceae); *Simal* (O & R).

Loc.: Baradabari, Kathambari, 20866, 20422.

Barks are made into a paste and applied on the fractured portion of the body (R).

Celastrus paniculatus Willd., (Celastraceae); *Kusur* (M).

Loc.: Kathambari, 20425.

A paste of root bark is applied on swollen veins (M).

Chromolaena odorata (L.) King & Robinson, (Asteraceae); *Assam lata* (O), *Ashmia* (R).
Loc.: Barodabari, Kathambari, 20880, 20134.

Bruised leaves are applied on cuts to stop bleeding (R).

Cissampelos pareira L., (Menispermaceae); *Siku-boma* (M), *Peria* (O), *Niltap* (R).
Loc.: Barodabari, Kathambari, 20854, 24506.

A paste made from 3-4 root pieces is taken orally twice daily in fever and body-ache due to cold (M).

Plant juice is used for treating diarrhoea in men as well as cattle. Two to three teaspoonful juice twice daily is given to human beings and a cup full for cattle (R).

A paste of roots with cotyledons of *Entada phaseoloides* Merr. is given twice daily after menstruation, for antifertility.

Costus speciosus (Koenig) Smith, (Zingiberaceae); *Deak-guri* (M), *Kaoa-kanda* (O).
Loc.: Kathambari, 17949.

Crushed rhizomes and barks of *Premna latifolia* Roxb. are soaked in water for 2-3 hours. This water is given twice daily as medicine to cure red urine (M).

Peeled stem is chewed against thirst in jungle and rhizome against dyspepsia (O).

Drynaria quercifolia (L.) J. Sm., (Polypodiaceae); *Dinkia-banda* (M), *Tookrafak* (R).
Loc.: Barodabari, Kathambari, 20849, 20438.

Rhizome with 2-3 internodal portions of *Cissus quadrangularis* L. is made into a paste and applied on bone fracture. The fractured part is tied with cloth for 10-12 days with bamboo splints (M).

Rhizome with 5-8 cm long stems of *Equisetum debile* Roxb. (R-Karengguch) is made into a paste and applied on broken limbs. Stem juice of *Equisetum debile* Roxb. is also prescribed orally, 2-teaspoonful once daily (R).

Gouania leptostachya DC., (Rhamnaceae); *Kangor-kur* (R).

Loc.: Chilapata, 20887.

Leaf infusion is used while bathing to cure jaundice (R).

Grewia tiliacifolia Vahl, (Tiliaceae); *Bakhar-ker* (M).

Loc.: Kathambari, 20353.

A paste of roots is given in syphilis. For ladies it is prescribed with unboiled milk (M).

Hedyotis scandens Roxb., (Rubiaceae); *Baina* (O).

Loc.: Barodabari, Chilapata, Kathambari, 20818, 24505.

A paste of root barks is given against diarrhoea and in stomach pain. With water, it is also used as medicine, about a teaspoonful once daily for 3 days in high fever.

Root powder is made into a pill and given twice daily for 3 days against swelling of body and in weakness (O).

Kydia calycina Roxb., (Malvaceae); *Ihau* (M).

Loc.: Kathambari, 20472.

A paste of barks with that of *Litsea sebifera* Pers. is applied on boils (M).

Lasia aculeata Lour., (Araceae); *Kanta sale* (O).

Loc.: Kathambari, 20480.

Rhizomes are consumed as a vegetable to cure dropsy (O).

Juice of the rhizome is used as an abortifacient; cloth soaked in the juice is inserted in the vagina to cause abortion.

Leea macrophylla Roxb. ex Hornem, (Vitaceae); *Hasua* (O).

Loc.: Kathambari, 20423.

Leaf powder is taken in hot water, twice daily for several days in leucorrhoea (O).

Leucas lavendulaefolia Sm., (Lamiaceae); *Ghuma* (O), *Kalsi* (R).

Loc.: Chilapata, 20870.

A paste of leaves is applied for ulcers of cattle (O). It is reported that poultice of fresh leaves is applied to old sores and wounds (Anon 1962).

Leaf juice is used as nasal drop to stop continuous bleeding (R).

Luffa cylindrica (L.) Roem., (Cucurbitaceae); *Phalla* (M), *Dhudul* (O).

Loc.: Kathambari, 20479.

Infusion of dried fruits is prescribed with juice of *Citrus medica* L. and sugarcandy, twice daily against diarrhoea (M).

Cows are made inhale the smoke of fried fruits in dyspepsia (O).

Lygodium flexuosum (L.) Sw., (Schizaeaceae); *Cochincha* (M), *Kukri-bisi* (O).

Loc.: Barodabari, Kathambari, 20824, 20857.

A paste of roots in warm water is prescribed in jaundice (M).

It is applied on septic wounds on the humps of cows and buffaloes. Also the paste with that of the roots of *Rauvolfia serpentina* Benth. ex Kurz are given twice daily in stomach pain (O). Chopra *et al.* (1956) have stated that fresh roots boiled in mustard oil is applied in ulcer, cut and wounds.

Melastoma malabathricum L., (Melastomataceae); *Tublu-khuli* (M), *Jatrangi* (O).

Loc.: Kathambari, 20459.

A paste made from 2-3 roots of this plant and 3-5 roots of *Antidesma diandrum* Roth is given twice daily in diarrhoea and blood dysentery (M). Kirtikar & Basu (1935) report that the whole plant and leaves are used for the same without mixing any other plant.

Mesua ferrea L., (Clusiaceae); *Nageswar* (M).

Loc.: Kathambari, 20432.

Paste made by rubbing ripe seeds with water on a stone is applied in septic ulcer (M).

Mimosa pudica L., (Fabaceae); *Mauriatiki* (M), *Ladaru* (O).

Loc.: Kathambari, 20343.

Roots are tied in hairs to expedite child birth (M).

A paste made from 6-8 leaves is applied

twice daily to cure swelling of feet caused by sting of insect, thorns or spines (O).

Naravelia zeylanica (L.) DC., (Ranunculaceae); *Chag-lat* (O).

Loc.: Barodabari, 20802, 20352.

Root juice is inhaled in cough and cold. Infusion of the roots is also used as a gargle for the same purpose (O).

Pedilanthus tithymaloides (L.) Poit., (Euphorbiaceae); *Kalichita* (O).

Loc.: Kathambari, Nathua, 20451, 17917.

A paste of stems is applied after heating in rheumatism. It is also used against snake bite (O).

Pouzolgia zeylanica (L.) Benn., (Urticaceae); *Charanga* (O), *Choak-daba* (R).

Loc.: Kathambari, Barodabari, Chilapata, 20877, 20344.

A paste of leaves is applied on swollen parts of the body (O).

Juice extracted by squeezing the leaves is touched to the right eye with the little finger of the left hand three times to cure eye inflammation. In the case of left eye, same procedure is followed by the little finger of the right hand (R).

Premna latifolia Roxb., (Verbenaceae); *Bantaki* (M), *De-sindhuri* (O).

Loc.: Kathambari, 20361.

Two pieces of roots about 1.5 cm long and 3 similar pieces of roots of *Oroxylum indicum* Vent. are made into a paste with coconut oil and applied in wounds caused by syphilis or gonorrhoea. The paste diluted in water is also given orally twice daily for 7 days (M).

Twigs are kept in poultry room for driving out "Uras-poka" (a parasitic insect on hens). It is used also to kill lice on hen's body (O).

Scindapsus officinalis (Roxb.) Schott, (Araaceae); *Harjora* (O).

Loc.: Kathambari, 20406.

A paste made from the whole plant is applied on bone fracture. The injured parts are tied with bamboo splints (R).

Scoparia dulcis L., (Scrophulariaceae); *Mas-hola* (O).

Loc.: Barodabari, Kathambari, 20825, 20381.

A paste of the whole plant is prescribed to a pregnant body for easy delivery (M).

A paste of the leaves is prescribed in ulcer of tongue for children (O).

A paste of the flowers is applied in rheumatism. One flower is also taken for 3 days for the same purpose (R).

Setaria italica (L.) P. Beauv., (Poaceae); *Hatkata* (O).

Loc.: Kathambari, 20375.

A paste of the roots is given twice daily in dyspepsia (O).

Smilax zeylanica L., (Liliaceae); *Kukur-daini* (M), *Ranipoan* (O).

Loc.: Boradabari, Chilapata, Kathambari, 20823, 20464, 20427.

Roots are made into a paste with that of *Paedaria foetida* L. and *Sida cordata* (Burm. f.) Boreas. and prescribed twice daily in blood dysentery (M). Kirtikar & Basu (*l.c.*) said that the root is used in ordinary dysentery.

Stems are used as tooth brush to cure gum infection. Stem pieces are tied as amulates on the waist, in rheumatic swelling (O).

Solanum viarum Dunal, (Solanaceae); *Pantu-gogalong* (M), *Vezri-kanta* (O).

Loc.: Barodabari, Kathambari, 20439, 24512.

Forty to fifty seeds are made into a paste with 5-10 grams of green algae and 2-3 pieces of roots about 1 cm long of *Clerodendrum indicum* (L.) Ktze and taken as a pill with

country liquor in morning for 7 days in empty stomach after menstruation against conception (M).

Smoke of burning seeds is brought in contact with the teeth for expellation of worms (O & R).

Stachytarpheta indica (L.) Vahl, (Verbenaceae); *Smuta* (M).

Loc.: Kathambari, 20444.

Two pieces of roots about 2 cm long are made into a paste with that of *Callicarpa arborea* Roxb. and given twice daily in pneumonia (M).

Thelypteris arida (D. Don) Morton, (Thelypteridaceae); *Sal-kadumi* (M).

Loc.: Kathambari, 20436.

Three to four root pieces are tied as amulate on neck of cows against larval infection (M).

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REFERENCES

- ANONYMOUS. Northern Hills Districts of West Bengal. Publication Division. Govt. of India. New Delhi. 1972.
 ———. Wealth of India Vol. VI. C.S.I.R. New Delhi. 1962.
 CHOPRA, R. N., S. L. NAVAR AND I. C. CHOPRA. Glossary of Indian Medicinal Plants. C.S.I.R. New Delhi. 1956.
 KIRTIKAR, K. R. AND B. D. BASU. Indian Medicinal Plants (1-4). Allahabad. 1935.