

Ethnomedicinal uses of barks in Jalgaon district

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Received 7 August 2006; Accepted 3 May 2007

Abstract

The ethnobotanical surveys were conducted during June 1997 to 2004 in Jalgaon district of Maharashtra. The tribes such as *Bhil*, *Pawara*, *Tadvi* and *Vanjari* inhabit in the district, apart from other rural people. Information on 37 angiospermic species belonging to 31 genera of 22 families was gathered on ethnomedicinal uses of barks. This paper reports their botanical identity, family, local names, parts used, preparations and doses, if any. It was observed that tribal people use barks of various trees in the form of decoction, infusion, extract, paste, poultice, powder, etc. Various human diseases treated were verified from the local tribal medicine men, elder ladies, head of hamlets and other rural informants. Further research on scientific line is, however, desirable to improvise their authenticity which would lead to discovery of new molecules and potential sources of drugs.

Keywords: Bark, Medicinal plants, Ethnomedicine, *Bhil*, *Pawara*, *Tadvi*, *Vanjara*, Jalgaon District, Maharashtra.

IPC code; Int. cl.^s — A61K 36/00, A61K 129/00

Results and Discussion

In the present paper, 37 plant species of angiosperms belonging to 31 genera of 22 families have been reported (Table 1). They are used as ethnomedicines for various human ailments such as women disease like post-delivery complaints, to facilitate delivery, to regularize menstrual cycle, gonorrhoea, bleeding lochia and leucorrhoea. Other common diseases and health complaints e.g. vomiting, weakness, scabies, fistula, bone fracture, dysentery, diarrhoea, foul or bad smell of mouth, strengthening of gums, tumours, polyurea, ring-worms, chronic wounds, diabetes, abdominal pains, rheumatism, asthma, pimples, burning sensation and pains, urinary stone, malarial and typhoidal fevers, boils, haemorrhage, intestinal worms, tapeworms, acidity, cough and cold, stomach-ache, anaemia, sprain, snake-bite, tooth-ache, lymph adenitis, etc. are cured by using bark of various trees found in the region. The bark is employed in the form of decoction, infusion, extract, powder, paste and poultice and sometimes used in the combination with other parts of same or different plants, viz. *Aloe vera* Linn., *Citrus aurantifolia* (Christ.) Swingle, *Bridelia airy-shawii* P.T. Li, *Emblca officinalis* Gaertn. (*Amla*), *Terminalia bellirica* Roxb. (*Beheda*) and *T. chebula* Retz. (*Hirda*). Other

Introduction

Jalgaon district lies between, 20° and 21° North latitude and 74°55' and 76°28' East longitude on the northern border of the state of Maharashtra. The Satpura mountain extends along northern border, whereas the off-shoots of Western Ghats (Sahyadris) extend in the eastern direction. These harbour mainly dry deciduous forests and the aborigines, viz. *Bhil*, *Pawara*, *Tadvi* and *Vanjara* inhabit the area, apart from rural populace. Main occupation of the people is agriculture. The results of our ethnobotanical forays in the district have been presented at National conferences and published in various research journals¹⁻⁹. This communication is in the same order.

Methodology

Field trips were conducted during June 1997 to 2004 in tribal and rural parts of the Jalgaon district. Data was collected regarding plant and plant part (s) used, local name, purpose, formulation, doses and method of administration of the drugs. They were inquired from tribal medicine men, old men and women and other local rural informants. At time, actual applications were also observed during field work. The plant specimens were identified using recent regional floras^{10, 11}. Customary herbarium methods have been followed in preserving specimens and they are deposited in the Herbarium, Department of Botany, Pratap College, Amalner.

Table 1 : Ethnomedicinal uses of barks in Jalgaon district

S. No.	Plant Name/Family/ Collection No.	Local Name	Preparation	Disease Treated	Mode of Administration
1.	<i>Acacia catechu</i> (Linn. f.) Willd. Mimosaceae/ Coll.No.35	<i>Khair</i>	Concentrated decoction along with bark of <i>Bridelia airy-shawii</i>	Fistula	Said concentrate homogenized with fruit powder of <i>Emblica officinalis</i> , <i>Terminalia bellirica</i> and <i>T. chebula</i> and given two spoons per day till cure.
			Extract	Cough and Cold	Two spoons twice a day for 3 days.
2.	<i>Acacia nilotica</i> Willd. ex Del. subsp. <i>indica</i> (Benth.) Brenan Mimosaceae/ Coll.No.14	<i>Babhul</i>	Extract	Cleaning of mouth and strengthening gums	Diluted extract gargled for few days in the morning.
				Acidity and Cough	Taken orally (15-20 ml) once a day for a week.
			owder	Stomach-ache	Powder (5g) taken once a day till cure.
3.	<i>Aegle marmelos</i> (Linn.) Corr. Rutaceae/ Coll.No.1	<i>Bel</i>	Extract	Preventing vomit	2-3 spoons of extract with honey only once.
4.	<i>Ailanthus excelsa</i> Roxb. Simaroubaceae/ Coll.No.13	<i>Maruk, Maharukh</i>	Decoction	Post-delivery pains	Decoction added in bath water for 15-30 days.
5.	<i>Azadirachta indica</i> A. Juss. Meliaceae/ Coll.No.21	<i>Neem, Limb, Kadu-neem</i>	Powder	Pimples	Powder mixed in milk applied.
6.	<i>Balanites aegyptiaca</i> (Linn.) Del. Balanitaceae/ Coll.No.48	<i>Hinganbet, Hingornya</i>	Powder	Intestinal worms	Pinch of powder in a cup of milk given for 5-6 days.
7.	<i>Bauhinia purpurea</i> Linn. Caesalpiniaceae / Coll.No.39	<i>Kanchan</i>	Concentrated decoction	Lymph adenitis	Two spoons of concentrate with honey per day for a week.
8.	<i>Bombax ceiba</i> Linn. syn. <i>Salmalia malabarica</i> (DC.) Schott. & Engl. Bombacaceae / Coll.No.110	<i>Lal Sawar, Kate Sawar</i>	Decoction	Weakness	Half cup in goat milk administered till cure.
				Body heat	Half cup with sugar at morning, daily to reduce body heat till cure.

S. No.	Plant Name/Family/ Collection No.	Local Name	Preparation	Disease Treated	Mode of Administration
9.	<i>Bridelia airy-shawii</i> PT. Li Euphorbiaceae / Coll.No.46	Asan	Powder	Diabetes	A spoonful powder mixed in half cup water drunk at morning.
				To reduce weight	Pinch of powder in honey and lime juice consumed at morning.
10.	<i>Careya arborea</i> Roxb. Barringtoniaceae/ Coll.No.94	Kumbh	Extract	Haemorrhage	One spoonful of extract prepared in water and equal quantity of cow ghee consumed after every two hours till cure.
11.	<i>Cassia auriculata</i> Linn. Caesalpiniaceae /Coll.No.74	Awali, Walanya	Powder	Toothache	Applied on gums.
12.	<i>Delonix regia</i> (Boj. ex Hook.) Rafin. Caesalpiniaceae / Coll.No.127	Gulmohar	Infusion	Burning sensation	Half cup of infusion prepared in whey taken orally till cure.
13.	<i>Dichrostachys cinerea</i> (Linn.) Wt. and Arn. Mimosaceae / Coll.No.109	Yellatur	Extract	As purgative	Two-spoonful extract administered.
			Powder	Tooth-ache	Powder applied on gums.
				Vermifuge	Mixed in water and then taken orally.
14.	<i>Erythrina variegata</i> Linn. Fabaceae / Coll.No.136	Mandar, Pangara	Decoction	Against fever	Half cup at morning and evening for 6 days.
15.	<i>Ficus arnottiana</i> Miq. Moraceae / Coll.No.143	Amsa	Paste	Ringworms	Paste applied for a fortnight.
16.	<i>Ficus benghalensis</i> Linn. Moraceae / Coll.No.142	Wad, Wat	Decoction	Leucorrhoea	Half cup decoction administered per day for a month.
17.	<i>Ficus glomerata</i> Roxb. Moraceae/ Coll.No.140	Umber	Powder	Polyurea	Spoonful powder at night for a week consumed with honey.
				Bleeding lochia	As above but for a month.
18.	<i>Ficus heterophyla</i> Linn. f. Moraceae/ Coll.No.114	Dedumber, Ghutni-umber	Extract	Tumour	Extract of leaves and bark mixed with cow urine applied twice a day till cure.

S. No.	Plant Name/Family/ Collection No.	Local Name	Preparation	Disease Treated	Mode of Administration
19.	<i>Ficus religiosa</i> Linn. Moraceae /Coll.No.117	<i>Pipal, Pimpal</i>	Powder	Gonorrhoea Fistula Bone fracture	Spoonful powder in water twice a day advised for 2 weeks. This powder and mucilage of <i>Aloe vera</i> homogenized and applied on fistula till cure. Poultice applied.
			Decoction	Scabies	Half cup of decoction orally for 3 weeks.
			Extract	Bad smell of breathing	Extract used as mouth wash for a week.
20.	<i>Ficus virens</i> Ait. Moraceae / Coll.No.139	<i>Pimpri</i>	Decoction	Irregular menstrual cycle	Half cup of decoction administered twice a day for 15 days.
21.	<i>Holarrhena pubescens</i> (Buch.-Ham.) Wall. ex G. Don Apocynaceae /Coll.No.157	<i>Dahikudi, Kuda</i>	Decoction Powder	Tooth-ache Malarial fever	Decoction gargled for few days. Spoonful powder consumed twice a day for 5-6 days.
22.	<i>Holoptelea integrifolia</i> (Roxb.) Planch. Ulmaceae/ Coll.No.156	<i>Papad</i>	Powder	Chronic wound	Powder applied for quick healing.
23.	<i>Justicia adhatoda</i> Linn. Acanthaceae/ Coll.No.118	<i>Adulsa</i>	Cooked paste	Rheumatic joints	This bark and neem leaves cooked and paste is applied on joints for relief.
24.	<i>Lannea coromandelica</i> (Houtt.) Merr. Anacardiaceae/ Coll.No.168	<i>Mohin</i>	Powder paste	Sprain	Paste applied on sprained part till cure.
25.	<i>Mangifera indica</i> Linn. Anacardiaceae/ Coll.No.313	<i>Amba</i>	Decoction	Diphtheria	Half cup decoction administered daily for a week.
26.	<i>Mitragyna parvifolia</i> (Roxb.) Korth. / Rubiaceae/ Coll.No.190	<i>Kalam, Jangli-Hirmundi</i>	Paste	Tumour	Paste applied on tumours till cure.
27.	<i>Moringa concanensis</i> Nimmo Moringaceae / Coll.No.188	<i>Ran-shewga</i>	Extract	Wounds	Extract applied on wounds caused by honeybee sting to reduce burning pain

S. No.	Plant Name/Family/Collection No.	Local Name	Preparation	Disease Treated	Mode of Administration
28.	<i>Nyctanthes arbor-tristis</i> Linn. Oleaceae / Coll.No.194	<i>Parijat</i>	Powder	Asthma	Spoonful powder consumed twice daily.
29.	<i>Pongamia pinnata</i> (Linn.) Pierre Fabaceae / Coll.No.128	<i>Karanj</i>	Powder	Typhoid	Powder (5g) mixed with honey consumed twice daily for 15 days.
30.	<i>Psidium guajava</i> Linn. Myrtaceae / Coll.No.210	<i>Peru, Jam</i>	Powder after frying	Dysentery	Spoonful powder mixed in a cup of buttermilk administered till cure.
31.	<i>Salvadora persica</i> Linn. Salvadoraceae / Coll.No.262	<i>Pili, Pilu</i>	Powder	To strengthen gums and for foul smell	Applied externally on gums till cure.
32.	<i>Schrebera swietenoides</i> Roxb. Oleaceae / Coll.No.222	<i>Mekha, Nakti</i>	Powder	Boils	Applied externally on boils till cure.
33.	<i>Solanum virginianum</i> Linn. Solanaceae / Coll.No.225	<i>Kateri-rigni, Ran-vangi</i>	Powder	Asthma	Half spoonful powder consumed at morning.
34.	<i>Sterculia urens</i> Roxb. Sterculiaceae / Coll.No.231	<i>Kadai</i>	Decoction	Delivery	Half cup decoction administered to a lady to facilitate delivery.
35.	<i>Tamarindus indica</i> Linn. Caesalpinaceae / Coll.No.223	<i>Chinch</i>	Powder	Snake-bite	Spoonful powder with honey consumed thrice a day after every two hours.
36.	<i>Terminalia crenulata</i> Roth Combretaceae / Coll.No.238	<i>Ragat-roda</i>	Decoction	Diarrhoea	Half cup at morning for 3 days.
			Infusion	Dysentery	Half cup twice daily for 5 days.
			Paste	Bone fracture	Applied on bone fracture.
			Powder	Anaemia	Spoonful powder consumed at morning daily till cure.
37.	<i>Wrightia arborea</i> (Dennst.) Mabb. Apocynaceae / Coll.No.276	<i>Kuda</i>	Powder	Urinary Stone	Spoonful powder mixed in equal curd and consumed twice daily for a week.

substances such as honey, milk, curd and cow-ghee are also employed during various preparations.

Conclusion

It can be concluded that data gathered from tribals and rural people of Jalgaon district will be useful for researchers in the field of medicine, pharmacology and industry. Further modern laboratory studies and chemical screening will help in selecting potential new molecules and drugs for the betterment of human being at large.

Acknowledgements

First author (SBP) is thankful to the Principals, Pratap College, Amalner and L. K. Dr. P. R. Ghogrey Science College, Dhule, for facilities provided during research. She is also grateful to the UGC, New Delhi, for financial help in the form of FIP programme.

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