

ORIGINAL RESEARCH ARTICLE

Ethnomedicinal plants used in the treatment of stomachache by the Bhil tribe of Ratlam district, Madhya Pradesh, India

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ABSTRACT

The present study highlights information on some of the ethnomedicinal plant species that are traditionally used by Bhil tribe of Ratlam district (Madhya Pradesh) for curing stomachache. First hand data on this ethnomedicinal information was collected through personal observations, discussions and a series of interviews with a large number of local tribal informants and traditional healers. Seventeen ethnomedicinal plant species belonging to 17 genera of 12 families are discussed here for their folklore use in the treatment of stomachache. Their botanical names, followed by local names, family, VSN, the method of drug preparation and mode of application are enumerated and described here.

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INTRODUCTION

Ratlam district is situated between 23°05' – 23°55' N latitude and 74°30' – 75°42' E longitude and covers an area of 4861 sq. km. The district is situated on Malwa plateau at 493.62 m. above the sea level. Bhils are the main inhabitants of different villages of this district. According to 2001 census, the population of Bhil tribe in the district was 2,26,156 lakhs, that constituted about 23.27% of the total population of Ratlam district. The major concentration of the tribal is in Bajna and Sailana Tehsils.

Ethnobotany is the study of how the people of a particular culture and regions makes use of their indigenous plants for food shelter, medicine, clothing, hunting and religious ceremonies. It is the science of studying which studies the relationship between a given society and its environment, particularly the plant world (Jain, 1981, 1991, 2002,

2004). During extensive field trips in some tribal inhabited villages of the Ratlam district, the author has recorded novel and interesting ethnomedicinal uses of plants in these habitats. (Jadhav, 2016, 2017, 2018, 2019). In this series of investigation, the present paper provides information on few ethnomedicinal plants effectively used in the treatment of stomachache by Bhil tribe of Ratlam district in Madhya Pradesh, India.

MATERIALS AND METHODS

Survey and data collection

Ethnobotanical survey was conducted in 52 different tracks in the forest areas of Ratlam district and more than 300 ethnomedicinal plants were recorded. Out of these, seventeen ethnomedicinal plants are discussed here that are particularly used in the treatment of stomachache. First hand data regarding various uses and local names of plants

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Table 1: Data collected on seventeen short listed ethnobotanical plants used for curing stomachache by Bhil tribes of Ratlam district

Botanical Name	Family	Local/Common Name	Voucher Specimen Number	Folklore Claim & Method of Drug Preparation /use
<i>Azadirachta indica</i> A. Juss	Meliaceae	Limdo	DJ-08	Leaves are chewed fresh to relieve pain
<i>Capparis zeylanica</i> L.	Capparidaceae	Kanthario	DJ-162	Powder of seeds is taken with water to cure stomach pain
<i>Cocculus hirsutus</i> (L.) Diels	Menispermaceae	Dechri	DJ-121	Extract of root is mixed with jaggery and syrup is prepared. It is taken in the case of stomach tumor
<i>Coleus aromaticus</i> Benth	Lamiaceae	Ajman	DJ-122	1-2 leaves chewed daily in the cases of vomiting, gastric complaints and stomach pain.
<i>Coriandrum sativum</i> L.	Apiaceae	Dhano	DJ-21	Extract of seeds is mixed with water (Mishri may be added) and taken with water in chronic gastritis
<i>Cuminum cyminum</i> L.	Apiaceae	Jiru	DJ-148	The seed powder is mixed with curd and taken to relieve stomach pain
<i>Curuma longa</i> L.	Zingiberaceae	Hardi	DJ-23	Powder of dried rhizome is mixed with salt (3:1) and taken with water for stomach pain
<i>Dalbergia sissoo</i> Roxb.	Papilionaceae	Shisham	DJ-90	Five to eight leaves chewed daily 3 times for a week to cure peptic ulcer
<i>Dendrocalamus strictus</i> (Roxb.) Nees.	Poaceae	Vansdo	DJ-58	A solid round small ball is obtained from the node of the stem. Extract of this ball is taken with water to cure stomachache
<i>Diospyros melenoxylon</i> Roxb.	Ebenaceae	Timru	DJ-91	Extract of stem bark is taken with water to cure stomach pain
<i>Helicteres isora</i> L.	Sterculiaceae	Atedo	DJ-94	Extract of dried fruit is useful in gripping of the bowels.
<i>Indigofera cordifolia</i> Heyne. ex Roth	Papilionaceae	Baam	DJ-210	The bhils apply warmed paste of the plant on the abdomen to cure abdominal pain
<i>Mentha spicata</i> L.	Lamiaceae	Pudino	DJ-142	The leaves are ground with the leaves of marua (<i>Ocimum basilicum</i>) and the bulb of onion (<i>Allium cepa</i>) to make a chutney. It is taken with food to cure stomach pain and indigestion issues.
<i>Ocimum sanctum</i> L.	Lamiaceae	Tulsi	DJ-38	The leaves are chewed raw
<i>Piper betle</i> L.	Piperaceae	Paan	DJ-129	Boiled leaves are tied on stomach to subside stomach pain.
<i>Tinospora cordifolia</i> (Willd.) Miers. ex Hk. f. & Th.	Menispermaceae	Limbvel	DJ-50	The stem juice is used for a month to cure stomach ulcer
<i>Tridax procumbens</i> L.	Asteraceae	Kalio	DJ-112	Extract of leaves is taken with mishri and water in the case of inflammation in stomach

were collected through personal contacts with a large number of tribal informants and “Bhopa” (Traditional rural vaidhyas). During the survey the Bhopa(s) was taken to the field for collecting information on ethnomedicinal plant, local names, plant part used, method of drug preparation and approximate dosage of administration. Voucher specimens were collected for authentication of information and future reference. With the help of local name and specimen, it was possible to verify the uses with other villagers and the data was considered valid if at least two informants provided similar uses on the particular medicinal plant. Herbarium specimens were prepared following the standard method and were identified with the help of standard Floras (Mudgal et al., 1997; Singh et al., 2001; Verma et al., 1993). The specimens were

deposited in the herbarium of Botany department, of Govt PG Arts & Science College, Ratlam (M.P.).

RESULTS AND DISCUSSION

Enumeration

The seventeen short-listed plant species were enumerated alphabetically with their botanical names, family, local names, Voucher Specimen Number (VSN) and folklore claims. Data is enumerated in Table 1.

The paper provides information on 17 ethnomedicinal plants used in the treatment of stomachache by Bhil tribe of Ratlam district, Madhya Pradesh. This ethnomedicinal data may provide baseline information for compounds related drug discovery research work. This ethnomedicinal

information will also help in developing novel drug formulations to cure stomach ailments. This valuable ethnomedicinal knowledge of tribes needs to be preserved before it is eroded from our memory.

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