Ethnomedicinal practices of Nasik District, Maharashtra

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The paper reports the age old empirical ethnomedicinal knowledge of 30 plant species belonging to 20 families from aboriginal and rural populace of Nasik district, Maharashtra. The preparation of ethnomedicinal recipes, dosage, mode of administration and uses of plants are given. These taxa appear to be promising from the view point of drug evaluation. They are enumerated with botanical name, local name, family name, uses and number of voucher specimens.

Keywords: Ethnomedicine, Nasik district, Maharashtra, Western Ghats, Tribals.


Nasik district situated towards North western side in Maharashtra lies between latitudes 19° 31’ and 20° 51’ and longitudes 73° 30’ and 74° 55’ occupying an area of 15582 sq km. The ranges of western Ghats extend in the district (Fig. 1). The forests in the region vary from evergreen to dry deciduous types. The district is predominantly tribal. The aborigines such as Mahadeo koli, Katkari, Bhils, Kunabi-kokana, Thakurs and Warlis inhabit in the rugged forest pockets of western Ghats. The complex topography and rugged terrain of western Ghats in Nasik district have provided refuge for racially varied set of microcultures like Mahadeo koli, Thakurs, Katkaris, Warlis, Kunabi kokana, Bhils etc. apart from other non-tribal far flung rural populace. There is a dire necessity of conservation of mediclore of the region. Literature resume indicated very little ethnobotanical work done from this region in past. Some workers have studied the district from view point of traditional utility of plants1, 2. However, their observations were largely the result of floristic studies. Later, some researchers also gave information of few edible plants3. The present enumeration is on the basis of the studies undertaken in the district since June 1997. Ethnobotanical surveys in Nasik district divulged fascinating findings of great interest and of immediate benefit to aboriginal society who safeguarded the medicinal secretes in spite of odds over centuries.

Methodology

The ethnobotanical surveys were carried out since June 1997. Field trips were organised in such a way as to encounter different tribal hamlets and forest pockets at regular intervals in different seasons. The information was accrued after discussions with tribal and rural physicians, tribal headmen, elder ladies, and other local informants. Repeated enquiries were made in different pockets to authenticate the information. Plant specimens collected during survey have been preserved and housed in the herbarium of Botany Department of G E T's Arts, Commerce & Science College, Nagaon, district Dhule. Plants are arranged alphabetically by their botanical name followed by family, local name and uses.

Enumeration

1 Ampelocissus latifolia (Roxb.) Planch. (Vitaceae)
Local name: Bedore
Uses: Few root pieces are chewed or about a half glass of infusion of roots is administered orally for easy delivery.

2 Anogeissus latifolia (Roxb. ex DC.) Wall. ex Bedd. (Combretaceae)
Local name: Dhamoda
Uses: Stem bark is crushed and soaked in water over night. Two spoons of the filtered infusion is given twice a day for about 10--15 days to cure whooping cough.
3 *Artocarpus heterophyllus* Lam. (Moraceae)  
Local name: *Phanas*  
Uses: Ash of rind spines removed from fruits is applied on throat or tongue for ulcers.

4 *Cassia fistula* L. (Caesalpiniaceae)  
Local name: *Bahava*  
Uses: Few drops of leaf juice are dropped in ears twice a day for earache.

5 *Catunaregum spinosa* (Thunb.) Keay (Rubiaceae)  
Local name: *Gal*  
Uses: Paste of fruits with seeds is prepared and applied on neck for tonsillitis.

6 *Celosia argentea* L. (Amaranthaceae)  
Local name: *Kirdu*  
Uses: About 20 ml of root extract is administered for five days twice a day to check excessive menstruation.

7 *Cissus quadrangularis* L. (Vitaceae)  
Local name: *Hadsandhi*  
Uses: Stem pieces are dipped in water and an infusion is obtained. A cup of infusion is administered to a patient for jointache twice daily for a week.

8 *Canscora diffusa* (Vahl) R.Br. (Gentianaceae)  
Local name: *Zinku, Bhuinarali*  
Uses: Leaf ash mixed with coconut oil is applied on skin to prevent fall of hair due to skin infection. This is followed till cure. Ash of entire plant is also applied on swelling, bruises, goiter or even smoke is passed over the body of a patient.

9 *Cordia dichotoma* Forst. f. (Boraginaceae)  
Local name: *Bhokar*  
Uses: Ripe fruits boiled in water are drunk for 10-15 days to treat kidney stone.

10 *Cryptolepis buchananii* R. & S. (Asclepiadaceae)  
Local name: *Bhuikavali*  
Uses: About half glass of root extract is taken orally early in the morning for seven days before break fast to treat jaundice.
11 *Dalbergia lanceolaria* L. f. (Papilionaceae)
Local name: *Dandus*
Uses: Bark is crushed and applied for relief from pain after scorpion sting.

12 *Dioscorea bulbifera* L. (Dioscoreaceae)
Local name: *Kadukand*
Uses: Tubers are boiled in water and are consumed for reducing acidity.

13 *Dolichus trilobus* L. (Papilionaceae)
Local name: *Ranval*
Uses: Root pieces are kept in water overnight. Ladies suffering from leucorrhoea drink half glass of root infusion daily.

14 *Emblica officinalis* Gaertn. (Euphorbiaceae)
Local name: *Awala*
Uses: Stem infusion is given orally as an antidote against snake bite.

15 *Geodorum densiflorum* (Lam.) Schltr. (Orchidaceae)
Local name: *Haryakand*
Uses: Sugar mixed with paste of pseudobulbs is taken orally for diabetes.

16 *Haldina cordifolia* (Roxb.) Ridsdale (Rubiaceae)
Local name: *Hed*
Uses: Stem bark is crushed, warmed and applied in the region of abdomen and loin against bodyache.

17 *Holoptelea integrifolia* (Roxb.) Planch. (Ulmaceae)
Local name: *Papada*
Uses: Leaf pieces are kept in jaws to get relief from toothache. In case of swelling or torsion on right side of stomach, warmed stem bark is kept on stomach to get relief.

18 *Kedrostis rostrata* (Rottl.) Cogn. (Cucurbitaceae)
Local name: *Mirchikand*
Uses: Roots are cut into pieces and kept in water to obtain infusion. About 20 ml of it is given for stomachache and cough.

19 *Luffa cylindrica* (L.) M.J.Roem. (Cucurbitaceae)
Local name: *Gilke*
Uses: Leaf paste is rubbed early in the morning on the body of a person suffering from fever.

20 *Meyna laxiflora* Robyns (Rubiaceae)
Local name: *Aliv*
Uses: Five pinches of seed powder is mixed in water thoroughly and is given twice a day for 10-15 days to treat kidney stone.

21 *Moringa concanensis* Nimmo ex Dalz. & Gibs. (Moringaceae)
Local name: *Ranshevg*
Uses: Fresh bark is tied on leg to reduce pain. Flakes of stem bark are warmed and kept on stomach of a pregnant woman. Stem bark is also used as abortifacient.

22 *Oroxylum indicum* (L.) Vent. (Bignoniaceae)
Local name: *Tetu*
Uses: Stem bark along with roots of *Abelmoschus manihot* (L.) Medic. subsp. *tetraphyllum* var. *tetraphyllum* (Roxb. ex Horn.) Borrsum is crushed together and infusion is prepared. It is administered to treat leucorrhoea. Food is not taken for about 2-3 hrs before and after the dose.

23 *Panicum millaceum* L. (Poaceae)
Local name: *Warai, Bhagar*
Uses: Cooked grains are advised for better digestion especially in the post delivery period.

24 *Pilostigma malabaricum* (Roxb.) Bth. (Caesalpiniaceae)
Local name: *Shid*
Uses: Root paste is applied on the body for dislocation.

25 *Terminalia bellerica* (Gaertn.) Roxb. (Combretaceae)
Local name: *Beheda*
Uses: Seeds are ground to fine powder. A pinch of it is given to babies once a day to cure cough.

26 *Terminalia chebula* Retz. (Combretaceae)
Local name: *Hirda*
Uses: Seeds are ground to fine powder. A pinch of it is given to babies once a day to cure cough.

27 *Trichosanthes tricuspidata* Lour. (Cucurbitaceae)
Local name: *Kawalamba*
Uses: Extract from fruits and roots is used as an antidote against snakebite.

28 *Ventilago denticulata* Willd. (Rhamnaceae)
Local name: *Piwalvel*
Uses: About 25 ml of stem bark extract is administered once a day for 3-4 days against yellow urination.

29 *Woodfordia fruticosa* (L.) Kurz. (Lythraceae)
Local name: *Dhaiti*
Uses: Flowers of *Dhaiti* and Palas (*Butea monosperma* Taub.) are crushed and homogenised with old jaggery. Tablets prepared from these are administered thrice a day for a week for conception.
30 Wrightia tinctoria R.Br. (Apocynaceae)
Local name: Dudhkuda
Uses: Infusion of stern bark (about 25 ml per day) for 10-15 days is administered orally as a galactogogue.

Discussion
Indigenous healthcare system had always played a vital role in the discovery of novel products from plants as chemotherapeutic agents, e.g., quinine from Cinchona species, morphine from Papaver somniferum, cocaine from Erythroxylum coca and picroliv from Picrorhiza kurrooa. Non-availability of satisfactory drugs in modern system of medicine for the treatment of various diseases has prompted scientists to study ethnomedicinal claims. This ‘Green Wave’ is also discernible in our country by the fast developing herbal industry. The traditional data on time-tested remedies are fast depleting. The use of plant resources as remedies is probably as ancient as man himself. The aforesaid prescriptions are the ones practiced in day-to-day life of tribals and rurals. Their uses along with modern system of medicine show preference for our traditional medicine. The use of traditional medicine is widespread in this region with higher per centage of the population relying on it. This percentage can be construed by the prevailing factor such as the lack of modern medications and their expensive nature to which these tribal people are unable to afford.

Ethnomedicinal plants can no doubt help to discover new drugs or lead molecules for the development of new drugs, provided the data are scientifically evaluated. The isolation of active principles and the potent antimicrobial activity of these plants should be studied to validate the claims of the traditional healers who are using them for generations in various treatments.

The present report accounts for 30 plant species belonging to 20 families, used for different ailments in Nasik district. Out of these four species, Canscora diffusa, Geodorum densiflorum, Kedrostis rostrata and Panicum milliaceum are not so far recorded in ethnobotanical literature.4 The classical literature does not include the taxa such as Ampelocissus latifolia, Catunaregum spinosa, Canscora diffusa, Moringa concanensis of the present account.5 Likewise, nine taxa, viz. Ampelocissus latifolia, Catunaregum spinosa, Cissus quadrangularis, Cordia dichotoma, Canscora diffusa, Geodorum densiflorum, Kedrostis rostrata, Ventilago denticulata and Woodfordia fruticosa have not been included in earlier studies.6 Wrightia tinctoria is, however, noted in ethnobotanical literature but for different plant part.3 Credibility of folk claims has often been questioned. Authentication and standardization of ethnomedical claims by modern scientific methods should be initiated. This will help in the conservation and their popularization.

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