

## Ethnomedicinal plants to cure diabetes and jaundice diseases among the rural and tribal peoples of Hathras district (U.P.)

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### Abstract

An ethnomedicinal studies was conducted in the Hathras district of Uttar Pradesh. The important information on the medicinal plants was obtained from the traditional medicinal peoples. Present investigations were carried out for the evaluation on the current status and survey on these medicinal plants. In the study we present 14 species of medicinal plants which are commonly used among the peoples of Hathras district (U.P.) to cure diabetes and jaundice diseases. This study is important to preserve the knowledge of medicinal plants used by the rural and tribal peoples of Hathras district (U.P.), the survey of psychopharmacological and literature of these medicinal plants have great pharmacological and ethnomedicinal significance.

**Keywords:** ethnomedicinal plants to cure diabetes and jaundice of Hathras (U.P.)

### 1. Introduction

Hathras district is situated in Aligarh region of Uttar Pradesh. It is bounded in East by Etah, in the West by Mathura, in the North by Aligarh and in the South by Agra district. The global location of Hathras is between 20.4°-29° North latitude and between 76°-77° East longitudes. It covered a geographical area is about 175.6 sq. km and surrounding area about 76.5 sq. km. It's about 398 hectare land area is covered by forests. Hathras district is divided into 4 Tehsil i.e. Sikandra Rao, Hathras, Sadabad and Sasni, and 7 Blocks i.e., Hasayan, Sikandra Rao, Hathras, Mursan, Sahpau, Sadabad and Sasni.

Medicinal plants have an important role for the survival of rural and tribal peoples of Hathras district, who live in the remote villages and forest area. The rural and tribal peoples were races throughout the World have developed their own culture and medicinal knowledge. A large number of cultivated and wild plants are being used by rural and tribal peoples for the treatment of various diseases. During the course of studies and field surveys were conducted by a number of rural and tribal peoples by contacting village heads, medicine and priests. They were interviewed to record different medicinal plants used for various remedies. Generally the rural and tribal peoples were very shy and reluctant to leak their previous knowledge to outsiders and provided to desired information about the medicinal plants of that areas of Hathras district of Uttar Pradesh.

### 2. Materials and Methods

The uses of plants in medicine had been a long practice by man from ancient times. Utilization of plants in medicine is still providing not only among the rural and tribal peoples of Hathras district but also among the several others

communities who live in the rural or forests areas. The main aim of this study was not only to prescribe remedy for diseases but to bring out the importance of plants in medicine. It is also aimed to encourage the farmers to go for cultivation of medicinal plant species in agro-climatic regions. The field survey were undertaken all seasons for gathering some important information on ethnomedicinal plants among the rural and tribal peoples by conducting the survey in different villages of Hathras district during 2014-2015. As methodological suggested by Kirtikar *et al.* (1983) [7], Singh & Gupta (2008) [11], Siddique *et al.* (1995), Visen (1993) [13], Kapil (1993) [6], Das *et al.* (2005) [2], Pandey & Chaturvedi (1960) [8], Puri (1993) [9], Jain (1989) [4], Singh & Subramanyam (2008) [12] were followed during collection, preservation and maintenance of the medicinal plant specimen. A large number of flora were consulted specially from the Flora of British India Vol. 7 (Hooker, 1989) [3], Flora of Dehradun Vol. 4 (Kanjilal *et al.* 1969) [5] and Glossary of Indian Medicinal Plants (Chopra *et al.* 1956) [1] for the proper identification of the collected medicinal plant specimens to cure diseases.

### 3. Results and Discussion

Present investigation were carried out to cure diabetes and jaundice diseases by medicinal plants were reported 14 plant species belonging to the 12 families from the Hathras district of Uttar Pradesh. The following important information were provided for each plant species like botanical name, local name, family, plant parts used and methods of the preparation of medicine as shown in Table-1. Study was found that the rural and tribal peoples are still using the herbal medicine to cure different types of diabetes and jaundice diseases.

**Table 1:** Botanical name, local name, family and plant part used by rural and tribal peoples by Hathras district (U.P.)

S. No.	Botanical Name	Local Name	Family	Plant part used
1.	<i>Abitilan indicum</i> Linn.	Atibala	Malvaceae	Leaves and root extract are used for the treatment of Jaundice and diabetes diseases.
2.	<i>Andrographis paniculata</i> Nees	Kalmegh	Acanthaceae	Dry leaves powder is used in the treatment of Jaundice and diabetes diseases.
3.	<i>Bixa orellana</i> Linn.	Kumkum	Bixaceae	Leaves are used to cure jaundice diseases.
4.	<i>Eclipta alba</i> Hassk.	Bhringraja	Asteraceae	Leaf extract is used for the treatment of jaundice.
5.	<i>Ficus racemosa</i> Linn.	Gular	Moraceae	Leaf and fruits are used for the treatment of diabetes diseases.
6.	<i>Gymnema sylvestre</i> R.Br.	Gurmar	Acanthaceae	Dry leaves and root powder is used for the treatment of diabetes diseases.
7.	<i>Luffa echinata</i> Roxb.	Ghager Bel	Cucurbitaceae	Fruit and stem are used in the treatment of jaundice.
8.	<i>Madhuca indica</i> Linn.	Mahua	Sapotaceae	Dried bark powder is used for the treatment of diabetes diseases.
9.	<i>Memerdica charantia</i> Linn.	Karela	Cucurbitaceae	Root extract is used for the treatment of diabetes.
10.	<i>Phyllanthus niruri</i> Linn.	Bhuiamla	Euphorbiaceae	Paste of green leaves is used for the treatment of jaundice diseases.
11.	<i>Picrorhiza kurraa</i> Benth.	Katki	Scrophulariaceae	Dried rhizome and root used for the treatment of jaundice and diabetes.
12.	<i>Sphoeranthus indica</i> Linn.	Gorkhimundi	Asteraceae	Leaves powder is used for the treatment of jaundice and diabetes.
13.	<i>Syzygium cumini</i> Linn.	Jamun	Myrtaceae	Dried fruit and bark powder is used for the treatment of diabetes.
14.	<i>Vinca rosea</i> Linn.	Nyantara	Apocynaceae	Leaf juice is highly efficacious against diabetes.

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