

SHORT COMMUNICATION

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

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ABSTRACT

The present paper gives information on ethnomedicinal plants used by the Bhil tribe of Ratlam District (Madhya Pradesh) for curing headaches. It deals with 15 plant species under 13 genera belonging to 12 families. The botanical names followed by local names, family, Voucher Specimen Number, method of preparation of the drug, and mode of use of the plants are mentioned.

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INTRODUCTION

Ratlam district lies in the western part of the Malwa Plateau in Madhya Pradesh. The district has an important place in the Railway Map of Madhya Pradesh. The geographic limits of the district extend from 23° 05' N to 23° 55' N and from 74° 30' E to 75° 42' E. It has a wide crescent shape with its concave on the east and widest part in the south. The most significant length of the district extends about 122 km. from southwest to northeast. The district is bounded by Mandsaur district on the north, Jhabua, Dhar on the south, Ujjain on the east, and Chittorgarh and Banswara district of Rajasthan State on the west. Shajapur district of Madhya Pradesh and Jhalawar district of Rajasthan also touches the northeastern boundary of Ratlam district. The elevation generally varies from 434 to 549 m above mean sea level. The district comprises an area of 4861 sq. km inhabited by 1,455,069 persons, living in 1080 villages covering eight tehsils Viz. Bajna, Jaora, Piploda, Ratlam, Rawti, Sailana, and Tal (Census 2011). Bhils are the principal inhabitants of

different villages of the district. According to the 2001 census, the population of the Bhil tribe in the district was 2.26 lac constituting about 23.27% of the total population.

The forests, which occupy a total area of 499.92 sq km or 10.26 %, are of the dry deciduous Vb type (Champion and Seth, 1968). Mostly the forests are dominated by Teak (*Tectona grandis* L.f.). Other notable wood species are Sajad [*Terminalia tomentosa* (DC.) Wt. & Arn.], Mahua (*Madhuca indica* Gmel.), Tendu (*Diospyros melanoxylon* Roxb.), Palas [*Butea monosperma* (Lam.) Taub.], Kalam [*Mitragyna parviflora* (Roxb.) Korth.], Dhaora [*Anogeissus latifolia* (Roxb.) Wall. ex Bedd.], Bel [*Aegle marmelos* (L.) Corr.], Bija (*Pterocarpus marsupium* Roxb.) and Bamboo (*Dendrocalamus strictus* Nees.), which constituted a significant chunk of the middle canopy of the forests. There are two important rivers in Ratlam district, namely, the Chambal flowing north district along with its tributaries and the Mahi flowing to the north-west. The climate of the State is generally sub-humid with an annual rainfall

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ranging from 700-1200 mm. The minimum and maximum temperatures range between 6 °C and 43 °C in January and May, respectively. The black cotton soil predominates the entire district.

During extensive field trips in some tribal inhabited villages of the district, the author recorded some ethnomedicinal uses of plants in the surrounding used by the tribals. Ethnobotany has introduced numerous little-known or unknown benefits of plants (Jain 1981; 1991; 2002; 2004). The author is engaged in ethnomedicinal investigations in this district, which have been published (Jadhav 2016; 2017; 2018; 2019) earlier. This paper is in a link of the same work. In the present investigation, the author recorded new and interesting ethnomedicinal uses of surrounding plants used by the tribe. The present paper provides information on some ethnomedicinal plants effectively used to treat headaches by the Bhil tribe of Ratlam district (M.P.).

MATERIALS AND METHODS

An ethnobotanical survey was conducted in tribal inhabited localities in the forest areas of Ratlam district during 2004-2008, where more than 300 ethnomedicinal plants were recorded. Fifteen ethnomedicinal plants have been discussed here, which are effectively used to treat headaches. First-hand data regarding various uses and local names of plants were collected through personal contacts established with many tribal informants and "Bhopa" (Traditional rural medicine men). During the survey, the Bhopa was contacted and taken to the field to collect information about ethnomedicinal plants, local names and parts used, method of preparation of the drug, and approximate dosage of administration. These data are recorded in the field book. Voucher specimens are collected for authentication of information and future reference. With the help of local names and specimens, it was possible to verify the uses with other villagers. The data are considered valid if at least two informants provided similar benefits about a medicinal plant. Herbarium specimens prepared following the standard method have been deposited in the Department of Botany, Govt PG Arts and Science College, Ratlam (M.P.). Herbarium specimens were identified with the help of standard Floras (Mudgal *et al.*, 1997; Singh *et al.*, 2001; Verma *et al.*, 1993).

ENUMERATION

Plant species are enumerated alphabetically with their botanical names, family, local names, VSN, and folklore claims:

Acacia leucophloea (roxb.) Willd. (Mimosaceae), 'Khejro', DJ-44.

Extract of stem bark is taken orally with water twice a day for 1-3 days to cure headache.

Acacia nilotica L. (Mimosaceae), 'Bawal', DJ-01.

Leaf paste is applied to the forehead to cure headaches.

Azadirachta indica A. Juss. (Meliaceae), 'Limdo', DJ-08.

Extract of fruits is taken with water to cure headache.

Brassica campestris L. (Brassicaceae), 'Sarsu', DJ-139.

Two drops of seed oil are poured into nostrils to get relief from the headache.

Brassica nigra (L.) Koch. (Brassicaceae), 'Rai', DJ-11.

The seed powder dissolved in warm water and applied to the forehead to cure the headache.

Coriandrum sativum L. (Apiaceae), 'Dhanio', DJ-21.

Powder of roasted fruits is mixed with sugar; this mixture is called "Punjari". It is taken daily 3 times to cure headaches.

Enicostemma littorale Blume. (Gentianaceae), 'Nau', DJ-26.

Extract of leaves is applied on the forehead to cure headache.

Erythrina suberosa Roxb. (Papilionaceae), 'Parabda', DJ-92.

Dried stem bark powder dissolved in hot water and fumes inhaled to cure headache.

Merremia emarginata Hall.f. (Convolvulaceae), 'Undri', DJ-207.

Paste of leaves is tied on the forehead to cure headache during the complaint of Blood Pressure.

Moringa oleifera Lam. (Moringaceae), 'Surajno', DJ-98.

Paste of stem bark is applied on the forehead to cure headache.

Plumbago zeylanica L. (Plumbaginaceae), 'Chitawal,' DJ-42.

Extract of the root is taken with tea to cure headache.

Ricinus communis L. (Euphorbiaceae), 'Arandi,' DJ-47.

Leaves are heated a bit with edible oil and tied on the forehead to cure migraine.

Tridax procumbens L. (Asteraceae), 'Kalio,' DJ-112.

The root is tied on-ear to cure migraine.

Vitex negundo L. (Verbenaceae), 'Negad', DJ-99.

Boiled leaves are tied on the forehead to cure headaches.

Xanthium strumarium L. (Asteraceae), 'Adosisi,' DJ-76.

A fruit is tied to the ear with the help of thread to cure migraine.

RESULTS AND DISCUSSION

The paper provided some new 15 ethnomedicinal plants used in the treatment of headaches by the Bhil tribe of Ratlam district (M.P.). These ethnomedicinal data provide a base to start the search for new compounds related to phytochemistry, pharmacology & pharmacognosy. This ethnomedicinal research has led to the development of many commercial plant-derived drugs. With the help of these data, we seek to record and present orally transmitted knowledge in danger of being forgotten. This study of traditional plant lore also discovers new drugs for the welfare of mankind.

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