

# ETHNOBOTANICAL WEALTH OF DARBHANGA DIVISION (BIHAR), HERBAL MEDICINAL PLANTS USED AGAINST DYSENTERY

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*Abstract* : Preliminary studies have been carried out to find out the herbal medicinal plants used against dysentery. The people of Darbhanga depends upon the herbaceous plants for medicinal use in their daily life. During the survey of Darbhanga Division 20- Medicinal plants species have been recorded in which five medicinal plants (Acacianilotica, Acanthospermum hispidum, Gmelina arborea, Parkia biglobosa and vitexdoniana) in dysentery treatment. Abdul Karim Agunu Sadiq Yusuf Gabel onvilovi, Andrew Abdul Kadir and Umar Zazi, Journal of Ethnopharmacology 101(1-3), 27-30, 2005. In the first phase the vernacular names, plant parts, used dosage and process of administration have been listed.

**Keywords** : Herbal Medicinal plants, desentery, Darbhanga Divison.

## I. INTRODUCTION

Darbhanga division is situated between 25<sup>0</sup>28' and 26<sup>0</sup>40' north latitude and between 85<sup>0</sup>31' and 86<sup>0</sup>44' miles. The Head quarter of this division i.e. Darbhanga town is situated in 26<sup>0</sup>10' N and 85<sup>0</sup>54' E. Due to the river koshi and Kamla Balan have been notoriously famous for flood and their changing course causing extensive damage in the past. Due to heavy rainfall and flood of the sub-himalayan region, the vast fertile tract area of this zone is flooded. Due to flood the high soil moistures and the climate is highly suitable for growth of various types of plants. Despite modern civilization most of the villagers especially Farmers, who are worked in fields still depend upon medicinal plants rather than commercial medicine.

## II. MATERIAL AND METHODS

The plants were collected during their flowering periods (2014-15) with the help of village Bisfi "known as vidyapati janam sthali". Information regarding the herbal medicinal plant parts used, their dosage and nature of administration have been recorded. The plants were identified with the help of standard flora. Herbaria were prepared and kept in the Department of Botany, J.N.College, Madhubani, L.N.Mithila University, Darbhanga.

## III. RESULTS AND DISCUSSION

The listed herbal medicinal plants have been collected and are studied for the treatment of dysentery. We have identify 20 herbal medicinal plants, which are used by the general people of Darbhanga Division in their daily life for the treatment of dysentery. Most of these plants are either cultivated or growing on plants. The plants have been listed alphabetically (Table - 1).

**Table-1**  
Herbal medicinal plants for the treatment of dysentery

| <i>Botanical name and Vernacular name</i>                        | <i>Family</i>    | <i>Plant parts used</i>   |
|--|------------------|---|
| <i>Achyranthes aspera</i> Linn.<br>*Chitchiti                    | Amaranthaceae    | Leaves : Power with water   |
| <i>Aloe barbadensis</i> Mill.<br>Ghritakumari                    | Liliaceae        | Stem : 100 gms paste with sugar   |
| <i>Allium cepa</i> Linn.<br>*Safed Piyaz                         | Liliaceae        | Bulb : Juice extract with honey   |
| <i>Aristolochia indica</i> Linn.<br>*Ishwarmul                   | Aristolochiaceae | Root : Extract root of aristolochia with chemamul and 5 fruits of Piper nigrum (Golmirch) |
| <i>Acacia nilotica</i>   | Fabaceae         | Leaves and stem used as pest.   |
| <i>Acanthospermum hispidum</i>                                   | Asteraceae       | Flowers : Powder with water   |
| <i>Catharanthus roseus</i> (L) G.Don<br>*Sadabahar (Red flowers) | Catharanthaceae  | Leaves : Juice extract  |
| <i>Chenopodium album</i> Linn<br>*Bhatua Sag                     | Chenopodiaceae   | Leaves : Powder with curd or used as vegetable  |
| <i>Cynodon dactylon</i> Pers.<br>*Doobghas                       | Poaceae          | Plant : Whole plant used extract in both blood and amoeboid dysentery                     |
| <i>Eclipta alba</i> Hassk.<br>*Bhringraj                         | Asteraceae       | Root : Extract boiled with water and used with 250 ml milk                                |
| <i>Foeniculum vulgare</i> Mill<br>*Saunf                         | Apiaceae         | Fruit : 10 gm extract with water at 15 minutes interval                                   |
| <i>Gmelina arborea</i>   | Lamiaceae        | Root bark - Powder used   |
| <i>Holarrhena antidysenterica</i> (Wall)<br>*Kurchi              | Catharanthaceae  | Stem bark : Powder extract with water, twice daily in amoeboid and blood dysentery        |
| <i>Mentha viridis</i> Linn.<br>*Podina                           | Lamiaceae        | Leaves : Juice extract after heating 5 drops at 10 minutes interval                       |
| <i>Ocimum sanctum</i> Linn.<br>*Tulsi                            | Lamiaceae        | Leaves : Paste with water   |
| <i>Piper nigrum</i> Linn.<br>*Gomirch, Gulki                     | Piperaceae       | Fruits : Powder with water  |
| <i>Parkia biglobosa</i>  | Fabaceae         | Pods : Powder with milk   |
| <i>Urginea indica</i> Kunth<br>*Vana Piyaz                       | Liliaceae        | Bulb : Juice extract, 10 drops at 15 minutes interval                                     |
| <i>Vitex doniana</i>   | Lamiaceae        | Flowers : Juice, extract with honey   |
| <i>Zingiber officinale</i> Rose<br>*Aada                         | Zingiberaceae    | Rhizome : Extract with water  |

In the past Mahto et. al. (1992, 1996) have reported some medicinal plants used in dysentery by the people of Darbhanga Division. But *Aristolochia indica*, *Eclipta viridis* and *Piper nigrum* have not been reported earlier by any researcher work or surveyer especially for dysentery listed in Table-1. On the other hand in *Holarrhena antidysenterica* (Panda et. al. 1991), *Nelumbo nucifera* (Mukherjee et. al. 1995), *Terminalia alata* (Combretaceae) and *Mallotia phillyifolia* (Euphorbiaceae) Tylor et. al. 1996 have reported that the plants act against dysentery. In *Catharanthus roseus* (Benjamin et. al. 1990), Singh et. al. 1992) and *Ocimum sanctum* (Singh & Agrawal, 1992) alkaloid contents have been traced out which are responsible for the treatment of dysentery. Some of the plants have been used by the authors and confirmed their authenticity of medicinal value by Chopra et. al. 1956 and Singh et. al. 1983; The present report also confirms the medicinal use against dysentery.

According to Nidal Amin Jaradat, Ola ibrahim Ayesh, Cynthia Anderson, Journal of ethnopharmacology 182, 57-66, 2016. Original cultures are not only useful for conservation of cultural traditions and biodiversity, but also useful for community health care and drug discovery in the present and in the future.

Further research work is continued by the authors to find out the bioactive compounds so that these known medicinal plants can commercially be exploited.

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