



WOODY PHYTO-RESOURCES OF MEDICINAL IMPORTANCE USED BY THE TRIBAL POPULATIONS BETWEEN SATPURA AND VINDYAN HILLS, MADHYA PRADESH, INDIA

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Abstract

Plants are serving almost all the needs of man from time immemorial. These plants are used as raw or processed for food, medicine, shelter etc. About 80% of the world's medicine is obtained from phyto-resources either woody or herbaceous in nature. Secondary metabolites of these phyto-resources are isolated for producing various medicines however, tribal or ethnic people use raw plant materials to treat different diseases. Beside using some important parts of the plants, this biodiversity is also maintained by these tribes or ethnic people. In the communication 102 such woody plants are reported which are used by the tribal people for treating various diseases between the Satpura and Vindyan hills in Madhya Pradesh.

Key words: Barwani, Tribes, Folk Medicine, Ethnobotany, Satpura, Vindhyan.

Introduction

Plant based health treatments through traditional practices are popular among 85% people of the world (Rai *et al.*, 2000). Approximately 3.5 billion people in developing countries believe that plant remedies are efficacious for treating many ailments (Gera *et al.*, 2003). About 90% of the human population in developing countries relies on the use of medicinal plants for their primary health care needs (WHO, 2006). All these medicinal plants come from natural forests or agricultural forms. The marketing of these medicinal plants improves the economic status of people who are involved in the business of medicinal plants all over the world. In India, traditional medicine from medicinal plants has still continued to play a major role in Primary Health Care (PHC) particularly in rural area or among the tribal people. The traditional system of medicine which is still operative among many tribes has given a modern name Indian System of Medicine and is composed of many wings like Ayurveda, Unani, Sidha and Amchi. All these different Indian Systems of Medicine mostly procure drug plants from wild. The wide spread use and acceptability of the traditional medicinal value of plants in all the systems in India could be attributed to culture, efficacy

against some diseases, accessibility and affordability as compared to modern medicine. This traditional medical system is characterized by variation in socio-cultural background, ecological diversity of the country as well as ethnic group. Among ethnic groups this knowledge is transmitted through oral dialogue (Dutt *et al.*, 2015), however, the written scripts for many systems are also available.

The considerable contribution to human wellbeing made by medicinal plant species is now widely appreciated and understood. Primary plant products like barks, roots and exudates, are widely used for treating various diseases. These are the best bio-resources available in the forests throughout the world. Their sustainable use because of the increasing demands at international level is the need of the hour. Most of the plants used in traditional medicine are collected from the wild and only a few have been domesticated. This can lead to the genetic erosion, which in turn calls for new conservation strategies for this section of the plants. For conservation of rare plant species, cultivation is often considered an alternative to wild collection (IUCN, 2001). The insufficient knowledge about the ecology of medicinal plants is a serious problem for resource management. The creation of protected areas may facilitate the

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conservation of medicinal plant species (Ndangalashi *et al.*, 2000; On *et al.*, 2001). But before moving towards declaration of protected area, a proper documentation of the bio-resources of the particular region is required. Cultural, economic and development of region is largely dependent upon the careful exploration, utilization of natural resources. Plant wealth of a region is regarded as an important and valuable resource. Phyto-resources studies can provide clues to the utilization of plant resources of an area for the benefit of mankind by collecting information on flora and proper evaluation of indigenous knowledge. The use of plants for different purposes is perhaps as old as mankind. In India since the Vedic period information on the utility of plants in medicine find place in different ancient scriptures. In the recent times much data on the bio-resources has been systematically gathered and compiled. Indian plant resources have a special status due to its occurrence of large number of species under different uses. The sub-tropical areas are considered as the transition zones between temperate and tropical ecosystems. These

sub-tropical areas are known for unique type of flora. During the current study phyto-resources of medicinal importance of Barwani district, MP are documented along with their medicinal importance.

Materials and Methods

The study was conducted particularly in Barwani district which lies between Satpura and Vindyan hills in Madhya Pradesh. The name Barwani originated from the forest of ‘Bad’ (*Ficus bengalensis*) which had surrounded the city in old times ‘Wani’ is the old word for the garden, therefore the city got the name ‘Barwani’ which means ‘gardens of Bads’. After the merger of the princely state Barwani with the Union of India in 1948. CE., it became a part of west Nimar district of the newly forms Madhya Bharat state. Barwani is situated on the south-west cover of Madhya Pradesh. The district lies between 21°37' and 22°22' North latitude and 74°27' and 75°30' East longitude. The district is triangular in shape with the highest point in west. The total geographical area of the district is 3665km² out of which forests occupy

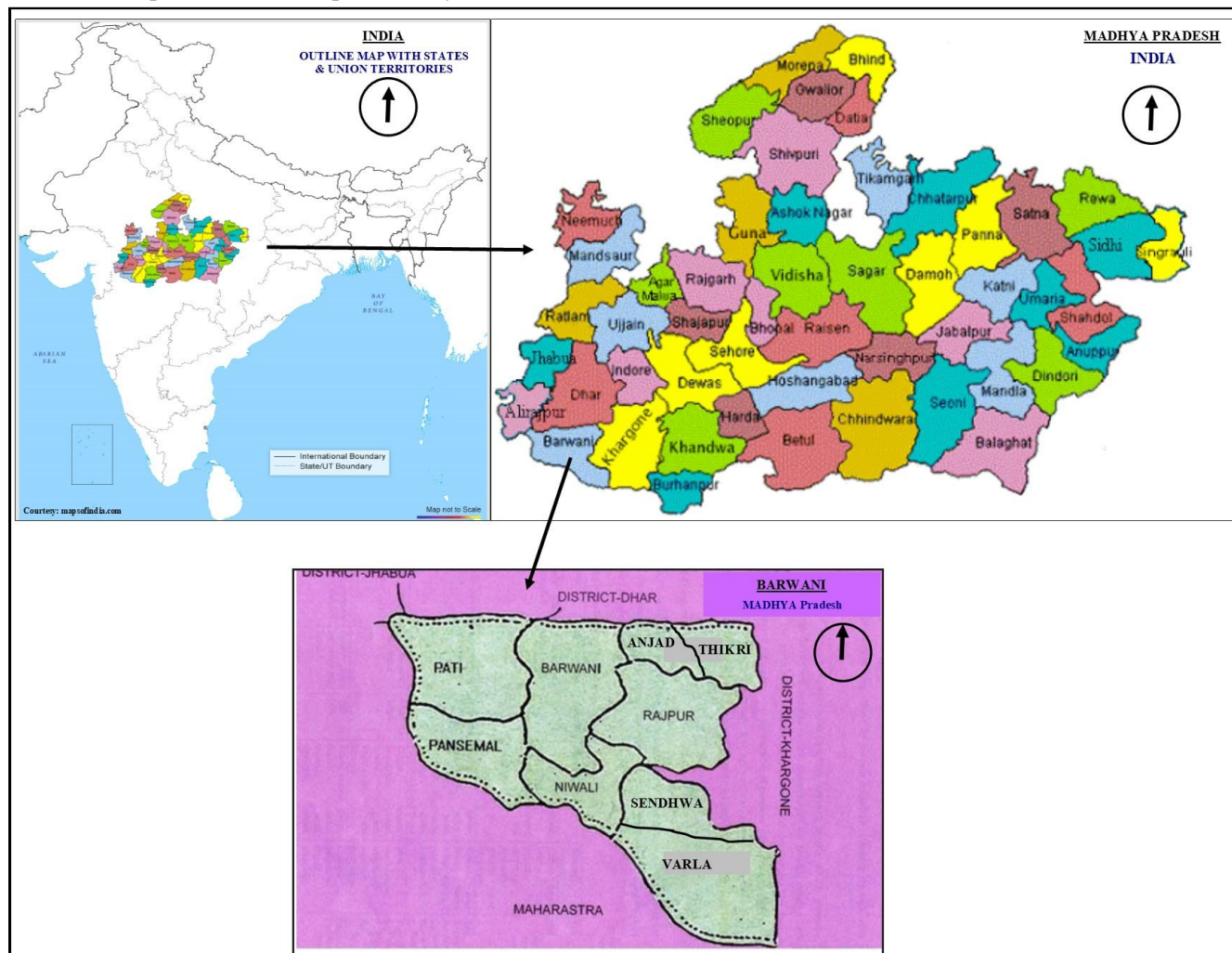


Fig. 1: Geographical map of the Study area.

1875.88km². The district is bounded by Maharashtra state to the south, Alirajpur district to the west, Dhar district to the North and Khargone district to the East. The district is surrounded by Satpura ranges in the South and Vindhyan ranges in North. Barwani district consists of thus subdivision, Barwani and Sendhwa which are future divided in to 9 tahsils viz., Barwani, Sendhwa, Pansemal, Niwali, Thikri, Varla, Pati, Anjad and Rajpur. The data is collected from the tribal people (Bhil, Bhilala, Barela, Nayak and Tadwi) inhabitants of hills covered with thick forests in Sendhwa, Pansemal, Niwal & Pati Tehsils of the district (Fig. 1).

The present communication pertains to woody phyto-resources collected from forests in Sendhwa, Pansemal, Niwal & Pati tehsils of Barwani district, Madhya Pradesh, India. The information on medicinal importance was gathered by conducting interview of tribal people inhabitant of thick forests on hills in above four districts.

Results

Explorations reveals that 102 woody plant species are of medicinal properties in Sendhwa, Pansemal, Niwal & Pati tehsils of Barwani district, MP, India. These phyto-resources belonging to 41 angiospermic families are used by the tribal people residing between the Satpura Hills in district Barwani for curing various ailments (Table 1). Maximum plants (n=14) belongs to family Fabaceae followed by Mimosaceae (n=8), Euphorbiaceae (n=6), Caesalpiniaceae (n=5) and Anacardiaceae (n=4) Other families namely Asclepiadaceae, Combretaceae, Flacourtiaceae, Lythraceae, Meliaceae, Moraceae, Rhamnaceae, Rubiaceae and Sterculiaceae having 3 species each, Acanthaceae, Apocynaceae, Burseraceae, Malvaceae, Rutaceae, Sapindaceae, Solanaceae, Tiliaceae and Ulmaceae having 2 species each, Alangiaceae, Amaranthaceae, Annonaceae Bombacaceae, Cactaceae, Capparaceae, Celastraceae, Cochlospermaceae,

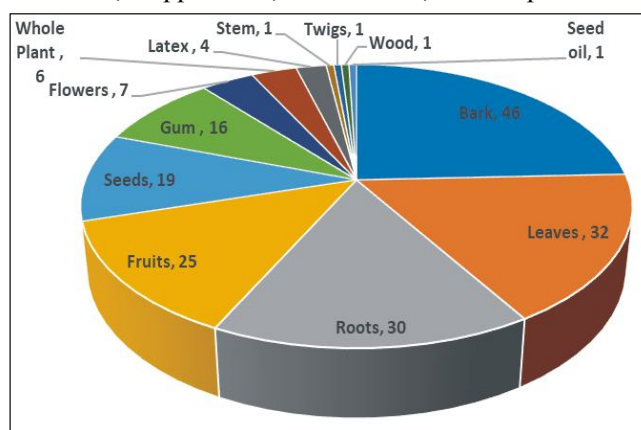


Fig. 3: Plant parts of the woody phyto-resources used for medicine purpose.

Ebenaceae, Ehretiaceae, Lecythidaceae, Loranthaceae, Moringaceae, Oleaceae, Periplocaceae, Sapindaceae, Simaroubaceae and Verbanaceae having 1 species each are the different families which can contribute in the medicine industry. Among these woody plant species trees contribute maximum species (n= 53) followed by shrubs (n=30), under shrubs (n=8), small trees (n=5), climbing shrubs (n=2), lianas (n=2) and thorny shrubs (n=1) in the health care system of the tribal people of the district (Table 1, Fig. 2). Among plant parts bark of 46 species, leaves of 32 species, roots of 30 species, fruits 25 species, seeds of 19 species, gum of 16 species, flowers of 07 species, whole plant of 06 species, latex of 04 species, stem of 01 species, twigs of 01 species, wood of 01 species and seed oil 01 species are used to cure different ailments (Table 1, Fig. 3).

Discussion and Conclusions

Traditional medicine includes diverse health practices, approaches, knowledge and beliefs incorporating biological resources and minerals for treating various diseases (Anonymous, 2005). Major part in these practices comes from plant world only. Exploring the traditional knowledge related to the use of plant by tribal or ethnic people is called as the ethno-botanical study. Ethnic people use wild plant species as food either for dietary purpose or for medicinal requirements. A research conducted about 40 decades ago, has recorded that about 800 plant species are consumed by tribal people as vegetables in India (Singh and Arora, 1978). Collection and use of wild plants for food materials is observed mostly among the poor people (Girach and Aminuddin, 1988). Poor households in Zimbabwe, rely on wild fruits as an alternative to cultivated food for a quarter of all dry season's meals (Wilson, 1990). However, the role of wild edible plants in developing countries has been ignored and underestimated for many years (Guinand and

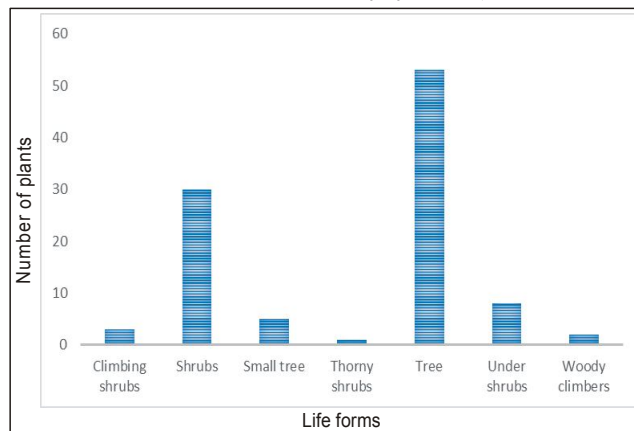


Fig. 2: Various life forms of the woody flora of medicinal importance

Table 1: Woody phyto-resources with medicinal properties in the forests of Barwani district, Madhya Pradesh, India.

S. No.	Botanical name / family	Vernacular name	Life form	Part used	Folk Medicinal Uses
1.	<i>Abelmoschus ficulneus</i> (L.) Wt. & Arn. ex Wt. Family: Malvaceae	Ban Bhindi	Under Shrub	Seeds	Asthma
2.	<i>Abrus precatorius</i> L. Family: Fabaceae	Ratti	Climbing shrub	Roots & Seeds	Cough, Cold, Anti-tumor, prevent conception.
3.	<i>Acacia catechu</i> (L.f.) Willd Family: Mimosaceae	Khair	Tree	Wood, Bark, Leaves	Astringent. Asthma, Bronchitis, Gonorrhoea
4.	<i>Acacia farnesiana</i> (L.) Willd. Family: Mimosaceae	Bilayati babool	Tree Small	Roots, Bark & Leaves	Toothache, Malarial fever, Gonorrhoea
5.	<i>Acacia leucophloea</i> (Roxb.) Willd. Family: Mimosaceae	Safed kikar	Tree	Bark	Ulcer, Astringent
6.	<i>Acacia nilotica</i> (L.) Willd. ex Delile ssp. <i>indica</i> (Benth.) Brenen Family: Mimosaceae	Babool	Tree	Bark	Asthma, Tooth and Gum trouble, Dysentery, Skin disease.
7.	<i>Acacia pennata</i> (L.) Willd. Family: Mimosaceae	Alia	Tree	Roots & Bark	Gastrointestinal trouble, Gum trouble
8.	<i>Adhatoda zeylanica</i> Medik. Family: Acanthaceae	Adoosa	Shrub	Leaves & Roots	Asthma, bronchitis
9.	<i>Aegle marmelos</i> (L.) Correa Family: Rutaceae	Bel	Tree	Fruits	Dysentery, Gastric trouble. Diabetes
10.	<i>Aerva lanata</i> (L.) Juss. ex Schult. Family: Amaranthaceae	Gorakh	Shrub	Whole Plant	Anthelmintic, Urinary trouble, Skin diseases
11.	<i>Ailanthus excelsa</i> Roxb. Family: Simaroubaceae	Maharukh	Tree	Bark, Leaves	Bronchitis, Skin diseases
12.	<i>Alangium salvifolium</i> (L.f.) Wang. Family: Alangiaceae	Ankol	Tree	Bark, Leaves	Reduce Blood pressure, Rheumatic pain
13.	<i>Albizia lebbek</i> (L.) Benth. Family: Mimosaceae	Siris	Tree	Seeds & Bark	Gonorrhoea, Diarrhoea, Dysentery
14.	<i>Albizia procera</i> (Roxb.) Benth. Family: Mimosaceae	Safed Siris	Tree	Bark	Antipyretic
15.	<i>Annona squamosa</i> L. Family: Annonaceae	Sitaphal	Shrub	Seeds, Bark & Roots	Insecticidal, Diarrhoea, Purgative
16.	<i>Anogeissus latifolia</i> (Roxb. ex DC.) Wall. ex Guill. & Perr. Family: Combretaceae	Dhawda	Tree	Bark & Gum	Colic pain, Diarrhoea Leucorrhoea
17.	<i>Azadirachta indica</i> A. Juss. Family: Meliaceae	Neem	Tree	Whole Plant	Skin diseases, Antiseptic, fever, Diabetes, Jaundice
18.	<i>Barleria prionitis</i> L. Family: Acanthaceae	Pila Katasala	Under shrub	Stem & Leaves	Gum trouble, Toothache, Rheumatic pain
19.	<i>Bauhinia racemosa</i> Lamk. Family: Caesalpinaceae	Phalesa	Tree	Bark	Diarrhoea, Dysentery
20.	<i>Bombax ceiba</i> L. Family: Bombacaceae	Semal	Tree	Bark, Roots & Gum	Pimples, Aphrodisiac, Boils, Diarrhoea
21.	<i>Boswellia serrata</i> Roxb. ex Colebr. Family: Burseraceae	Salai	Tree	Gum	Epilepsy, Skin diseases, Stomach complaints
22.	<i>Buchanania cochinchinensis</i> (Lour.) Almeida Family: Anacardiaceae	Chironj Aachar	Tree	Bark, Gum & Seeds	Bronchitis, Cuts, Diarrhoea, Skin diseases, Tonic

Table 1 Continue...

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23.	<i>Butea monosperma</i> (Lam.) Taub. Family: Fabaceae	Dhak Palas	Tree	Seeds, Gum & Flowers	Killing intestinal worms, Astringent, Contraceptive, Diabetes, Diarrohea
24.	<i>Caesalpinia bonduc</i> (L.) Roxb. Family: Caesalpinaceae	Sagargota	Climbing shrub	Seeds	Malarial fever, Laxative, Rheumatic pain, Skin disease
25.	<i>Calotropis gigantea</i> (L.) R. Br. Family: Asclepiadaceae	Aak	Under shrub	Roots, Latex & Bark	Asthma, Diarrohea, Epilepsy, Leprosy, Skin diseases
26.	<i>Calotropis procera</i> (Aiton) Ait.f. Family: Asclepiadaceae	Akav	Under shrub	Roots, Latex & Bark	Asthma, Diarrohea, Epilepsy, Leprosy, Skin diseases
27.	<i>Capparis zeylanica</i> L. Family: Capparaceae	Hurhur	Climbing shrub	Roots, Bark & Leaves	Anthelmintic, Cholera, Piles
28.	<i>Careya arborea</i> Roxb. Family: Lecythidaceae	Kumbhi	Tree	Bark	Blood dysentery, Cuts and wound, Skin diseases
29.	<i>Casearia graveolens</i> Dalz. Family: Flacourtiaceae	Berri	Tree	Roots	Liver complaints
30.	<i>Casearia tomentosa</i> Roxb. Family: Flacourtiaceae	Kirchi	Tree	Leaves, Bark	Anthelmintic, Skin diseases, Stomachache
31.	<i>Cassia fistula</i> L. Family: Caesalpinaceae	Amaltas	Tree	Fruits, Seeds & Bark	Diarrhoea, Dysentery, Diabetes
32.	<i>Catunaregam nilotica</i> (Stapf) Trivengadam Family: Rubiaceae	Bhadav	Small tree	Fruits	Diarrhoea, Dysentery
33.	<i>Catunaregam spinosa</i> (Thunb.) Trivengadam Family: Rubiaceae	Mainphal	Tree	Fruits, Roots & Bark	Blood Dysentery, Malarial fever, Rheumatic pain
34.	<i>Celastrus paniculatus</i> Willd. Family: Celastraceae	Malkangani	Liana	Seed oil & Bark	Body pain, Bronchitis, diarhoea, Dysentery, Eczema, Leprosy
35.	<i>Clerodendrum cordatum</i> D.Don. Family: Verbanaceae	Bhant	Shrub	Roots & Leaves	Antipyretic, Boils, Dysentery, Malarial fever
36.	<i>Cochlospermum religiosum</i> (L.) Alston Family: Cochlospermaceae	Galgal	Tree	Bark & Roots	Jaundice, Urinary trouble
37.	<i>Cordia dichotoma</i> G. Forster Family: Ehretiaceae	Lasoor	Tree	Seeds, Fruits & Leaves	Anthelmintic, Lung disorder, Colic pain, Expectorant
38.	<i>Cryptolepis buchananii</i> Roem. & Schult. Family: Periplocaceae	Nagbel	Shrub	Roots	Stomach Pain, Cholera, Epilepsy, Malarial fever, Rheumatic pain
39.	<i>Dalbergia lanceolaria</i> L.f. Family: Fabaceae	Dhamosi	Tree	Bark	Fever, Tongue infection
40.	<i>Dalbergia sissoo</i> Roxb. Family: Fabaceae	Sheesham	Tree	Leaves & Bark	Gonorrhoea, Dysentery, Leprosy
41.	<i>Desmodium gangeticum</i> (L.) DC. Family: Fabaceae	Sarivan	Shrub	Roots	Asthma, Dysentery, Fever, Vomiting
42.	<i>Desmodium pulchellum</i> (L.) Benth. Family: Fabaceae	Chipoto	Shrub	Roots	Burning sensation in abdomen
43.	<i>Diospyros melanoxylon</i> Roxb. Family: Ebenaceae	Biripatta Temru	Tree	Leaves & Fruits	Skin diseases, Urinary complaints
44.	<i>Eriolaena candollei</i> Wall. Family: Sterculiaceae	Bothi	Shrub	Leaves	Wounds
45.	<i>Ficus benghalensis</i> L. Family: Moraceae	Bargad	Tree	Fruits, Bark, Roots & Latex	Aphrodisiac, Diabetes, Diarrhoea, Gum trouble

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46.	<i>Ficus hispida</i> L.f. Family: Moraceae	Daduri	Shrub	Fruits	Purgative, ulcer in mouth
47.	<i>Ficus racemosa</i> L.f. Family: Moraceae	Gular	Tree	Leaves & Fruits	Diarrhoea, Piles, Bronchitis
48.	<i>Flacourtia indica</i> (Burm.f.) Merr. Family: Flacourtiaceae	Bilanga	Shrub	Bark & Fruits	Diarrhoea, Eczema, Jaundice. Rheumatic pain
49.	<i>Flemingia strobilifera</i> (L.) Ait. & Ait. f. Family: Fabaceae	Chipti Kusrunt	Shrub	Roots	Antipyretic, Epilepsy, Leucorrhoea
50.	<i>Garuga pinnata</i> Roxb. Family: Burseraceae	Kakad	Tree	Roots, Bark & Fruits	Diabetes, Dysentery, Skin diseases
51.	<i>Grewia hirsuta</i> Vahl Family: Tiliaceae	Gursukti	Shrub	Roots	Boils, Dysentery, Rheumatic pain, Venereal diseases
52.	<i>Grewia tiliifolia</i> Vahl Family: Tiliaceae	Dhaman	Small tree	Roots	Syphilis
53.	<i>Haldnia cordifolia</i> (Roxb.) Ridsd. Family: Rubiaceae	Haldu	Tree	Whole plant	Jaundice
54.	<i>Helicteres isora</i> L. Family: Sterculiaceae	Marorphali	Shrub	Fruits, Roots	Diarrhoea, Anthelmintic, Asthma, Colic pain
55.	<i>Holarrhena pubescens</i> (Buch.Ham.) Wallich ex G Don Family: Apocynaceae	Safed Dudhi	Tree	Bark, Seeds	Malarial fever, Gastrointestinal Trouble, Asthma, Colic pain
56.	<i>Holoptelea integrifolia</i> (Roxb.) Planch. Family: Ulmaceae	Chilbil	Tree	Bark, Flowers	Boils, Bone fracture, Skin diseases, Rheumatic pain
57.	<i>Indigofera cassioides</i> Rottl. ex DC. Family: Fabaceae	Baroli Girguli	Under shrub	Leaves	Epilepsy, Cough & Cold
58.	<i>Indigofera linnaei</i> Ali Family: Fabaceae	Bhuiguli	Shrub	Whole plant	Dysentery, Stomachache, Antifertility
59.	<i>Indigofera tinctoria</i> L. Family: Fabaceae	Neel	Shrub	Leaves & Roots	Fever, Wounds, Eye disease, Liver disorder
60.	<i>Jatropha curcas</i> L. Family: Euphorbiaceae	Safed-arand	Shrub	Leaves, Bark & Seeds	Skin diseases, Rheumatic pain, Toothache, Wounds
61.	<i>Jatropha gossypifolia</i> L. Family: Euphorbiaceae	Kosoranda	Shrub	Leaves & Latex	Toothache, Cough & Cold
62.	<i>Kydia calycina</i> Roxb. Family: Malvaceae	Baranga	Tree	Bark	Diabetes, Rheumatic pain, Boils, Febrifuge
63.	<i>Lagerstroemia parviflora</i> Roxb. Family: Lythraceae	Lendia	Shrub	Bark	Bronchitis, Syphilis, Diabetes
64.	<i>Lannea coromandelica</i> (Houtt.) Merr. Family: Anacardiaceae	Jhingav moyan	Tree	Bark & Leaves	Diarrhoea, Toothache, Ulcer Sores, Stomach disorder,
65.	<i>Lantana camara</i> L. Family: Verbenaceae	Baramasi	Shrub	Roots & Leaves	Colic pain, Ringworm, Malarial fever
66.	<i>Lawsonia inermis</i> L. Family: Lythraceae	Mehndi	Shrub	Roots	Jaundice
67.	<i>Madhuca longifolia</i> (Koenig) MacBr. var. <i>latifolia</i> (Roxb.) Chev. Family: Sapotaceae	Mahua	Tree	Flowers & Bark	Diabetes, Jaundice, Bronchitis, Colic pain, Diabetes, Gum trouble
68.	<i>Mallotus philippensis</i> (Lam.) Muell.-Arg. Family: Euphorbiaceae	Sindoori	Tree	Fruits & Seeds	Anthelmintic, Leprosy, Skin diseases
69.	<i>Mangifera indica</i> L. Family: Anacardiaceae	Aam	Tree	Fruits, Bark and Gum	Diarrhoea, Dysentery, Fever, Stomach-ache, Gum trouble

Table 1 Continue...

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70.	<i>Melia azedarach</i> L. Family: Meliaceae	Bakain	Tree	Fruits & Leaves	Anthelmintic, Skin diseases, Antiseptic, Insecticidal
71.	<i>Moringa oleifera</i> Lamk. Family: Moringaceae	Surjana	Tree	Whole plant	Asthma, Gastrointestinal trouble, Dysentery, Eczema
72.	<i>Murraya koenigii</i> (L.) Spreng. Family: Rutaceae	Kathnim; Kadineem	Shrub	Leaves & Fruits	Digestive, Anthelmintic, Malarial fever
73.	<i>Nyctanthes arbortristis</i> L. Family: Oleaceae	Harshingar	Shrub	Bark & Leaves	Malarial fever, Sciatica pain, Intestinal work
74.	<i>Opuntia elatior</i> Mill. Family: Cactaceae	Nagphani	Shrub	Leaves & Fruits	Purgative, Gonorrhoea
75.	<i>Ougeinia oojeinensis</i> (Roxb.) Hochr. Family: Fabaceae	Tinsa	Tree	Bark & Gum	Febrifuse, Dysentery, Diarrhoea
76.	<i>Phyllanthus emblica</i> L. Family: Euphorbiaceae	Aonla	Tree	Fruits	Bronchitis, Diabetes, Gastrointestinal trouble
77.	<i>Phyllanthus reticulatus</i> Poir. Family: Euphorbiaceae	Panjoli	Shrub	Fruits	Jaundice
78.	<i>Pithecellobium dulce</i> (Roxb.) Benth. Family: Mimosaceae	Jangli-jalebi	Tree	Seeds & Flowers	Leprosy, Cooling agent
79.	<i>Pongamia pinnata</i> (L.) Pierre Family: Fabaceae	Karanj	Tree	Seeds	Bronchitis, Burns, Eczema, Fever
80.	<i>Pterocarpus marsupium</i> Roxb. Family: Fabaceae	Bijasal	Tree	Bark & Gum	Asthma, Diabetes, Cooling, Diarrhoea
81.	<i>Sapindus emarginatus</i> Vahl Family: Sapindaceae	Ritha	Tree	Bark & Seeds	Epilepsy, Body pain, Expectorant, Labour pain
82.	<i>Schleichera oleosa</i> (Lour.) Oken Family: Sapindaceae	Kusum	Tree	Bark & Seeds oil	Gout, Burns, Cold, Fever, skin diseases
83.	<i>Securinega virosa</i> (Roxb. ex Willd.) Baill. Family: Euphorbiaceae	Chirgodi	Shrub	Leaves & Fruits	Constipation, Stomach-ache
84.	<i>Semecarpus anacardium</i> L.f. Family: Anacardiaceae	Bhelwa	Tree	Fruits, Fruits & Leaves	Abortifacient, Asthma, Piles, Antifertility, Leprosy
85.	<i>Senna occidentalis</i> (L.) Link Family: Caesalpiniaceae	Ban-chironta Karondi	Under shrub	Leaves & Seeds	Eczema
86.	<i>Sesbania sesban</i> (L.) Merr. Family: Fabaceae	Jainti	Tree	Leaves & Flowers	Antifertility, Colic pain, Gastro-intestinal trouble
87.	<i>Solanum incanum</i> L. Family: Solanaceae	Jangli-bhanta	Under shrub	Roots	Stomach pain
88.	<i>Soymida febrifuga</i> (Roxb.) A. Juss. Family: Meliaceae	Rohan	Tree	Bark	Bone fracture, Diarrhoea, Malarial fever
89.	<i>Sterculia urens</i> Roxb. Family: Sterculiaceae	Kullu	Tree	Gum	Blood dysentery, Joint pain, Throat infection
90.	<i>Tamarindus indica</i> L. Family: Caesalpiniaceae	Imli	Tree	Seeds, Fruits & Leaves	Anthelmintic, Boils, Digestive, Toothache, Urinary complain, Dropsy,
91.	<i>Terminalia bellerica</i> (Gaertn.) Roxb. Family: Combretaceae	Bahera	Tree	Fruits	Stomach disease
92.	<i>Terminalia cuneata</i> Roth Family: Combretaceae	Arjun	Tree	Bark	As hair tonic
93.	<i>Trema orientalis</i> (L.) Blume Family: Ulmaceae	Beeghjebhii	Small Tree	Roots	Diarrhoea, Urinary trouble

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94.	<i>Ventilago denticulata</i> Willd. Family: Rhanmaceae	Keonti	Shrub	Seeds & Bark	Abortifacient, Cooling, Rheumatic pain, Ulcer, Syphilis, Skin infection
95.	<i>Viscum articulatum</i> Burm.f. Family: Loranthaceae	Madang	Shrub	Whole plant	Bone fracture, Rheumatic pain
96.	<i>Vitex negundo</i> L. Family: Verbenaceae	Sambhalu Nirgud	Shrub	Leaves, Roots & Flowers	Colic pain, Diarrhoea, Diuretic, Eczema
97.	<i>Wattakaka volubilis</i> (L.f.) Stapf Family: Asclepiadaceae	Hirandodi	Liana	Leaves, Roots & Bark	Anthelmintic, Urticaria, Skin diseases, Urinary complaints
98.	<i>Withania somnifera</i> (L.) Dunal Family: Solanaceae	Aswagandha	Under shrub	Roots	Bronchitis, Dropsy, Tonic, Epilepsy
99.	<i>Woodfordia fruticosa</i> (L.) Kurz Family: Lythraceae	Dhavai	Shrub	Flowers	Cough & Cold
100.	<i>Wrightia arborea</i> (Dennst.) Mabber. Family: Apocynaceae	Indranav	Small tree	Bark	Diabetes, Fever, Piles
101.	<i>Ziziphus oenoplia</i> (L.) Mill. Family: Rhamnaceae	Makoya	Shrub	Fruits	Stomach Disorder
102.	<i>Ziziphus rugosa</i> Lam. Family: Rhamnaceae	Churna	Thorny shrub	Twigs	Gum trouble, Ulcer in mouth

Lemessa, 2000). India has also ventured very slowly in the study of wild medicinal food (Bharucha and Pretty, 2010). On the other hand, wild plants are also used as the medicine by different ethnic and tribal people throughout world (Jain, 2013; Shah, 2012; Verma *et al.*, 1999).

District Barwani is placed in south west of Madhya Pradesh and is surrounded by Satpuda (in South) and Vindhya (in North) forest ranges. The district is distributed on 3665 km² and majorly have large part as forests. Various tribe like Bhil, Bhilala, Barela, Nayak and Tadwi are the inhabitant of these forests who use the local flora for their day to day life. Therefore, plants are the life support system to these tribe. They are the custodians of the plant wealth of this region and protect the ecology of these forests. The dependency of the tribal people on the forests for food, medicine, shelter etc. is the main reason for their concern towards biodiversity. About 102 woody plant species are used by these tribal peoples to treat various ailments, like asthma, bronchitis, cough, contraception, gonorrhoea, fever, ulcers, skin diseases, gastro-intestinal troubles, hypertension etc. (Table 1). Despite of the use of various parts of the woody species especially bark (46), roots (30), fruits (25), seeds (25), these species grown profusely in the region. This indicates that tribal people do take care of these species and are the true faithful custodians of the forests.

Conflicts of interest

All contributing authors declare no conflicts of interest.

Authors' contributions

SS and HCD designed the study and SS conducted the field surveys and compiled the data. HCD wrote the manuscript and all authors have read and approved the final manuscript.

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