



## ETHNOMEDICINAL PLANTS USED FOR DYSENTERY AND DIARRHOEA BY TRIBALS OF NORTH WESTERN TARAI REGION OF U.P., INDIA

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North Western Tarai Region of U.P. India, offers a great scope for ethnobotanical studies because of its diverse flora and ethnic culture. The tribal population of the region primarily depends on ethnomedicinal plants of their surroundings for curing diarrhoea and dysentery. The present study deals with thirty one plant species represented by twenty two families, which are being used in aforesaid ailments. These plant species are enumerated alphabetically with their botanical name, vernacular names, family and ethnomedicinal uses.

**Key words** - Ethnomedicinal plants, dysentery and Diarrhoea, tribes, tarai region.

Diarrhoea and dysentery are the leading cause of child and adult mortality in India. It constitutes a major health problem in rural areas of North Western Tarai Region of U.P. because of illiteracy, poverty, unsafe water supply, inadequate sanitation and hygiene. The tribal people of the area are poor, illiterate and mostly depend on forest wealth to meet their basic medical care. They use different plant species for all ailments and have enormous knowledge about their medicinal usage. In this study, an attempt has been made to collect and document the ethnomedicinal plants used for dysentery and diarrhoea by local inhabitants of North Western Tarai region of U.P., India.

### MATERIALS AND METHODS

For the purpose of collection and documentation of ethnomedicinal plants of North Western Tarai region of U.P., several field trips were conducted during July 2006-July 2007. The method of collection of voucher specimens, their preservation in Herbaria and technique for the collection of ethnomedicinal information was followed as recommended by Jain and Rao, 1976 and Rao, 1989.

During field trips information's were collected on the basis of personal interviews with traditional healers, village head, knowledgeable person and old women of the society. The collected plant specimens were identified with the help of taxonomic literature and floras (Duthie, 1994; Hooker, 1872-1897). All the plant specimens are deposited in the Herbarium maintained in the department.

### RESULTS

Plant species, which are used as traditional medicine for dysentery and diarrhoea, are enumerated alphabetically with their botanical and vernacular names, family and ethnomedicinal uses.

*Achyranthes aspera* L. (Amaranthaceae);  
Latzeera; Chirchitta

The powdered root bark is given twice a day for dysentery. The small piece of root when tied on the wrist is believed to cure diarrhoea.

*Aegle marmelos* (L.) Corr. (Rutaceae); Bel  
The bark is pounded and made in to paste with mustard seeds and given twice a day for diarrhoea.

*Anisomeles indica* (L.) Kuntze. (Lamiaceae);  
Basiga, Gobura  
The leaf juice is used twice a day for dysentery.

*Bridelia squamosa* Gehrm. (Euphorbiaceae);  
Khaja Root paste is given thrice a day for two days for diarrhoea.

*Butea monosperma* (Lam.) Taub.  
(Papilionaceae); Palas

The gum mixed with curd and small amount of salt cures diarrhoea and dysentery.

*Caesalpinia bonduc* (L.) Roxb. (Caesalpiniaceae); Karanju

The seed powder is mixed with honey and given three times a day for dysentery.

*Catharanthus roseus* (L.) G. Don. (Apocynaceae); Sadabahar

The leaf juice (few drops) mixed with a cup of water, is taken in empty stomach for blood dysentery.

*Centella asiatica* (L.) Urban. (Apiaceae); Brahmi

The five ml leaf juice is given orally in empty stomach for three days.

*Cissampelos pariera* L. (Menispermaceae); Purain – Padi; Madrachi

The decoction of leaves, lemon and garlic juice mixed with small amount of common salt is taken orally twice a day for four days for blood dysentery.

*Citrus medica* L. (Rutaceae); Baranimbu

Fruit juice is taken with one glass of cow milk for dysentery.

*Clausena pentaphylla* (Roxb.) DC. (Rutaceae); Van nimbua

The decoction of leaf mixed with black pepper (*Piper nigrum*) and barley seeds (*Hordeum vulgare*) and taken twice a day for dysentery.

*Curcuma amada* Roxb. (Zingiberaceae); Amahaldi

The rhizome powder is taken with 'Gur' for diarrhoea.

*Cyperus rotundus* L. (Cyperaceae); Motha

Dried rhizome paste is given to child along with honey twice a day for dysentery.

*Euphorbia thymifolia* L. (Euphorbiaceae); Lal dudhi

The whole plant juice is mixed with *Piper*

*nigrum* (2 gm.) and taken orally three times a day for dysentery.

*Ficus glomerata* Roxb. (Moraceae); Gular

The stem bark decoction is given in case of diarrhoea and dried fruit powder (2gm) with latex is given thrice a day for three days to treat dysentery.

*Helicteres isora* L. (Sterculiaceae); Marorphali

The aqueous extract of seed is given thrice a day for two days.

*Holarrhena antidysenterica* (Roxb. ex. Fleming) Wall. (Apocynaceae); Dudhi

The decoction of stem bark is taken twice a day.

*Lawsonia inermis* L. (Lythraceae); Mehendi

Roots along with neem leaves (*Azadirachta indica*) and ginger (*Zingiber officinale*) is made in to paste and taken with pre boiled water to stop diarrhoea in babies.

*Millettia extensa* Benth. ex Baker. (Papilionaceae); Gauj

The powdered rhizome (2gm) and lemon juice (5ml) is mixed with common salt and taken orally for three days.

*Momordica dioica* Roxb. ex Willd. (Cucurbitaceae); Tituaa

The powdered rhizome (5gm) mixed with *Piper nigrum* (2gm) and is taken twice a day for two days.

*Mucuna pruriens* (L.) DC. (Papilionaceae); Kewanch

The aqueous root paste is taken twice a day for two days.

*Oroxylum indicum* (L.) Benth. (Bignoniaceae); Ullu; Dagdagva

The stem bark powder mixed with powder of barley seeds (*Hordeum vulgare*) is used for stomachache and dysentery.

*Psidium guajava* L. (Myrtaceae); Amrood

The decoction of young leaves mixed with



'Anar' leaf juice is taken orally twice a day for three days.

*Shorea robusta* Gaertn. (Dipterocarpaceae); Sakhu

The resin (ral) is soaked in curd and given twice a day.

*Sida cordifolia* L. (Malvaceae); Kungji

The leaf paste is given two times a day for two days.

*Spilanthes calva* DC. (Asteraceae);

The root decoction is given twice a day for three days.

*Syzigium cumini* (L.) (Myrtaceae); Jamun

The stem bark powder mixed with curd and taken orally two times a day for blood dysentery.

*Tamarindus indica* L. (Caesalpiniaceae); Imali  
Stem bark decoction is given twice a day for diarrhoea. Juice made from the fruit pulp mixed with lemon juice, is taken 2-3 times in a day for dysentery.

*Tinospora cordifolia* (Willd.) Miers. ex. Hook. f. & Thomas. (Menispermaceae); Amrita

The unripe fruit paste is taken in empty stomach for three days.

*Xanthium indicum* Koen. (Asteraceae); Banokra  
The root decoction mixed with *Piper nigrum* (2gm.) is taken orally twice a day.

*Xeromorphis uliginosa* (Retz.) Maheswari. (Rubiaceae); Pindalu

The roasted fruit pulp and root decoction is used for diarrhoea.

## DISCUSSION

A total of thirty one plant species belonging to twenty two families used for the treatment of dysentery and diarrhoea by tribals of North Western Tarai region of U.P., have been recorded. Of these

twelve are tree species, seven shrubs, nine herbs and three climbers. Rutaceae with three species is the dominant family followed by Euphorbiaceae, Papilionaceae, Caesalpiniaceae, Myrtaceae, Menispermaceae, Asteraceae and Apocynaceae with two species each.

The practice of indigenous traditional knowledge and its application are still alive in different tribal colonies of study area. People are making maximum use of plant species for meeting their day-to-day household demands. However, it is alarming that the indigenous knowledge and practices are gradually disappearing day-by-day. Hence it is necessary to document the indigenous knowledge of useful plants and their therapeutic uses before they are lost forever from the community.

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