Chapter 5
Traditional Uses of Medicinal and Aromatic Plants Among the Tribes of India

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Abstract Tribes of India are the centers of information on plant wealth and their different uses for the livelihood. They tend to use plants in various ways during their life. Herbal drug formulations used by these tribes are important also to the society. India is a rich diversity center of medicinal plants. Around 45,000 plant species nearly 15,000 plants are used for their medicinal values. Many of these plants are aromatic, but there has been nearly no such report available till date. Therefore, an attempt is made to compile a list of aromatic plants that are still being used by the Indian tribes for medicinal purposes. After a thorough study, overall 134 valid plant species are listed.

Keywords Aromatic plants · India · Medicinal plants · Traditional · Tribes

5.1 Introduction

Nature has an amazing blessing on India where almost all the climatic zones are found with huge diversity in terms of flora and fauna. The biodiversity hot spots are evidential proofs of this amazing country. As the existence of human beings is dependent upon the surroundings of any place hence the settlements of human beings have evolved in accordance with the various geographical zones. That is why, in India there is a huge difference among various communities that belong to different states in terms of their languages, costumes, living standards, rituals, food habits, etc.

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Though, over the years, the increasing urbanization throughout the country somewhat successful in lessening these differences among various communities yet the tribes of India are still maintaining their unique identity by conserving their ancient mode of living in forests. These tribes are the treasures of India and many efforts are going on to protect them in their natural habitats.

Like it's floral and faunal diversity, India is very rich in tribal communities and at present most of states of the country have appreciable tribal populations. The majority of the tribal persons is far away from the much needed education and healthcare systems. They are still dependent on the natural resources to fulfil their daily needs except the formal education. However, they are very well educated by their surroundings and as a result their knowledge about the biodiversity is deeper than that of the so called modern and well-educated society (Pei 2001).

Especially in terms of floral diversity and its sustainable use these tribes are knowledgable and in the era of herbal medication they are reservoirs of treasured information. Whenever, any researcher collects data about the plant uses by various tribes, the term ethnobotany appears. In the past, various ethnobotanists attempted to collect information from these tribes of the country and published very good articles. Those articles tell about the level of knowledge of Indian tribes regarding the plants. Though, till date there are several articles on ethnobotany have been published from different regions of the country, on different aspects, *viz*., food plants; fodder plants; fibre plants; religious plants, plants in ritual uses, medicinal plants, etc., yet a huge amount of research must be done in this field (Dutta et al. 2014; Sharma and Alam 2018).

Ethnobotany has emerged as one of the most important sciences, on the front of social welfare. Seeing this facet of the subject, studies and intensive research, extensive plant surveys and field studies are being conducted in full swing in numerous universities, colleges, Government and non-governmental autonomous institutions, along with research institutes of higher level.

The wild plants in Indian folklore always have been a valuable reservoir and are being used to fulfill the various needs of the tribal people. Generally, it is projected that almost 15,000 species of plant are used by Indian tribes and other poor people. These plants provide almost everything to the tribes, *viz*., food, fodder, clothing, shelter, drugs, medicine, agricultural implements, hunting, tranquilizers, toxin, masticatories, resins and dyes, fuels and insecticides etc.

In this manner it can be also said that the studies about human ecology and ethnobotany has attained a prime importance: it has become a critical need of modern ages, because ethnobotany deals with the direct, traditional, and natural relationships between plant wealth and human societies Ethnobotanical studies enable us to keep the records, and prepare proper documentation of the age old knowledge and wisdom of the tribal and rural people about the miraculous and useful properties of different plant species. In other words, ethnobotanical studies are considered as an important tool for the utilization of floristic diversity for the sake of human welfare (Jain 1994).

The enhancing interest of present-day workers in the field of ethnobiology, has resulted in the fact that biodiversity is now emerging as holistic segment of ecology. Therefore, studies related to ethnobotany undertake prodigious significance in enhancing our understanding about the floral wealth used by the tribal or native or rural people, the rich plant diversity assembled by these rural people or natives for their sustenance and the various methods followed by those people for the preservation and conservation of this information. Since the dawn of olden Indus Valley civilizations evidence proved the existence of a great dearth of ethnobotanical knowledge. Even the written records about the utilization of plant resources for the treatment and prevention of human or animal diseases can be traced back to the Vedic ages, i.e. the earliest from 4500 to 1600 B.C from the conventional scriptures of Hindu religion such as Rig Veda (Sharma and Alam 2018).

The traditional Indian indigenous structure of medicine popularly recognized as Ayurveda was splendidly established in the later parts of the vedic ages from 1500 to 800 B.C. (Harshberger 1896; Buckingham 1994). Even now it is well known as integral and inseparable part of tribal culture. This depicts that Aryans of Vedic ages had a thorough knowledge of medicinal plants. Similarly, in Atharava- Veda description of several plants was found. This illustrated narrative of plants was later on practiced by monumental ancient treatise on the subject like 'Charak Samhita' (1000–800 B.C), 'Sushutra Samhita' (800–700 B.C), and Vighatta's Astanga Hridasja. These three classical documentations can be considered as milestones in the traditional Indian indigenous curative system (Chaudhury and Pal 1975; Trivedi 2007).

Looking upon this inextricable link between indigenous ethnic culture and botanical upkeep, the decade beginning from 1 January 1995 was observed as year of ethno the "International decade for the World's Indigenous and Ethnic People". All over the world the ethnic people have engaged in a pivotal role for the safety of floral and faunal wealth with which they have emotional and interdependent relationship.

In the agenda 21 of Rio Earth Summit which was held in 1992, it is clearly stated that Indigenous (i.e. tribal or ethnic societies) folks and their societies and other local groups have a vivacious role in the environmental supervision and sustainable development as they have sound knowledge and traditional practices for the same. Hence, it is necessary that every nation and states should identify the areas to protect and duly support their ethnic identity, culture and welfares and enable their actual participation in the achievement of supportable development (Trivedi 2007; Alam 2020).

Since tribal communities have naturally educated to live in the most hostile conditions from Polar Regions to equator, from the arid deserts to the wet tropical rain forests, therefore these ethnic people have established, various sophisticated techniques to survive in their surroundings and to make the circumstances congenial or advantageous for leading their life rather with ease and comfort. Generally, tribes or the ethnic people have nurtured the areas of high biodiversity in their community lands and in their vicinity. In most of the cases, higher proportion of diversified species has been recorded in ethnic community areas, and in their water bodies (Jain 1991, 1994).

5.2 Ethnobotany in Indian Subcontinents

The plants mentioned in Indian literature and in the religious books of Hindus (e.g. Rigveda, Atharvaveda, Upanishads, and Mahabharata) provided the base for Indian ethnobotanists. The Indian subcontinent depicts a unique richness in floristic diversity. They have estimated that out of these 15,000 species, approximately 7500 species have medicinal importance; about 3900 species of plants are edible, while 700 species are utilized in traditional rituals, cultural purposes, and in the important functions of tribal societies (Jain 1991). Similarly, the other plant species are also used for diversified purposes such as fibres, fodder, gum, resins and dye, pesticides and insecticides, as well as for incense and perfume. The floristic wealth in India is spread in natural habitats, in the different types of forests and other plant communities. However, it is also quite interesting to note that in such areas where native communities dominate, they use native plant wealth and practice customary agriculture. In this manner these tribal or primitive societies maintain intact their own lifestyle customs, rituals and beliefs. Jain and Mitra (1997) combined all information on the uses of medicinal plants from English literature in form of catalogues, dispensatories, pharmacopoeias of plants. The researchers of Botanical Survey of India (B.S.I) roofed ethnobotanical studies which covered more than 30 diverse ethnic societies of 16 states of India (Sharma and Alam 2018).

According to 'All India Coordinated Research Project on Ethnobiology' (AICRPE) which had inputs from Botanical Survey of India (B.S.I), National Botanical Research Institute (N.B.R.I), Central Drug Research Institute (C.D.R.I), Tropical Botanical Garden and Research Institute, collected valuable information according to which about 10,000 species of wild plants have been used by ethnic people to satisfy their all requirements.

So, much information is already available by the great efforts of ethnobotanists of the country nevertheless there is always a scope to update the existing knowledge for the future. Keeping this in view it was found that no consolidated account about the aromatic and medicinal plants that are used by Indian tribes is available till date. Therefore, this article is an attempt to provide an all-inclusive account on this important aspect of ethnobotany. In this article, with the exhaustive study of available literature, a compilation of Indian tribes setting has been done and all the aromatic plants having medicinal value have been placed together (Mittre 1981; Sasikala et al. 2019).

5.3 Outline of Indian Tribes

To begin it must be noted that the list of Scheduled Tribes is State/Union Territory explicit and a community acknowledged as a Scheduled Tribe (ST) in a state need not be ST in another state. The insertion of a tribe as a Scheduled Tribe is a dynamic

process. The indispensable features first laid down in 1965 as the Lokur Committee which had a purpose to identify a community to as Scheduled Tribes. Those important features are:

(a) Indications of primitive traits;
(b) Distinctive culture;
(c) Extremely low literacy; and
(d) Subsistence level of economy.

5.3.1 Distribution of Tribes

The Scheduled Tribes are notified in 30 States/UTs and the number of individual ethnic groups, etc. notified as Scheduled Tribes is 705.

The tribal populace of India, as per 2011 census, was 10.43 crore, sharing 8.6% of the total population. About 89.97% of them are living in rural areas and 10.03% in urban areas.

The decadal population growth of the tribes from Census 2001 to 2011 was 23.66% against the 17.69% of the entire population.

The trend in ST population since Census 1961 is illustrated in Table 5.1. From 30.1 million in 1961, the ST population has increased to 104.3 million in 2011 (Alam 2020).

It can be observed from maps that more than 2/3 of the ST population is residing only in the 7 major states, *viz*., Madhya Pradesh, Chhattisgarh, Jharkhand, Maharashtra, Odisha, Rajasthan, and Gujarat. Surprisingly, there is no ST inhabitants in 3 States (Delhi-NCR, Punjab and Haryana) and 2 UTs (Pondicherry and Chandigarh).

Table 5.1 Trends in proportion of scheduled tribe population

Census year	Total population (in millions)	Scheduled tribes population (in millions)	Proportion of STs population
1961	439.2	30.1	6.9
1971	547.9	38.0	6.9
1981#	665.3	58.1	7.8
1991@	838.6	67.6	8.1
2001$	1028.6	84.3	8.2
2011	1210.8	104.3	8.6

Excludes Assam in 1981@ Excludes Jammu & Kashmir in 1991 (The figures exclude Mao-Maram, Paomata and Purul sub-divisions of Senapati district of Manipur, census 2001)

Source: www.census2011.co.in

5.3.2 *Major Tribes of India*

It is noticed that every 20th person on the earth belongs to tribal societies. Tribal culture occupies a significant role in our sociological society. Tribal can be called as the sons of the soil, as they are artistic of their place and also familiarize with living in absolute synchronization with nature. Tribal are dispersed in about more than 70 countries all over the world. More or less 150 million tribal found in Asia; out of which in China and India about two third of earliest people are lived.

In case of distribution of tribes on the globe, India possesses the highest traditional populations in comparison to other countries (Fig. 5.1).

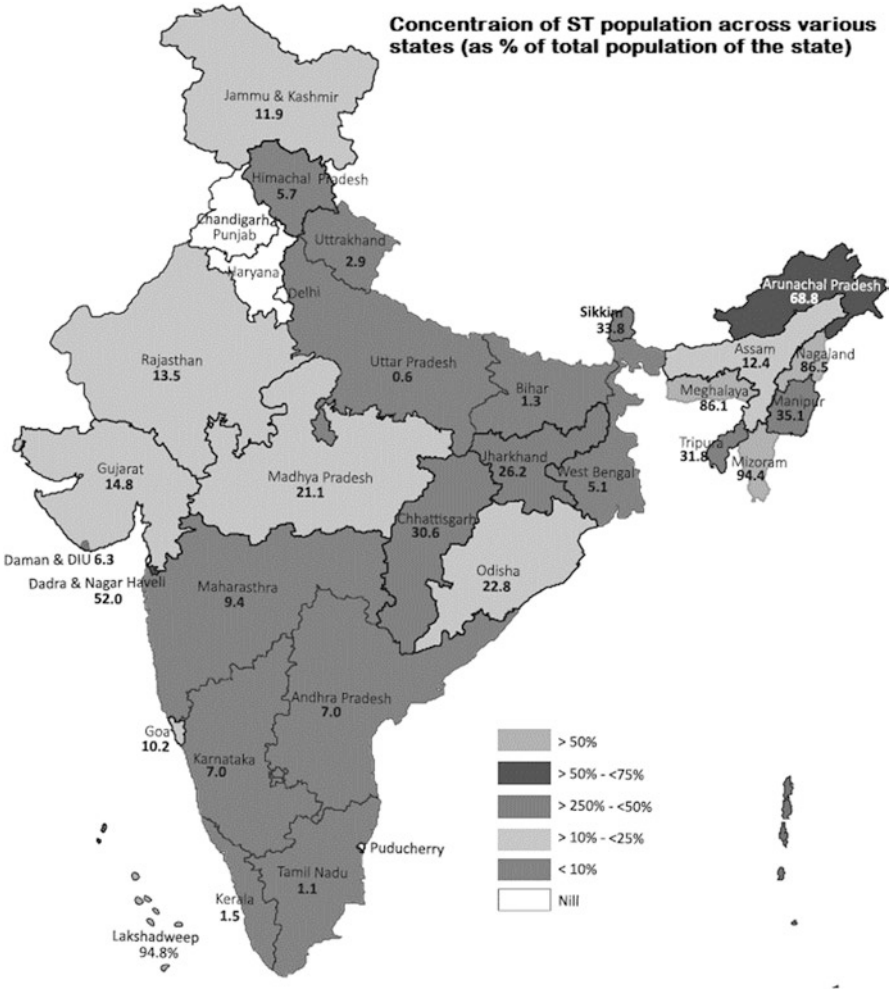

Fig. 5.1 Percentage of ST population in India. (Source: Census 2011 by Registrar General of India)

Different anthropologists called them by various names in different regions of India. e.g., Martin and A. V. Thackkar (Uprety et al. 2010) called them as 'Adivasis or Aborigines', termed them as 'Forest tribes' or 'Folk' (Kirtikar and Basu 1935, 1980; Jain 1991, 1994).

As designated by numerical data available the Indian subcontinent is populated by 53 million tribes occurring to over 650–700 tribal culture of 227 traditional groups.

Tribes add up to 7.7% of India's population. Out of which few are prehistoric tribes such as Lepchas and Rajis, which are facing problem of disappearance. So, for safeguard of tribes the constitution of India establishes some special concern under Article 46.

The importance of tribal cannot be estimated by their amplification and distribution. For example, "Toda" has possessed very small population, so it was ignored by ethnobotanists for a longer time period.

There are some tribal cultures in India which are called as earliest human population on this earth which are totally restricted in forest areas for their survival. Such societies include Jarawas, Sentineles and Shompens of Andaman and Nicobar Islands.

These tribes are totally dependent on hunting, food gathering and fishing. These tribes are behaving as massive protector of biodiversity as they follow various taboos and totems for securing the regeneration of wild plant species (Jain 1994).

There are several major tribes like – Khasi, Garo and Nagas form North East (Moa et al. 2009), Khonds from Odisha, Santhals from Bihar, Gonds from Central India, Bhotia, Khus, Boksa from Uttar Pradesh and Uttarakhand, Dabla from Gujarat, Kinnaur from Himachal Pradesh, Irula from South India, Bhils; Damors; Garasias; Kathodias; Meenas from Rajasthan (Table 5.1).

According to 1951 census, 5.6% of the total Indian population was tribal. While in accordance to the year 2011-Census, the number of scheduled tribes was '10, 42, 81,034'. It was 8.6% of the total population of India at that time. A total of '9, 38, 19,162' people belonging to scheduled tribes were residing in rural areas whereas 1, 04, 61,872 people shifted to urban areas.

According to census-2011, there were about 550 schedule tribes in India, constituted 11.3% of the total population of rural areas and 2.8% of urban areas.

5.4 State Wise Representation of Tribes and Major Uses of Plants

5.4.1 Andhra Pradesh and Telangana

Andhra Pradesh is considered as a home for 33 tribal communities, *viz*., Lambada, Yarukala, Yanadi, Valmiki, Porja, Kondh, Bagata, Konda Kapu, Konda Reddy, Koya Dora, Konda Kammara etc.), which possess 6.59% of the state's population (Reddy 2008). They have knowledge of different drugs used for their ailments (Ratnam and

Raju 2008; Naidu 2011; Nadakarni 2013). These tribes tend to use the ambient plant wealth for the cure of skin diseases, burns, cuts, diabetes, backache, leucorrhoea, veterinary diseases, dysentery, scorpion sting, tumors, anthrax, malaria, worm infestation etc. (Kapoor and Kapoor 1980; Pullaiah 2007; Reddy et al. 2010). There is chance for cultivation of various native medicinal plants (which are produced by Pharmaceutical Companies of Andhra Pradesh and other states of India) by Government and Private Firms for establishing crude drug extracts of drug plants. This can increase the quality of Ayurvedic medicines and thus trust of tribal on native systems of medicine.

5.4.2 Arunachal Pradesh

Arunachal Pradesh is the only state in North East region of India having 28 major tribes along with 110 subtribes (Nath and Saikia 2002; Tag et al. 2005). The rich floral diversity of the state has given the immense benefit to its residents to understand, use, and conserved their natural resources and traditional knowledge base. There are over 500 plant species which has been mentioned from Arunachal Pradesh. The folks of Arunachal Pradesh find their way to survive by using natively accessible medicinal plants (Namsa et al. 2011).

5.4.3 Assam

There are some major tribes like – Rabha, Bodo, Garo, Hajong which found in Assam state. Beyond Assam, these tribes are also present in Meghalaya, Manipur, West Bengal. They utilize many plant species in their daily life (Tamuli and Ghosal 2017).

The Thengal-Kacharis tribe of Assam has the indigenous acquaintance on diseases as well as their remedies with the outmoded use of diverse parts of natural herbals, *viz*., roots, leaves and shoots etc. From which they treat patients suffering from different serious ailments. Thus, Thengal society has sturdy confidence on herbals to cure many human diseases (Borah 2014).

5.4.4 Bihar and Jharkhand

There are many prominent tribes exist in Bihar and Jharkhand states. Santhal tribe is considered as the second larger most tribe after Gond and it is present in Bihar, Bengal and Odisha states. In Bihar, this tribe is found in Dhanbad, Hajaribag, Singhbum, Purnia, Bhagalpur and Saharsa (Prasad and Singh 2014; Dey and Mukherjee 2015).

The Oraon tribe is also commonly called as Dhangar and present near Raigarh and Surguja districts of Madhya Pradesh. They use various herbal drugs, tubers, bulbs, flowers and fruits of various species to cure many diseases. They believe in use of folk medicines in the treatment of their diseases.

5.4.5 Chhattisgarh

Chhattisgarh is gorgeous in terms of its forest resources; approximately 44% area of the state is under forest cover. Kanwar, Oraon, Korva and Gond tribes of this state use many medicinal plants as traditional knowledge (Dubey and Bhadur 1996; Patel 2012).

5.4.6 Gujarat

In this state of west about 5 million tribal populaces is living. Among all the Bhil tribe account for over 50% of the total Gujrat's tribal population. Most of the tribes claim descent from few clans, viz., the Solanki, Rathod, Chauhan, Makwana and Parmar. The main tribes of this state are Bhil (Taviyad/Garasia/Dholi/Dungri/Mewasi), Bhilala, Bhagalia, Vasava, Pawra, Vasave, etc. (Patel et al. 2018).

5.4.7 Himachal Pradesh

Due to varied altitudinal gradients and climatic conditions, this state possesses rich plant diversity, which includes around 3400 plant species (Chowdhery 1999). The state of Himachal Pradesh consists of various tribal like- Gaddi, Gujjar, Kinnura, Bhot or Bhotia, Swangla, Lahaula and Pangwal (Sharma and Lal 2005).

5.4.8 Jammu and Kashmir

Jammu and Kashmir can be authentically stated as the most sublime and out-of-this-world locale amidst the Himalayan splendor. Jammu and Kashmir are an abode to quite several tribal communities, who have settled down in every corner of this hilly region. The tribal and their places, the tribal and their customs, their cultures, their means of communication, or simply their culinary arts, makes the tribes of J&K stand out from the rest of Indian tribesmen. Gujjar and Bakarwal tribes of Jammu and Kashmir interpreted various medicinal and aromatic plants (Gupta et al. 1982; Sharma and Singh 1989).

5.4.9 Karnataka

These tribes of this southern state have built their settlements in some hilly and hilly areas. These tribes of Karnataka state interact with each other in dissimilar languages, however Kananda is their main language. However, they possess their separate tradition and ethnicity. Some of them are also supposed as being originated from the ancient warrior race (Bhandary et al. 1995; Narayanan et al. 2011).

5.4.10 Kerala

In Kerala the prominent tribes are Panyan, Irula, Pulaya and Kadar. These tribe have a rich heritage of adapting the profession of forests product collection and some of them are the practitioners of rituals and medicines. A tribe, Malaipandaram settled in the mountainous forest near to Sabarimala (Prakash et al. 2008; Xavier et al. 2014).

5.4.11 Madhya Pradesh

Central India also hosts rich flora of medicinal significance. Regions like Vindhyachal, Aravali ranges, Bailadilla Hills, Satpuda, Abhujmar, Khurchel valleys, Kanger reserve, Amarkantak, Pachmarhi and Patalkot areas major reservoirs (Wagh and Jain 2010a, b). As observed earlier, total 500 species of medicinal plants found in which some are economically important medicinal plants that are now on the verge of extinction. The major tribes are Pardhi, Pawara and Bhil tribes who used the traditional medical practices (Sharma et al. 2010; Kumar et al. 2004).

5.4.12 Maharashtra

Tribes of Maharashtra are the primitive people of this region and are dispersed in different parts of the state. Mostly they are the inhabitants of the hilly areas. Some of the tribes are of primitive and nomadic character. Tribes like Warli Tribe, Bhil Tribe, Koli Tribe and Halba Tribe are some of the tribes that inhabit in the land of Maharashtra. They have their characteristic language, clothes, folklores, rites and (Natarajan and Paulsen 2000).

5.4.13 Manipur

The state has a central valley (Imphal Valley) populated by the Meitei and Meitei pangal whereas the hilly areas are settled by 30 different tribes of Naga and Kuki tribes (Yumnam and Tripathi 2012). The North – Eastern region of India including Manipur is part of both Himalaya as well as Indo-Burma biodiversity hotspots in the world supporting about 50% of the total India's biodiversity but represent only 8% of the total geographical area of India (Moa et al. 2009). In Manipur, the Meitei tribe inhabiting in the valley regions have the traditional knowledge of eating minor and underutilized fruit crops as medicine from time immemorial to treat different ailments and are associated with various folklore and rituals, which are performed by traditional herbal healers of medicinal men and women locally known as "Maibas" and "Maibis" (Singh et al. 2003).

5.4.14 Meghalaya

Meghalaya is a climatic gift of nature that gives rushes of rain to this region, which inclined by the Southwestern monsoon due to the Bay of Bengal. The Meghalaya state is divided into three mountainous regions, *viz*., Garo Hills (Western part), the Khasi Hills (Central part) and the Jaintia Hills (Eastern part). The tribes of this state are also residing well in these parts and enjoying the nature's gifts (Rao 1981; Kayang 2007).

5.4.15 Mizoram

Medicinal plants are the second most resources of Mizoram after water resources. Medicinal plants such as *Swertia* spp., *Neopicrorhiza*sp., *Podophyllum* sp., *Taxus wallichiana, Podocarpus* sp. are highly demanded and globally important. Thus, around 500 to 1000 ethnomedicinal and aromatic plants have been mentioned (Lalramnghinglova 1999). But one plant sp. i.e., *Parispolyphylla*, locally called Khambal of (family Liliaceae) has not been documented. High valuable medicinal plants constitute basis for advanced allopathic drugs development and the use of aboriginal drugs from plant origin which form major part of complementary medicine (Joshi et al. 2004).

5.4.16 Nagaland

This state has 16 major tribes – Ao, Angami, Chakhesang, Chang, Khiamniungan, Konyak, Lotha, Phom, Pochury, Rengma, Sangtam, Sumi, Yimchunger, Zeliang, Kuki, and Kachari. Each tribe is exclusive in character in its linguistic, custom. Nagaland has basically an agricultural economy. With its different agroclimatic conditions has several types of forest and is covered with coniferous trees, broad varieties of flora, medicinal plants, bamboos, and thus has huge potential to utilize and cultivate various types of medicinal and aromatic plants. Phom tribe of Longleng district constitutes a great role in use of medicinal plants. Angamis tribe (Khonoma village) of Nagaland is needed to make careful use of the resources, so that the integrity and traditional knowledge is not lost (Rao and Jamir 1982a, b).

5.4.17 Odisha

Tribes of Odisha comprise a great variety with exclusive and vibrant socio-cultural life. The total population of tribes living in the state of Odisha is much more than other places in India. Their distribution in different districts however varies. Kalahandi, Koraput, Rayagada District, Naurangpur and Malkangiri are some of the districts of Odisha where more than 50% of the total population is tribal. The name of Saora tribe (or Sabar) is mentioned in the great Hindu epic of Mahabharata. The tribes of Odisha belong to three linguistic divisions, namely Dravidian, Indo-Aryan and Austric. These tribes follow the trend of building their houses with bamboo and thatched roofs (Sahu et al. 2011).

5.4.18 Rajasthan

The total area covered by tribes in Rajasthan is 5,474,881which is 12.44% of the total population of this state. The tribes of Rajasthan constitute 8.07% of the total tribal population of India. Several tribes inhabited in the state of Rajasthan, namely – 'Bhil', 'Bhil-Meena', 'Garasia' 'Damor', 'Dhanaka', 'Kathodia', 'Meena', 'Patelia' and 'Saharia'. Out of which, there are some nomadic, semi-nomadic tribes. Nomadic tribes are 'Banjara', 'Gadia–Lohar' and 'Kalbelia', whereas semi-nomadic tribes are 'Rebari', 'Jogi' and 'Masani'. 'Bori', 'Kanjer', 'Sansi', 'Bhat' are included in de-notified tribes. The most common plants recorded are *Curcuma longa, Vitex negundo, Ocimum sanctum, Sesamum indicum* and flour of *Cicer aritinum* which used as ethnomedicinal purposes (Sebastian and Bhandari 1984; Trivedi 2002; Jain et al. 2005; Sharma and Kumar 2011; Sharma and Kumar 2012).

5.4.19 Sikkim

It is also a beautiful Indian state with great floral wealth. This small state is also a home to the common ethnic Gorkhali folks which comprise tribes via., Limbu (Subba), Gurung, Chhetri, Newar, Thakuri, Sherpa, Tamang, Magar (Manger), Shresthas, Kami, Sunuwar, Kirat Rai, Sarki, Hyolmo and Damai (Jha et al. 2016).

5.4.20 Tamil Nadu

The tribes of Tamil Nadu encompass noteworthy population ranging from diminishing to immense. A prominent fact about these Tamil tribes is sharing of enormously opposing and accompanying relationship among them. For instance, a precise tribe is involved in rational activity like tea/coffee cultivation, or dairy, and on the other tribe is involved in yet-primordial activities like witchcraft or occult. The Todas community inhabit as the dominant amongst the other tribes. The Kotas and the Irulas are also notable in the tribal section of Tamil Nadu, excelling mainly in handicrafts work and agriculture (Sharma and Alam 2018). The valuable contributions of ethnobotanical interests on Tamil Nadu given by Ramachandran and Nair (1982), Ansari and Dwarakan (1993), Kaushik (1988), and Kaushik and Dhiman (2000).

5.4.21 Tripura

Tripura tribes *viz*., Jamatia, Chakma, Halam, Kuki, Santhal, Murasing,Chaimal, Uchoi, Magh, Garo, Lushai, Oraon, Mog, Bhutia, Lepcha, Bhil, Munda, Reang, Tripuri possess great familiarity on the medicinal plants and their utilization. So, their traditional knowledge can enhance the potential of these medicinal plants to other societies as well and it can lead to be helped in conservation of these plants for further use (Dipankar et al. 2012; Debbarma et al. 2017).

The Ochoi possesses rich knowledge about treatment of minor diseases and perform many enchanted rites and worships for cure of diseases (Majumdar and Datta 2007). But with the time, their knowledge is vanishing rapidly due to lack of documentation and loss of interest.

5.4.22 Uttar Pradesh and Uttarakhand

The major tribal populace of Uttaeparadesh and Uttarakhand are Tharu, Raji, BhotiaJaunsari, and Bhoksa. They are mainly residing in the Uttarakhand encompassing areas like Uttar-kashi, Tehri Garhwal, Pauri Garhwal, Champawat, Almora,

Chamoli, Bageswar, Haridwar, Nainital, Pithoragarh, Dehra Dun, Udham Singh Nagar and Rudraprayag. The tribal populace of Uttar Pradesh mostly hails from few hilly regions of U.P. and belongs to the Jat or the Gujjar race. These tribal people are mainly inhabiting in those districts which are adjacent to Nepal and be indebted for their lineage to the Indo-Aryan and Indo-Scythian tribes (Sharma et al. 2010; Singh and Singh 2009; Sharma et al. 2017).

5.4.23 West Bengal

The state of West Bengal has a mixture of tribes from Odisha, and Jharkhand. The diversity of state is evident from its population, individual count and of course the intellectual stamina of the people residing in this region. This state includes tribes like - Santal, Lodha, Munda, Oraon (Maji and Sikdar 1982; Dey and De 2012).

5.4.24 Andaman and Nicobar

Tribes of this particular state are - Nicobarese, Shompens, Jarawas, Sentinels, Onges and Great Andamanese and Karen tribes. The traditional knowledge of these tribes is disappearing along with its natural resources due to lack of support and recognition. Due to existence of wide biodiversity, there are about 71 medicinal plants in the island which are now endemic (Dagar and Dagar 1991).

States like Delhi, Haryana, Panjab, Goa are not known for their tribal communities.

5.5 Discussion

The present study reveals the great diversity in Indian tribes inhabiting in different phyto-geographical regions of the country with mutual understanding with their floral wealth. Based on this review it can be said that because of tribal communities, the modern researchers got valuable information regarding plant uses including medicinal and aromatic plants. The tribal communities are conserving and protecting this floral wealth across India. India contains two hot spots of biodiversity because of these tribes, as one can correlate the populations of tribal communities in these two hot spots of biodiversity, i.e. Eastern Himalayas and Western Ghats.

This review reveals the intimate relationships among the tribes and floral wealth and through light on this neglected relationship in the conservation of biodiversity. It can be said that all these tribal populaces have great knowledge of medicinal and aromatic plants, and surprisingly the use of particular plant of plant parts are more or less same among these tribes, though they have their uniqueness in other aspects

of life. So, the floral wealth of the country is successful in binding the diverse cultures by their exclusive significance. Although the plants have different names across the country, but they have somewhat same medicinal uses. This review is about the aromatic plants only and based on all available literature total 134 aromatic plants (Table 5.2) with medicinal properties have been listed along with their uses.

5.6 Conclusions

As we know medicinal plants play a vital role in ancillary wellbeing in India. From previous studies, it is estimated that around 75% of the population occupying in pastoral or rural areas are adjacent to the natural wealth and have vast knowledge about traditional use of medicinal and aromatic plants presented among prehistoric peoples for ages in India.

Medicinal plants continue to provide health security to millions not only in India but also all over the world. As far as India is concerned around 17,000 angiosperm taxa of the designed 25 hotspots in the world and due to which this constitutes 550 tribes having rich knowledge of traditional uses of medicinal and aromatic plants (Singh and Panda 2005).

Although a variety of studies has been conducted all over India, this attempt finds that the traditional knowledge of medicinal and aromatic plants among population of tribes is still under-documented because only 134 valid plant species have been listed here on the basis of previous work done by the researchers. However, this number can increase further in future because now the ethnobotanical research is regaining attention of botanists and herbalist after a dark phase.

Thus, by this review article an attempt was made to find out the aromatic plants that were mentioned in ethnobotanical text to provide a base for ongoing and future work in this direction.

5.7 Future Prospects

Traditional knowledge of the use of plants has always been transmitted from one generation to another generation. But now, the continuation of this knowledge is in threatened because of lack of transmission between younger and older generations. The young generations of these tribes are willing to settle in urban areas of the country hence causing a lacuna in the information transmission. Therefore, there is an urgent need to inventory and record all ethnobiological information of all tribes not only in India but all over the world. Thus, it is a duty of government, Non-Government Organizations (NGOs), and all of us to protect their habitats and culture and encourage them to stay at their native places and continue to traditions in

Table 5.2 List of medicinal and aromatic plants used by different tribes for various medications India

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
1.	*Alnus japonica* (Thunb.) Steud.	Betulaceae	Maibau	Tribes of North East India, Odisha and South India	The plant is well known for its traditional uses in the treatment of various diseases like stomachache, diarrhea rheumatism, dysentery, fever, etc. Nowadays this plant is also used to treat Cancer.	Kaur et al. (2001), Sati et al. (2011).
2.	*Allium hookeri* (Thw.) Enum	Liliaceae	Kanda	Tribes of Manipur	Bulbs and leaves are used to treat respiratory and skin problems.	Ayam (2011)
3.	*Aloe vera* (L.) Burm. f.	Asphodelaceae (Liliaceae)	Cherukattazha, Gheekumari; Kathalai, KattarVazha, Khorpad	All tribes of India	Extract of leaves is used as skin healer. It helps to calm skin injuries due to burning, skin irritations, wounds and insect bites. It also has bactericidal properties hence relieves itching and swellings in skin.	Jani et al. (2007), Salehi et al. (2018)
4.	*Alstonia scholaris* (L.) R.Br.	Apocynaceae	Sapthaparna	Tribes of both Eastern and Western Himalayas	it is used a mordant herb for treating skin disorders, malarial fever, chronic dysentery, diarrhea and in cases of snake bite	Jain et al. (2009)

5.	*Ampelocissus latifolia* (Roxb.) Planch.	Vitaceae	Dhodo	Tribes of Central India, Maharashtra, Uttar Pradesh, Bihar, and Western Himalayas	The root paste is used on old wounds. The ripe fruits are eaten as a good source of vitamins	Pednekar et al. (2014)
6.	*Andrographis paniculata* (Burm. f.) Wall. ex Nees	Acanthaceae	Bhui-neem, Kalmegh	Tribes of Odisha, Tibes of Tripura (Jamatia, Chakma, Halam, Kuki, Chaimal, Uchoi, Magh) and Chattisgarh (Kanwar)	This plant is one of the most popular medicinal plants with traditional uses in the treatment of various diseases like tumors, diabetes, hypertension, ulcer, leprosy, respiratory problems, influenza, malaria, skin diseases, flatulence, colic, dysentery, dyspepsia, etc. Also use to treat dog bite with some mantra and they used powder rice.	Hossain et al. (2014)
7.	*Angelica glauca* Edgew.	Apiaceae	Chora	Tribes of H.P. and Uttarakhand (Gaddi, Gujjar, Kinnura, Bhot/ Bhotia, Swangla, Lahaula and Pangwal, etc.)	The young roots and root powder are used in treatment of digestive system related problems like dyspepsia and stomachache.	Dhar et al. (2000)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
8.	*Annona muricata* L.	Annonaceae	Ata-phal	Tribes of North East India	It is a traditional medicine for the treatment of malaria in which the decoction of bark, root, seed and leaves is used. Besides malaria it is also used to treat the stomachache, parasitic infections, diabetes, and tumors.	Abdul Wahab et al. 2018
9.	*Annona squamosa* L.	Annonaceae	Sitaphal, Ata phol, Ganda gathram	Tribes of North Eastern India (except Sikkim), South India, Rajasthan and Central India	It has been used Traditionally it is used to treat the conditions of Diarrhea, Dysentery, common cold and cough, and as an Insecticidal.	Pandya (2011)
10.	*Argemone mexicana* L.	Papavaraceae	Satyanashi, Kateli, satyanashi, Darudi	Tribes of Assam (Oraon tribe, Chakma, Dimasa, Garo, Hajong, Hmar, Khasi), Rajasthan and Gujarat	The whole plant is effectively used in the cases of guinea-worm infestations, as purgative and diuretic agent. Seeds are used as an antidote in snake bite and also as an expectorant, emetic, demulcent and also as a laxative. Seed oil is used to treat skin diseases leprosy and inflammations. Roots are used as anthelmintic.	Priya and Rao (2012)

11.	*Asparagus racemosus* Willd.	Liliaceae (Asparagaceae)	Utro, Satamul, Satmuli, Karangi	Tribes of Assam (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi), Tribes of West Bengal, Korwa Tribe	Invariably root powder is used to treat malaria fever. Leaves and roots are given orally to treat bloody dysentery, bloody urine, Epilepsy, Filarial fever, Nocturnal emission, Biliary Colic, Hematemesis, etc. Root extract used as health tonic.	Bopana and Saxena (2007)
12.	*Azadirachta indica* A. Juss.	Meliaceae	Neem	All tribes of India	Whole plant is widely used in traditional medicine systems to treat various skin disorders and diabetes, as insecticides\pesticides Leaves are used to cure snake and scorpion sting.	Kumar and Navaratnam (2013)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
13.	*Boswellia carteri* Birdw.	Burseraceae	Salai, Salai guggul	Tribes of Andhra Pradesh, Gujarat, Madhya Pradesh, Jharkhand and Chhattisgarh	In traditional medicinal texts it is registered as an effective remedy for diarrhea, dysentery, ringworm, boils, fevers, skin and blood diseases, mouth sores, bad throat, cardiovascular diseases, jaundice, hemorrhoids, cough, bronchitis, asthma, vaginal discharges, hair-loss, syphilitic diseases, stimulation of liver and irregular menses.	Siddiqui (2011)
14.	*Calendula officinalis* L.	Asteraceae	Genaduk, Jaragul	Tribes of South India, Odisha and Assam	The plant possesses antiviral, antifungal, antibacterial, antimutagenic, reno-protective, hepatoprotective, free radical scavenger, anti-inflammatory properties and used to treat problems related to central nervous system.	Shivasharan et al. (2013)
15.	*Cayratia carnosa* L.	Vitaceae	Kalitripanni	Tribes of Assam and adjacent regions (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi)	This plant is used as diuretic, to cure tumors, neuralgia and spleno-pathic situations.	Kumar et al. (2011)

16.	*Celastrus paniculatus* Willd.	Celastraceae	Jayotismoti, Kujri, Malkangni, Kujari	Tribes of West Bengal (Snatali)	Paste of complete young and healthy plant is used to cure constipation and also as an abortifacient. The seed oil used to heal the wounds	Kulkarni et al. (2015)
17.	*Centella asiatica* (L.) Urban	Apiaceae	Brahmibuti, Ngyarikor, Beng Sag, Brahmi Buti, Gotu Kola	Tribes of Assam (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi) and Arunachal Pradesh (Apatami, Mongpa, Singpho and Tangsa tribes) and Oraon tribe	The plant extract mixed with water is taken as tonic against various neurological disorders, tuberculosis, leprosy and dysentery. Whole plant is used to increase appetite.	Gohil et al. (2010)
18.	*Chlorophytum tuberosum* Baker	Liliaceae	Safed Musli	Tribes of North east India, Central India and South India	This plant is well known as traditional herbal medicine mainly for treating various illnesses viz., diabetes, sexual disorders, kidney stones, diarrhea, cholera, leucorrhoea, general debility, etc.	Patil and Deokule (2010)
19.	*Chloroxylon swietenia* (Roxb.) DC.	Rutaceae	Bharhi, Dhoura, Girya, Hurihulli,	Tribes of Odisha, Madhya Pradesh, Andhra Pradesh, Karnataka, Kerala and Tamil Nadu	The leaf paste is used to cure the swelling in legs.	Srivastava et al. (1998)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
20.	*Cissampelos pareira* L.	Menispermaceae	Peepra mool, Heir, Jaljamni, Korya-padbin, Padh, Bhatve	Tribes Madhya Pradesh, Chattisgarh, Bihar, West Bengal and Assam (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi)	Roots are used to treat fever, leprosy, prolonged cough, chronic skin diseases like blisters.	Sood et al. (2015)
21.	*Cissus quadrangularis* L.	Vitaceae	Harjora lota, Adamant creeper, Kynbat–harjora	Tribes of Meghalaya, Manipur, West Bengal (Rabha, Bodo, Garo and Khasi)	Plant paste is applied topically in the cases of fractures/dislocation of bones. Leaf juice is used as an alternative of ear drop to treat otorrhea. Powder mixed with mustard oil is used in treating rheumatoid arthritis.	Brahmkshatriya et al. (2015)
22.	*Citrus maxima* (Burm.) Mitt.	Rutaceae	Obakotru, Pamparamasam	Tribes of North eastern India, South India, Rajasthan, Maharashtra and Gujarat	This plant has varied medicinal uses; traditionally used for the treatment of convulsive cough, epilepsy, and hemorrhagic Also used as sedative by some tribes.	Singh et al. (2018)

23.	*Cleome gynandra* L.	Capparaceae	Hulhul, Bagro	Tribes of North Eastern India and south India	Roots of the plant are used in chest pain; leaves used for the treatment of diarrhea. The decoction of seeds is used in fever and leaf decoction in headache. Traditionally the plant is uses as rubefacient and vesicant therefore beneficial in case of rheumatism, applied externally as well as orally taken.	Singh et al. (2009)
24.	*Cleome viscosa* L.	Capparidaceae (Cleomaceae)	Nayivelai	Tribes of South India, Central India, North India, Rajasthan and Gujarat	In cases of scorpion sting and snake bite, paste of leaves is applied on the affected portions. Also used for the treatment of rheumatic arthritis, malaria, neurasthenia, and as a common wound healer.	Mali (2010)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
25.	*Cocculus hirsutus* (L.) Diels	Menispermaceae	Kattukkodai	Tribes of Tamil Nadu	Various plant parts have different uses in local medicinal system viz., the leaf juice to treat eczema. Roots decoction is used as an antipyretic and stomach related problems. The leaves are known to treat skin infections and itchy skin, rheumatism and gonorrhea. Root juice is taken as a tonic and alterative and as a diuretic and laxative.	Dhirajal et al. (2019)
26.	*Codiocarpus and amanicus* (Kurz) R.A.Howard.	Stemonuraceae	Lansot	Tribes of Andaman and Nicobar	Leaves are used for the treatment of urinary tract infections, kidney problems, constipation and other stomach related problems.	Sharma et al. (2018)
27.	*Colchium luteum* L.	Colchicaceae (Liliaceae)	Suranjantalkh	Tribes of Jammu And Kashmir and Himachal Pradesh	As a traditional medicine the plant parts like corms and seeds are used for treatment of gout, rheumatism, liver and spleen related ailments. The extract of seed used as health tonic.	Kapur and Singh (1996)

28.	*Coleus barbatus* Andr.	Lamiaceae	PashanBheda, Pathar Chur, Fiwain	Tribes of Odisha and Uttarakhand	Roots are used to destroy out kidney stone/calculi. In traditional medicine, plant has also been used to treat spasmodic pain, heart diseases, painful urination and convulsions.	Sharma and Vasundhara (2011)
29.	*Commiphora myrrha* (Nees) Engl.	Burseraceae	Bola, Bol, Hirabol	Tribes of Himalayan regions	It has been used in traditional medicines against a many disease such as ulcerative colitis, fever, skin infections, problems of gall bladder, tumors, dysmenorrhea, amenorrhea, chest pain and burning sensation.	Hashim et al. (2016)
30.	*Commiphora wightii* (A.) Bhandari	Burseraceae	Guggal, kungiliyam, gukkal,	Tribes of Assam (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi); Tribes of Gujarat and Rajasthan	Plant parts are used for the treatment of Arthritis, Hemorrhoids, joint pain, etc. Gum resin is used to treat rheumatized arthritis, paralytic conditions and as laxative.	Qureshi and Chahar (2013)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
31.	*Costus speciosus* (J. Koenig) Sm.	Costaceae	Jamlakhuti, Ketki	Thengal Kachari tribes of North Eastern India (Apatami, Mongpa, Singpho and Tangsa tribes)	Fresh roots of the plant are taken to clear the respiratory blockage and young stems are eaten to treat burning sensation during urination.	El-Far et al. (2018)
32.	*Crinum defixum* Ker-Gawl	Amaryllidaceae	Sukhdarshan, Bon-naharu	Tribes of Assam and adjacent states (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi)	Leaf extract is commonly applied for the treatment of pimples, body-ache and dropsy, the bulbs have emollient, nauseate, emetic and diaphoretic properties hence used in various conditions of inflammation.	Trivedi (2007)
33.	*Croton roxburghii* Balak.	Euphorbiaceae	Putri	Tribes of Odisha and West Bengal	The young plant parts are used in the cases of snake bite, to treat pain and inflammation, stomach trouble, indigestion, liver disorders like jaundice; as cardio tonic and purgative, etc. The root and stem bark paste are beneficial in dysentery, while the poultice is used in muscular pain.	Panda et al. (2010)

34.	*Cryptolepis buchanani* Roem. & Schult.	Asclepiadaceae	Kankrashringi, Nedashringi, Karilata, Utri dudhi, Ananta mul	Tribes of West Bengal Meghalaya and, Manipur (Rabha, Bodo, Santali)	Root has demulcent nature, used as tonic in the cases of appetite loss, fever and skin diseases. It is having blood purification property and extensively used in leprosy and other skin diseases. Leaves are useful in the cases of rickets.	Dutta et al. (1978)
35.	*Cuphea aequipetala* Cav.	Lythraceae	Pani Jetuka	Tribes of Arunachal Pradesh, Assam, Nagaland and West Bengal	The plant is used as blood purifier, diuretic, purgative, emmenagogue, laxative and hypotensive agent. Also used to treat the cardiovascular diseases and menstruation problems.	Das et al. (2018)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
36.	*Curculigo orchioides* Gaertn.	Amaryllidaceae	Talmule or Hookakand	Tribes of Eastern Himalayan region	The plant is an important ingredient of many medicinal properties like aphrodisiac, antioxidant, hepatoprotective, immunostimulant, antitumor and antidiabetic activities. The root paste is mixed with castor oil and rubbed on skull in lunacy. The root decoction is used in cases of stomach trouble and dysentery	Joy et al. (2004)
37.	*Curcuma amada* Roxb.	Zingiberaceae	Am-ada, Phacheng, Amo-haldi	All tribes of India	The rhizome is used to treat various diseases of skin, pain and digestion.	Policegoudra et al. (2011)
38.	*Curcuma angustifolia* Roxb.	Zingiberaceae	Tikhur	Gond and Bhil tribes	Tubers are useful in the treatment of digestive problems. The root mixed with milk is used to cure weakness and rheumatism.	Prajapati et al. (2003)

39.	*Curcuma aromatica* Salisb.	Zingiberaceae	Haridra, Ban Haridra	Tribes of Kerala	Fresh rhizome applies to treat skin irritation and as a cure for pimples. Also used as a carminative, antidote to snake bites. It is used for bruises, corn, sprains, joint pains and is a well-known for enhancing complexion.	Sikha et al. (2015)
40.	*Curcuma longa* L.	Zingiberaceae	Haldi, Haridra	All tribes of India	Dried and fresh rhizome crushed along with kodasheri and the resultant paste is applied in the cases of insect's bite. Fresh rhizome crushed along with leaves of *Lawsonia* and neem and applied to the infected nail. Rhizome paste is also useful in the cure of pimples and to recover skin color and for nourishment.	Prasad and Aggarwal (2011)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
41.	*Curcuma zanthorrhiza* Roxb.	Zingiberaceae	Adavikachola, Manjakoova, Pulakizhangu, Kasthurimanjal	Tribes of Kerala	The powder with milk is useful in the treatment of diabetes and blood pressure patients. Conditions of liver damage, hypertension and cancer can also be cure by this plant.	Salleh et al. (2016)
42.	*Cuscuta hyaline* Boiss. ex Engelm.	Convolvulaceae	Hrvatski	Tribes of Assam, Central India, Soth India and Rajasthan	The stem is very useful in the treatment of bilious disorders. The whole plant has a purgative property. It is used in the treatment of protracted fevers, and externally to treat body pains and itchy skin. Also, helpful to treat trouble in urinating, conditions of jaundice, chest pain, muscle pain and coughs.	Ahmad et al. (2017)

43.	*Cuscuta reflexa* Roxb.	Convolvulaceae	Akasbel, Amarble,Verillakothan, Zarbut, Moodillathali, Akashbel	Thengal Kachari tribes of NE India	This miraculous plant is well known for its purgative nature, used internally in the treatment of protracted fevers, and externally in the treatment of various body pains and itchy skin. The vapors of boiled plants are used daily to treat body swellings and fever.	Lalchand et al. (2018)
44.	*Cydonia oblonga* Mill.	Rosaceae	Beeeh, Bom Chunth	Tribes of Jammu and Kashmir, Himachal Pradesh and Uttarakhand	The plant is used to treat several ailments *viz*., cancer, diabetes, hepatitis, ulcer, respiratory, and urinary infections, to cure sore throat, the seeds are chewed raw. Leaves, buds and bark have astringent property. Fruits are well known cardiac stimulant, tonic and expectorant.	Ashraf et al. (2016)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
45.	*Cymbopogon martini* (Roxb.) Watson	Poaceae	Rosha grass, Rauns, Thisankah	Tribes of Uttarakhand, Himachal Pradesh	The paste of the leaf and stem of is applied in the cases of scabies and discoloration of the skin. The oil extract is mixed with hot water and used for hot steam inhalation in condition of asthma and common cold.	Promila (2018)
46.	*Cynodon dactylon* (L.) Pers.	Poaceae	Dhoobghas, Durba, Garike, Phaitualhnim, Ambatehullu	Tribes of North eastern India like Mizoram, Manipur (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi, Korva tribes), and Karnataka	This grass is used as a coolant, laxative, expectorant, carminative and as a heart and brain tonic. Decoction of leaves is used to treat Leucorrhoea.	Nagori and Solanki (2011).

47.	*Dendrophthoe falcata* (L. f.) Ettingsh	Loranthaceae	Bandha	Tribes of Odisha, NE India, South India and Central India	Plant is invariably used in folklore medicine to treat diseases including ulcers, asthma, impotency, paralysis, skin diseases, menstrual troubles, pulmonary tuberculosis and wounds. The plant parts have diuretic, wound healing, anti-helminthic, anti-microbial, anti-fertility, anti-cancer, anti-diabetic, anti-hyperlipidemic, anti-hypertensive activities. The boiled flowers are used for regulating menstrual cycle.	Guptha et al. (2011), Gupta et al. (2020)
48.	*Dioscore abulbifera* L.	Dioscoreaceae	Paharikan, Suarkand,Ganthe	Tribes of Assam, Odisha and Andhra Pradesh	Plant and plant parts are used to treat constipation, piles, dysentery and syphilis. The young tuberous roots are usually eaten during the onset of the rainy season. Also used against snake bite	Kundu et al. (2020)

(continued)

Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
49.	*Dioscorea vexans* Prain & Burkill	Dioscoreaceae	Getti	Tribes of Andaman and Nicobar	Tubers are used for the treatment of asthma, arthritis, chronic cough, eczema, diarrhea, diabetes, regular metabolic activity.	Sharma and Bastakoti (2009)
50.	*Diospyros melanoxylon* Roxb.	Ebebaceae	Tendu, Tendu-Seeta	Tribes of M.P., Chhattisgarh, Andhra Pradesh, Odisha	The ripened fruits are eaten by tribal people. However, both unripe, as well as ripe fruits have been used in folk-medicine system, especially by the by the Oraon tribe in the incidence of syphilis.	Tiwari (2018)
51.	*Echinops grijisii* Hance	Asteraceae	Kantela	Tribes of Uttarakhand, Himachal Pradesh and Jammu & Kashmir	This plant is used to treat variety of pains, inflammation conditions, respiratory diseases, diseases due to exposure of different microorganisms. The plant has aphrodisiac nature hence used to fasten expulsion of placenta, and also for removal of kidney stones.	Dangwal et al. (2011)

52.	*Ehretia laevis* Roxb.	Boraginaceae	Tamboli, Pushipan, Khandu Chakka	Tribes of West Bengal; Maharashtra, Uttarakhand	Juice of leaves given to treat dysentery, to kill intestinal worms, and also applied externally on wounds. Paste of leaves used on joint and minor fractures to relief pain.	Sharma et al. (2014)
53.	*Elettaria cardamomum* (L.) Maton	Zingiberaceae	Elakkai	Tribes of Tamil Nadu, Kerala and Karnataka.	Power of seeds with honey is taken to cure vomiting, while seed powder mixed with coconut water is used to cure urinary problems. The plant is also known to control asthma, to prevent teeth and gum infections, to treat cataracts, nausea, diarrhea, also to cure digestive, cardiac, and kidney disorders	Kaliyaperumal et al. (2020).
54.	*Elytraria acaulis* Lindau	Acanthaceae	Patharchatta	Tribes of Assam and adjacent regions	Plant is used to treat the abscess of mammary glands, boils, burns. Also useful in the treatment of asthma, migraine, leucorrhoea, and snake bite	Babu et al. (2015)

(continued)

Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
55.	*Embelia tsjeriam-cottam* A. DC.	Primulaceae	Bai birangi, Joladhanna, Waiwarung, Rahsen	Tribes of Malabar, South India, Mizoram and Maharashtra	Leaves are used to treat diarrhea and chest related problems. Seeds are used as vermifuge. The bark of the root is useful in toothache. Decoction of leaves used as a gargle in case of sore throat.	Sharma et al. (2011)
56.	*Emblica officinalis* L.	Phyllanthaceae	Amla, Awla, Aonla	Tribes of Central India, North Eastern India, Rajasthan, Gujarat, Uttar Pradesh and Madhya Pradesh	The plant parts have multiple uses in traditional medicine system. It possesses immunomodulatory, anti-inflammatory, antiulcer, hepatoprotective, and anticancer properties. The juice is used to cure asthma and digestive problems. The decoction of bark and fruits mixed with the fruits of *Terminalia chebula* and used to preventcontinuous vomiting. The fruit powder and bark juice is useful in the treatment of stomach troubles.	Variya et al. (2016)

57.	*Epipremnum pinnatum* (Linden & André) G.S. Bunting	Araceae	Money Plant/Paisaped	Tribes of Gujarat, Maharashtra, Rajasthan, Andaman and Assam	Decoction of leaves and young shoots is used for gargle and as mouth wash in the situations of gum inflammations and tooth abscesses. Paste of leaves is a remedy for skin diseases.	Sasikala et al. (2019)
58.	*Erigeron annuus* (L.) Pers.	Asteraceae	Phuntha	Tribes of Himalayan regions of India	The plant is known for its astringent properties and used in the treatment of diarrhea, bleeding hemorrhoids rheumatic pain. Plant is also useful as diuretic agent and used in the cases of emmenagogue and styptic.	Nazaruk and Kalemba (2009)
59.	*Eulophia nuda* Lindl.	Orchidaceae	Ban singara, Amarkand, Balakand, Manakand, Munjatak, Amrita, Ambarkand, Salam, Budbar, Salab, Amarkand, and Salibmisri.	Tribes Madhya Pradesh, Gujarat, Maharashtra, Madhya Pradesh, Uttar Pradesh	Tubers are useful in the treatment of chest problems and for snake bite. Also used as expectorant, diuretic, astringent, digestive, and soft purgative. It is useful for the cure of ear discharge, joint edema, blood clotting, and debility	Narkhede et al. (2016)

(continued)

Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
60.	*Euonymus alatus* (Thunb.) Siebold.	Celastraceae	Bicchu-Jhad	Tribes of North Eastern Himalayas	Used in the treatment of cold, headache, body aches, irregular menstruation, and other gynecological diseases	Sharma et al. (2012)
61.	*Euphorbia hirta* L.	Euphorbiaceae	Dudhi, Bichujari, Dudhi, Dudhika, Nagarjuni, Vikshirini	Tribes of Assam and Uttarakhand	Specially used in the treatment of female related disorders. Besides this the plant parts have been used to cure respiratory ailments, dysentery, worm infestations, jaundice, pimples, and tumors.	Kumar et al. (2010)
62.	*Euphorbia nerifolia* L.	Euphorbiaceae	Hathlo thuvar, Danda-thor, Sehund, Elakkalli, Akujamudu	Tribes of south India, West Bengal and Odisha	Latex is acrid, laxative. The latex is given with *Piper betel* leaf to cure asthma. Latex is pungent and good for the treatment of tumors, abdominal troubles and leukoderma. It is also used as to cure enlargement of the spleen, colic and gall bladder stones. It is frequently used to eradicate warts and cutaneous eruptions.	Mali and Panchal (2017)

63.	*Fissistigma oldhamii* (Hemsl.) Merr.	Annonaceae	Oldhamii	Tribes of Assam, Manipur, Madhya Pradesh and Chhattisgarh	In the traditional medicinal system this plant is used as an analgesic, astringent, and to treat various ailments like snakebite, diarrhea, dysentery, arthritis, rheumatic pain, neuralgia, and to enhance weight loss.	Attiq et al. (2017)
64.	*Fritillaria roylei* Hook.	Liliaceae	Shethkar	Tribes of Jammu and Kashmir	The extract of the bulbs is used as a potent anti-pyretic. The roots are used for healing wounds, corms. Also used for the treatment of asthma, rheumatism, tuberculosis.	Bisht et al. (2016)
65.	*Gardenia jasminoides* J. Ellis	Rubiaceae	Midola, Gandroya, Kaboklei, Gulchand	Tribes of Assam, Manipur, Assam, Maharashtra, Uttar Pradesh	Fruits are invariably used to cure swelling, diabetes and liver problems. Flowers are used for abortion.	Muthu et al. (2006)
66.	*Gardenia latifolia* Aiton	Rubiaceae	Ghas patti, Perunkambi, Kambi, Kattu marikalam, Papra	Tribes of Tamil Nadu and Himachal Pradesh	Leaves are useful remedy to treat irregular menstruation	Natarajan et al. (2000)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
67.	*Ceriscoides turgida* (Roxb.) Tirveng.	Rubiaceae	Khadarghar, Kha Vellakara, Karkar, Malankara	Tribes of south India, Chhattisgarh and Madhya Pradesh	The root powder mixed with sugary milk is used to treat spermatorrhoea, and indigestion in children. Pulp of fruits used to treat eye ailments of cattle. The pulp also applied to forehead in case of fever and used to treat abdominal, colic, and mammary gland related ailments.	Asolkar et al. (2005)
68.	*Glinus lotoides* L.	Molluginaceae	Ciru-Ceruppadai, Duserasag, Chandrasikoora, Kodak	Tribes of South India, Assam, Gujarat (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi)	It is used as an antiseptic, an anthelmintic, as a treatment for diarrhea and bilious attacks, and as a purgative for curing boils, wounds and pain in general. Urinary troubles	Bhavani (2015)
69.	*Glochidion zeylanicum* (Gaertn.) A. Juss.	Phyllanthaceae	Neervetti, Pannimutti, Kumbalm, Keotomi, Keoura, Paniatori, Pannyaturi	Tribes of South India, Assam and West Bengal	The leaves have anti-inflammatory compounds with anti-tumor properties.	Sharma et al. (2011)

70.	*Gloriosa superba* L.	Colchicaceae	Kalihari	Tribes of Tamil Nadu and Kerala	Multiple uses of this plant are known such as it has been used in the treatment of gout, infertility, snakebite wounds, kidney problems, cholera, ulcers, arthritis,, colic, itching, leprosy, sprains, hemorrhoids, cancer, impotency, nocturnal discharge, smallpox, sexual diseases.	Bhide and Acharya (2012)
71.	*Heterostemma brownia* Hayata.	Apocynaceae	Not known	Tribes of North East India	Plant parts are used to cure digestive ailments, malarial fever, diabetes, body pain.	Bhadane et al. (2018)
72.	*Himatanthus sucuuba* (Spruce ex Müll. Arg.) Woodson	Apocynaceae	Dodo-ni	Tribes of Kerala and Tamil Nadu	Latex is used to treat abscesses/boils	Dwivedi et al. (2016)
73.	*Holoptelea integrifolia* Planch	Ulmaceae	Papri, Bastedun, Chirabilva	Tribes of North Eastern India (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi)	Leaf paste is used to get relief from localized swelling, skin problems. Powder of tender plant parts is used for the treatment of nausea, piles, diabetes, stomach disorders, and also used to purify blood.	Srivastava et al. (2013)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
74.	*Homalonema aromatica* Schott.	Araceae	Sugandhmantri	Tribes of Tripura (Jamatia, Chakma, Halam, Kuki, Chaimal, Uchoi, Magh, etc.)	The rhizomes are used as anti-inflammatory, antiseptic, analgesic, sedative, antidepressant, antispasmodic, and to treat joint pain and skin problems.	Raomai et al. (2013)
75.	*Hyssopus officinalis* L.	Lamiaceae	Jufa	Tribes of Western Himalayas (Gaddi, Gujjar, Kinnura, Bhot/ Bhotia, Swangla, Lahaula and Pangwal)	Decoction of leaves is considered a stimulant, expectorant and carminative. Also used in the treatment of congestion, colds, cough, and other lung problems. Leaves are used to make a herbal tea like drink to get rid of toothache. Also operative in pulmonary, digestive, and urinary problems. For the treatment of asthma and other respiratory problems the decoction of young leaves is given.	Fathiazad et al. (2011)

76.	*Jatropha curcas* L.	Euphorbiaceae	Mukhrandhe, Ratanjyot	Tribal of Madhya Pradesh and Chattisgarh	The massage of seed oil is useful in muscular pain and swellings. The young twigs are used as an alternative of toothbrush in gum diseases. Root bark decoction is used to treat the conditions of diarrhea and dysentery.	Maravi et al. (2015)
77.	*Justicia adhatoda* L.	Acanthaceae	Barsikhe, Aadalodakam, Vasaka, Baska tita, Boga-bahak	Thengal Kachar itribes of North East India, Assam, Madhya Pradesh, Odisha	The aerial plant parts and bark of have been used to treat respiratory problems like asthma, bronchitis, bronchial catarrh, tuberculosis, common cough and colds, also used as an expectorant and bronchodilator.	Khan et al. (2018)
78.	*Justicia gendarussa* Burm F.	Acanthaceae	Titabahak	Tribes of Meghalaya, Manipur, West Bengal	Paste of leaves issued as an anti-inflammatory agent. While decoction of shoot and bark has antibacterial properties.	Paval et al. (2009)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
79	*Kigelia africana* (L.) Benth.	Bignoniaceae	Balamkheera	Tribes of Karnataka and Kerala	The whole plant is used for the treatment of syphilis, dysentery, elephantiasis, piles, constipation, rheumatic swellings, and as a vermifuge	Saini et al. (2009)
80.	*Lagerstriemia parviflora* Roxb.	Lythraceae	Sidha, Bot Dhaiyanro, Bondga, Bondara, Ajhar	Tribes of Himalayas, Assam and Nilgiri hills	Tender plant parts are used to cure inflammatory, and as analgesic. The decoction is used to treat gastrointestinal infection.	Choudhury (2015)
81.	*Leea grandifolia* (L.) Pers.	Vitaceae	Takteyu, Agasti	Tribes of Andaman and Nicobar	Leaves are used to treat intestinal disorders and abdominal pain.	Yadav et al. (2010)
82.	*Leucas aspera* (Willd.) Link.	Lamiaceae	Gumma, gomo, Thumbai, Comba or Cuma	Tribes of Assam (Chakma, Dimasa, Garo, Hajong, Hmar) and Tamil Nadu (Thoda)	Decoction of young shoots is used as antipyretic to lessen fever. Decoction of the leaf with hot milk is given to the patient with high fever. The paste of young leaves is used for the relief from headache.	Kundu et al. (2018)

83.	*Litsea monopetala* (Roxb. ex Baker) Pers.	Lauraceae	Meda, Chiru maamidi, Meda, Bon-khuwalu, Khuwalu	Kanwar tribe (Chhattisgarh)	Bark has anti-inflammatory properties and hence used to treat swelling in bones and muscles. The seed-oil massage is useful for the treatment of rheumatism. However, the oil extraction in this case is very difficult and the yield is low.	Biswas et al. (2017)
84.	*Lygodium flexpsum* (L.) Sw.	Lygodiaceae	Sorgajal	Chakma, Dimasa, Garo, Hajong, Hmar, Khasi (Assam)	Decoction of roots is used for earache.	Yadav et al. (2012)
85.	*Madhuca longifolia* (L.) J. F. Macbr.	Sapotaceae	Mahua, Mahva, Mohva, Mohua, Erappe, Ippa, Iluppai, Madhukah, Irippa	Tribes of North Eastern India.	The oral doses of bark juice are given to pregnant females for easy delivery. The extracted oil from seeds is used for the treatment of epilepsy, diabetes.	Rangari (2009)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
86	*Mallotus philipinensis* Muell. Arg.	Euphorbiaceae	Rohini, Kampillaka, Shendri	Tribes of Outer Himalayas (Oraon tribe)	The leaves are bitter in taste but have cooling effect and decoction is used as an appetizer. Fruits have purgative in nature and used as anthelmintic, carminative and useful in treatment of abdominal diseases, bronchitis, spleen enlargement, etc. Paste of bark is applied topically for pain relief.	Gangwar et al. (2014)
87.	*Manilkara zapota* (L.) Van Royan	Sapotaceae	Sapota, Chikoo	Oraon tribe	Paste of leaves is used for skin treatment and as anti-inflammatory remedy. Fruits are used to get rid from constipation.	Kulkarni et al. (2007)
88.	*Marsdenia tenacissima* (Roxb.) Wight et. Arn.	Apocynaceae	Murva or Moorva, Jartor, Safed Nishoth, Chinhaur, Chagaveru, Perunkurinjan, Chunhar	Tribes of South India, Central India and Odisha (Bhuiyans, Gonds, Kharias, Kisans, Mundas and Oraons)	Powder of roots is taken orally with water to treat postnatal problems.	Girach et al. (1998)

89.	*Martynia annua* L.	Martyniaceae	Caimokhe, kakanasika, Hathajori	Tribes of South India, Maharashtra and Odisha	Traditionally the fruits and seeds are used for the treatment of epilepsy, cardiac problems, dysentery, dysuria, hemorrhage, fever, constipation, worm infestation, bacterial infection, ulcer and tuberculosis.	Dhingra et al. (2013)
90.	*Maytenus emarginata* (Willd.) Ding Hou	Celastraceae	Thandisamaram, Mulmaram, Baikal	Tribes of Karnataka and Kerala	Plant is useful to treat the various stomach complaints, tumors, rheumatoid arthritis and fever.	Sangwan et al. (2011)
91.	*Melhania futteyporensis* Munro ex Mast.	Stercualiaceae	Basni	Tribes of Assam and adjacent states (Chakma, Dimasa, Garo, Hajong, Hmar, Khasi); tribes of Andhra Pradesh and Telangan (Yanadi tribe)	The paste of leaves has anti-inflammatory and wound healing properties.	Savithramma et al. (2016)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
92.	*Melia azadirachta* L.	Meliaceae	Bakain, Bevu, Malaveppu, Bakan-nimb	Tribes of South India, Maharashtra, Central India	Decoction of tender shoots and leaves is used as an anthelmintic, diuretic, expectorant, vermifuge, emmenagouge, and also used in case of piles. In south India the tribes used this plant as an astringent, to treat hysteria and leprosy.	Kumar et al. (2003)
93.	*Mollugo cerviana* (L.) Ser.	Molluginaceae	Chiriyaro khet, Parpataka, Kaagepurulegida, Citam	Tribes of Assam, Odisha and tribes of south India	Flowers and young roots are used as blood purifier and stimulating the lochial discharge.	Parvathamma and Shanthamma (2000)
94.	*Nandina domestica* Thunb.	Berberidaceae	Manna	Tribes of Assam and Meghalaya	the plant is toxic to dogs, cats, horses and grazing animals	Khare (2007a, b)
95.	*Neurada procumbens* L.	Neuradaceae	Ya-hom	Tribes of Assam, Odisha and West Bengal	Seed extract is used as energy drink and health tonic.	Chen et al. (2004)
96.	*Ocimum basilicum* L.	Lamiaceae	Safed Bhabdi	All tribes of India	Decoction of aerial parts is used to treat headaches, diarrhea, constipation, coughs, worms, warts, and kidney failures. Fresh leaf juice is applied in eye to cure the infection.	Joshi (2014)

97.	*Ocimum sanctum* L.	Lamiaceae	Tulsi, Tulasi	All tribes of India	This is a revered plant for most of the tribes and has an exceptional amalgamation of actions viz., antimicrobial, anti-cataract, anti-inflammatory, antimalarial, analgesic, anthelmintic, anti-diarrheal, anti-diabetic, anti-hypercholesterolemia, anti-hypertensive properties. Also known for anti-oxidant, chemo-; radio-; hepato-, neuro-, cardio-protective, anti-carcinogenic, anti-pyretic, anti-allergic, immunomodulator, anti-depressant, diaphoretic, memory enhancer, anti-asthmatic, anti-tussive, anti-spasmodic, anti-arthritic, anti-stress, anti-leukoderma and anti-coagulant properties.	Singh et al. (2010)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
98.	*Panax ginseng* C.A. Mey	Araliaceae	Ginseng	Tribes of higher Himalayan range	Tribal use this plant to improve the conditions of fatigue, insomnia, and depression. The plant is also used to reduce cholesterol levels hence cardio-protective.	Seenivasagam et al. (2011)
99.	*Petiveria alliacea* L.	Phytolaccaceae	Anamu	Tribes of Kerala	Plant is used for the treatment of tumors, skin diseases, diabetes, muscular pain, central nervous system disorders, respiratory and pulmonary infections, and malarial fever.	Sathiyabalan et al. (2017)
100.	*Hebanthe eriantha* (Poir.) Pedersen	Amaranthaceae	Gadrya, Garke	Tribes of higher Himalayan range	Powder/decoction of plant is used to arouse sexual aspiration and to enhance the pleasure during sexual act.	Chauhan et al. (2014)
101.	*Phoenix acaulis* Roxb.	Arecaceae	Chhindi or Khajoor	Tribes of NE India and south India	The paste of the aerial parts of the plant paste is rubbed on nipple of the tribal female to get relaxed lactation.	Khare (2007a, b)

102.	*Physalis peruviana* L.	Solanaceae	Ras bhari	Tribes of Uttar Pradesh, Madhya Pradesh	The plant is used as antispasmodic, sedative, diuretic, antiseptic and analgesic.	Singh et al. (2019)
103.	*Pimpinella bracteata* Haines	Apiaceae	Tiryo	Tribes of Uttarakhand and Himachal Pradesh	The root decoction is used twice daily for few days to get rid of frequent constipation and dysentery.	Arya (2017)
104.	*Plectranthus mollis* (Aiton) Spreng.	Lamiaceae	Bhosare	Tribes of Kerala	The root juice is used to cure usual fever, while the paste is used to get relief from headache.	Arumugam et al. (2016)
105.	*Plumbaga zeylanica* L.	Plumbaginaceae	Chituar	Tribes of Kerala	The decoction of root and leaf is used to treat various stomach ailments.	Rajakrishnan et al. (2017)
106.	*Portulaca oleracea* L.	Protulacaceae	Lunar, Leeshakh	Tribes of Jammu and Kashmir	Leaf extract with mustard oil is used as boost for hair growth. Leaf extract is also massaged on forehead to get rid of headache. The bitter taste roots are effective for the treatment of prolonged muscular pain, intestinal pain and rheumatism.	Rahimi et al. (2019)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
107.	*Prunus persica* (L.) Batsch	Rosaceae	Satalu	Tribes of Himachal Pradesh	The seeds have antitussive, emollient, antiasthmatic, haemolytic, laxative and sedative and properties. It is taken for the treatment of constipation in the old-aged peoples. Also useful to cure asthma, coughs and menstrual disorders. The bark is used as diuretic, expectorant and sedative.	Kant et al. (2018)
108.	*Rhaphidophora korthalsii* Schott	Araceae	Not known	Tribes of Arunachal Pradesh	Paste of leaves is used for the treatment of skin infections.	Sasikala et al. (2019)
109.	*Rhus javanica* L.	Simaroubaceae	Balaniog	Tribes of Jammu and Kashmir	The decoction of aerial parts of the plant has anti-tumor, anti-malarial, and anti-inflammatory properties.	Sasikala et al. (2019)
110.	*Toxicodendron vernicifluum* (Stokes) F.A. Barkley	Anacardiaceae	Not known	Tribes of North East India	The young plant parts are used to treat tumors, inflammation, viral infections, and for its anti-rheumatic action.	Sasikala et al. (2019)

111.	*Ricinus communis* L.	Euphorbiaceae	Erand/ Jada/Rendi	Chakma, Dimasa, Garo, Hajong, Hmar, Khasi (Assam), Gond tribe of Central and Northern India	Powder of seeds is used as an anti-fertility drug for birth control. Decoction of leaves is used to treat jaundice. The oil used as a protection against sun stroke	Majumder et al. (2019)
112.	*Rivea hypocrateriformis* Choisy	Convolvulaceae	Phanji	Kandha tribes of Odisha	The leaf paste is used in skin diseases	Borkar et al. (2015)
113.	*Rollinia mucosa* (Jacq.) Baill.	Annonaceae	Biriba	Tribes of South India	Paste of tender shoots is used as a medicine for rheumatism.	Pathak et al. (2010)
114.	*Ruellia tuberosa* L.	Acanthaceae	Ranughare, Ruwel, Tapas kaaya	Tribes of North East India	This plant has been used as anti-diabetic, diuretic, antipyretic, gastro-protective, thirst-quencher, analgesic, anti-hypersensitive, and antidotal agent.	Ananthakrishnan and Doss (2013)
115.	*Rumex nepalensis* Spreng.	Polygonaceae	Hobul	Tribes of Jammu and Kashmir	Roots of the plant are used to counter the insect bites and wounds. The paste of roots is used as a cure for hair.	Ghosh et al. (2003)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
116.	*Salvia aegyptiaca* L.	Lamiaceae	Asvagola	Tribes of Eastern Himalayas and South India	Decoction of aerial parts of the plant is used to treat diarrhea	Bose et al. (2007)
117.	*Sarcandra glabra* (Thunb.) Nakai	Chloranthaceae	Kari-kari	Tribes of South India	Oil extracted from the leaves is used to treat stress related diseases and high blood pressure.	Sasikala et al. (2019)
118.	*Scoparia dulcis* L.	Plantaginaceae	Cranghae/Bhuidhania/ Bundighas	Tribes of Uttar Pradesh and Uttarakhand	The decoction of entire plant is used for the treatment of dysentery in children and menstrual disorders in women. The paste of leaves is applied to cure from skin diseases.	Ahmed et al. (2001), Singh and Navneet (2016)
119.	*Scutellaria baicalensis* Georgi	Lamiaceae	Baikal	Tribes of South India and North East India	The decoction of tender aerial plant parts is used for the treatment of hypertension, insomnia, diarrhea, hemorrhaging, dysentery, inflammations and few respiratory ailments.	Tiwari et al. (2008)

120.	*Smilax zeylanica* L.	Smilacaceae	Ramdatoon or Sarmukhare, Kumarika, JangliAushbah, Kaltamara, Ayad	Tribes of South India, Tripura, Andaman and Nicobar	The young twigs of the plant are used as tooth-brush. The decoction of roots is used in general weakness and spermatirrhoea. The paste of leaves is used to treat skin diseases, piles, toothache, rheumatism, arthritis, dysentery, venereal diseases, and urinary problems.	Kekuda et al. (2018)
121.	*Solanum torvum* Swartz.	Solanaceae	Turkey Berry	Tribes of Madhya Pradesh and Chhattisgarh	Traditionally this plant is used to treat diabetes and kidney dysfunctions.	Gandhi et al. (2011)
122.	*Soymida febrifuga* (Roxb.) A. Juss	Miliaceae	Rohan, Rakth-rohan, Ruhina, SomidaChettu	Tribes of South India, Maharashtra, Madhya Pradesh	The decoction of bark is used for the treatment of fever and cough.	Reddy et al. (2008)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
123.	*Tabebuia rosea* (Bertol.) Bertero ex A. DC.	Bignoniaceae	Basant Rani, Tikoma	Tribes of South India	Decoction of bark is taken orally to get rid of intestinal parasites. Also used against malaria and uterine cancer. The decoction is suggested for anemia and to cure from constipation. A decoction of the floral parts, young leaves and tender roots has been used to lessen fevers and pain, tonsil inflammation.	Sasikala et al. (2019)
124.	*Terminalia alata* Roth.	Combretaceae	Saja	Tribes of south India, Madhya Pradesh, Rajasthan and Uttar Pradesh	The bark decoction is used for the treatment of high fever.	Saraswathi et al. (2012)
125.	*Terminalia arjuna* (Roxb.) Wight and Arn.	Combretaceae	Arjuna	Tribes of South India, Central India, Rajasthan, Uttar Pradesh and Maharashtra.	The decoction of bark has been used to cure ulcers, leucorrhea, anemia, diabetes, fracture, cirrhosis and heart related problems.	Dwivedi and Chopra (2014), Alam et al. (2019)
126.	*Terminalia bellirica* (Gaertn.) Roxb.	Combretaceae	Bahera, Baheda, Bahuvirya	Almost all tribes of India	The extracted oil from the seed kernel is used to get rid of pain and inflammations.	Gupta et al. (2020)
127.	*Terminalia chebula* Retz.	Combretaceae	Harra	Kanwar tribe of Chhattisgarh	Bark decoction and unripe fruits are used to cure intermittent cough.	Bag et al. (2003)

128.	*Tripterygium wilfordii* Hook. f.	Celastraceae	Peeli bel	Tribes of Central India	The paste of aerial parts is used in the treatment of rheumatoid arthritis and muscular pains.	Rathore et al. (2007)
129.	*Tulipa clusiana* DC.	Liliaceae	Cur Posh	Tribes of Jammu and Kashmir	Bulbs are eaten raw as worthy heart tonic.	Rivera et al. (2005)
130.	*Urginea indica* (Roxb.) Kunth	Asparagaceae	Jangalipiyaz	Tribes of Odisha, Assam, West Bengal and south India	Bulbs are consumed to get rid of bronchial troubles. The paste of bulbs mixed with Mahua oil is used for the cure of ulcers.	Aswal et al. (2019)
131.	*Withania somnifera* (L.) Dunal.	Solanaceae	Ashwagandha, Asgand	All tribes of India	Powder of roots is used in curing numerous ailments including asthma, diabetes, stress, hypertension, arthritis and cancer.	Rayees and Malik (2017)

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Table 5.2 (continued)

Sr. No.	Botanical name of the medicinal plants	Family	Local name	Tribes and their states using the plant	Uses	References
Plants used by the Indian tribes for medicinal purposes						
132.	*Wrightia tinctoria* R. Br.	Apocynaceae	Kueda, Indrajao, Pala, dhudi	Tribes of Rajasthan, Madhya Pradesh, Gujarat	The decoction prepared from leaves and bark is used as febrifuge, to get rid of toothache, stomach spasms and to cure bowel problems. The decoction of bark is used as an anti-dysenteric, particularly beneficial in piles, also used to treat skin infections and biliousness. The latex is given with water in case of malarial fever.	Srivastava (2014)
133.	*Zingiber officinale* Roscoe	Zingiberaceae	Sonth	Tribes of North Eastern states	Powder of dried rhizome is used to treat several digestive and respiratory problems.	Rahmani et al. (2014)
134.	*Ziziphus xylopyrus* (Retz.) Willd.	Rhambaceae	Chhotaber	Tribes of central and south India	The fruits are used for making dye to protect skin from sun stroke.	Gandagule et al. (2013)

eco-friendly way. They are the hidden protectors of India's natural way but now there is great need to protect them and make them comfortable in their livelihoods.

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