

# Ethnomedicinal Knowledge of Plants used by Local People in Buldhana District of Maharashtra (India)

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## Abstract

The present investigation was aimed at documentation, analysis and evaluation of ethnomedicinal knowledge in the study area as the forces of acculturation are rapid in recent times. The underprivileged tribal and rural people of Buldhana district (Maharashtra India) do not receive adequate primary healthcare. They have perforce been still utilizing traditionally the plants in their surrounding for various purposes including ethnomedicine. The objective of the study was to document ethnobotanical knowledge especially of notable herbs utilized by the different backward people, whether tribal or rural, in the area under study. Season-wise regular visits formed the basis of the present investigation. Ethnomedicinal data was obtained through structural interviews, and discussions, following Jain (1987), with the tribal/rural informants, healers, medicine-men/women, etc. (with age between 50-65) or actual personal observations during ethnobotanical forays. Minimum five to eight informants were taken into consideration for each claim. This investigation brought on record that people of the study area generally utilize 62 plants species belonging 38 families. Different plant parts such as fruit, stem-bark and root are most commonly employed. Medicinal recipes viz. extract, powder and decoction are used in this preferential order. A fair wide range of diseases, as many as 35, are treated by people of Buldhana district using local plants. Jaundice and rheumatism are more prevalent in the study areas as compared to other diseases. These ethnomedicinal claims may aid in finding novel lead molecules for welfare of mankind. The data would be useful for further scientific investigations.

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Key Words: Ethnomedicine, Buldhana district, Maharashtra

## Introduction

The success of aboriginal, primitive or rural societies in understanding plants and their medicinal virtues is a result of long-standing and intimate association with the flora and their dependence on them. Several wild and cultivated plant species play a very important and vital role among their cultures. Their relationships with the plant world has evolved over generations of experience, practice, experimentation, trials and errors and has passed down to next generations by word of mouth. Their traditional knowledge has still remained especially with the indigenous tribal or rural people world over.

India is a country with rich biological and cultural diversity. Its tribal population accounts for 22% of world's tribal population belonging to 573 tribes in different geographic locations with various patterns of subsistence. By virtue of their own distinct culture, beliefs, traditional habits of food and medicine, they have accumulated an enormous amount of knowledge on the plant species in their ambience. It is also true that their experience and knowledge were subjected to modifications and refinements by the successive generations which have been also integrated with their traditions. Their knowledge systems have thus also become broad-based in the past. At the same time, we should not be ignorant of the forces of acculturation which are dwindling their knowledge in modern times (cf. Idu, 2009; Brahman, 2008). We have to tap down their rich natural heritage before its complete depletion. Ethnomedicinal investigations offer immense scope and

opportunities for the development of new drugs (cf. Jain, 2006; Shah, 2008, Malid *et al.* 2008). Some well known modern drugs e.g. artemisinin, bacosides, guggul stenone, ajamaline, ajamlicine, etc. have been developed through folkloric knowledge. Scientists are well convinced now that ethnomedicinal claims can be successfully utilized as focal points for the development of new biological resources (cf. Patil, 2006; Sahu, 2007). Medicole of the indigenous people can motivate the world community to utilize the same for the betterment and economic benefit of human beings (Coz, 2005). The present authors extended their ethnomedicinal investigations in the tehsils viz., Lonar, Sindkhed Raja and Dewulgaon Raja of Buldhana district in Maharashtra, India. The results of their research activity conducted during 2006-2008 appeared worth communicating.

### Study Area

Buldhana district of Maharashtra (India) extends between 19°51' and 21°17' north latitude and 75°57' and 76°59' east longitude with an area of 9745 sq km. The present authors covered three tahsils viz., Lonar, Sindkhed Raja and Dewulgaon Raja, a southern part of Buldhana district (Map-1). It is bordered with common district boundaries with Jalgaon, Akola, Jalna, Parbhani and Hingoli districts of Maharashtra on the west, east and south. It is delimited on the north by Nimar district of the state of Madhya Pradesh. Buldhana is a district headquarter.



Figure : Buldhana district showing study area (11,12,13)

The area receives precipitation about 796 mm annually from south-west monsoon. The September, October and November are the post-monsoonal months. The total number of rainy days are normally 47 throughout a year, July being the rainiest month. The relative humidity is generally higher, about 70%, during the period of south-west monsoon. It ranges between 27-30% in the afternoon in the hot summer season. The sky is clear and dry for major part of the year. Season-wise temperature fluctuations are observed. The mean daily minimum temperature is about 26.7°C and maximum 38.3°. In the winter, December is the coldest month with average daily temperature nearly 15°C. Rapid rise in temperature begins after mid-February till May. May is the hottest month in a year, in which temperature shoots up to 47°C. On the onset of monsoon, particularly in the second week of June, it decreases considerably.

Penganga and Purna are the main rivers, besides several tributaries like Bangana, Nalganga, Vishwaganga, Gyanganga, Katepurna, Koradi, Dhamna, Mun, etc. Southern Tropical Dry Deciduous, type of forests are generally found in the area. The reserved forests extend for about 1082 sq.km., whereas the protected forests do so on nearly 94.52 sq.km. The chief floral elements are the species of *Tectona*, *Acacia* and *Boswellia*, apart from other associates such as *Terminalia*, *Lagerstroemia*, *Eugenia*, *Anogeissus*, *Wrightia*, *Salmalia*, *Pterocarpus*, *Diospyros*, etc. (Anonymous 1976).

### The People

The area of three tehsils is predominantly tribal and rural and have 93 villages in Lonar, 114 villages in Sindkhed Raja and 64 villages in Dewulgaon Raja tehsils. The villages consist of several families of subsistence farmers, farm labourers, and other artisan families. Although majority of the people communicate through Marathi, the state language, they also have their own dialects. Besides the rural and farming communities, backward communities belonging to Dohor, Dom, Ganda, Bedar, Basor, Ghasi, Kaikadi, Panchal, Sutar, Pathrats, Rangari, Lohar, Beldar, Katia, etc. cohabit the area under study. Agriculture is although mainstay, they also depend on the plant wealth flourished on uncultivated lands, Govt. barren lands, other barren lands, forest lands, and ruderal sites, etc. The bioresources in these lands are freely

used by the inhabitants for various necessities of life, inclusive of minor and major forest products. Socio-economically weaker sections of the society have performed been utilizing plant species in their vicinity. Moreover, modern healthcare facilities are mostly beyond their reach. Malnutrition, unsafe drinking water sources, unawareness about hygiene, etc. are some of the potent factors that decide their fate.

### Methodology

Before paying regular field visits, authors tried to acknowledge with the heads of hamlets and villages, traditional healers, knowledgeable elders from the tehsils of the area. Information regarding geography, main routes, forests, tribal communities, language and dialects, etc. was obtained. Knowledgeable elders/informants with 50-65 years of age were usually contacted during 2006 to 2009, besides the traditional healers, medicine men and women in the tehsils *viz.*, Lonar, Sindkhed Raja and Dewulgaon Raja. They also accompanied in the field study for collecting plant samples. Discussions were held and personal interviews were conducted to obtain data about ethnomedicinal plants, or plant products, local plant names, methods of preparation of medicine and their administration, dosage and their timing, age and sex of the patients to be treated, etc. as suggested by Jain (1987). Personal observations and interviews of some of the patients who received treatments also formed part of the methodology. The information was noted in a special diary with these queries. Thus, exclusively the authentic and specific information after cross-checking with 5 to 8 informants has been gathered for the present report.

Voucher plant specimens were collected alongwith the useful part/s or product/s to authenticate the data accrued. Herbarium specimens were prepared by using standard method, especially those of Jain and Rao (1977). Botanical identity was completed with the help of state, regional and various district floras by Cooke (1958), Naik (1988), Patil (2003), Kshirsagar and Patil (2008), Patel (1968), Sharma, Karthikeyan and Singh (1996), Singh and Karthikeyan (2000a, 2000b), Diwakar and Sharma (2000) etc. The specimens have been deposited in the Post-Graduate Department of Botany, L.K.Dr.P.R.Ghogrey Science College, Dhule (M.S.), India.

All observations are presented in Table-1 giving plant name and family, herbarium number and local name, part and recipe used, administration and disease treated.

Table-1 : Medicinal plants and their traditional utilities in Buldhana District

Sr. No.	Plant Name & Family	Herbarium No. & Local Name	Part and Recipe used, administration, disease treated
1.	<i>Abelmoschus manihot</i> (L.) Medik. ssp. <i>tetraphyllus</i> (Roxb. ex Horn.) Borssum Malvaceae	AYA 359 Ran-bhendi	Young raw fruits (3-4) consumed alongwith honey daily once for 3-4 day to check cough.
2.	<i>Abrus precatorius</i> L. Fabaceae	AYA 413 Gunj	Few leaves consumed 3-4 times daily for mouth ulcer till cure, also advised to clear throat and voice.
3.	<i>Acacia chundra</i> Willd. Mimosaceae	AYA 224 Khair	Ash obtained from stem and leaves mixed with coconut oil, applied on burns, scabies and wounds till cure.
4.	<i>Acacia nilotica</i> (L.) Willd. ex Del. subsp. <i>indica</i> (Bth.) Brenan Mimosaceae	AYA 377 Babhul	Few flowering heads extracted in cow-ghee or cow-milk, a spoonful extract administered at morning and evening to treat jaundice for 8-15 days or till cure.
5.	<i>Acalypha indica</i> L. Euphorbiaceae	AYA 411 Tankhalan	A spoonful of leaf extract and curd (1:1 ratio) drunk daily for a week to treat jaundice.
6.	<i>Achyranthes aspera</i> L. Amaranthaceae	AYA 408 Aghada, Zinzoda	A spoonful of leaf juice drunk twice daily for 5-8 days to cure piles. Leaf paste also applied on injuries due to piles till cure.
7.	<i>Adansonia digitata</i> L. Bombacaceae	AYA 308 Gorakh-Chinch	Leaf or bark decoction, about half cup drunk once daily for 3-4 days to control dysentery.
8.	<i>Adiantum philippens</i> L. Adiantaceae	AYA 151 Rajhans	Few drops of leaf extract applied on and around eyes to prevent conjunctivitis for few days.
9.	<i>Aerva lanata</i> (L.) Juss. ex Schult. Amaranthaceae	AYA 56 Hatti-Sondi	About 20 ml of leaf juice and curd (1:1 ratio) drunk at morning as a remedy against kidney-stone for 15 days or more.
10.	<i>Ailanthus excelsa</i> Roxb. Simaroubaceae	AYA 186 Waghat Mahapurush	A spoonful of fruit power consumed daily once for 7 days to check diabetes.
11.	<i>Allium sativum</i> L. Liliaceae	AYA 353	Bulbets (3) made into paste, boiled slightly in coconut oil, few drops of oil poured into ear to treat ear-ache and prevent pus formation.
12.	<i>Aloe vera</i> L. Liliaceae	AYA 301 Korphad	About 10 gm leaf pulp and 3-4 gm candy homogenized, consumed once daily as a remedy against sunstroke and scant urination, advised for 2-3 days.
13.	<i>Amorphophallus commutatus</i> (Schott.) Engl. Araceae	AYA 77	Rhizome extract and coconut oil (1:1 ratio) mixed, warmed slightly and applied at morning for 3-4 days to treat hair-blisters.
14.	<i>Argemone mexicana</i> L. Papaveraceae	AYA 415	Root paste (2-3 gm) wrapped in betel leaf, consumed thrice daily for 3-4 days to better malarial fever.
15.	<i>Aristolochia bracteolata</i> Retz. Aristolochiaceae	AYA 117 Gidhad	2-3 drops of leaf extract poured once daily into ears to prevent pus formation.
16.	<i>Azadirachta indica</i> A.Juss. Meliaceae	AYA 355 Nimb	A spoonful of extract of stem bark administered daily once for 3-4 days to control cough.
17.	<i>Barleria prionitis</i> L. Acanthaceae	AYA 223 Kate-kul, Kate-koranti	Leaf paste mixed in coconut oil, applied on scabies and wounds till cure.
18.	<i>Bauhinia racemosa</i> Lamk. Caesalpiniaceae	AYA 217 Apta	A spoonful of leaf powder mixed in honey consumed at morning for 5-7 days to check asthma, also advised against tuberculosis.

Sr. No.	Plant Name & Family	Herbarium No. & Local Name	Part and Recipe used, administration, disease treated
19.	<i>Blepharis repens</i> (Vahl) Roth Acanthaceae	AYA 202 Hadsan	Entire plants dried and powdered, 10 gm powder mixed in sweetmeat, consumed at morning for a month or more for healing bone fracture.
20.	<i>Boerhavia diffusa</i> L. Nyctaginaceae	AYA 209 Vasu	About 10 ml leaf extract consumed daily once to treat jaundice till cure, roots also advised similarly.
21.	<i>Buchanania lanzan</i> Spreng. Anacardiaceae	AYA 162 Char	Slightly diluted gum in water applied on joints daily to treat arthritis for 15 days or more.
22.	<i>Butea monosperma</i> (Lamk.) Taub. Fabaceae	AYA 52 Palas	10 ml extract of fresh leaves prepared in castor-oil drunk daily once for 10-15 days to check rheumatism.
23.	<i>Caesalpinia pulcherrima</i> (L.) Swartz Caesalpinaceae	AYA 346 Shankasur	Leaves (5-7 gm) cooked with rice, consumed daily once for a week or so to check rheumatism.
24.	<i>Capparis grandis</i> L.f. Capparidaceae	AYA 460 Thikavi	Decoction of stem bark and leaves applied daily once on joints to treat rheumatism for 15 days or more.
25.	<i>Cassia auriculata</i> L. Caesalpinaceae	AYA 107 Tarwad, Awali	A spoonful of fruit powder consumed daily once to check asthma, advised for a week or so.
26.	<i>Cassia fistula</i> L. Caesalpinaceae	AYA 271 Bahava	About 3-4 gm of fruit powder dissolved in water, drunk twice daily as a remedy for inflammation of body/organ, advised for 7 days or more, common salt and pungent substances to be avoided in diet.
27.	<i>Celastrus paniculatus</i> Willd. Celastraceae	AYA 62 Malkangani	Seed oil applied daily once for 15 days on joints to control rheumatic pains, also applied daily once for paralysed organs till cure.
28.	<i>Citrullus colocynthis</i> (L.) Schrad. Cucurbitaceae	AYA 97 Kadunar, Kadu-indrayan	5-10 ml leaf extract administered orally twice daily to check fever, advised for 4-5 days.
29.	<i>Cleamatis gouriana</i> Roxb. Ranunculaceae	AYA 174 Ranmogra	Leaf extract and coconut oil (1:1 ratio) applied on gums daily once to check tooth-ache, advised for 6-7 days.
30.	<i>Clerodendrum multiflorum</i> (Burm. f.) Kt. Verbenaceae	AYA 135 Kali-tankhalan	Leaf paste and candy (1:1 ratio) mixed and then applied on gangrene daily for a fortnight or so, also advised for blisters for 3-4 days daily once.
31.	<i>Dolichandrone falcata</i> (Wall. ex DC.) Seem Bignoniaceae	AYA 185 Melshingi	Leaf powder, about, 5 gm, consumed at morning for a month or so to check diabetes.
32.	<i>Echinops echinatus</i> Roxb. Asteraceae	AYA 114 Utkata, Katephal	Root extract, about 5 ml, mixed in milk, drunk daily once for 5-6 days to check typhoid fever.
33.	<i>Enicostema axillare</i> (Lam.) Raynal Gentianaceae	AYA 313 Nay	About 15 ml of leaf decoction drunk at evening daily to control fever till cure.
34.	<i>Euphorbia tirucalli</i> L. Euphorbiaceae	AYA 246 Shera-thor	Young green branches, after defoliation, extracted using sesame oil, pellets prepared after mixing jaggery, one pellet per day advised for 8-15 days or more to cure jaundice.
35.	<i>Ficus nervosa</i> Heyne ex Roth Moraceae	AYA 160 Umbar	Fruit latex applied inside mouth at morning to cure mouth ulcer, advised for 4-5 days.
36.	<i>Grewia damine</i> Gaertn. Tiliaceae	AYA 361 Mukahamam	Stem paste, about 3-4 gm, wrapped in betel leaf, consumed daily thrice for a week or so as a remedy against asthma.
37.	<i>Helicteres isora</i> L. Sterculiaceae	AYA 146 Mural, Bahalsheng	Paste of fresh leaves and green fruits applied daily once on eczema for 10-15 days.

Sr. No.	Plant Name & Family	Herbarium No. & Local Name	Part and Recipe used, administration, disease treated
38.	<i>Kirganelia reticulata</i> (Poir.) Baill. Euphorbiaceae	AYA 122 Pithori	Half cup of leaf juice mixed with equal quantity of curd administered orally at morning before tea to treat piles for 6-7 days.
39.	<i>Lavandula bipinnata</i> (L.) Ktze. Lamiaceae	AYA 344 Ran-bhang	Smoke obtained after burning dried leaves, inhaled once daily for 3-5 days to get rid of fever and cough.
40.	<i>Lepidagathis cuspidata</i> Nees. Acanthaceae	AYA 31 Bendya-ghas	Leaf powder applied directly on wounds and scabies for 7-8 days or more.
41.	<i>Leucas cephalotes</i> (Roxb. ex Roth) Spreng. Lamiaceae	AYA 395 Dholkamni	3-4 pieces of dried roots wrapped in a betel leaf, consumed at morning and evening to check fever and pneumonia.
42.	<i>Maytenus emarginata</i> (Willd.) Ding Hou Celastraceae	AYA 370 Henkal	Leaf paste first warmed slightly and mixed in coconut oil, applied daily once on scabies for 7-10 days.
43.	<i>Merremia dissecta</i> (Jacq.) Hall. f. Convolvulaceae	AYA 430 Afumari	4-5 leaves added in boiling cow-ghee, 2-3 drops of it poured into nose daily once for 3-4 days to check migraine.
44.	<i>Mimosa hamata</i> Willd. Mimosaceae	AYA 318 Arati	About 15 ml of root decoction administered at morning and evening for 10-15 days to treat rheumatism.
45.	<i>Morinda pubescens</i> J.E. Sm. Rubiaceae	AYA 111 Bardoi	About 5 ml stem bark extract drunk once daily for 7 days as a remedy against jaundice.
46.	<i>Ocimum americanum</i> L. Lamiaceae	AYA 102 Ran-tulsi	3-4 gm paste prepared from dried roots consumed daily once for 7 days to control fever.
47.	<i>Opuntia elatior</i> Mill. Cactaceae	AYA 45 Nivdung	Fruits first heated and then powdered, about 5 gm powder consumed at morning for 10-15 days to cure rheumatism.
48.	<i>Pergularia daemia</i> (Forsk.) Chiov. Asclepiadaceae	AYA 412 Utrand	About 15 ml of leaf extract, administered orally at morning for 5-7 days to check jaundice.
49.	<i>Phyllanthus amarus</i> Schumacher & Thonn. Euphorbiaceae	AYA 50 Bhui-awala	Entire plants extracted, about 15 ml of extract administered orally at morning for 5-7 days to check jaundice.
50.	<i>Semecarpus anacardium</i> L.f. Anacardiaceae	AYA 268 Biba, Bhilawa	Seed ash mixed in coconut oil applied daily on eczema for 8-10 days.
51.	<i>Sesbania bispinosa</i> (Jacq.) Steud. ex Wight Fabaceae	AYA 328 Kath-Shewari	Flower powder smelt daily 3-4 times to stop nose bleeding, advised till cure.
52.	<i>Soyimida febrifuga</i> (Roxb.) A.Juss. Meliaceae	AYA 237 Rangat-rolu	5-7 gm of stem bark powder consumed at morning and evening for 7-8 days to purify blood.
53.	<i>Tectona grandis</i> L. Verbenaceae	AYA 112 Sagwan	About 15 ml of seed extract diluted slightly in water, drunk once daily for 15 days to treat kidney-stone.
54.	<i>Tephrosia purpurea</i> (L.) Pers. Fabaceae	AYA 11 Diwali	Stem bark or root powder about 10-15 gm dissolved in water, drunk at morning and night to treat kidney-stone, advised till cure.
55.	<i>Terminalia arjuna</i> L. Combretaceae	AYA 100 Arjun-Sadada	Stem bark powder mixed in coconut oil, applied daily on injunes for 7-8 days.
56.	<i>Terminalia bellirica</i> (Gaertn.) Roxb. Combretaceae	AYA 340 Behda	Fruits and inner bark (1:1 ratio) extracted in water, about 10-15 ml extract drunk at morning for 5-6 days to treat whirling.

Sr. No.	Plant Name & Family	Herbarium No. & Local Name	Part and Recipe used, administration, disease treated
57.	<i>Tinospora cordifolia</i> (Willd.) Miers. Menispermaceae	Aya 216 Gulwel	Warmed lea extract and extract mixed in cow-milk (1:1 ratio), a cup of it drunk at morning for 3-10 days to check jaundice.
58.	<i>Trianthema portulacastrum</i> L. Molluginaceae	AYA 133 Pandhara-vasu	About 15 ml extract administered orally twice daily for 10-15 days to control jaundice.
59.	<i>Trichosanthes cucumerina</i> L. Cucurbitaceae	AYA 407 Sonpadol	Green fruits crushed and boiled, a spoonful of this decoction advised 3 times daily for 10-15 days to cure asthma.
60.	<i>Ventilago denticulata</i> Willd. Verbenaceae	AYA 57 Sakhal-wel	Decoction of stem bark applied daily on gums to check tooth-ache till cure.
61.	<i>Vitex negundo</i> L. Verbenaceae	AYA 358 Nirgudi	About a litre of decoction of leaves added in bath water daily at morning for 15 days or more to treat rheumatism, leaves warmed and tied on joints to treat rheumatism, advised till cure.
62.	<i>Withania somnifera</i> (L.) Dunal Solanaceae	AYA 442 Askand, Ashwagandha	Root extract, about 20 ml drunk orally at night for 15 days to increase body strength, also advised against rheumatism.

## Results

During our ethnobotanical studies we recorded 62 species representing 59 genera and 37 families (Table-1). Of these, dicotyledonous taxa predominate the use-reports. They are reported by 58 species, 55 genera and 34 families. Monocotyledonous taxa are represented by only total three species, three genera and two families. A single species of pteridophyte is used in the area. The families Fabaceae (Papilionaceae), Euphorbiaceae and Verbenaceae are represented by 04 species and 04 genera, whereas Caesalpiniaceae by 04 species but only 03 genera. There are certain families represented by 03 species belonging to 03 genera each e.g. Lamiaceae, Acanthaceae and Mimosaceae. There are 07 families with two species associated in medicinal utility. Majority of families (23) are having a single representation. Out of total 62 taxa, trees (18 taxa) are more commonly used, which is then followed by shrubs (16 taxa), lianas and vines (07 taxa). Herbs (21 taxa) are the most commonly employed in various medicinal recipes. The highest number of plant species recorded to cure a single disease condition are jaundice (08 species) and rheumatism (07 species). Kidney stone and scabies are cured by 03 species each. Fever, including typhoidal and malarial, are cured by 06 species. Cough, injuries, diabetes, pus in ears and eczema each are cured by 02 species. Majority of disease conditions (about 22) have been found cured by one plant species each. Kind of recipes depend upon the type of disease and their method of administration. They are administered in the form of recipes such as extract (20), powder (12), decoction (09), paste (07), juice (03), ash (02), direct consumption of plant part (03), while pulp, gum, oil, latex, smoke, warmed leaves (01 each). The number in parenthesis indicates the number of use-reports out of total 62 use-reports for the respective diseases. Similarly for the total use-reports various plants parts/products are employed as such (number indicate use reports); leaves (27), fruits (09), stem bark (06), roots (05), stem, flowers and entire plants (02 each), gum (03), latex, young branch, rhizome, bulblets are associated with

single use-report each. While preparing, medicinal recipes some domestic substances are also used, for example, coconut oil, cow-milk, cow-ghee, curd, honey, candy, sesame-oil, castor-oil, etc.

## Discussion

Certain facts are apparent from the results obtained during our studies. They are : (i) Herbaceous flora (21 species), being dominant in Buldhana district, is the most commonly associated with the different diseases. Trees (18 species) and shrubs (16 species) stand next to them. (ii) Likewise, dicotyledonous taxa predominate other monocotyledonous and pteridophytic taxa, and therefore most widely used in the district. (iii) Leaves (27 use-reports) constituted the large segment out of the total 62 use-reports for medicinal recipes administered. Fruits (09 use-reports), stem bark (06 use-reports) and roots (05 use-reports) occupy sequential position in them. (iv) Extract is more common form of medicinal recipe having been associated with about 20 use-reports. Powder (12 use-reports) and decoction (09 use-report) are also fairly employed in the medicaments. (v) Apart from plant parts, plant products e.g. oil, latex and gum are occasionally used, (vi) Domestic substances are added while preparing these recipes. (vii) Jaundice and rheumatism are more prevalent disease conditions in the area studied. Amongst the other, asthma, kidney-stone and scabies are also noted fairly common. These traditional remedies, however, should be screened for their chemical contents, pharmacological and biological activities to avoid toxicity, if any, and improvise their efficacy. They may yield new compounds or molecules for better safety and future utility worldwide. We experienced that people of Buldhana district have rich heritage of medicinal knowledge and employed them instantly whenever somebody suffers from some form of ailment. We should preserve this treasure-house of their knowledge and experience for better prosperity at the backdrop of obvious forces of acculturation prevailing in the area of study.

It is observed that some taxa (numbered as 2, 3, 6, 14, 19, 35, 61, 62 in the Table-1) are reported ethnobotany from different parts of India (cf. Jain, 1991). They also find place in Ayurvedic applications (Warrier, 1994; Kirtikar and Basu, 1981). Some taxa are planted or domesticated in the homestead gardens e.g. *Aloe vera*, *Barleria prionitis*, *Buchanania lanzan*, *Semecarpus anacardium*, *Vitex negundo* etc. for ready accessibility. This activity thereby also help conserve these species. Biotic interference is more accelerated in this region and hence some species are being depleted e.g. *Terminalia arjuna*, *T.bellirica*, etc. These need attention from conservation point of view. Similar forces are also on record from Indian region (cf. Majumdar and Datta, 2007; Meena and Yadav, 2007; Shaik *et al.* 2005; Rama Rao and Reddy, 2005; Dwivedi *et al.* 2007). Domestic substances e.g. coconut-oil, cow milk and ghee, curd, etc. are common adjuvant in the medicinal recipes. This is also a practice from other Indian remedies (cf. Reddy *et al.* 2008). It is observed that younger generation in the study area is mostly ignorant about local remedies, a trend also noted in Orissa (India) (Pattnaik *et al.*, 2006).

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