



Ethnomedicinal investigation in Nandurbar district of Maharashtra

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Abstract

The aborigines exploit medicinal virtues of tubers, roots, fruits, seeds, flowers, leaves etc. from the forest and use in a variety of ways. They are used in the form of juice, decoction, oil, paste, extract, infusion and powder. Fresh parts are also used and the substances like sugar, sugarcandy, groundnut oil, milk and cow-ghee are used as additives. The native uses of medicinal plants are employed to better stomach-complaints, rheumatic pains, spermatorrhoea, tooth-ache, head-ache, ear-ache, weakness, urinary troubles, fresh cuts, tumors, fever, mouth ulcer, bone fracture and few other human diseases. Total 47 species are being reported for the aforesaid ailments of these, applications of 32 species are unknown or little known. These are, however, desired for further scientific assessments for obvious reasons.

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Key Words : *Ethnomedicine, Nandurbar district, Maharashtra.*

Introduction

Nandurbar district is predominantly tribal. The main tribes inhabiting the district are Bhil and Pawara, besides rural folks. Main occupation of this region is agriculture. The ranges of Satpura mountain extend in the region. It is hilly terrain and occupied by thick forests. During ethnomedicinal field studies in different villages and hamlets (Padas) the authors came across a large number of tribal and rural people who use plants or their products for different medicines. The present contribution deals with medicinal uses of 47 species of angiosperms collected from medicinemen, elder and experienced tribal/rural men and women.

There are few published reports on the subject-matter (Bhamare, 1998; Tayade and Patil, 2003, 2005, 2006). The present paper communicates additional reports from the region.

Methodology Adapted

The ethnomedicinal surveys are conducted in villages and hamlets of Bhils and Pawaras and the surrounding forest pockets in Nandurbar district. The plant species of ethnomedicinal importance are collected and documented alongwith data on ethnomedicinal uses as gathered from

tribal and rural people. Genera and species were deciphered with the help of : (i) Cooke's (1958) Flora of the Bombay Presidency (1958), (ii) Patil's Flora of Dhule and Nandurbar Districts (2003). The herbarium specimens have been prepared using traditional method of pressing and drying. Recent botanical name, local name, family and local use/s are given. They are compared with the classical literature by Ambasta (1986), Anonymous (1948-1976), Watt (1889-1893), Jain (1991) and recent literature to point undocumented applications (* asterisked in the enumeration).

Enumeration

*1.	<i>Abrus precatorius</i> L. (Fabaceae) Gunj :Fresh leaves are chewed for mouth ulcer.
*2.	<i>Achyranthes aspera</i> L. (Amaranthaceae) Aghada :A spoonful of seed powder mixed in a cup of water if drunk 2-3 times daily. It helps to stop cough troubles.
*3.	<i>Ailanthus excelsa</i> Roxb. (Simaroubaceae) Maharuk : Root extract, about two spoons daily, is drunk against stomach-ache for 3-4 days.
4.	<i>Aloe vera</i> (L.) Burm. f. (Liliaceae) Korphad :(i) Pulp is removed from leaves after heating. Cow-ghee and sugar are homogenized with it. This is consumed twice a day for three consecutive day to better cough. *(ii) Leaf is heated, the pulp is then consumed once in small quantity to cure cough. (iii) Leaf pulp is applied on body parts to reduce burning sensation
*5.	<i>Argemone mexicana</i> L. (Papaveraceae) Utkata :Seed extract prepared in water, about 10-15 ml, is administered once to children to cure stomach-ache.

*6.	<i>Argyreia strigosa</i> (Roth) Roberty (Convolvulaceae) Gowel :Root paste is applied on suppurating tumours.
7.	<i>Aristolochia bracteata</i> Retz. (Aristolochiaceae) (Gidhad) :Leaf extract is applied onto wounds to repel worms. It also helps to cure it early.
*8.	<i>Barleria montana</i> Nees (Acanthaceae) Banyas :Decoction of roots, about half cup, is taken orally for sunstroke.
*9.	<i>Boerhavia repens</i> L. (Nyctaginaceae) Dagad-phodi : Two to three spoons of root extract are administered to children in case of stomach-ache. It is administered till cure.
*10.	<i>Caesalpinia bonduc</i> (L.) Roxb. (Caesalpiniaceae) Sagargoti :Seed extract, just a spoon, is given to treat stomach-ache for 2-3 days.
*11.	<i>Cardiospermum halicacabum</i> L. (Sapindaceae) Fatakadi :Seed paste is applied on forehead to treat head-ache.
*12.	<i>Cassia auriculata</i> L. (Caesalpiniaceae) Awali :Decoction of flowers is administered to kids for body fever. About two spoonful of it is given orally per day till cure.
*13.	<i>Cayratia auriculata</i> (Wall. ex Wight & Arn.) (Gamble (Vitaceae) Tedip :Root extract is applied onto wounds for killing germs.
14.	<i>Chlorophytum borivillianum</i> Sant. & Fernand (Liliaceae) Safed-musali : Root powder about 3-4 spoons, is added in milk. A glass of it a day is advised for a month for body strengthening.
15.	<i>Cissus quadrangularis</i> L. (Vitaceae) Hadmodi :Stem paste is applied on fractured body part.
*16.	<i>Clerodendrum multiflorum</i> (Burm.f.) O.Ktze. (Verbenaceae) Arani :Leaf extract, about two spoons, is advised to drink for reducing body heat for 2-3 days at night.
17.	<i>Cymbopogon martinii</i> Wats. (Poaceae) Roysa-ghas :Oil prepared from leaves is applied on joints for rheumatic pains.
18.	<i>Datura metel</i> L. (Solanaceae) Kala-dhotra :Groundnut oil is applied on leaves of this plant, then heated and tied on injured body part for early cure.

*19.	<i>Diplocyclos palmatus</i> (L.) Jeffery (Cucurbitaceae) Shivlingi : Seeds crushed in milk are consumed to conceive especially male child. About a cup of it is advised for a fortnight.
*20.	<i>Eclipta prostrata</i> (L.) L. (Asteraceae) Maka : Juice of leaves and inflorescence together is useful to treat migraine. About two spoons of it is advised for 7-8 days.
*21.	<i>Enicostemma axillare</i> (Lam.) Roynal (Gentianaceae) Kadumul :(i) Leaf juice, about 10 ml, is taken orally to treat stomach-ache. (ii) It is also advised to stop hi-cough.
*22.	<i>Eranthemum roseum</i> (Vahl) R.Br. (Acanthaceae) Thandi-karav : Half cup decoction of roots is administered at morning to reduce body heat. It is followed till cure.
*23.	<i>Eulophia herbacea</i> Lindl. (Orchidaceae) Kukudkan : Seed powder is added ins seetmeats to increase body strength.
24.	<i>Hemidesmus indicus</i> (L.) Schultes (Asclepiadaceae) Anantmul : Decoction of roots, 15-20 ml daily at night for a month, is administered to cure spermatorrhoea.
25.	<i>Hygrophila schullii</i> (Buch.-Ham.) M.R. & S.M. Almeida (Acanthaceae) Talimkhana : Leaf juice, diluted with water in 1:1 ratio about 20-25 ml, is administered at morning daily for a week to remove urinary complaints.
26.	<i>Kalanchoe pinnata</i> (Lam.) Pers. (Crassulaceae) Panphuti : Leaves are heated and tied on legs if twisted.
27.	<i>Mallotus philippensis</i> (Lam.) Muell.-Arg. (Euphorbiaceae) Biwa : Extract of stem bark is applied on boils.
28.	<i>Mentha spicata</i> L. (Lamiaceae) Pudina : Two to three leaves are eaten once a day to treat cough and cold. This is followed for three to four days.
*29.	<i>Nicotiana tabacum</i> L. (Solanaceae) Tambhaku : Few drops of infusion of leaves are dropped into nose at morning for three consecutive days as a remedy against migraine.
30.	<i>Ocimum basilicum</i> L. (Lamiaceae) Sajba : Few drops of leaf juice are dropped into ears to treat ear-ache.

31.	<i>Ocimum canum</i> Sims. (Lamiaceae) Jangli-tulas :Few leaves are chewed and the juice is swallowed to treat cough. It is followed daily till cure.
*32.	<i>Pergularia daemia</i> (Forsk.) Chiov. (Asclepiadaceae) Utran:(i) Leaf-juice is added into ears to expel gadfly from ears. (ii) Leaf juice, about half cup, is taken orally thrice a day to reduce acidity/
*33.	<i>Peristrophe paniculata</i> (Fork.) Nees (Acanthaceae) Kali-kirdan :Juice of leaves, about 10-15 ml, is administered to a patient suffering from cough. It is followed till cure.
*34.	<i>Plumbago zeylanica</i> L. (Plumbaginaceae) Safed-chitrak :Sugarcandy is added in root extract and about half cup is advised on alternate days to purify blood. It is followed for 10-15 days.
*35.	<i>Pongamia pinnata</i> (L.) (Fabaceae) Pierre :Seed oil is applied to reduce body swelling.
*36.	<i>Rhyncosia bracteata</i> Benth. ex Baker (Fabaceae) Najrya :About 15-20 ml root extract is given at morning to improve digestion for 4-5 days.
*37.	<i>Rhyncosia minima</i> var. <i>minima</i> (L.) DC (Fabaceae) Wal-mohida :Decoction of roots, about half cup, is drunk once for stomach-ache.
*38.	<i>Ricinus communis</i> L. (Euphorbiaceae) Arandi, Diwji :Seed oil, about 15-20 ml, is taken orally for once to better stomach complaints.
39.	<i>Salvadora persica</i> L. (Salvadoraceae) Tikhi-phuli :Leaf paste is applied on body to reduce pains.
*40.	<i>Sarcostemma intermedium</i> Decne. (Asclepiadaceae) Bhurwel :Latex is applied in case of body swelling.
*41.	<i>Sesbania grandiflora</i> (L.) Poir (Fabaceae) Hadga : Flowers are used as vegetable especially to improve digestion.
*42.	<i>Sterculia urens</i> Roxb. (Sterculiaceae) Kudai :Seeds after removing seed-coats are eaten to improve body weakness.

*43.	<i>Termanalia chebula</i> Retz. (Combretaceae) Hirda : Fruit powder is applied on gum to treat tooth-ache for week.
44.	<i>Tinospora cordifolia</i> (Willd.) Miers ex Hook. f. & Thoms. (Menispermaceae) Gulwel : Decoction of stem is taken orally as general body tonic. Half cup is advised at morning especially during winter.
45.	<i>Tridax procumbens</i> L. (Asteraceae) Ghav-pala :Leaf juice is applied on fresh cuts.
*46.	<i>Wendlandia heynei</i> (R. & S.) Sant. & March. (Rubiaceae) Gestil :A glass of leaf extract is taken orally as an antidote for snake-bite.
47.	<i>Withania somnifera</i> L. (Solanaceae) Ashwagandha :Root extract, about 20-25 ml, is taken orally at night to increase body strength.

Discussion

The tribal medicinemen and elder tribal/rural people of Nandurbar district possess considerable knowledge of the therapeutic properties of local plants. The drugs used are in the form of juice, infusion, decoction, extract, oil, latex, pup, paste, powder etc. Total 47 species are being communicated in this contribution belonging to 33 angiospermic families. Nearly applications of 32 species are being communicated for the first time. They are unknown to classical literature. Few species e.g. *R.communis*, *M.spicata*, *K.pinnata*, *O.basilicum*, *N.tabacum*, *C.quadrangularis*, *S.grandiflora*, *A.vera* are found under cultivation. These are used for different human ailments or diseases. These are also mixed sometimes with groundnut oil, sugarcandy, milk, sugar, cow-ghee etc. Some of the common ailments treated are stomach complaints, ear-ache,

rheumatism and cough, while others are occasional or accidental ones. Supernatural power and evil spirit, and the alleged powerful oracles appeared usually an essential part of the treatment. The remedies are almost exclusively based on the use of single species. Although the tribal people attribute most of the ills of life to spirits and often seek the aid of magical practices and religious rites or sacrifices to get rid off ills, they do not disregard the curative properties of fruits, barks, leaves, roots of plants and other natural products.

In recent times, the tribal/rural people and especially younger generation are going away from these practices for obvious reasons. It is, therefore, imperative to document such information before it is lost in the long strides of modernization, industrialization and loss of vegetal wealth.

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