The Pharma Innovation Journal 2020; 9(7): 600-612

www.ThePharmaJournal.com

The Pharma Innovation

ISSN (E): 2277- 7695
ISSN (P): 2349-8242
NAAS Rating: 5.03
TPI 2020; 9(7): 600-612

www.thepharmajournal.com
Received: 21-05-2020
Accepted: 25-06-2020

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Useful plants in the Eastern Ghats and adjacent Deccan region, India

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DOI: https://doi.org/10.22271/tpi.2020.v9.i7i.25999

Abstract
Eastern Ghats are one of the richest of biodiversity centres in India. The hill ranges are discontinuous and separated by rivers which flow through them. The spermatophytes of Eastern Ghats provide various useful products for human consumption, which include timber and non-timber forest products. The knowledge regarding traditional uses of various plant species is dwindling in recent days. It is very important to protect our indigenous traditional knowledge regarding the green wealth. Therefore, in the present paper the ethno botanical uses regarding all useful plants other than ethnomedicine and ethnic food plants are discussed.

Keywords: Traditional acknolwdge**,** dyes, gums, fibres, wood, ornamental, sacred plants, tendu leaf

Introduction
The Eastern Ghats and Deccan region of Peninsular India harbour a rich diversity of ethnobotanical plants which generate considerable benefits in social and economic perspectives. However, in the current times the traditional values of ethnobotanical species are difficult to reconcile with acute conflicts. There are many important sectors in developing the ethnobotany and there is no doubt that the plant kingdom is a treasure house of diverse natural products (Kala, 2007) [18], such as medicine, food, aromatic compounds, dyes, timber, gums, resins, arrack, toddy etc. The literature indicates that most traditional knowledge regarding the medicinal and edibleplants was well documented in India, whereas the other uses of Ethnoplant species have relatively limited documentation. This traditional knowledge is acquired due to the close interaction of the local communities with the forests and their products. In recent days due to rapid technological development and globalization, a clear shift to urban lifestyles has been witnessed. In this regard traditional ethnic knowledge has largely been neglected. Besides, due to anthropogenic activities such as construction, mining and indusctilisation, forest are adversely affected. At this rate of migration for urban culture, its will soon be hard to document trational knowledge only avaiabule with tribal peoples. So it is very important to procure and document the knowledge regarding all the Ethnobotinical uses of all groups of plants prior to its extinction for the benefit of future generation. Apart from this in recent days forests in Eastern Ghats region are under severe pressure for meeting growing demands for fuel, timber and other forest products from an ever increasing human and livestock population and industrial demands.

It reveals that the forests of Eastern Ghats are a rich source for goods like wild food plants, honey, oils, gums, resins, gum-resins, dyes, wax, lac, fibers, fuel wood, charcoal, fencing material, brooms, wildlife products, raw materials like bamboo and cane for handicrafts, etc. besides the medicinal plants (Omkar *et al.*, 2012) [24]. Earlier several botanists studied extensively the biodiversity and vegetation of Eastern Ghats. Rao (1998) [36] studied vegetation and valuable plant resources that are found in the Eastern Ghats of Andhra Pradesh, India with a special note on conservation. Tree wealth and its prominent role in life and economy of tribal people living in the forests of Eastern Ghats, Andhra Pradesh were reported by Rani *et al.*, (2003) [34]. Phytodiversity and useful plants of Eastern Ghats of Orissa with a special reference to the Koraput region was reported by Singh (2009) [48]. The ethnomedicinal and ethnic food plants that are found in Eastern Ghats of India are also well reported (Ellis, 1992; Ramarao and Henry, 1996; Kadavul and Dixit., 2009; Parthipan *et al.*, 2011; Ramasubbu *et al.*, 2012) [11, 31, 17, 26, 32]. It is equally important to document the other uses of plants (fiber, wood, dye, gums, resins, latex, arrack and toddy etc). An account of these different uses of plants used by the tribals in Eastern Ghats and Deccan region is given below.

Fiber yielding plants

The importance of fiber yielding plants has been considered next to the food plants in their usefulness in human society (Sahu *et al.*, 2013) [44]. The use of the plant fibers was preferred from time immemorial due to its easy availability. The use of cotton fiber and silk is known since 5000 BC. *Boehmeria nivea*, *Crotalaria juncea*, *Corchorus capsularis*, *Gossypium arboretum*, *Hibiscus cannabinus*, *Linum usitatissimum* are the best known commercial plants which provide durable and flexible fiber. The utility of plant fibers is manifested in a diverse range of products, which includes making ropes, papers and various household materials. The fiber production also contributes significantly to the economy of the region in various ways including agricultural, clothing, small scale industry and products for other household operations. It has been estimated that nearly 700 species yield fibers in India. However majority of the traditional fiber yielding plants remained underutilized because these uses are need based or site specific. However the plant fibers have specific qualities such as thermal insulation, resistance to water and other desirable traits (Pandey and Gupta, 2003) [25]. Different plant parts are used for extraction of fiber like bark, leaf, stem and young shoots. It is interesting to note that there are 26 types of preparations which were used in combinations of different parts. Use of bark as fiber is more frequent, due to the presence of long soft tissues.

Dye yielding plants

Dyes are the natural or synthetic compounds used to add a colour or to change the colour of materials. Dyes are capable of being fixed to materials and do not wash out with detergents and water or fade easily on exposure to light (Rashid, 2013) [37]. In the human civilization plants have been used not only for the basic needs of life such as food, fiber, fuel, clothing and shelter but also as sources of natural dyes for dyeing cloths, design and painting. A spectrum of beautiful natural colours ranging from yellow to black exists in the plant sources. These colours are exhibited by various organic and inorganic molecules and their mixtures (Das and Mondal, 2012a) [9]. The indigenous knowledge system associated with extraction and processing of natural dyes from plants is ancient process (Antima *et al.*, 2012) [1]. The invention of indigo, the most important Indian natural dye, is as old as the textile marketing itself. The natural dyes are environmentally friendly, for example turmeric, the brightest of naturally occurring yellow dye, is a powerful antiseptic which revitalizes the skin. Throughout history people have been using natural dyes for their textiles and other materials like leather, cosmetics, inks etc (Tiwari and Bharat, 2008) [51], by using common locally available plants. Many natural dyestuff and stains were obtained from plants and dominated as sources of colouring producing different colour like red, yellow, blue, black and a combination of these. Nature has gifted us with more than 500 dye-yielding plant species (Mahanta and Tiwari, 2005) [22]. Many of these plants have been identified as potentially rich in natural dye contents and some of them have been used in natural dyeing like Kalamkari and Lacquering toys. Almost all parts of the plants like leaves, flowers, roots, berries, bark, rhizomes, tubers, shoots, sap, wood etc produce dyes (Gokhale *et al.*, 2004) [13]. Some plants have given more than one colour depending upon the parts of the plant which are used. The shade of the colour a plant produces will vary according to time of the year the plant is picked, how it was grown, soil conditions etc.,. The minerals in the water used in a dye bath can also alter the colour. Some natural dyes contain natural mordants to hold fast the dye and to prevent them from touching the cloth were printed bales of soft textile (Das and Mondal, 2012b) [10].

It is interesting to note that over 2000 pigments are synthesized by various parts of plants of which only about 150 have been commercially exploited (Siva, 2007) [19]. In India, there are more than 450 plants that can yield dyes. In addition to their dye-yielding characteristics, some of these plants also possess medicinal value (Chengaiah *et al.*, 2010) [7]. Among these more than 200 species are found in Eastern Ghats itself of which 50 are considered to be the most important. The colours thus derived from these plants are fast colours and give strength to the clothmaking the cloth durable for years together and gives a shine as years pass on. The following plants have been extensively used in Kalamkari for colouring the fabrics on the mordanted cloth. *Albizia odoratissima* bark yields brown shades, *Rubia cordifolia* roots give red colour, *Oldenlandia umbellata* roots, *Morinda citrifolia* roots, *Ventilago maderaspatana* gives red colour, *Woodfordia fruiticosa* leaves are used as lavelling agent, *Punica granatum* leaves produce the olive green colour on alum mordanted cloth after boiling, *Acacia catechu* bark gives rich reddish brown colour after boiling on alum mordanted cloth, *Indigofera tinctoria* leaves yield blue colour, *Terminalia chebula* flowers are used for producing the yellow colour, *Butea monosperma* flowers give yellow colour to the cotton cloth, *Curcuma longa* rhizome gives yellow, *Nyctanthus arbor-tristis* corolla tube of flowers yield orange colour, *Cedrella toona* flowers yield yellow colour, *Soymida febrifuga* bark yield brown shades and *Symplocos racemosa* bark yield brown shades. Few plant parts are also used as mordants and these include *Symplocos racemosa* bark and leaves, *Bixa orellana* bark, *Terminalia chebula* bark and fruit, *Curcuma longa* rhizome, *Woodfordia fruticosa* flowers, *Cassia fistula* bark, *Erythrina indica* aqueous extract etc (Rani *et al.*, 2002; Pullaiah and Rani, 1999) [33, 28].

The wooden toys of Etikoppaka have earned the name for their exquisite craftman ship. Wood of *Wrightia tinctoria* (locally known as Ankudu, Reppala) and rarely wood of *Millingtonia hortensis* are used in toy manufacturing. Dyes (synthetic as well as plant based) have been used in lacquering of toys. Usage of vegetable dyes is very meager when compared to synthetic dyes in dyeing of toys. The following plants have been used for extracting the dyes, for lacquering of toys: *Indigofera tinctoria*, *Lawsonia inermis*, *Mallotus philippenensis*, *Vetiveria zizanioides*, *Centella asiatica*, *Acacia catechu*, *Punica granatum*, *Terminalia arjuna*, *Terminalia chebula*, *Curcuma longa*, *Phyllanthus emblica*etc (Rani *et al.*, 2002) [33].

Gums and resins

Various gums, gumresins, latex, oleoresins and resins are obtained from various parts of different plants found in the forests of Eastern Ghats and Deccan. Many of them are little known and some may prove useful and valuable articles both for medicinal (Sravani *et al.*, 2014) [50] and commercial purposes.

Gums obtained from plants are solids consisting of mixtures of polysaccharides (carbohydrates) which are either water-soluble or absorb water and swell up to form a gel or jelly when placed in water. They are insoluble in oils or organic solvents such as hydrocarbons, ether and alcohol. The mixtures are often complex and on hydrolysis yield simple

sugars such as arabinose, galactose, mannose and glucuronic acid. Some gums are produced by exudation, usually from the stem bark of a tree or shrub but in a few cases from the root. The exudation is often considered to be a pathological response to injury to the plant, either accidental or caused by insect borers or by deliberate injury (tapping). Seed gums are those isolated from the endosperm portion of some seeds (Coppen, 1995) [8].

Plant gums originating from many countries have been an important item in international trade for centuries in food, pharmaceuticals, paper, textile and other industries. Depending upon their major use, plant gums may be broadly classified as food and non-food or technological grade gums. The former can be used as food additives in various kinds of confectioneries, foods and beverages and include gum arabic, gum tragacanth, gum karaya and gum carob. The latter category find its major use in non-food industrial applications and include 'gum ghatti', 'gum talha' and a variety of other gums.

The term gum resin is occasionally found in the literature but it has no precise meaning (and is best avoided) although it is generally used to describe a resinous material which contains some gum. The coagulated part of some commercially important latex such as chicle and jelutong are often referred to as non-elastic gums or masticatory (chewing) gums, but they are not gums in the proper sense of the word (Coppen, 1995) [8].

Latex - a fluid, usually milky white in colour, consists of tiny droplets of organic matter suspended or dispersed in an aqueous medium. The most well-known example is rubber latex, in which the solids content is over 50% of the weight of the latex. The solids can normally be coagulated to form a solid mass by boiling the latex. The principal components of the coagulum are cis or transpolyisoprenes and resinous material. If the polyisoprene is mainly cis, it confers elasticity to the solid and makes it rubber-like; if it is mainly trans, the solid is non-elastic and gutta-like. Latexes are usually obtained by cutting the plant to make it bleed. Latex-yielding plants occur in fewer families than those which produce gums and resins -Apocynaceae, Euphorbiaceae and Sapotaceae are among the important ones (Coppen, 1995) [8].

A resin with, because of a high content of volatile oil is softer than one which contains little or no oil. The term is, nevertheless, sometimes shortened to resin when describing soft resins. (The term is also used in another context to describe prepared extracts of spices or other plant materials - after evaporation of the solvent used to extract the spice a soft extract, or oleoresin, remains).

A solid or semi-solid material, usually a complex mixture of organic compounds and which is insoluable in water but soluble in certain organic solvents are called terpenes. Oil-soluble resins are soluble in oils and hydrocarbon-type solvents; spirit-soluble resins are soluble in alcohols and some other solvents. Resins are very widely distributed in the plant kingdom although a few families are notable in accounting for a large proportion of the resins of commerce (e.g., Leguminosae, Burseraceae and Pinaceae). Resins can occur in almost any organ or tissue of the plant; a few (such as lac) are produced from insects. Most resins of commerce are obtained as exudates by tapping (Coppen, 1995) [8].

Wood yielding plants

Forests produce a wide range of services that are essential to human well-beingand one major financial output consists of timber that can be used for a variety of manufacturing building, fuel, and other materials. Timber is harvested from forest ecosystems annually in a wide range. India is blessed with a variety of timber yielding tree species and as many as 1500 species are commercially utilized for diverse purposes. Among those it is no wonder that sandalwood which is available in India is the second most expensive wood in the world, next to the African Blackwood (*Dalbergia melanoxylon*). The carved images of gods and mythological figures have a high demand in the market. A wide variety of articles such as boxes, cabinet panels, jewel cases, combs, picture frames, hand fans, pen holders, card cases, letter openers and bookmarks are made from sandalwood (Kumar *et al.*, 2012) [20]. *Pterocarpus santalinus*, commonly known as Red sanders, belongs to the family Fabaceae. It is endemic to Easter Ghats of India and considered globally endangered, with illegal harvest being a key threat. The plant is known for its characteristic timber of exquisite color, beauty and superlative technical qualities. The red wood yields a natural dye santalin, which is used in coloring pharmaceutical preparations and foodstuffs (Arunakumara *et al.*, 2011) [4]. Next to the above mentioned two species Teak (*Tectonagrandis*) wood played a prominent role. It is widely used in preparing doors windows and other house hold furniture (Shah *et al.*, 2007) [46].

Some of the other important tree species grown in India are *Azadractha indica*, *Eucalyptus* spp., *Acacia* spp., *Dalbergia sissoo*, *Swietenia* sp. *Casuarina* spp, *Meliadubia*, *Ailanthus excelsa*, *Leucaena leucocephala* etc. Productivity of forests in general and particularly that of commercial forest plantations is very much affected by frequent outbreak of pests and diseases, besides human interventions and various natural calamities. The total production of timber in India from forests is reported at an average 2.3 million cu.m in 2010. The wood and wood products imports to India have gradually increased since 1998 and have reached 6.3 million cu.m in 2011 with a total import value of Rs 9800 crores. Though wood is imported from about 100 countries, six countries namely Malaysia, Myanmar, New Zealand, Ghana, Ivory Coast, and Gabon constitute bulk of the timber imports to India (about 80 percent). Teak constitutes about 15 percent of total timber imports to India and the major teak exporting countries to India include Myanmar, Ivory Coast, Ghana, Ecuador, Costa Rica and Benin.

Fuel wood is the main source of energy in the developing world. The use of wood by mankind for energy purposes is as old as human civilization itself. One of the most serious problems in the developing world is shortage of fuel wood. The total fuel-wood consumption estimated in household sector is 248 million m^3 and about 13 million m^3 additional fuel-wood is consumed in hotels and restaurants, cottage industries and cremation of dead human bodies. This makes the total annual consumption of fuel-wood to be 261 million m^3 which comes from different sources. The production of fuel-wood from forests has been estimated to be 52 million m^3 (FSI 2009) and remaining 209 million m^3 from farmland, community land, homestead, roadside, canal side and other wastelands (ICFRI, 2010). India produces about 23.19 million cum of timber log domestically and imports nearly 20 percent of its requirement from countries, such as Malaysia (57 percent) and Myanmar (18 percent). It is very important to be aware of the timber yielding plants and rapid growing plants which will give wood in short period to reduce timber import in future

Sacred plants

India is famous for its religious culture.During these occasions a wide variety of plants are used because of their holy nature. Some plants are treated as gods and goddesses and worshipped while some species are used for doing pooja for Gods. People also believe in a plant Kalpavriksa, i.e. a tree fulfilling all human desires. In India coconut plant is known as *kalpavriksa*. One of the most common offerings in Indian temples is a coconut. It is also offered on occasions like weddings, festivals, the use of new vehicle, house etc. The coconut is broken and placed before the Lord. It is later distributed as *prasada*. Coconut fruit is also offered as *tambulum* along with betel leaves and areca nuts. Even in *purnakumbha* a coconut is part of *kalasha*. Plants are considered sacred because of their close association with a deity (Bilva with Lord Shiva and Tulasi with Lord Krishna). Some plants are believed to have originated from bodies or limbs of Gods and hence the sanctity (Butea is believed to have originated from the body of Lord Brahma). Some plants became sacred owing to their association with great individuals. (Peepal under which Gouthama Budha attained enlightment is considered sacred by the Buddhists) (Reddy and Krishnaveni, 2014) [42].

Indian women offer leaves of *Mangifera*, *Prosopis*, *Ocimum*, *Aegle* etc to God in different vratas and worship to give health and wealth. They also make *pradakshinas* (go around certain number of times) around the *Ficus benghalensis and* pray for the longevity of their husbands and for fulfillment of their wishes. In India, different sides of the houses are associated with different plants. *Ficus benghalensis* tree on the eastern side, *Ficus religiosa* in the south, *Cocos nucifera* in the east is always auspicious. *Mangifera indica* is auspicious at every place and believe that it gives wealth. Religious importance of trees can be seen from the birth to marriage. People believe that God has bestowed some specific power to certain plants, like *Ficus religiosa*, *Azadirachta indica*, *Ocimum sanctum*, *Curcuma longa*, *Centella asiatica*, *Cynodon dactylon* which have divine qualities. Therefore these plants are used in a number of religious activities (Robinson and Cush, 1997) [53].

Ornamental and decorative plants

Most of the present day flowers have come from the wild progenitors, a few of which still exist in natural habitat (Thomas *et al.*, 2011) [52]. Along with the established ornamentals like rosa, primula, senecio, rhododendron, orchids etc, many other beautiful herbs, shrubs, and trees have been introduced in the gardens. Nature has given a wealth of wild flower and ornamental plants, unfortunately many of them have been destroyed to such an extent that several have become extinct and survival of many is endangered by over exploitation by human beings (Arora 1993) [3]. Ornamental horticulture is the functional and aesthetic integration of wild flowering and beautiful plants in to commercial important plants for use in landscape. The Wild Vegetation of Eastern Ghats is blessed with rich and fascinating plant species and holds a large number of curious, botanically interesting, exquisite, economically important, rare, threatened, endangered and endemic plants (Pullaiah *et al.*, 2007) [29]. This region is a huge repository of plants of botanical importance and a reservoir of genetic variability, ecosystem diversity and species diversity.

Hundreds of wild plants from India have found their way into many European botanical gardens where they have been much appreciated. Eastern Ghats of India possess potential of raw ornamentals from wild sources. The ornamental plants which are under usage in floriculture and landscaping originalluy hsailed from Europe. The indigenous floristic wealth in our country proclaims its own significance and is deeply involved in our culture, literature, socio economic life, romance and poetry. It is very much interesting but a bit precarious task to incorporate such ornamental wild plants and flowers in to floriculture trade. The prime source of introduction of these plants would be in the botanic gardens which can very well coordinate and exchange seeds and plant material. It is more important to collect such plants which are not available commercially and found in nature only (Sharma and Goyal, 1991) [47]. Extensive Literature survey on these wild horticultural ornamental plants was made and a fair number of wild plants that have great economic importance havebeen listed.

Tendu leaf and Economy

The deciduous forest species *Diospyros melanoxylon* Roxb. is quite important as it yields valuable tendu leaves which are used for making bidis (for rolling local cigarettes). Tendu leaves make excellent wrappers, and the success of the beedi is due, in part, to this leaf. (Goud *et al.*, 1997; Lal 2009) [14]. The leaves are in abundance shortly after the tobacco crop is cured and so are ready to be used in beedi manufacture. Collected in the summer and made into bundles, the leaves are dried in the sun for 3 to 6 days before being used as wrappers (Gupta 1992) [15]. Throughout India, collection of tendu leaf (*D. melanoxylon*) generates part time employment for 7.5 million people - a majority of them tribal women (Arnold, 1995) [2]. *Bauhinia racemosa* leaves are also used for making *bidis*

Additional non-timber forest product

Along with the above mentioned useful plants, some other plants were also used by the tribal's who living in the forests of Eastern Ghats hill ranges. Leaves, roots, bark and seeds of many plants have wider uses and help the economy of tribal's. A number of tribal families are dependent on these products for their lively hood. They collect these products and sell them in markets nearby forests or to Girijan Cooperative Corporation limited. The roots of *Decalepis hamiltonii* and *Hemidesmus indicus* are collected by the forest tribes and dried in houses, made in to pieces and directly sold in tribal markets or they prepare health drink from them and sell it in bazaars. Leaves of some species like *Bouhinia vahlii* and *Butea monosperma* are collected from forests and used them to make meal plates after drying. Some species (like *Semecarpus* anacardium, *Madhuca longifolia* and *Borassus flabellifer*) are also used for collection of arrack and toddy (intoxicating drink) which are used by tribes for drugeness. Several other species were used for various purposes, like ome species are used as brooms and rroom sticks preparations. Some species are used as pesticides and as fertilizers while some used to protect stored grains from pests in houses and for other purposes like as tooth brush, shampoos, detergents etc.

In the present paper the details regarding some of the important traditional useful plants that are available in forests of Eastern Ghat hill ranges of peninsular Indiaare described with their botanical names,parts used, purpose of use are given in the table -1.

Table 1: Ethnobotanical uses of plants

S.No	Species	Part	Use	Reference
1	*Abutilon indicum* G. Don	Stem	Fiber	Basha *et al.*, 2011 [5]
			Tooth brush	Behera and Nath, 2012 [6]
2	*Abutilon hirtum* (Lam.) Sweet	Flowers	Ornamental shrub	Reddy *et al.*, 2012 [41]
3	*Acacia arabica* (Lam.) Willd.	Stem bark	Gum	Basha *et al.*, 2011 [5]
4	*Acacia chundra* (Rottl.) Willd.	Wood	Dal stirrer (*pappu gittae*), finger millet food preparation stirrer (*teddu katte*) and cots	Reddy *et al.*, 2008 [39]
		Stem bark	Gum	Basha *et al.*, 2011 [5]
		Heart wood	Brown dye	Rani *et al.*, 2002 [33]
5	*Acacia leucophloea* (Roxb.) Willd.	Stem bark	Gum	Basha *et al.*, 2011 [5]
		Leaves, bark	Red dye	Rani *et al.*, 2002 [33]
6	*Acacia catechu* (L.f.) Wild.	Plant	Women worship to it to remove *kujadosha*.	Reddy and Krishnaveni, 2014 [42]
7	*Acacia nilotica* (L.) Willd.ex Del.	Stem bark	Gum	Basha *et al.*, 2011 [5]
		Bark, fruits	Yellow-brown, black	Rani *et al.*, 2002 [33]
		Stem leaves	Agricultural implements	Behera and Nath, 2012 [6]
8	*Acacia farnesiana* (L.) Willd.	Bark, fruits	Yellow dye	Rani *et al.*, 2002 [33]
		Tree	Ornamental in gardens	Reddy *et al.*, 2012 [41]
9	*Acaca leucophloea* (Roxb.) Willd.	Leaves, bark	Red dye	Rani *et al.*, 2002 [33]
10	*Acacia pennata* Willd.	Bark	Brown, black dye	Rani *et al.*, 2002 [33]
11	*Acacia planifrons* Wight & Arn.	Fruits	Brown, black dye	Rani *et al.*, 2002 [33]
12	*Acacia sinuata* (Lour.) Merr.	Bark	Brown dye	Rani *et al.*, 2002 [33]
13	*Achyranthus aspera* L.	Whole plant	Dye	Rani *et al.*, 2002 [33]
14	*Adenantherapavonia* L.	Wood	Red dye	Rani *et al.*, 2002 [33]
15	*Aegle marmelos* (L.) Cor.	Bark	Red dye	Rani *et al.*, 2002 [33]
		Leaves	Offered to Siva in Mahasivarathri.	Reddy and Krishnaveni, 2014 [42]
16	*Agave americana* L.	Leaves	Fibers - ropes, canes, shepherd and cowherd's carrier boxes	Reddy *et al.*, 2008 [39] Basha *et al.*, 2011 [5]
			Fibers - Coir	Rekha and Kumar, 2014 [43]
			Laxative dye	Rani *et al.*, 2002 [33]
17	*Agave angustifolia* Haw.	Leaves	fibers - Coir	Rekha and Kumar, 2014 [43]
			Detergent	Prabakaran *et al.*, 2013 [27]
18	*Aglaia roxburghiana* Hiern	Wood	Brown dye	Rani *et al.*, 2002 [33]
19	*Alangium salvifolium* Linn.	Young twigs	Tooth brush	Rekha and Kumar, 2014 [43]
20	*Albizia odoratissima* (L.f.) Benth.	1.Wood 2. Stem bark	1. Agricultural tools and furniture 2. Boil with toddy for purification and doubling the activity	Naidu and Khasim, 2010 [23]
		Bark	Brown dye	Rani *et al.*, 2002 [33]
		Wood	Doors, cots and windows	Rekha and Kumar, 2014 [43]
21	*Albizia amara* Boivin.	Leave powder	Shampoo	Rekha and Kumar, 2014; [43]Prabakaran *et al.*, 2013 [27]
22	*Albizia lebbeck* Benth.	Bark	Brown, black dye	Rani *et al.*, 2002 [33]
		Woody stem	Fuel	Rekha and Kumar, 2014 [43]
23	*Albizia procera* Benth.	Bark	Black dye	Rani *et al.*, 2002 [33]
24	*Aleuritis moluccana* Willd.	Roots	Brown dye	Rani *et al.*, 2002 [33]
25	*Allium cepa* L.	Bulb	Yellow to orange dye	Rani *et al.*, 2002 [33]
26	*Aloe barbadensis* Mill.	Whole plant	Red dye	Rani *et al.*, 2002 [33]
27	*Althaearosea* Cav.	Flowers	Red dye	Rani *et al.*, 2002 [33]
28	*Amaranthus paniculatus* L.	Ash	Ash colour dye	Rani *et al.*, 2002 [33]
29	*Amaranthus spinosus* L.	Plant	Auxillary	Rani *et al.*, 2002 [33]
30	*Anacardium occidentale* L.	Nuts	Black dye	Rani *et al.*, 2002 [33]
		False fruits	Alcoholic preparation	Naidu and Khasim, 2010 [23]
		Seed	Oil	Basha *et al.*, 2011 [5]
31	*Andrographis echioides* Nees.	Whole plant powder	Wash hairs to prevent hair loss	Rekha and Kumar, 2014 [43]
32	*Annona reticulata* L.	Leaves	Black dye	Rani *et al.*, 2002 v
33	*Annona squqmosa* L.	Fresh flowers paste	Wash hairs	Rekha and Kumar, 2014 [43]
34	*Anisochilus carnosus* (L.f.) Wall.	Plant	Ornamental in parks and gardens	Reddy *et al.*, 2012 [41]
35	*Anogeissus latifolia* (Roxb.ex DC.) Wall ex Guill.	Wood	Harrow	Rekha and Kumar, 2014 [43]
		Stem	Gums	Goud *et al.*, 1997 [14]; Basha *et al.*, 2011 [5]
		Fruit	Yellow dye	Rani *et al.*, 2002 [33]
36	*Aphanamixis polystachya* (Wall.) Parker	Bark	Dark green dye	Rani *et al.*, 2002 [33]
37	*Ardisiaso lanacea* Roxb.	Fruits	Yellow	Rani *et al.*, 2002 [33]
38	*Areca catechu* L.	Nuts	Brown dye	Rani *et al.*, 2002 [33]
		Plant	Worship women to remove *kujadosha*.	Reddy and Krishnaveni, 2014 [42]
39	*Artemisia pallens* Wall.	Leaves	Mixed with ghee and used as incense to attract	Reddy and Krishnaveni,

			positive power	2014 [42]
40	*Aristida funiculate* Trin. & Rupr.	Dried Inflorescences	Brooms	Naidu and Khasim, 2010 [23]
41	*Artocarpus hirsutus* Lam.	Mature stem	Churn-staff	Rekha and Kumar, 2014 [43]
42	*Atylosia scarabaeoides* (L.) Benth.	Leaves	Oil	Basha *et al.*, 2011 [5]
43	*Azadirachta indica*, A.Juss.	Young twigs, wood	Tooth brush, furniture and other implements	Rekha and Kumar, 2014 [43]
		Leaves, bark, twigs, fruits	As pesticides, fertilizers	Behera and Nath, 2012 [6]
		Whole plants	Worshiped for good health	Reddy and Krishnaveni, 2014 [42]
44	*Bambusa arundinacea* (Rets.) Willd.	Poundeddried tillers, culms	Beverage (like tea) mats, baskets and supporting rods for roof	Naidu and Khasim, 2010 [23]
		Split culms	Woven into mats, baskets and fans	Rekha and Kumar, 2014 v
45	*Bambusa nutans* Wall. ex Munro	Leaves, culms	Construction, fensing, decorative items	Behera and Nath, 2012 [6]
46	*Bambusa vulgaris* Schrad. ex J.C. Wendl.	Leaves, young shoot	Baskets	Behera and Nath, 2012 [6]
47	*Bassia longifolia* L.	Seeds	Oil	Basha *et al.*, 2011 [5]
48	*Barringtonia acutangula* (L.) Gaertn.	Flowers pale pink or red	Ornamental	Pullaiah and Rani 1999 [28]
49	*Bauhinia purpurea* L.	Bark	Brown dye	Basha *et al.*, 2011 [5]
50	*Bauhinia tomentosa* L.	Woody stem	Fuel	Rekha and Kumar, 2014 [43]
51	*Bauhinia vahlii* Wight & Arn.	Leaves	Meal plates	Reddy *et al.*, 2008 [39]
		Stem	Fiber -ropes, cordage	Naidu and Khasim, 2010 [23]
52	*Bauhinia variegate* L.	Twigs	Carried with new born child in travelling to repel evil sprits	Reddy and Krishnaveni, 2014 [42]
53	*Bixa orellana* L.	Pericarp and seeds	Red, yellow dyes	Basha *et al.*, 2011 [5]
54	*Bombax ceiba* L.	Flux	Stuffing pillow	Reddy *et al.*, 2008 [39]
		Bark	coushions,	Behera and Nath, 2012 [6]
		Flowers blood red	Ornamental	Pullaiah and Rani 1999 [28]
55	*Borassus flabellifer* L.	Leaves, male inflorsence	Umbrellas, dolls, writing pads and fans (*visanakarra*), crackers	Reddy *et al.*, 2008 [39]
		Cutfemale spadices, ramenta (browny hairs) of young leaves, stem, leaves	Toddy (intoxicating drink), cots, house construction, baskets and roofing huts	Naidu and Khasim, 2010 [23]
		Petiole	Fiber - ropes	Basha *et al.*, 2011 [5]
56	*Boswellia ovalifoliolata* Balak. & Henry	Stem bark	Oleogum-resin, gum - burnt and to spread fumes in home	Basha *et al.*, 2011 [5]
57	*Boswellia serrata* Roxb.	Stem bark	Gum	Goud *et al.*, 1997 [14]
58	*Bridelia crenulata* Roxb.	wood	Fire wood	Prabakaran *et al.*, 2013 [27]
59	*Buchanania angustifolia* Roxb.	Woody stem	Fuel wood	Rekha and Kumar, 2014 [43]
60	*Butea monosperma* (Lam.) Taub.	Leaves	Meal plates	Reddy *et al.*, 2008 [39]
			Mulching,	Behera and Nath, 2012 [6]
			Beedi (local cigarette) wrappers	Naidu and Khasim, 2010 [23]
		Stem bark, flowers	Gum, yellow and orange dyes	Basha *et al.*, 2011 [5]
		Red flowers	Offered to gods in various religious activities	Reddy and Krishnaveni, 2014 [42]
		Flowers red	Ornamental	Pullaiah and Rani 1999 [28]
61	*Calamus rotang* L.	Plants	Basket and vessels	Reddy *et al.*, 2008 [39]
62	*Calotropis gigantea* (L.) R.Br.	Bark	Fiber - ropes	Basha *et al.*, 2011 [5]; Naidu and Khasim, 2010 [23]
		Leaves, flowers	Offered to Loard Siva and hanuman for blessings	Reddy and Krishnaveni, 2014 [42]
		Latex	Pesticide	Behera and Nath, 2012 [6]
63	*Calophyllum inophyllum* L.	Plant	Scan evil spirits, counteracting domination influence on evil sprits	Reddy and Krishnaveni, 2014 [42]
64	*Canavalia gladiata* (Jacq.) DC.	Flowers	Indoor ornamental herb	Reddy *et al.*, 2012 [41]
65	*Canavalia virosa* Wight & Arn.	Leaves	Oil	Basha *et al.*, 2011 [5]
66	*Canthium dicoccum* (Gaertn.) Teijsm. & Binn.	Wood	Wood carving, Fire wood	Prabakaran *et al.*, 2013 [27]
67	*Caralluma lasiantha* (Wight) N.E. Br.	Entire plant	Ornamental succulent	Reddy *et al.*, 2012 [41]
68	*Caralluma umbellate* Haw	Plant	Indoor plant	Reddy *et al.*, 2012 [41]
69	*Careya arborea* Roxb.	Wood	Furniture	Naidu and Khasim, 2010 [23]
70	*Caryota urens* L.	Cutinflorescence stalk	Toddy	Naidu and Khasim, 2010 [23]
71	*Cassia fistula* L.	Leaves	Ripening of fruits	Rekha and Kumar, 2014 [43]
		Wood	Agricultural tools Fire wood	Prabakaran *et al.*, 2013 [27]
		Twigs	Kept in houses to keep away evil sprits	Reddy and Krishnaveni, 2014 [42]

		Flowers bright yellow	Ornamental	Pullaiah and Rani 1999 [28]
72	*Cassia siamea* Lam.	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
73	*Cassine glauca* (Rottb.) Kuntze.	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
74	*Chloroxylon swietenia* DC.	Wood	Agricultural implements and furniture	Naidu and Khasim, 2010 [23]; Prabakaran *et al.*, 2013 [27]
		Mature stem, wood	Pounder, handle of axe	Rekha and Kumar, 2014 [43]
75	*Chomelia asiatica* O.Kze.	Woody stem	Fuel	Rekha and Kumar, 2014 [43]
76	*Chrysopogon zizanioides* L.	Roots and rachis	Mat making, brooms	Behera and Nath, 2012 [6]
77	*Citrus medica* L.	Fruits	Dandruff, kill lice	Rekha and Kumar, 2014 [43]
78	*Cleistanthus collinus* Benth.	Wood	Doors and windows	Rekha and Kumar, 2014 [43]
		Leaves	Fertilizer	Prabakaran *et al.*, 2013 [27]
79	*Cleome chelidonii* L.f. var. *pallai* V.S. Raju & C.S. Reddy	Seeds	Condiment	Reddy *et al.*, 2006
80	*Cocculus hirsutus* (L.) Diels	Plants	Pot stands, brooms, baskets, mouth baskets for bullocks	Reddy *et al.*, 2008 [39]
81	*Cochlospermum religiosum* (L.) Alston	Stem bark	Gum	Naidu and Khasim, 2010 [23]; Basha *et al.*, 2011 [5]; Goud *et al.*, 1997 [14]
82	*Cocos nucifera* L.	Vines, petiole, fiber-coir	Brooms, fish hunting instruments (*maavu*), rope making, foot mats and in beds preparation	Reddy *et al.*, 2008 [39]; Prabakaran *et al.*, 2013 [27]
83	*Commiphora caudata* (Wight & Arn.) Engl.	Stem	Gum	Basha *et al.*, 2011 [5]
84	*Corchorus aestuans* L.	Stem	Fiber	Basha *et al.*, 2011 [5]
85	*Corchorus olitorius* L.	Stem	Fiber - rope	Reddy *et al.*, 2008 [39]
86	*Corchorus trilocularis* L.	Stem	Fiber	Basha *et al.*, 2011 [5]
87	*Cordia macleodii* Hook.f. & Thoms.	Wood	Cots	Reddy *et al.*, 2008 [39]
88	*Cordia wallichii* G. Don	Wood	Doors,cots and windows	Rekha and Kumar, 2014 [43]
89	*Coryphaum braculifer* L.	Split leaves	Baskets	Rekha and Kumar, 2014 [43]
90	*Crateva adansonii* DC.	Flowers	Ornamental tree	Reddy *et al.*, 2012 [41]
91	*Crotalaria juncea* L.	Bark	Fiber - gunny bags, carry bags, fishing nets	Reddy *et al.*, 2008 [39]
92	*Crotalaria laburnifolia* L.	Stem	Fiber	Basha *et al.*, 2011 [5]
93	*Crotalaria pulcherrima* Roxb.	Stem	Fiber	Basha *et al.*, 2011 [5]
94	*Crotalaria retusa* L.	Stem	Fiber	Basha *et al.*, 2011 [5]
95	*Crotalaria verrucosa* L.	Stem	Fiber	Basha *et al.*, 2011 [5]
96	*Cucurbita maxima* Duchesne	Dried fruits	Musical instrument - Tambura	Naidu and Khasim, 2010 [23]; Reddy *et al.*, 2008 [39]
97	*Curcuma longa* L.	Rhizome	Paste is applied on face and body of the bride and groom for getting blessings on the day of marriages and other rituals.	Reddy and Krishnaveni, 2014 [42]
98	*Cyamopsis tetragonoloba* Taub.	Stem	Gum	Basha *et al.*, 2011 [5]
99	*Cymbopogon coloratus* (Hook.f.) Stapf	Plant	Ornamental in Lawns	Reddy *et al.*, 2012 [41]
100	*Cynodon dactylon* (L.) Pers.	Roots	Soaked in oil and used for head	Rekha and Kumar, 2014 [43]
		Grass	To pray loard Ganesh	Reddy and Krishnaveni, 2014 [42]
101	*Cyperus rotundus* L.	Leaves and branches	Roofing and thatching	Rekha and Kumar, 2014) [43]
102	*Dalberiga lanceolaria* L.	Wood	Doors and windows	Rekha and Kumar, 2014 [43]
103	*Dalberiga latifolia* Roxb.	Mature stem	Pounder	Rekha and Kumar, 2014 [43]
104	*Dalbergia sissoo* DC.	Plant	Planted near houses and believed that it protects home from natural lighting strokes.	Reddy and Krishnaveni, 2014 [42]
105	*Decaschistia crontonifolia* Wight & Arn.	Stem	Fiber	Basha *et al.*, 2011 [5]
106	*Decaschistia cuddapahensis* Paul & Nayar	Stem	Fiber	Rao and Pullaiah, 2007
107	*Decaschistia rufa* Craib	Stem	Fiber	Rao and Pullaiah, 2007
108	*Dendrocalamutu strictus* (Roxb.) Nees	Culms	Chairs, grain store boxes, mulberry rearing trays, canes, flower vases, water and tea cups, ladder, pipe for medicine for cattle, fans (*visanakarra*), arrows and arrow sticks	Reddy *et al.*, 2008 [39]
		Stem	Agricultural tools Thatching	Prabakaran *et al.*, 2013 [27]
109	*Desmostachya bipinnate* Stapf.	Leaves	Roof thatching,	Behera and Nath, 2012 [6]
110	*Dillenia indica* L.	Flowers white fragrant	Ornamental	Pullaiah and Rani 1999 [28]
111	*Dillenia pentagyna* Roxb.	Flowers yellow	Ornamental	Pullaiah and Rani 1999 [28]
112	*Dioscorea oppositifolia* L.	Whole plant	Arched creeper	Reddy *et al.*, 2012 [41]
113	*Diospyros ebenum* J.Koen.	Wood	Doorsand and windows	Rekha and Kumar, 2014 [43]
114	*Diospyros ferrea* (Willd.) Bakh. Var. *buxifolia* (Rottb.) Bakh.	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
115	*Diospyros melanoxylon* Roxb.	Wood ash, ripen fruits,	Detergent, edible, beedi wrapper	Naidu and Khasim, 2010 [23]

		leaves		
116	*Diospyros montana* Roxb.	Woody stem	Fuel	Rekha and Kumar, 2014 [43]
117	*Dodonaea viscosa* L	Branches	Brooms, thatching	Reddy *et al.*, 2008 [39]
118	*Eleusinecor cana* Gaertn.	Inflorescence	Pillows	Reddy *et al.*, 2008 [39]
119	*Entada pursaetha* DC.	Seeds	Paper weight	Reddy *et al.*, 2008 [39]
120	*Eriolaena quinquelocularis* (Wight &Arn.) Cleghorn	Stem bark	Fiber - ropes	Reddy *et al.*, 2006
121	*Erythrina variegate* L.	Bark leaves, flowers	Red dye	Basha *et al.*, 2011 [5]
123	*Erythroxylum monogynum* Roxb.	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
124	*Evolvulus alsinoides* (L.) L.	Whole plant	Worshipping this life would be lengthened.	Reddy and Krishnaveni, 2014 [42]
125	*Euphorbia hirta* L.	Whole plant	Fodder	Naidu and Khasim, 2010 [23]
126	*Ficus benghalensis* L.	Leaves	Meal plates	Reddy *et al.*, 2008 [39]
		Aerial roots	Tooth brush	Rekha and Kumar, 2014 [43]
		Wood	Agricultural tools	Prabakaran *et al.*, 2013 [27]
		Tree	tree, associated with planet Saturn and women worship to it for the longevity of Their husbands.	Reddy and Krishnaveni, 2014 [42]
127	*Ficus glomerata* Roxb.	Young twigs	Tooth brush	Rekha and Kumar, 2014 [43]
128	*Ficus racemosa* L.	Tree	believed to have mystic powers by worshipping this	Reddy and Krishnaveni, 2014 [42]
129	*Ficus religiosa* L.	Leaves	Greeting cards	Reddy *et al.*, 2008 [39]
		Young twigs	Tooth brush	Rekha and Kumar, 2014 [43]
		Tree	Believed that, sitting under this tree one will get enlightment.	Reddy and Krishnaveni, 2014 [42]
130	*Gardenia gummifera* L.f.	Bark	Gum	Basha *et al.*, 2011 [5]
		White flowers	Ornamental	Pullaiah and Rani 1999 [28]
131	*Gardenia resinifera* Roth	Wood	Doors and windows	Rekha and Kumar, 2014 [43]
132	*Givotia rottleriformis* Griff.	Wood	Toys	Reddy *et al.*, 2008 [39]
133	*Gmelina arborea* Roxb.	Maturestem	Stickfor musical instruments	Rekha and Kumar, 2014 [43]
		Wood	Agricultural tools, Fire wood	Prabakaran *et al.*, 2013 [27]
134	*Gossypium herbaceum* L.	Seed	Fiber - beds and pillows	Reddy *et al.*, 2008 [39]
135	*Grevillea robusta* A.Cunn. ex R. Br.	Wood	Doors and windows	Rekha and Kumar, 2014 [43]
		Wood	Agricultural tools	Prabakaran *et al.*, 2013 [27]
136	*Grewia hirsuta* Vahl	Stem	Fiber	Basha *et al.*, 2011 [5]
137	*Grewia obtusa* Wall.	Stem	Fiber	Basha *et al.*, 2011 [5]
138	*Grewia tiliifolia* Vahl	Stem	Fiber	Basha *et al.*, 2011 [5]
139	*Guazuma tomentosa* Kunth	Stem	Fiber	Basha *et al.*, 2011 [5]
140	*Gyrocarpus americanus* Jacq.	Wood	Mulberry rearing stands, toys, cricket bats	Reddy *et al.*, 2008 [39]
		Woody stem	Fuel	Rekha and Kumar, 2014 [43]
141	*Helicteres isora* L.	Bark	Fiber	Basha *et al.*, 2011 [5]
142	*Hibiscus cannabinus* L.	Stem bark	Fiber - ropes, canes, hanging boxes, shepherd, cowherd carrier boxes	Reddy *et al.*, 2008 [39]
143	*Hibiscus rosa-sinensis* L.	Flowers	Boiled in oil and applied on hair	Rekha and Kumar, 2014 [43]
144	*Hibiscus sabdariffa* L.	Stem bark	Fiber - rope	Reddy *et al.*, 2008 [39]
145	*Hibiscus vitifolius* L.	Fruit	Fibers	Basha *et al.*, 2011 [5]
146	*Hildegardia populifolia* (Roxb.) Schott & Endl.	Stem	Fibers	Rao and Pullaiah, 2007
147	*Hiptage benghalensis* (L.) Kurz	Leaves	Oil	Basha *et al.*, 2011 [5]
			Narcotics	Prabakaran *et al.*, 2013 [27]
148	*Hiptage madablota* Gaertn.	Leaves	Oil	Basha *et al.*, 2011 [5]
149	*Holarrhena pubescens* (Buch.-Ham.) Wall.ex.G.Don	Mature stem	All traditional religious festivals and religious ceremonies	Rekha and Kumar, 2014 [43]
150	*Holoptelea integrifolia* (Roxb.) Planch	Woody stem	Fuel	Rekha and Kumar, 2014 [43]
151	*Ipomoea carnea* L.	Stem, leaves	Fencing, mulching	Behera and Nath, 2012 [6]
152	*Ixora pavetta* Andr.	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
153	*Jasminum pubescens* L.	Flowers	Lakshmi puja.	Reddy and Krishnaveni, 2014 [42]
154	*Jasminum sambac* (L.) Sol.	Flowers	Used in all rituals.	Reddy and Krishnaveni, 2014 [42]
155	*Jatropha curcas* L.	Seeds	Oil	Basha *et al.*, 2011 [5]
		Young twigs	Toothbrush	Rekha and Kumar, 2014 [43]
		Stem	Fencing	Behera and Nath, 2012 [6]
156	*Jatropha gossypifolia* L.	Seeds	Oil	Basha *et al.*, 2011 [5]
157	*Lagenaria siceraria* (Mol.) Standl.	Fruit wall	Water bottle (carrier)	Reddy *et al.*, 2008 [39]
		Ripened fruits	Musical instruments	Naidu and Khasim, 2010 [23]
158	*Lannea coromandelica* (Houtt) Merr.	Wood	Furniture	Naidu and Khasim, 2010 [23]
		Stem bark	Gum	Basha *et al.*, 2011 [5]
159	*Lawsonia inermis* L.	Leaves	Crushed and boiled in oil and applied to hairs regularly	Rekha and Kumar, 2014 [43]

160	*Macaranga peltata* (Roxb.) Muell. -Arg.	Bark	Gum	Basha *et al.*, 2011 [5]
161	*Macroptilium atropurpureum (*DC.). Urban	Leaves	Oil	Basha *et al.*, 2011 [5]
162	*Madhuca indica* L.	Leaves	Used in religious ceremonies.	Reddy and Krishnaveni, 2014 [42]
			Making string for doors on all auspicious occasions to attract positive power of nature	Reddy and Krishnaveni, 2014 [42]
163	*Madhuca longifolia* (Koen.) Macbr.	Flowers	Arrack	Naidu and Khasim, 2010 [23]
164	*Madhuca latifolia* J.F. Gmel.	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
		Flowers	Liquor	Behera and Nath, 2012 [6]
165	*Malachra capitata* L.	Stem	Fibers	Reddy *et al.*, 2008 [39]
166	*Mallotus philippensis* Muell.-Arg.	Dried fruit powder	Detergent	Naidu and Khasim, 2010 [23]
		Flower, fruit and Seeds	Red dye	Basha *et al.*, 2011 [5]
		Woody stem	Fuel	Rekha and Kumar, 2014; [43] Prabakaran *et al.*, 2013 [27]
167	*Mangifera indica* L.	Wood	*Teddu* (pan) for finger millet food preparation	Reddy *et al.*, 2008 [39]
			Wood grinder	Rekha and Kumar, 2014 [43]
168	*Melia azedarach* L.	Leaves and fruits	Fertilizer	Prabakaran *et al.*, 2013 [27]
169	*Melia compositaWilld.*	Wood	Doors, cots and windows	Rekha and Kumar, 2014 [43]
170	*Memecylon edule* Retz.	Wood	Agricultural tools, Fire wood	Prabakaran *et al.*, 2013 [27]
171	*Memecylon jadhavii* K.N. Reddy *et al.*	Stem branches	Fuel	Reddy *et al.*, 2006
172	*Memecylon umbellate* Burm.f.	Flowers bluish purple or blue	Ornamental	Pullaiah and Rani 1999 [28]
173	*Mirabilis jalaba* L.	Rhizome powder	Tooth powder	Rekha and Kumar, 2014 [43]
174	*Moringa oleifera* Lam.	Wood	Swimming sticks	Reddy *et al.*, 2008 [39]
		Woody stem	Fuel	Rekha and Kumar, 2014 [43]
175	*Moringa pterygosperma* Gaertn.	Stem bark	Gum	Naidu and Khasim, 2010 [23]
176	*Musa paradisiaca* L.	Ripened fruits	Alcohol	Naidu and Khasim, 2010 [23]
		Leaves	Meal plates	Reddy *et al.*, 2008 [39]
		Stems with leaves and fruits	Used in entrance of houses during festivals and functions	Reddy and Krishnaveni, 2014 [42]
177	*Nymphaea nouchali*.Burm.f.	Flower	In doodr and out door Aquatic ornamental	Reddy *et al.*, 2012 [41]
			Used to pray for Ganesh, Siva and Lakshmi devi	Reddy and Krishnaveni, 2014 [42]
178	*Nymphaea pubescens* Willd.	Flower	Ornamental grown in ponds and pools	Reddy *et al.*, 2012 [41]
179	*Ocimum basilicum* L.	Leaves	Used in functional ceremonies	Reddy and Krishnaveni, 2014 [42]
180	*Ocimum sanctum* L.	Plant	Like by vrishnu, Women worship every day	Reddy and Krishnaveni, 2014 [42]
181	*Origanum majorana* L.	Leaves	used to make garlands along with other flowers for deities	Reddy and Krishnaveni, 2014 [42]
182	*Ophiuros exalatus* O.Ktz.	Leaves and branches	Roofingand thatching	Rekha and Kumar, 2014 [43]
183	*Oryza sativa*, L.	Arial parts	Roofing, thatching	Rekha and Kumar, 2014 [43]
184	*Oxalis corniculata* L.	Leaves	Blue dye	Basha *et al.*, 2011 [5]
185	*Oxystelma esculentum* R. Br.	Whole plant	Household creeper	Reddy *et al.*, 2012 [41]
186	*Pandanus odorifer* (Forssk.) Kuntze	Leaves	Offered to deities to get their blessings.	Reddy and Krishnaveni, 2014 [42]
187	*Passiflora foetida* L.	Plant	House hold creepers	Reddy *et al.*, 2012 [41]
188	*Passiflora incarnata* L.	Flowers	Rocky bands	Reddy *et al.*, 2008 [39]
189	*Peltophorum pterocarpum* (DC.) Baker	Bark, wood, leaves	Brown, black dyes	Basha *et al.*, 2011 [5]
190	*Phaseolus aconitifolius* Jacq.	Leaves	Oil	Basha *et al.*, 2011 [5]
191	*Phoenix acaulis* Roxb.	Leaves	Thatching roof	Behera and Nath, 2012 [6]
192	*Phoenix alba*	Leaves	Mats	Behera and Nath, 2012 [6]
193	*Phoenix loureirii* Kunth.	Wood	Thatching	Prabakaran *et al.*, 2013 [27]
194	*Phoenix sylvestris* (L.) Roxb.	Leaves	Baskets, boxes, mats, brooms	Reddy *et al.*, 2008 [39]
		Leaf rachis, cutting inflorescence	Tooth brush, toddy	Naidu and Khasim, 2010 [23]
		Petiole	Fiber	Basha *et al.*, 2011 [5]
		Leaves	Broom sticks	Rekha and Kumar, 2014 [43]
195	*Phyllanthus reticulatus* Poir.	Branches	Tooth cleaners	Naidu and Khasim, 2010 [23]
196	*Pinus roxburghii* Sarg.	Flowers	Decorative items	Reddy *et al.*, 2008 [39]
197	*Plectronia didyma* Kurz.	Woody stem	Fuel	Rekha and Kumar, 2014 [43]
198	*Pleurostylia opposita* (Wall.) Alston	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
199	*Pongamia pinnata* L.	Seeds	Oil	Basha *et al.*, 2011 [5]
		Leaves, twigs	Pesticides, tooth brush	Behera and Nath, 2012 [6]

200	*Premna tomentosa* Willd.	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
201	*Prosopis cineraria* (L.) Druce	Tree	The bride and bride groom rotate around this plant for blessings of Lord Vishnu.	Reddy and Krishnaveni, 2014 [42]
202	*Psidium guajava* L.	Young twigs, woody stem	Tooth brush, fuel	Rekha and Kumar, 2014 [43]
203	*Pterocarpus marsupium* Roxb.	Wood	Poosalu, water glasses	Reddy *et al.*, 2008 [39]
		Stem bark	Gums	Basha *et al.*, 2011 [5]
204	*Pterocarpus santalinus* L.f	Bark	Red dye	Basha *et al.*, 2011 [5]
		Whole plant	Ornamental tree in public gardens	Reddy *et al.*, 2012 [41]
205	*Pterospermum xylocarpum* (Gaertn.) Sant. &Wagh	Dried leaves, wood	Smoked just like tobacco, furniture, agricultural tools	Naidu and Khasim, 2010 [23]
		Flowers pale white	Ornamental	Pullaiah and Rani 1999 [28]
206	*Randia malabaricum* Lam	Wood	Windows	Rekha and Kumar, 2014 [43]
207	*Rhynchosia cana* DC.	Seeds	Oil	Basha *et al.*, 2011 [5]
208	*Rhynchosia minima* (L.) DC	Seeds	Oil	Basha *et al.*, 2011 [5]
209	*Salix tetrasperma* Roxb.	Woody stem	Fuel	Rekha and Kumar, 2014 [43]
210	*Sansevieria roxburghiana* Schult.f	Leaves	Fiber	Basha *et al.*, 2011 [5]
211	*Santalum album* L.	Flowers, leaves, wood	Garland preparation, Wood carving (idols, toys, boxes)	Reddy *et al.*, 2008 [39]
		Wood, oil	Paste derived from wood is given as an offeringto the gods and incense made of sandal wood shavings is burnt before them.	Reddy and Krishnaveni, 2014 [42]
212	*Saraca asoca* (Roxb.) Willd.	Plant	Worshiped for getting peace in their life	Reddy and Krishnaveni, 2014 [42]
213	*Schleichera oleosa* (Lour.) Oken	Seeds	Coocking oil	Behera and Nath, 2012 [6]
214	*Semecarpus anacardium* L.f	False fruits	Arrack	Naidu and Khasim, 2010 [23]
			Fertilizer	Prabakaran *et al.*, 2013 [27]
		Fruit, Seeds, bark	black, gray dyes	Basha *et al.*, 2011 [5]
215	*Sesamum alatum* Thonn.	Seeds	Oil	Basha *et al.*, 2011 [5]
216	*Shorea robusta* Gaertn.	Leaves, wood	Meal plates, beedi-making, furniture and agricultural tools	Naidu and Khasim, 2010 [23]
		Leaves, stem bark	Oil and gum	Basha *et al.*, 2011 [5]
		Young stem, seeds	Tooth brush, coocking oil	Behera and Nath, 2012 [6]
		Plant	Offered to god to give prosperity, stability and unity among all the people.	Reddy and Krishnaveni, 2014 [42]
217	*Shorea roxburghii* Roxb.	Wood	Doors, cots, windows, fuel	Rekha and Kumar, 2014 [43]
		Wood	Thatching	Prabakaran *et al.*, 2013 [27]
218	*Sida acuta* Burm.	Dried plants	Brooms	Reddy *et al.*, 2008 [39]; Naidu and Khasim, 2010 [23]
219	*Sida cordifolia* L.	Stem	Fiber	Basha *et al.*, 2011 [5]
220	*Smilax zeylanica* L.	Stem	Tooth brush	Behera and Nath, 2012 [6]
221	*Sorghum vulgare* L.	Leaves, branches	Roofing and thatching	Rekha and Kumar, 2014 [43]
222	*Soymida febrifuga* (Roxb.) A.Juss.	Ripe fruits	Flower vases	Reddy *et al.*, 2008 [39]
		Flowers and dry flowers are attractive	Ornamental	Pullaiah and Rani 1999 [28]
223	*Sterculia urens* Roxb.	Stem, wood	Gum - skin softening, agricultural tools	Naidu and Khasim, 2010 [23]
		Stem bark	Gum	Goud *et al.*, 1997 [14]
224	*Strychnos potatorum* L.	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
425	*Syzygium alternifolium* (Wt.) Walp.	Flowers cream or yellowish white, sweet scented	Ornamental	Pullaiah and Rani 1999 [28]
226	*Syzygium cumini* (L.) Skeels	Woody stem	Fuel	Rekha and Kumar, 2014 [43]
		Leaves	Used in festivals	Reddy and Krishnaveni, 2014 [42]
227	*Tabernaemontana divaricata* (L.) R.Br	Flowers	Very much favour to Lord Shiva and offer them during Karthik mahotsavas.	Reddy and Krishnaveni, 2014 [42]
228	*Tamarindus indica* L.	Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
229	*Tarenna asiatica* (L.) Kunize	Wood	Thatching	Prabakaran *et al.*, 2013 [27]
230	*Tectona grandis* L.f.	Wood	Carts, chairs, tables	Reddy *et al.*, 2008 [39]
			Doors, cots, windows, fuel, harrow	Rekha and Kumar, 2014 [43]
231	*Tephrosia purpurea* (L.) Pers	Leaves	Blue dye	Rani *et al.*, 2002 [33]
232	*Terminalia alata* (Roxb. ex DC.) Wt. & Arn.	Leaves	Blue dye	Rani *et al.*, 2002 [33]
233	*Terminalia pallida* Brandis	Fruits	Brown, black dyes	Basha *et al.*, 2011[5]; Rani *et al.*, 2002 [33]
234	*Terminalia arjuna* (DC.) Wight &arn	Wood ash along with leaf paste	Detergent, hair wash	Naidu and Khasim, 2010 [23]
		Stem bark	Orange dye	Basha *et al.*, 2011 [5]
		Plant	Offered to god to protect crops from natural calamities.	Reddy and Krishnaveni, 2014 [42]
235	*Terminalia bellerica* Roxb.	Woody stem	Fuel	Rekha and Kumar, 2014 [43]

236	*Terminalia chebula* Retz.	Wood, Fruit powder, woody stem	Doors, cot, windows, tooth powder, fuel	Rekha and Kumar, 2014 [43]
237	*Themeda cymbaria* Hackel	Wood	Thatching	Prabakaran *et al.*, 2013 [27]
238	*Thespesia populnea* Cav.	Bark, flowers, fruits and wood	Yellow dye	Basha *et al.*, 2011 [5]; Rani *et al.*, 2002 [33]
		Leaves	Detergent	Prabakaran *et al.*, 2013 [27]
239	*Thysanolaena maxima* (Roxb.) Kuntze	Dried inflorescence	brooms	Reddy *et al.*, 2008 [39]; Naidu and Khasim, 2010 [23]
240	*Tinospora cordifolia* Miers	Leaves	Oil	Basha *et al.*, 2011 [5]
241	*Trichosanthes bracteata* (Lamk.) Voigt.	Plant	Grown as ornamental on Arches in public gardens	Reddy *et al.*, 2012 [41]
242	*Trigonella foenum-graecum* L.	Leaves	Yellow dye	Rani *et al.*, 2002 [33]
243	*Urena lobata* L.	Wood	Brown dye	Rani *et al.*, 2002 [33]
244	*Urena sinuata* L.	Stem	Fiber	Basha *et al.*, 2011 [5]
245	*Ventilago madraspatana* Gaertn.	Stem bark	Oil, red dye	Basha *et al.*, 2011 [5]
246	*Vetiveria zizanioides* (L.) Nash	Roots	Fiber - door mats, cooler mats	Reddy *et al.*, 2008 [39]
247	*Vitex altissima* L.f	Wood, bark	Yellow dye	Basha *et al.*, 2011 [5]
		Wood	Fire wood	Prabakaran *et al.*, 2013 [27]
248	*Vitex negundo* L.	Stem bark	Dye	Basha *et al.*, 2011 [5]
		Leaves, stem	Pesticide, tooth brush, fencing	Behera and Nath, 2012 [6]
249	*Waltheria indica* L	Stem	Fiber	Basha *et al.*, 2011 [5]
250	*Wedelia calendulacea* Less.	Leaves	Crushed and boiled in oil and apply hairs	Rekha and Kumar, 2014 [43]
251	*Wedelia chinensis* (Osbeck) Merril	Flowers, roots	Black dye	Rani *et al.*, 2002 [33]
252	*Wrightia arborea* (Dennst.) Mabb.	Seeds, roots	Yellow dye	Rani *et al.*, 2002 [33]
253	*Wrightia tinctoria* R.Br	Wood	Toys, stirring stick for preparation of finger millet food and combs	Reddy *et al.*, 2008 [39]
		Leaves	Blue dye	Basha *et al.*, 2011 [5]
		Mature stem	Used in all traditional religious festivals and religious ceremonies	Rekha and Kumar, 2014 [43]
254	*Xylia xylocarpa* (Roxb.) Taub.	Whole plant	Fencing	Behera and Nath, 2012 [6]
255	*Yucca gloriosa* L.	Leaf	Fiber	Basha *et al.*, 2011 [5]
256	*Zanthoxylum budrunga* Wall.	Wood, woody stem	Doors, cots, windows, fuel	Rekha and Kumar, 2014 [43]
257	*Zizyphus mauritiana* Lamk.	Wood	Doors, cots and windows	Rekha and Kumar, 2014 [43]
258	*Ziziphus rugosa* Lam.	Leaves, wood	Fire wood	Prabakaran *et al.*, 2013 [27]
259	*Zizphus oenoplia* Mill.	Bark	Brown, black dye	Rani *et al.*, 2002 [33]
260	*Ziziphus xylopyrus* (Retz.) Willd.	Leaves, wood	Fire wood	Prabakaran *et al.*, 2013 [27]

Conclusion

The Eastern Ghats and Deccan region of India are rich in ethnobotanical diversity, offering significant social and economic benefits. Traditional knowledge, acquired through deep forest-community interaction, is at risk due to urbanization, industrialization, and deforestation. Despite extensive documentation of medicinal and edible plants, the broader uses of ethnobotanical species remain underexplored. Fiber-yielding plants, such as *Gossypium arboretum* and *Linum usitatissimum*, have been pivotal for centuries, contributing to agriculture, small-scale industries, and household utilities. Urgent efforts are needed to document and conserve this knowledge to prevent its loss, ensuring these resources benefit future generations while supporting sustainable development.

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