

MEDICINAL PLANTS

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Sacred Groves : Repositories of Medicinal Plants

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ABSTRACT

Sacred groves are patches of native vegetation protected on the basis of religious faith. Sacred groves of Kerala are called 'Kavu' and are repositories of invaluable medicinal plant species. A study conducted in a non-forested region in Kerala where sacred groves are the only remnants of natural forests revealed the presence of 290 species of medicinal plants out of a total of 687 plant species belonging to 493 genera and 127 families. Distribution, regeneration status and major threats faced these medicinal plants are discussed in this paper.

INTRODUCTION

As per the definition by the International Union for the Conservation of Nature and Natural Resources (IUCN), Sacred Groves, one form of nature worship, are considered as "Sacred Natural Sites" (Oviedo et al., 2005). Though sacred groves were reported from Asia, Africa, Europe, America and Australia, their present occurrence is mostly restricted in Asia and Africa (Hughes and Chandran, 1998). In India, they are mainly distributed in the states of Andhra Pradesh, Chhattisgarh, Haryana, Himachal Pradesh, Karnataka, Kerala, Maharashtra, Manipur, Meghalaya, Orissa, Rajasthan, Tamil Nadu, Uttarakhand, West Bengal and the Union Territory of Puducherry (Malhotra, et al., 2001; Ramanujam et al., 2007). Sacred groves vary in size from a few trees to dense forests covering vast tracts of land. Around 1,00,000 to 1,50,000 groves exist in India. Declaration of Convention on Biological Diversity has resulted in more emphasis being given for the conservation of sacred groves. According to the National Environment Policy of India, ancient sacred groves should be treated as possessing "Incomparable Values" (Government of India, 2006). Examples of entities with "Incomparable Values" are unique historical monuments such as the Taj Mahal, charismatic species such as the Tiger or unique landscapes such as the Valley of Flowers. Though there are many references on sacred groves in early literature, the scientific study of them was initiated by Gadgil and Vartak (Gadgil and Vartak, 1975). Many valuable medicinal plants and wild relatives of cultivated species have been reported from sacred groves.

SACRED GROVES OF KERALA

Sacred groves of Kerala are generally referred as *Kavu* and they exist almost throughout

the state. These groves are generally dedicated to serpent deities (*Sarpakkavu* in south and *Nagam* in north), Goddess Bhagavathy (*Bhagavathykkavu*) or Lord Ayyappa (*Ayyappankavu* or *Sasthamkavu*). Small groves dedicated to spirits, demons or ancestors (*Yakshikkavu*, *Madankavu* and *Appoppankavu*) are also common. In north Kerala, certain groves are called as *Daivakkvu* in general where a male God (Vishnumurthy, Siva, Vettakkorumakan, Kshethrapaalan, Gulikan or Kuttichathan) is worshipped. Groves exclusively dedicated to Vettakkorumakan and Gulikan are known as *Kottam* and *Mundya* respectively. Sacred groves of the state are mainly owned and managed by ancestral families, cluster of related families, village communities or temple trusts. Some are under the control of Devaswom Board, Government of Kerala.

Most of the sacred groves in Kerala are veritable sanctuaries of flora and fauna. Many of them can be seen in combination with sacred ponds and they also act as micro-watersheds of freshwater systems. Some groves give birth to streams and even rivers as in case of river Kavaai originating from Theyyottukavu in Kannur district (Mohan and Prasad, 2004). A study conducted by the Tropical Botanic Garden and Research Institute, Thiruvananthapuram, Kerala revealed that structurally, the vegetation of the sacred groves is typically of tropical evergreen forest in general with several tiers or types of trees, climbers, shrub and undergrowth. Floristic diversity indices of the sacred groves of Kerala are equal or nearly equal to the forests of the Western Ghats (TBGRI, undated).

PRESENCE OF WILD CULTIVARS

Ramachandran and Mohan (1991) has reported the presence of wild cultivars of crop plants which have better pest resistance and productivity from the sacred groves of Kerala.

Garcinia spp., *Artocarpus* spp. *Piper* spp. and mango are some of the notable wild relatives of cultivated plants found in the sacred groves. Wild turmeric (*Curcuma* spp.), wild ginger (*Zingiber* spp.) wild rice (*Oryza* spp.) and wild nutmeg (*Myristica malabarica*) have also been reported (Chandran *et al.*, 1998).

SACRED GROVES OF ALAPPUZHA DISTRICT, KERALA

Alappuzha is the smallest of the 14 districts of Kerala (1414 km²) with the highest population density (1492 persons per km²) and it is the only district in Kerala without natural forests (Department of Information Technology, GOI, 2007). However, sacred groves of varying size are present in the area, which attract utmost attention as they are the only remnants of natural forests once present. A total of 1128 sacred groves have been recorded from Alappuzha district after conducting an extensive field survey covering all the 91 revenue villages within the six Taluks (Warrier *et al.*, 2015). Considerable variation was observed with reference to the extent of the groves and it varied from 0.003 to 36 acres. Around 57 per cent of the groves (648) measured an area of less than 5 cents (200 m²) and two hundred and thirty six groves (21%) were small groves having an area of 5 to 10 cents. Ten per cent of the groves (116) fell under the medium category. Eighty-one groves (7%) were identified as moderately large. Large (28) and very large groves (19) accounted only for 3 and 2 per cent respectively.

Floristic inventory carried out in all the sacred groves recorded a total number of 687 plant species belonging to 493 genera and 127 families. These 687 species included 275 species of herbs (40.02%), 107 species of shrubs (15.57%), 194 species of trees (28.24%) and 111 species of climbers including 03 species of lianas. The

family having the maximum number of genera (38) and species (54) was Poaceae followed by Euphorbiaceae (27 genera and 43 species) and Fabaceae (21 genera and 34 species).

MEDICINAL SPECIES

Among the 687 species of plants including trees identified from the sacred groves of Alappuzha district, 290 were known to possess medicinal values. Among these 88 were herbs, 65 shrubs, 54 climbers and 83 were trees. Table 1. Appended to this chapter provides a list of medicinal plants recorded during the survey along with their known medicinal importance. The family with the maximum number of medicinal plants was Euphorbiaceae (23) followed by Apocynaceae (16). Rubiaceae contained 14 species and Asteraceae 12. Ten species were endemic to Western Ghats. *Vateria indica* was the only critically endangered medicinal tree found in the sacred groves of the region. Most of the groves had at least one individual of this tree species. Three vulnerable species namely *Saraca asoca*, *Dalbergia latifolia* and *Santalum album* were found in the district. A good population of *Morinda citrifolia* which is being utilized extensively for the preparation of 'Noni' herbal medicine was present in majority of the sacred groves in the coastal sandy region. *Myristica malabarica* which is a wild relative of the cultivated *Myristica fragrans* was present in certain groves in the district. Local community in certain region of the district used to consume the kernel of this species mixed with tender coconut water in case of dog bite along with the other standard allopathic treatments. *Garcinia xanthochymus* is another wild relative of a cultivated species, *Garcinia gummi-gutta* found in the groves.

NATURAL REGENERATION

Natural regeneration was observed in

Caryota urens, *Syzygium zeylanicum*, *S. caryophyllatum*, *Hydnocarpus pentandra*, *Myristica malabarica*, *Cinnamomum malabatrum*, *C.verum*, *Aporosa cardiosperma*, *Holigarna arnottiana*, *Strychnos nux-vomica*, *S. minor*, *Calophyllum calaba*, *Tabernaemontana alternifolia*, *Acronychia pedunculata*, *Vateria indica*, *Garcinia gummi-gutta* and *Carallia brachiata*. Invasion of exotic species like *Acacia auriculiformis* and *Leucaena leucocephala* which regenerated profusely was found to hamper the natural regeneration of the native medicinal species. This may result in elimination or suppression of the valuable medicinal species in the sacred groves.

MANAGEMENT OF THE GROVES

The only management operation being practised in sacred groves of the region is digging a small trench of about 1m width around the grove for preventing its extension into the adjacent home gardens. Few small groves (upto 10 cents in area) were protected by erecting a boundary wall around the grove. However, the vegetation within majority of such groves was observed to be sparse. Worship of the Idol installed in such groves attract prominence in these groves.

REFERENCES

- Chandran, M.D.S., Gadgil, M. and Hughes, J.D., 1998. Sacred groves of the Western Ghats, 211-232: In *Conserving the Sacred for Biodiversity Management*, Ramakrishnan, P.S., Saxena, K.G. and Chandrashekhara, U.M. (eds.) Oxford and IBH, New Delhi.
- Gadgil, M. and Vartak, V. D., 1975. Sacred groves of India- a plea for continued conservation, *Journal of the Bombay Natural History Society*, 72 (2). pp. 314-320.
- Government of India, 2006. *National Environment Policy*, 2006. Ministry of Environment and Forests, Govt. of India, pp 28.
- Hughes, J.D. and Chandran, M.D.S., 1998. Sacred groves around the Earth: An overview. Pp. 69-86 in Ramakrishnan, P.S., Saxena, K.G. and Chandrashekhara, U.M. (eds.). *Conserving the sacred for biodiversity management*. Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi, Kolkata.
- Malhotra, K.C., Gokhale, Y., Chatterjee, S. and Srivastava, S., 2001. *Cultural and Ecological Dimensions of Sacred Groves in India*. Indian National Science Academy, New Delhi and Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal, 34 p.
- Mohanani, C. and Prasad, G.A., 2004. The sacred groves of Kerala and their conservation 44-55: In: *Workshop Papers, National Workshop on Sacred Groves*, 16-18 September 2004, Kozhikode, Kerala. Ministry of Environment and Forests, Government of India and

THREAT TO THE CONSERVATION OF MEDICINAL PLANTS

Due to the pressures arising due to scarcity of land and increased land values, many sacred groves have been destroyed by clearing their vegetation followed by the transfer of the deity of the grove to a temple or an idol by following expensive spiritual rituals. Converting the groves to temples, a social change of popular values which may be referred to as Sanskritisation, also adds to the destruction of the invaluable resources. In a few cases overexploitation of the resources of the groves has been causing retrogression of the sacred groves. Removal seeds along with litter as part of the clearing up prior to the annual worship of the deity in the grove has been resulting in retrogression by hindering the natural regeneration in many groves especially in those located along the coastal sandy region. Exotic weeds namely, *Mikania micrantha*, *Lantana camara* and *Chromolaena odorata* overgrow the new recruits of native species and play a major role in degradation. Invasion of an indigenous climber, *Acacia torta* also has led to the degradation of a number of groves in the district.

- Department of Forests and Wildlife, Government of Kerala.
- Oviedo, G., Jeanrenaud, S. and Otegui, M., 2005. *Protecting Sacred Natural Sites of Indigenous and Traditional Peoples: an IUCN Perspective*. Gland, Switzerland.
- Ramachandran, K.K. and Mohanan, C.N., 1991. *Studies on Sacred Groves of Kerala with Particular Reference to Conservation of Rare, Endemic, Endangered and Threatened Plants of the Western Ghats, India*. Final report submitted to the Ministry of Environment and Forests, Government of India. Kerala Forest Research Institute, Peechi, India, pp 21.
- Ramanujam, P., Ganesan, T., Kadambaran, D., Kumaravelu, G. and Devaraj, P., 2007. *Flora of Sacred Groves of Puducherry Region (Pictorial Guide)*. Department of Forest and Wildlife, Government of Puducherry, 186 p.
- TBGRI, Undated. Available on the web: <http://www.btisnet.nic.in/tbgri/page3.htm> . Accessed on 13th August, 2019.
- Warrier, K.C.S., C. Kunhikannan, C. and Sasidharan, K.R. 2015. Endangering sacred groves of a non forested region in Kerala and strategies for their conservation. *Indian Forester* 141(8):832-837.

Table 1. List of medicinal plant species recorded from the sacred groves of Alappuzha District, Kerala

No.	Botanical Name and Local Name	Habit, status and uses
Family: Acanthaceae		
1	<i>Andrographis paniculata</i> (Burm. f.) Wall. ex Nees Local Name: Karakanjiram	Herb- Used traditionally for the treatment of an array of diseases such as cancer, diabetes, high blood pressure, ulcer, leprosy, bronchitis, skin diseases, flatulence, colic, influenza, dysentery, dyspepsia and malaria.
2	<i>Hygrophila schulli</i> (Buch.-Ham.) M. R. & S. M. Almeida.	Herb- The roots and leaves have diuretic properties. It helps in treating urinary cystitis and calculi.
3	<i>Indoneesiella echiodides</i> (L.) Sreem. Local Name: Gopuramthangi	Herb- Used in goitre, liver diseases, fertility problems, bacterial, malarial and fungal disorders. The leaf juice of this plant is used to treat fevers.
4	<i>Justicia adhatoda</i> L. Local Name: Aadalodakam	Shrub-Cough and other respiratory ailments.
5	<i>Justicia betonica</i> L. Local Name: Vellakurinji	Shrub-Used for poisonous bites.
6	<i>Justicia gendarussa</i> Burm. Local Name: Vathakodi	Shrub-An infusion of the leaves is taken internally in the treatment of pains in the head, paralysis of one side of the body and facial paralysis. The leaf juice is used in the treatment of earache. The bitter root is anodyne, diaphoretic, diuretic and laxative. The root bark is emetic.
7	<i>Justicia procumbens</i> L.	Herb- The plant is alterative, anthelmintic, antiphlogistic, depurative, diaphoretic, diuretic, expectorant, febrifuge and laxative. A decoction or an infusion is used in the treatment of asthma, cough, backache, flatulence and many skin conditions.

No.	Botanical Name and Local Name	Habit, status and uses
8	<i>Peristrophe paniculata</i> (Forssk.) Brummitt. Local Name: Kattupuzhukkolli	Herb- Possess anti-bacterial properties (tuberculostatic), and has proven to be effective in treating sprain, snake poison, fever, bone fracture, cold and cough and for ear and eye treatments
9	<i>Phaulopsis imbricata</i> (Forssk.) Sweet.	Herb- Used in arthritis, rheumatism, etc. Root is used in skin diseases, leaf-sap is used against diarrhea and dysentery.
10	<i>Rhinacanthus nasutus</i> (L.) Kurz.	Herb- Prevents neurodegenerative diseases, treats skin conditions, lowers blood pressure, lessens allergy severity, prevents diabetes, lowers inflammation, and boosts the immune system. It also has anticancer potential.
11	<i>Ruellia tuberosa</i> L.	Herb- Diuretic, anti-diabetic, antipyretic, analgesic, antioxidant, anti- hypertensive, gastroprotective agent and also used to treat gonorrhea.
Family: Alangiaceae		
12	<i>Alangium salvifolium</i> (L.f.) Wang. ssp. <i>hexapetalum</i> (Lam.) Wang. Local Name: Valli ankolam	Climber -Root is used as hypotensive agent, anthelmintic and in the treatment of biliousness, inflammation, diarrhea, piles, paralysis, vomiting, skin diseases and snakebite. The bark shows anti tubercular activity.
13	<i>Alangium salvifolium</i> (L. f.) Wang. Local Name: Ankolam	Tree -Root is used in the treatment of biliousness, inflammation, diarrhea, piles, paralysis, vomiting, skin diseases and snakebite. The bark shows anti tubercular activity.
Family: Amaranthaceae		
14	<i>Achyranthes aspera</i> L.var. <i>aspera</i> ; Hook. f. Local Name: Valiyakadaladi	Herb- Anti-inflammatory agent besides being useful in hemorrhoids, indigestion, cough, asthma, anemia, jaundice and snake bite.
15	<i>Aerva lanata</i> (L.) Juss. ex Schult Local Name: Cherula	Herb- Traditional medicine for snakebites.
16	<i>Alternanthera sessilis</i> (L.) R. Br. ex. DC. Local Name: Kozhuppa	Herb- Used in hepatitis, tight chest, bronchitis, asthma and other lung troubles, to stop bleeding and as a hair tonic.
17	<i>Amaranthus spinosus</i> L. Local Name: Cherucheera	Herb- This exotic plant is medicinal and used in treatment of internal bleeding, diarrhea, excessive menstruation, snake bites, boils, stomach disorders, ulcerated mouths, vaginal discharges, nosebleeds and wounds. A paste of the root is used in the treatment of menorrhagia, gonorrhoea, eczema and colic.
18	<i>Cyathula prostrata</i> (L.) Blume Local Name: Cherukadaladi	Herb- Used in treating many ailments including rheumatic fever, dysentery, wounds and eye trouble.
Family: Anacardiaceae		
19	<i>Anacardium occidentale</i> L. Local Name: Kasumavu	Tree -This exotic medicinal plant is anthelmintic, aphrodisiac, ascites, dysentery, fever, inappetence, leucoderma, piles, tumors, and obstinate ulcers.

No.	Botanical Name and Local Name	Habit, status and uses
20	<i>Holigarna arnottiana</i> Hook. f. Local Name: Cheru	Tree This plant, endemic to Southern Western Ghats is medicinal and helpful in treatment of inflammation, arthritis, hemorrhoids, obesity, tumor, cancer, and skin diseases.
21	<i>Lannea coromandelica</i> (Houtt.) Merr Local Name: Uthi	Tree-The leaf paste is applied to treat sprains and elephantiasis. The boiled leaves are applied for local swellings and body pains. The juice of bark and leaves is applied to ulcers and swellings.
22	<i>Mangifera indica</i> L. Local Name: Mavu	Tree -Various parts are used as a dentrifice, antiseptic, astringent, diaphoretic, stomachic, vermifuge, tonic, laxative and diuretic and to treat diarrhea, dysentery, anaemia, asthma, bronchitis, cough, hypertension, insomnia, rheumatism, toothache, leucorrhoea, haemorrhage and piles.
23	<i>Spondias pinnata</i> (L. f.) Kurz Local Name: Ambazham	Tree -Used in dysentery, diarrhea, biliousness, menstrual disorders, arthritis, tuberculosis, for rubbing on the skin over painful joints. The bark paste is used for stomach and body pain.
Family: Annonaceae		
24	<i>Uvaria narum</i> (Dunal) Wall. ex Hook.f. & Thoms. Local Name: Narumpanal	Root and leaves-used in intermittent fevers, biliousness, jaundice; also in rheumatic affections; used in skin diseases. A decoction of the root bark is given to women to control fits at the time of delivery.
25	<i>Uvaria zeylanica</i> L.	Climber -Used as purgative and febrifugal.
Family: Apiaceae		
26	<i>Centella asiatica</i> (L.) Urban Local Name: Kodangal	Herb- Used to repair nervous tissue due to spinal injury, neuromuscular disorders, and to increase general brain function and memory. It is also used in skin treatments for a wide spectrum of skin conditions.
Family: Apocynaceae		
27	<i>Alstonia scholaris</i> (L.) R. Br. Local Name: Ezhilampala	Tree-Used to treat fever, malaria, troubles in digestion, tumors, ulcers, asthma.
28	<i>Carissa carandas</i> L. Local Name: Karakka	Shrub-Used to treat acidity, indigestion, fresh and infected wounds, skin diseases, urinary disorders and diabetic ulcer, as well as biliousness, stomach pain, constipation, anemia, skin conditions, anorexia and insanity.
29	<i>Carissa spinarum</i> L. Local Name: Cherumully	Shrub-Used in the treatment and management of breast cancer, headache, chest pains, gonorrhea, lowering blood pressure, rheumatism, syphilis, rabies, immune booster, fever, oedema, cough, ulcer, malaria.
30	<i>Catharanthus pusillus</i> (Murr.) G. Local Name: Kapavila	Herb- The roots, leaves and latex of these plants are used to treat skin and liver diseases, leprosy, dysentery, worms, ulcers, tumor.
31	<i>Cerbera odollam</i> Gaertn. Local Name: Othallam	Tree-Cardiac treatment.

No.	Botanical Name and Local Name	Habit, status and uses
32	<i>Chonemorpha grandiflora</i> (Roth) M. R. & S. M. Local Name: Appuppanthadi	Climber -Entire plant, roots and root bark are used for fever and stomach disorders. The plant is useful in treatment of skin diseases and inflammations.
33	<i>Holarrhena pubescens</i> (Buch.-Ham.) Wall. ex G. Don Local Name: Kadalapala	Shrub to small tree-It is used for the treatment of amoebic dysentery, diarrhoea, irritable bowel syndrome, bleeding piles, and liver disorders
34	<i>Ichnocarpus frutescens</i> (L.) R. Br. Local Name: Palvalli	Climber -Formulations made with this plant are given orally to treat dysentery, glossitis, haematuria, measles, bleeding gums, convulsions, cough, delirium, etc.
35	<i>Nerium oleander</i> L. Local Name: Chuvanna-arali	Shrub-This exotic plant is medicinal, ornamental and used for treating heart conditions, asthma, epilepsy, cancer, painful menstrual periods, leprosy, malaria, ringworm, indigestion, and venereal disease; and to cause abortions.
36	<i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz Local Name: Sarpagandhi	Herb- Used to treat high blood pressure.
37	<i>Strophanthus wightianus</i> Wall. ex Wight Local Name: Kambetti	Climber -For arteriosclerosis, heart problems, and high blood pressure.
38	<i>Tabernaemontana alternifolia</i> L. Local Name: Kundalappala	Tree-This is endemic to Southern Western Ghats and used in treatment of skin infections.
39	<i>Tabernaemontana divaricata</i> (L.) R. Local Name: Nandiyar-vattom	Shrub-Antioxidant, antitumor, anti-infection, analgesic.
40	<i>Vallaris solanacea</i> (Roth) O. Ktze. Local Name: Vishappala	Climber -The milky latex can be applied to treat ringworm and other skin infections, including sores, cuts and wounds.
41	<i>Wrightia arborea</i> (Dennst.) Mabb. Local Name: Mylappala	Tree-The bark possess antipyretic and antibacterial activities and is also used for curing menstrual and renal complaints. The latex of this plant is used as an antidote for snake bites and scorpion-stings. The leaves are used as a diaphoretic, expectorant and to treat dysentery, toothache and diarrhea.
42	<i>Wrightia tinctoria</i> (Roxb.) R. Br. Local Name: Dhanthappala	Tree-The bark is useful in treatment of diarrhoea, piles and ringworm and other skin diseases. The seeds have anti-dysenteric properties and are also used as astringents, antihelminthics, aphrodisiacs and to reduce fever.
Family: Araceae		
43	<i>Amorphophallus paeoniifolius</i> (Dennst.) Nicolson Local Name: Kattuchena	Herb- Root is carminative, restorative, stomachic and tonic; used in the treatment of piles and dysentery; acute rheumatism

No.	Botanical Name and Local Name	Habit, status and uses
44	<i>Cryptocoryne spiralis</i> (Retz.) Fisch. ex Wydler	Herb- Leaves are used as anti-itching agents. Rhizome extracts are used for cough, fever, nausea, abdominal pain, vomiting in infants, and abdominal complaints.
45	<i>Lagenandra toxicaria</i> Dalz. Local Name: Andavazha	Herb- Herb- This is endemic to the Endemic to Southern Western Ghats Used in the preparations of ointments for skin itch and the rhizome is used in renal and cardiac ailments.
46	<i>Pothos scandens</i> L. Local Name: Anapparuva	Climber -The root of the plant is used to promote healing of abscesses, after being fried in oil. An infusion of the leaves of this plant is used as a bath for curing convulsions and epilepsy.
Family: Arecaceae		
47	<i>Areca catechu</i> L. Local Name: Kavungu	Tree-Alertness, increased stamina, a sense of well-being, euphoria, and salivation.
48	<i>Borassus flabellifer</i> L. Local Name: Karimbana	Tree-Used for the treatment of difficulty in micturition, general debility, diarrhea, psychiatric conditions, hepatomegaly and acidity.
49	<i>Caryota urens</i> L. Local Name: Choondappana	Tree-For seminal weakness and urinary disorders; the juice is applied on the forehead for hemicranias.
Family: Aristolochiaceae		
50	<i>Aristolochia indica</i> L. Local Name: Eshwaramulla	Climber -Used to relieve snake bites and coughs.
51	<i>Thottea siliquosa</i> (Lam.) Ding Hou Local Name: Alpm	Shrub-Diarrhoea and dysentery.
Family: Asclepiadaceae		
52	<i>Asclepias curassavica</i> L. Local Name: Chemullicedi	Herb-The juice, made into a syrup, is given as a powerful anthelmintic to children.
53	<i>Calotropis gigantea</i> (L.) R. Br. Local Name: Erikku	Shrub-Effective in treating skin, digestive, respiratory, circulatory and neurological disorders and was used to treat fevers, elephantiasis, nausea, vomiting, and diarrhea.
54	<i>Gymnema sylvestre</i> (Retz.) R. Br. ex Schult. Local Name: Chakkarakolli	Climber -Anti-diabetic properties.
55	<i>Tylophora indica</i> (Burm. f.) Merr. Local Name: Vallippala	Climber -Against asthma, bronchitis, bronchial asthma, hay fever, and rheumatism.
56	<i>Wattakaka volubilis</i> (L. f.) Stapf Local Name: Vattakakkakoti	The plant is useful in cold and eye disease. Leaves are used as an application to boils and abscesses.
Family: Asteraceae		
57	<i>Blumea lacera</i> (Burm. f.) DC. Local Name: Kukkura-chedi	Bitter, astringent, acrid, thermogenic, errhine, anti-inflammatory, styptic, opthalmic, digestive, anthelmintic, liver tonic, expectorant, febrifuge, antipyretic, diuretic, deobstruant, and stimulant

No.	Botanical Name and Local Name	Habit, status and uses
58	<i>Chromolaena odorata</i> (L.) King & Robins. Local Name: Communist-pacha	Shrub-This exotic weed is widely used for its wound healing property. In particular, the several parts of this herb have been used to treat wounds, burns, and skin infections.
59	<i>Eclipta prostrata</i> (L.) L. Local Name: Kayyunni	Herb- Usage in hair growth and liver disorders. It is also an effective medicine for skin diseases, cough, asthma, eye disorders and diseases related to any part of the head.
60	<i>Elephantopus scaber</i> L. Local Name: Aanachuvadi	Herb- Different parts of the plant are used as an astringent agent, cardiac tonic, and diuretic, and is used for eczema, rheumatism, fever, and bladder stones.
61	<i>Emilia sonchifolia</i> (L.) DC. Local Name: Muyalchevian	Herb- The juice of the leaves is used in treating eye inflammations, night blindness, cuts and wounds and sore ears. The plant is astringent, depurative, diuretic, expectorant, febrifuge and sudorific. It is used in the treatment of infantile tympanites and bowel complaints.
62	<i>Sphaeranthus africanus</i> L. Local Name: Velutha-adakkamaniyan	Herb- Pacify epilepsy, migraine, jaundice, fever, cough, hemorrhoids, helminthiasis, skin diseases and as nervine tonic.
63	<i>Sphaeranthus indicus</i> L. Local Name: Adakkyamaniyan	Herb- Used in conditions of epilepsy, mental illness, hemicrania, jaundice, hepatopathy, diabetes, leprosy, fever, pectoralgia, cough, gastropathy, hernia, hemorrhoids, helminthiasis, dyspepsia and skin diseases.
64	<i>Spilanthes radicans</i> Jacq. Local Name: Venapacha	Herb- This exotic is stomachic, stimulant, and antidiarrhoeal and is used rarely against tuberculosis. The whole plant has local anaesthetic, anti-inflammatory, antioxidant, aphrodisiac, antinociception, immunomodulator, and insecticidal effect.
65	<i>Tridax procumbens</i> L. Local Name: Thelkuthi	Herb- This exotoc plants leaf extracts are used for infectious skin diseases, for liver disorders, gastritis, and heartburn.
66	<i>Vernonia cinerea</i> (L.) Less. Local Name: Puvankurunal	Herb- Plant possess anti cancerous property. Seeds cures diseases caused by roundworms and threadworms, coughs, flatulence, intestinal colic, dysuria, leucoderma, psoriasis and other chronic skin-diseases. The seeds are made into a paste with lime juice and used for destroying pediculi.
67	<i>Wedelia chinensis</i> (Osbeck) Merr. Local Name: Aswagandhi	Herb- Very specific in treating viral hepatitis. Traditionally the fruit, leaves and stem are used in child birth and in treatment of bites and stings, fever and infection. Leaves are used to treat the kidney dysfunction cold, wound and amenorrhea

No.	Botanical Name and Local Name	Habit, status and uses
68	<i>Xanthium indicum</i> Koenig Local Name: Otta	Herb- The leaves and root are anodyne, antirheumatic, appetizer, diaphoretic, diuretic, emollient, laxative and sedative. The plant is considered to be useful in treating long-standing cases of malaria.
Family: Basellaceae		
69	<i>Basella alba</i> L. Local Name: Basalacheera	Climber -Treatment of many diseases like dysentery, diarrhea, anaemia and cancer.
Family: Bignoniaceae		
70	<i>Oroxylum indicum</i> (L.) Benth. ex Kurz. Local Name: Palakapayyani	Tree-Possess anti-inflammatory, diuretic, astringent, expectorant, anti-arthritis, antipyretic, aphrodisiac antifungal and antibacterial activity.
71	<i>Pajanelia longifolia</i> (Willd.) K. Schum. Local Name: Azhantha	Tree-Hepatoprotective.
Family: Bixaceae		
72	<i>Bixa orellana</i> L. Local Name: Kurangumanjal	Shrub to small tree-This exotic ornamental plant is used as a topical antiseptic for ear, eye, and skin infections for digestive problems.
Family: Bombacaceae		
73	<i>Bombax ceiba</i> L. Local Name: Mullilavu	Tree-Used in the treatment for various conditions and diseases like cholera, fractures, toothache, coughs, urinary problems, influenza, and snake bites.
Family: Boraginaceae		
74	<i>Heliotropium indicum</i> L. Local Name: Thelkada	Herb- Treat warts, inflammations and tumours. Throughout tropical Africa it is used as an analgesic to ease rheumatic pain, as a diuretic and to treat numerous skin problems including yaws, urticaria, scabies, ulcers, eczema and impetigo.
Family: Bromeliaceae		
75	<i>Ananas comosus</i> (L.) Merr. Local Name: Kaithachakka	Herb- This exotic plants leaves are used as anthelmintic, cholagogue; fresh juice taken to treat hiccup and constipation. Fruit used as digestive, diuretic, laxative, diaphoretic and antiscorbutic; used to treat gastric irritability, jaundice. Green fruit used as abortifacient, anthelmintic, emmenagogue and styptic.
Family: Burseraceae		
76	<i>Commiphora caudata</i> (Wight & Arn.) Engl. Local Name: Kilimaram	Tree-Hepatoprotective, febrifuge, antibacterial and antioxidant properties. The gum mixed with water is used as mouth wash to cure mouth ulcer and is used for wound healing and rheumatoid arthritis. The leaves mixed with goat milk are taken as sexual stimulant.

No.	Botanical Name and Local Name	Habit, status and uses
Family: Caesalpiniaceae		
77	<i>Bauhinia tomentosa</i> L. Local Name: Manjamanaram	Shrub-The root bark of this ornamental plant is used internally for conditions of the large intestine, while the flower is used as a remedy for dysentery and diarrhea.
78	<i>Caesalpinia bonduc</i> (L.) Roxb. Local Name: Kazhanji	Climber -Febrifuge, antiperiodic, anthelmintic and tonic properties. Pods are roasted and the powder is used as a substitute for quinine. The root bark has been used for relieving intestinal worms, fever, tumors, cough, amenorrhea, and to remove placenta after childbirth.
79	<i>Caesalpinia pulcherrima</i> (L.) Swartz Local Name: Rajamalli	Shrub-This exotic plant's bark is used as an abortifacient and an infusion of leaves is used as abortifacient and cathartic.
80	<i>Caesalpinia sappan</i> L. Local Name: Chappangam	Tree-Used to cure wounds (also with a plaster of macerated leaves and bark), tuberculosis, diarrhoea and dysentery and is reported as having antioxidative, anti-inflammatory, hepatoprotective, cytotoxic, hypoglycaemic and xanthine oxidase-inhibitory activities.
81	<i>Cassia fistula</i> L. Local Name: Kanikonna	Tree-In the treatment of inflammatory swellings and as a cleaning agent for ulcers and wounds. It is believed to decrease purulent discharge and act as a local antiseptic. The fruits are also used as a laxative.
82	<i>Saraca asoca</i> (Roxb.) de Wilde Local Name: Ashokam	Tree-This plant classified as vulnerable is used in the management of female disorders like congestion, excessive bleeding and discomfort or pain. It is also beneficial in relieving dysmenorrhoea, uterine spasms and abdominal pain. It is an efficient tonic for the proper functioning of the uterus.
83	<i>Senna alata</i> (L.) Roxb. Local Name: Malamthakara	Shrub-Laxative or purgative and in the treatment of skin problems
84	<i>Senna occidentalis</i> (L.) Link Local Name: Karinthakara	Shrub-Tonic, diuretic, stomachic and febrifuge properties and are especially used for dropsy, rheumatism, fevers and venereal diseases
85	<i>Tamarindus indica</i> L. Local Name: Puli	Tree-This introduced and naturalized plant is used in wound healing, abdominal pain, diarrhea, dysentery, parasitic infestation, fever, malaria and respiratory problems.
Family: Capparaceae		
86	<i>Cleome viscosa</i> L. Local Name: Karimkadugu	Herb- The leaves and seeds of the plant are used as rubefacient and to treat infection, rheumatism, fever and headache. Traditionally, this plant is used in various disorders such as diarrhea, fever, inflammation, liver diseases, bronchitis, skin diseases, and malarial fever.

No.	Botanical Name and Local Name	Habit, status and uses
87	<i>Crataeva magna</i> (Lour.) DC. Local Name: Neermathalam	Tree-It is used to stimulate digestive fire and used to pacify kapha and vata dosha. It is used to treat urine retention, calculi, abdominal tumors and worm infestation.
Family: Caricaceae		
88	<i>Carica papaya</i> L. Local Name: Pappali	This exotic plant is used for treatment of a numerous diseases like warts, corns, sinuses, eczema, cutaneous tubercles, glandular tumors, blood pressure, dyspepsia, constipation, amenorrhoea, general debility, expel worms and stimulate reproductive organs
Family: Clusiaceae		
89	<i>Calophyllum calaba</i> L. Local Name: Cherupunna	Tree-This is Endemic to Western Ghats and used against cancer and bacterial infections
90	<i>Calophyllum inophyllum</i> L. Local Name: Punna	Tree-The latex and pounded bark are applied externally on wounds, ulcers and to treat phthisis, orchitis and lung affections, and internally as a purgative, after childbirth and to treat gonorrhoea
91	<i>Garcinia gummi-gutta</i> (L.) Robs. Local Name: Kodampuli	Tree-Used for treating constipation, oedema, ulcers, haemorrhoids, dysentery, intestinal parasites, irregular menstruation, open sores, diarrhoea and fever.
92	<i>Garcinia xanthochymus</i> Hook.f. ex Anders. Local Name: Monthanpuli	Tree-Antioxidant, antidiabetic, and for having Nerve Growth Factor-potentiating, antimicrobial and cytotoxic
Family: Combretaceae		
93	<i>Terminalia bellirica</i> (Gaertn.) Roxb. Local Name: Thanni	Tree-Useful in leprosy, cough, bronchitis, allergic cough, insomnia, edema, dyspepsia, eye disease and graying of hair. It's pulp is used in dropsy, piles and diarrhoea. It is also used in oxalic acid and preparation of ink.
94	<i>Connarus monocarpus</i> L. Local Name: Kuriel	Climber -A decoction of the root is taken to cure syphilis, and the fruits to treat eye diseases.
Family: Convolvulaceae		
95	<i>Argyrea nervosa</i> (Burm.f.) Bojer Local Name: Samudrappacha	Climber -Anti-oxidant, anti-inflammatory, anti-rheumatic, immunomodulatory, adaptogenic and hepatoprotective
96	<i>Cuscuta chinensis</i> Lam.	Climber -Treating the aching and weakness of the loins and knees, tonifying the defects of the liver and the kidney, and treating the diarrhea due to hypofunction of the kidney and the spleen.
97	<i>Cuscuta reflexa</i> Roxb. Local Name: Moodillathali	Climber -The stems are used in the treatment of bilious disorders. The whole plant is purgative. It is used internally in treating protracted fevers and externally in the treatment of body pains and itchy skin. The plant is employed in Ayurvedic medicine to treat difficulty in urinating, jaundice, muscle pain and coughs.

No.	Botanical Name and Local Name	Habit, status and uses
98	<i>Evolvulus alsinoides</i> (L.) L. Local Name: Vishnukranthi	Herb- This used extensively as a febrifuge and tonic. With cumin and milk it is used for fevers nervous debility, and loss of memory; also for syphilis, scrofula, etc. It is said to be a sovereign remedy for bowel complaints, especially dysentery.
99	<i>Evolvulus nummularius</i> (L.) L.	Herb- Edatives, etc. Plant medicines: paralysis, epilepsy, convulsions,
100	<i>Ipomoea cairica</i> (L.) Sweet Local Name: Kolambipoo	Climber -Used for treating eye-troubles:
101	<i>Ipomoea mauritiana</i> Jacq. Local Name: Muthalakizhangu	Climber -The leaves and roots are used externally to treat tuberculosis and for the treatment of external and breast infections. In Ayurveda, a decoction of the tuberous roots are used for the preparation of medicinal wine.
102	<i>Ipomoea obscura</i> (L.) Ker-Gawl. Local Name: Thiruthali	Climber -Applied to open sores and pustules. Dried and powdered leaves are used to treat aphthae.
103	<i>Ipomoea pes-tigridis</i> L. Local Name: Naripadam	Climber -The root of this plant was found to possess purgative action.
104	<i>Xenostegia tridentata</i> (L.) Austin & Staples Local Name: Prasarani	Herb- The aerial parts are used in treating haemorrhoids, swellings, rheumatic affections and urinary infections
	Family: Crassulaceae	
105	<i>Kalanchoe pinnata</i> (Lam.) Pers. Local Name: Aakasachedi	Herb- This exotic plant is used in treatment of kidney and bladder stones, recurrent stones, Jaundice, High blood pressure
Family: Cucurbitaceae		
106	<i>Diplocyclos palmatus</i> (L.) Jeffrey Local Name: Neyyunni	Climber -The fruits and leaves are used to cure stomachache, stems are used as an expectorant, fruits are used as a laxative and seeds are febrifuge. The aerial plant parts are potentially utilized for several purposes such as for Aphrodisiac and tonic, Constipation, Stomach problem, Diarrhoea, Malaria fever
107	<i>Mukia maderaspatana</i> (L.) Roem. Local Name: Kasappuchedi	Climber -Used as a herbal drug in cough and cold
108	<i>Solena amplexicaulis</i> (Lam.) Gandhi Local Name: Kakkarikka	Climber -Used as a remedy for the treatment of inflammation
109	<i>Trichosanthes cucumerina</i> L. Local Name: Kattupadavalam	Climber -Used for treating headache, alopecia, fever, abdominal tumors, bilious, boils, acute colic diarrhea, haematuria, and skin allergy
Family: Cyperaceae		
110	<i>Cyperus rotundus</i> L. Local Name: Muthanga	Herb- Traditionally used to treat various clinical conditions at home such as diarrhea, diabetes, pyresis, inflammation, malaria, and stomach and bowel disorders

No.	Botanical Name and Local Name	Habit, status and uses
Family: Dioscoreaceae		
111	<i>Dioscorea bulbifera</i> L. Local Name: Kattukachil	Climber -Corms are aphrodisiac, tonic, and used for treating sore throat, boils and swellings, dysentery, piles, and syphilis
Family: Dipterocarpaceae		
112	<i>Vateria indica</i> L. Local Name: Vellappayin	This is Critically Endangered and endemic to the Western Ghats. Dammar resin obtained from bark of the tree is used in chronic bronchitis and throat troubles
Family: Euphorbiaceae		
113	<i>Acalypha indica</i> L. Local Name: Kuppameni	Herb- Emetic, expectorant, used in homoeopathy for incipient phthisis with bloody expectorations, emaciation and arterial haemorrhage
114	<i>Aporosa cardiosperma</i> (Gaertn.) Merr. Local Name: Vetti	Tree
115	<i>Baliospermum montanum</i> (Willd.) Muell.-Arg. Local Name: Cheriyananthi	Shrub-Blood purifier and paste of danti roots and seeds are used to reduce edema and pain. This herb has antipyretic properties and used to treat fever. Roots are laxative and highly purgative in nature
116	<i>Briedelia retusa</i> (L.) A. Juss. Local Name: Mulluvenga	Tree-Useful in lumbago, hemiplegia; bark is good for the removal of urinary concretions
117	<i>Briedelia stipularis</i> (L.) Blume Local Name: Kanjikottam	Shrub-Used in pleurisy and exudation. Bark decoction is given to children for cough, fever and asthma and as gargle for sores in mouth
118	<i>Chamaesyce hirta</i> (L.) Millisp. Local Name: Nilappala	Herb- Used traditionally for female disorders, respiratory ailments (cough, coryza, bronchitis, and asthma), worm infestations in children, dysentery, jaundice, pimples, gonorrhea, digestive problems, and tumors.
119	<i>Chamaesyce rosea</i> (Retz.) Webster	Herb- Milky juice is alexiteric, carminative and purgative. It is useful in whooping cough, gonorrhea, asthma, leprosy, dropsy, dyspepsia, enlargement of spleen, colic, jaundice and stone in bladder.
120	<i>Chamaesyce thymifolia</i> (L.) Millsp. Local Name: Chitrapala	Herb- Decoction or infusion against dysentery, enteritis, diarrhoea and venereal diseases. The dried leaves and seeds are slightly aromatic and are used as a stimulant, astringent, anthelmintic and laxative.
121	<i>Croton hirtus</i> L'Herit.	Herb- To treat severe constipation, heal lesions, and is used as a purgative
122	<i>Croton laevigatus</i> Vahl Local Name: Pongalam	Tree-Cytotoxic, anti-inflammatory, antifungal, acetylcholinesterase inhibitory, and neurite outgrowth-promoting activities
123	<i>Euphorbia tirucalli</i> L. Local Name: Katerumakkali	Shrub-Latex is vesicant and rubefacient which is used for rheumatism, warts, cough, asthma, ear-ache, tooth-ache and neuralgia. It acts as a purgative in small doses while in big doses it is bitter irritant and emetic.

No.	Botanical Name and Local Name	Habit, status and uses
124	<i>Jatropha curcas</i> L. Local Name: Kadalavanakku	Shrub-This exotoc plant is used in treating dysentery and diarrhea
125	<i>Jatropha gossypifolia</i> L. Local Name: Chuvanna-Kadalavanakku	Shrub-Manage emesis and gastrointestinal motility disorders such as constipation and diarrhea.
126	<i>Mallotus philippensis</i> (Lam.) Muell.-Arg. Local Name: Chenkolli	Tree-Leaves are bitter, cooling and appetizer. Fruit is heating, purgative, anthelmintic, vulnerary, detergent, maturant, carminative, alexiteric and useful in treatment of bronchitis, abdominal diseases, spleen enlargement
127	<i>Microstachys chamaelea</i> (L.) Muell.-Arg. Local Name: Kodiyavannakku	Herb- A decoction of the leafy stems is used as a bath to relieve teething pain in babies.
128	<i>Phyllanthus acidus</i> (L.) Skeels Local Name: Arinelli	Tree-Peppered leaves are used to make a poultice to treat sciatica, lumbago and rheumatism
129	<i>Phyllanthus amarus</i> Schum. & Thonn Local Name: Keezhanelli	Herb- Dropsy, diabetes, jaundice, asthma and bronchial infections
130	<i>Phyllanthus emblica</i> L. Local Name: Nelli	Tree-Immunomodulatory, anti-inflammatory, antiulcer, hepatoprotective, and anticancer actions.
131	<i>Phyllanthus reticulatus</i> Poir Local N Local Name:ame: Neeroli	Shrub-Fresh leaf juice is used for muscle spasms. Dried bark is used for dysmenorrhea, diarrhea with anal bleeding. Dried root bark is used for promoting fertility. India: Dried bark and leaves decoction are as a diuretic, alterative and for cooling effect and also used for smallpox
132	<i>Phyllanthus urinaria</i> L. Local Name: Chirukizhukanelli	Herb- Used as a diuretic and purgative to treat a wide variety of uro-genital disorders, diarrhoea and diabetes, as a bitter tonic and to treat fever, including malaria.
133	<i>Putranjiva roxburghii</i> Wall. Local Name: Ponkalam	Tree-Seed in the treatment of eye disorders, burning sensation, elephantiasis, difficulty in micturition, azoospermia and habitual abortions.
134	<i>Ricinus communis</i> L. Local Name: Aavannakku	Shrub-This exotic plant has laxative propoerties
135	<i>Tragia involucrata</i> L. Local Name: Kodithoova	Herb- Used to treat inflammation, wounds, eczema, scabies and skin infections. It has also been found to be effective in treating pain and bronchitis
Family: Fabaceae		
136	<i>Abrus precatorius</i> L. Local Name: Kunni	Climber -Neuro-protective, abortifacient, antiepileptic, anti-viral, anti-malarial, antifertility, nephroprotective, immunomodulator, immunostimulatory properties, anti-inflammatory activity, antidiabetic effect
137	<i>Alysicarpus monilifer</i> (L.) DC. Local Name:	Herb- Used as anti-inflammatory, in stomach ache, as an antidote to snakebite, and for the treatment of fever, jaundice, leucoderma, diarrhoea, skin diseases and kidney stones

No.	Botanical Name and Local Name	Habit, status and uses
138	<i>Butea monosperma</i> (Lam.) Taub. Local Name: Plasu	Tree-Leaves are good have astringent, depurate, diuretic and aphrodisiac in pharmacological properties. It stimulates and promotes diuresis and menstrual flow.
139	<i>Dalbergia latifolia</i> Roxb. Local Name: Eeti	This is classified as vulnerable plant and its bark is used in traditional medicine in India, to treat diarrhoea, indigestion and leprosy, and as a vermifuge
140	<i>Desmodium gangeticum</i> (L.) DC. Local Name: Orila	Herb- Anti-oxidant properties which help to neutralize the effects of free radicals and other substances. Thus it is a good herb to protect the body from diseases and also helps to boost up the immune system.
141	<i>Desmodium triflorum</i> (L.) DC. Local Name: Cherupulladi	Herb- The plant is antipyretic, antiseptic, expectorant. A decoction is commonly used to treat diarrhoea and dysentery; and to quench thirst. A decoction is used as a mouthwash; and the crushed plant, or a poultice of the leaves, is applied externally on wounds, ulcers, and for skin problems in general.
142	<i>Erythrina variegata</i> L.	Tree-it is used in treatment of menstrual disorders and fissures at penis tip
143	<i>Indigofera tinctoria</i> L. Local Name: Neelayamari	Shrub-The roots, stems and leaves are bitter, thermogenic, laxative, trichogenous, expectorant, anthelmintic, gastropathy, splenomegaly, cephalalgia, cardiopathy, hepatoprotective anticancer, epilepsy, neuropathy, chronic bronchitis, asthma, ulcers, skin diseases, diuretic
144	<i>Mucuna gigantea</i> (Willd.) DC. Local Name: Kakavalli	Climber -Root decoctions are taken to treat gonorrhoea and schistosomiasis. In India the bark is applied externally to treat rheumatic complaints. Powdered seed is used as a purgative. The irritant hairs on the outside of the pods are mentioned as being used in criminal poisoning
145	<i>Mucuna pruriens</i> (L.) DC. Local Name: Naikurana	Climber -An established herbal drug used for the management of male infertility, nervous disorders, and also as an aphrodisiac
146	<i>Pongamia pinnata</i> (L.) Pierre Local Name: Ungu	Tree-Applied as crude drug for the treatment of tumors, piles, skin diseases, and ulcers
Family: Flacourtiaceae		
147	<i>Flacourtia montana</i> Graham Local Name: Vayyamkaitha	Tree-Hepatoprotective, anti-inflammatory and antioxidant
148	<i>Hydnocarpus pentandra</i> (Buch.-Ham.) Oken Local Name: Marotti	Tree-Seeds of this plant which is endemic to the western ghats yield hydnocarpus or chaulmoogra oil, used in leprosy. Seed oil is also anti-inflammatory, alterative, tonic, used as local application is rheumatism, sprains, bruises, sciatica and chest affections. Seed and seed oil are also used in leucoderma, worm infection, polyuria, pruritus, eye diseases and sinus wounds.

No.	Botanical Name and Local Name	Habit, status and uses
Family: Hippocrateaceae		
149	<i>Salacia fruticosa</i> Heyne ex Lawson Local Name: Ponkarandi	Climber -This is Endemic to Western Ghats. In addition to treating diabetes, it is used for treating gonorrhea, asthma, itchiness, joint pain (rheumatism), obesity, thirst, and menstrual problems.
Family: Hypoxidaceae		
150	<i>Curculigo orchiioides</i> Gaertn. Local Name: Nilappana	Herb- A rejuvenating tonic, aphrodisiac drug, and diuretic. It is useful in general debility, cough, jaundice, asthma, and piles
Family: Icacinaceae		
151	<i>Sarcostigma kleinii</i> Wight & Arn. Local Name: Erumathali	Climber -Fruits are eaten and also used in rheumatism. Seeds yield fatty oil which is esteemed as a cure for rheumatism, but is reported to be injurious to eyes. Powdered bark mixed with honey is given in rheumatism, leprosy, hysterics and ulcers.
Family: Lamiaceae		
152	<i>Anisomeles indica</i> (L.) O. Ktze. Local Name: Karithumba	Herb- Useful in affections of the stomach and bowels, and in catarrh and intermittent fevers; and that the juice of the leaves is administered to children for colic, dyspepsia, and fever caused by teething. Inhaling the vapor of the hot infusion induces copious perspiration
153	<i>Hyptis suaveolens</i> (L.) Poit. Local Name:	Shrub-Herb- This exotic plant is analgesic and decongestant, and also to avoid fever and to fuel blood circulation with a sour, minty and sweet-smelling flavour
154	<i>Leucas aspera</i> (Willd.) Link Local Name: Thumba	Herb- Antifungal, prostaglandin inhibitory, antioxidant, antimicrobial, antinociceptive and cytotoxic activities
155	<i>Ocimum americanum</i> L. Local Name: Kattuthulasi	Herb- Decoctions are used for coughs, pounded leaves are placed on the forehead to relieve catarrh or on the chest for respiratory problems, the whole plant is used in baths to treat rheumatism, renal colic and calcifications
156	<i>Ocimum gratissimum</i> L. Local Name: Ramathulasi	Shrub-Used in herbal and local soup preparation for the management/treatment of many diseases such as upper respiratory tract infections, diarrhea, headache, ophthalmic, skin diseases, pneumonia and also as a treatment for cough, fever
157	<i>Ocimum tenuiflorum</i> L. Local Name: Krishnathulasi	Shrub-Contains vitamin C and antioxidants such as eugenol, which protects the heart from the harmful effects of free radicals. Anti-aging. Treats Kidney Stones. Relieves Headaches. Fights Acne. Relives Fever. Eye Health. Oral Health.
158	<i>Plectranthus amboinicus</i> (Lour.) Spreng. Local Name: Panikoorka	Herb- Used in soup to stimulate lactation for the month or so following childbirth.

No.	Botanical Name and Local Name	Habit, status and uses
Family: Hydrocharitaceae		
159	<i>Pogostemon paniculatus</i> (Willd.) Benth. Local Name:	Herb- Treatment of gastro-intestinal disorders, hemorrhoids and asthma
Family: Lauraceae		
160	<i>Cassytha filiformis</i> L. Local Name: Moodillathali	Climber -Used for the treatment of cancer, African trypanosomiasis and many other related disease
161	<i>Cinnamomum malabattrum</i> (Burm. f.) Blume Local Name: Vazhana	Tree-This plant is endemic to the Southern Western Ghats. Bark is stimulant, carminative, haemostatic, astringent, diaphoretic, deobstruent, and galactagogue. In infusion, decoction and powder or in oil, the bark is prescribed in bowel complaints such as dyspepsia, flatulence, diarrhea and vomiting.
162	<i>Cinnamomum verum</i> Preslh. Local Name: Karuva	Tree-Stomach upset, diarrhea, and gas. It is also used for diabetes, stimulating appetite, treating infections, and reducing body weight in patients who are overweight or obese.
163	<i>Persea macrantha</i> (Nees) Kosterm. Local Name: Kulamavu	Tree-Leaf as well as bark are used extensively by folklore practitioners in treating various ailments such as rheumatism, asthma, ulcer, bruise, mental upset, fractures, swellings, weakness and debility
Family: Lecythidaceae		
164	<i>Careya arborea</i> Roxb. Local Name: Pezhu	Tree-Powder of the bark of the tree is sprinkled over the wounds for quick healing
165	<i>Couroupita guianensis</i> Aublet Local Name: Nagalingamaram	Tree-This exotic plant's leaves, flowers, and barks are used to treat hypertension, tumor, pain, and inflammatory reactions. Leaves are used to make juice which is used to treat skin diseases
Family: Leeaceae		
166	<i>Leea indica</i> (Burm. f.) Merr. Local Name: Chorianthali	Shrub to small tree-The plant is used as a remedy for ailments such as diarrhea, dysentery, diabetes, bone fracture, body ache, fever, and wound treatment.
Family: Liliaceae		
167	<i>Asparagus racemosus</i> Willd. Local Name: Sathavari	Climber -For upset stomach (dyspepsia), constipation, stomach spasms, and stomach ulcers. It is also used for fluid retention, pain, anxiety, cancer, diarrhea, bronchitis, tuberculosis, dementia, and diabetes
168	<i>Gloriosa superba</i> L. Local Name: Menthonni	Climber -Used in the treatment of snake bites, scorpion stings, parasitic skin diseases, urological pains, colic, chronic ulcers, piles, gonorrhoea, gout, infertility, wounds, arthritis, cholera, kidney problems, typhus, itching, leprosy, cancer, nocturnal emission, abdominal pains, head lice, sexually transmitted

No.	Botanical Name and Local Name	Habit, status and uses
Family: Linaceae		
169	<i>Hugonia mystax</i> L. Local Name: Modirakkanni	Climber -The roots are astringent, bitter, sweet, febrifuge and anthelmintic. They are useful in fever, verminosis and vitiated conditions of vata, externally as a past for inflammations and used swelling due to viper bite.
Family: Loganiaceae		
170	<i>Strychnos minor</i> Dennst. Local Name: Cherukanjiravally	Climber -It is used as a remedy in chronic dysentery, paralytic and neuralgic disorders, epilepsy, rheumatic arthritis, and hydrophobia
171	<i>Strychnos nux-vomica</i> L. Local Name: Kanjiram	Tree-It is also used for nerve conditions, depression, migraine headache, symptoms of menopause, and a blood vessel disorder called Raynaud's disease. Other uses include treatment of "tired blood" (anemia), as a tonic, and as an appetite stimulant.
Family: Loranthaceae		
172	<i>Dendrophthoe falcata</i> (L. f.) Etting. Local Name: Ithil	Shrub-Used in folklore medicine for ailments including ulcers, asthma, impotence, menstrual troubles, asthma, psychic disorders, paralysis, skin diseases, and wounds.
Family: Lythraceae		
173	<i>Lawsonia inermis</i> L. Local Name: Mailanchi	Shrub-Powder with butter cures scabies, mange and swelling. It acts against hair loss and strengthens hair. Because of the astringent nature, it is used to cure sunburn and other rashes in the body.
Family: Magnoliaceae		
174	<i>Magnolia champaca</i> (L.) Baill. ex Pierre Local Name: Chembakam	Tree-Used in the cure of bleeding disorders such as nasal bleeding, heavy periods, etc, Dysuria, urinary retention, Toxic conditions, poisoning, worm infestation, acts as the cardiac tonic, congenial for the heart, Gout, burning sensation, ulcers, wounds.
Family: Malvaceae		
175	<i>Abelmoschus moschatus</i> Medik. Local Name: Kasthurivenda	Shrub-Anti-halitosis, Antispasmodic, Appetizer and Digestive stimulant , Aphrodisiac, Demulcent (mucilage), Stomachic , Diuretic
176	<i>Abutilon indicum</i> (L.) Sweet Local Name: Oorpam	Shrub-Demulcent, aphrodisiac,laxative, diuretic, sedative, astringent, expectorant, tonic, anti-inflammatory, anthelmintic, and analgesic and to treat leprosy, ulcers, headaches, gonorrhea, and bladder infection.
177	<i>Hibiscus rosa-sinensis</i> L. Local Name: Chembarathi	Shrub-The flowers of this exotic ornamental plants are used in the treatment of carbuncles, mumps, fever and sores. The root is a good source of mucilage and is used as a substitute for marsh mallow in the treatment of coughs and colds. A paste made from the root is used in the treatment of venereal diseases[

No.	Botanical Name and Local Name	Habit, status and uses
178	<i>Hibiscus sabdariffa</i> L. Local Name: Polechi	Shrub-This exotic plants is unsed in treating high blood pressure, liver diseases and fevers
179	<i>Sida acuta</i> Burm. f. Local Name: Anakurunthotti	Herb- Stringent, cooling, stomachic, febrifuge,
180	<i>Sida alnifolia</i> L. Local Name: Kurunthotti	Herb- Used as tonic and for the treatment of asthma and other chest ailments
181	<i>Sida cordata</i> (Burm. f.) Borss. Local Name: Vallikurunthotti	Herb- Used to treat asthma, tuberculosis, the common cold, flu, headaches, nasal congestion, cough and wheezing, urinary tract infections, sore mouth, and fluid retention (edema).
182	<i>Sida cordifolia</i> L. Local Name: Kurunthotti	Herb- Used for weight loss, erectile dysfunction (ED), sinus problems, allergy, throat diseases, asthma, and bronchitis. These combinations are also used to burn fat, increase energy, and promote strong bones.
183	<i>Thespesia populnea</i> (L.) Soland. ex Correa Local Name: Poovarasu	Tree-Used to treat skin diseases (India), dysentery and haemorrhoids
184	<i>Urena lobata</i> L. Local Name: Kuruvachedi	Shrub-It is considered expectorant and emollient.
Family: Melastomataceae		
185	<i>Melastoma malabathricum</i> L. Local Name: Kalampotti	Shrub-The leaves, shoots, barks, seeds, and roots have been used to treat diarrhoea, dysentery, hemorrhoids, cuts and wounds, toothache, and stomachache
Family: Meliaceae		
186	<i>Aphanamixis polystachya</i> (Wall.) Parker Local Name: Ponnambazham	Tree-Root bark in abdominal complaints like enlargement of glands, liver and spleen disorders and corpulence. Seeds have refrigerant, laxative, anthelmintic activities; used against the diseases of the blood and scale back muscular pain. Oil of the seeds is used to treat rheumatism and conjointly has pesticidal character. Bark and seeds of the plant are useful for ulcer
187	<i>Azadirachta indica</i> A.Juss. Local Name: Ariyaveppu	Tree-Used in many medicinal treatment like skin diseases, healthy hair, improve liver function, detoxify the blood, Pest and disease control, fever reduction, dental treatments, cough, asthma, ulcers, piles, intestinal worms, urinary diseases etc
188	<i>Naregamia alata</i> Wight & Arn. Local Name: Nilanaragam	Herb- Used in prescriptions for malarial and chronic fevers, anaemia
Family: Menispermaceae		
189	<i>Cissampelos pareira</i> L. var. <i>hirsuta</i> (Ham. ex DC.) Forman Local Name: Malathangi	Climber -Used in the treatment of chronic non-healing ulcers and sinuses. It is also used in the treatment of chronic skin diseases and in the treatment of poisonous bites.
190	<i>Cyclea peltata</i> (Lam.) Hook. f. & Thoms. Local Name: Padathali	Climber -Root juice used as nasal drops for headache. Studies have shown that it is good anti-inflammatory.

No.	Botanical Name and Local Name	Habit, status and uses
191	<i>Tinospora cordifolia</i> (Willd.) Miers. Local Name: Chitamruthu	Climber -Used for diabetes, high cholesterol, allergic rhinitis (hay fever), upset stomach, gout, lymphoma and other cancers, rheumatoid arthritis (RA), hepatitis, peptic ulcer disease (PUD), fever, gonorrhea, syphilis, and to boost the immune system
192	<i>Tinospora sinensis</i> (Lour.) Merr. Local Name: Local Name: Kattamruthu	Climber -Stems are used for treating piles, ulcerated wounds, liver complaints, chronic rheumatism and also as muscle relaxant.
Family: Mimosaceae		
193	<i>Acacia torta</i> (Roxb.) Craib Local Name: Kallinja	Climber -Cough, bronchitis, measles, tubercular fistula and in the treatment of menstrual disorders
194	<i>Adenanthera pavonina</i> L. Local Name: Manchadai	Tree-This exotic plant is antiseptic and used to treat boils and inflammations
195	<i>Albizia chinensis</i> (Osbeck) Merr. Local Name: Mottavaka	Tree
196	<i>Albizia lebbek</i> (L.) Benth. Local Name: Nenmenivaka	Tree-Astringent, treat boils, cough, to treat the eye, flu, gingivitis, lung problems, pectoral problems
197	<i>Mimosa pudica</i> L. Local Name: Thottavadi	Herb- This exotic weed possesses antibacterial, antivenom, antifertility, anticonvulsant, antidepressant, aphrodisiac, and various other pharmacological activities. The herb has been used traditionally for ages, in the treatment of urogenital disorders, piles, dysentery, sinus, and also applied on wounds.
Family: Moraceae		
198	<i>Artocarpus heterophyllus</i> Lam. Local Name: Plavu	Tree-Extract from its seed, root and bark is supposed to be helpful in digestion and used also in the treatment of diarrhea and dysentery .The root extract is used as a remedy against skin disease, asthma and fever .The heated leaves of jackfruit are placed on wounds and the wood has a sedative property
199	<i>Ficus benghalensis</i> L. Local Name: Peraal	Tree-It is astringent to bowels; useful in treatment of biliousness, ulcers, erysipelas, vomiting, vaginal complaints, fever, inflammations, leprosy
200	<i>Ficus exasperata</i> Vahl Local Name: Therakam	Tree-The extracts from the tree used to treat as anti-ulcer, hypotensive, lipid-lowering, analgesic, anti-inflammatory and antipyretic activity.
201	<i>Ficus hispida</i> L. f. Local Name: Parakam	Fruit and bark of the tree is used for inducing purgation and emesis to remove excess pitta dosha from the body.
202	<i>Ficus microcarpa</i> L. f. Local Name: Ithi	Tree-Cooling, astringent, and anti-bilious. It is found to have good healing property, and is used in preparation of oils, and ointments for external application in the treatment of ulcers
203	<i>Ficus racemosa</i> L. Local Name: Atthi	Tree-Has long been used in Ayurveda, for various diseases/disorders including diabetes, liver disorders, diarrhea, inflammatory conditions, hemorrhoids, respiratory, and urinary diseases.

No.	Botanical Name and Local Name	Habit, status and uses
204	<i>Ficus religiosa</i> L. Local Name: Arayal	Tree-Asthma, diabetes, diarrhea, epilepsy, gastric problems, inflammatory disorders, infectious and sexual disorders.
205	<i>Ficus tinctoria</i> G. Forst. ssp. <i>parasitica</i> (Koen. ex Willd.) Corner Local Name: Kallathi	Tree
Family: Myristicaceae		
206	<i>Myristica malabarica</i> Lam. Local Name: Ponnampayin	Tree-The aril of this plant which is endemic to the western ghats is used as febrifuge, cooling, expectorant.
Family: Myrtaceae		
207	<i>Psidium guajava</i> L. Local Name: Pera	Tree-Leaves of this exotic plant act as astringent, anti-inflammatory, and antiseptic. Tea made from the leaves are used to treat dysentery, diarrhea,
208	<i>Syzygium caryophyllatum</i> (L.) Alston Local Name: Cherujara	Decoction of the bark of this plant endemic to western ghats is taken for diabetes; Crushed leaves are applied on burns and boils on skin; Seeds are purgative
209	<i>Syzygium cumini</i> (L.) Skeels Local Name: Njaval	Tree-Infusion of fruit or mixture of powdered bark and fruit is given orally to treat diabetes. Juice obtained from the seeds is applied externally on sores and ulcers. Powdered seeds are mixed with sugar are given orally 2-3 times daily in the treatment of dysentery.
Family: Nelumbonaceae		
210	<i>Nelumbo nucifera</i> Gaertn. Local Name: Thamara	Herb- Leaves of this hydrophyte are used for hematemesis, epistaxis, and hematuria, the flowers are used for diarrhea, cholera, fever, and hyperdipsia.
Family: Nyctaginaceae		
211	<i>Boerhavia diffusa</i> L. Local Name: Thazhuthama	Herb- Possess diuretic, anti-inflammatory, anti-oxidative, anti-arthritic, spasmolytic, antibacterial, analgesic, immunity booster and anti-ageing properties. It is beneficial in arthritis as it reduces inflammation and pain in joints.
212	<i>Mirabilis jalapa</i> L. Local Name: Nalumanichedi	Herb- Parts of this exotic ornamental plant may be used as a diuretic, purgative, and for vulnerary (wound healing) purposes. The root is believed to be an aphrodisiac as well as having diuretic and purgative properties. It is also used in the treatment of dropsy. The leaves are used to reduce inflammation.
Family: Nyctanthaceae		
213	<i>Nyctanthes arbor-tristis</i> L. Local Name: Paarijatham	Shrub to small tree-Used in various ailments like fever, enlargement of the spleen, malaria, blood dysentery, cough and gastritis. Juices of leaves is used as digestives, antidote to reptiles venom. Seeds are used to cure scurfy infection of scalp, piles and skin diseases

No.	Botanical Name and Local Name	Habit, status and uses
Family: Nymphaeaceae		
214	<i>Nymphaea nouchali</i> Burm.f. Local Name: Ambel	Herb- This hydrophyte is used in treatment of diabetes, inflammation, liver disorders, urinary disorders, menorrhagia, blenorragia, menstruation problem, as an aphrodisiac, and as a bitter tonic.
Family: Oleaceae		
215	<i>Jasminum grandiflorum</i> L. Local Name: Pichakam	Climber -Used for the treatment of wounds, skin diseases, ulcers of the oral cavity, gingivitis, headache, erectile dysfunction and eye diseases.
216	<i>Jasminum sambac</i> (L.) Ait. Local Name: Kudamulla	Climber -Anti-depressant, antiseptic, cicatrisant, aphrodisiac, expectorant, anti-spasmodic, galactagogue, sedative, parturient, uterine
Family: Orchidaceae		
217	<i>Acampe praemorsa</i> (Roxb.) Blatt. & McCann Local Name: Maravazha	Herb- Anticancer, antibacterial, antifungal, antioxidant and anti-inflammatory activities
Family: Oxalidaceae		
218	<i>Biophytum reinwardtii</i> (Zucc.) Klotzsch. Local Name: Mukkutti	Herb- In ailments such as inflammation, arthritis, wounds, tumors and burns, gonorrhea, stomach ache, asthma, cough, degenerative joint disease, urinary calculi, diabetes, snake bite, amenorrhea and dysmenorrhea.
219	<i>Oxalis corniculata</i> L. Local Name: Puliyarila	Herb- Anthelmintic, anti-inflammatory, analgesic, astringent, depurative, diuretic, emmenagogue, febrifuge, relaxant, lithontripic, stomachic and styptic. The plant is used as an antiscorbutic in the treatment of scurvy
Family: Pandanaceae		
220	<i>Pandanus kaida</i> Kurz Local Name: Kaitha	Shrub-Anti-microbial, anti-diabetic, anti-viral, antineoplastic, anti-oxidant, anti-diuretic, analgesic and neuroprotective
221	<i>Pandanus odorifer</i> (Forssk.) Kuntze Local Name: Pookaitha	Shrub-Treatment of headache, rheumatism, spasm, cold/flu, epilepsy, wounds, boils, scabies, leucoderma, ulcers, colic, hepatitis, smallpox, leprosy, syphilis, and cancer and as a cardiotonic, antioxidant, dysuric, and aphrodisiac
Family: Passifloraceae		
222	<i>Passiflora foetida</i> L. Local Name: Ammummapazham	Climber -This exotic plant is analgesic and antidiarrhoeal
Family: Pedaliaceae		
223	<i>Martynia annua</i> L. Local Name: Kakkachundu	Shrub-This exotic plant is used in the treatment of epilepsy, inflammation, sore throat, burns, itching, skin affections and tuberculosis.
224	<i>Sesamum orientale</i> L. Local Name: Ellu	Herb- It is mildly laxative, emollient and demulcent. The seeds and fresh leaves may be used as a poultice.

No.	Botanical Name and Local Name	Habit, status and uses
Family: Periplocaceae		
225	<i>Cryptolepis buchananii</i> Roem. & Schult. Local Name: Kattupalvalli	Climber -Root is demulcent, alterative, tonic and is useful in loss of appetite, fever and skin diseases. It is considered as a blood purifier and extensively used in skin diseases and leprosy. It is prescribed to children for rickets.
226	<i>Hemidesmus indicus</i> (L.) R. Br. Local Name: Narunandi	Climber -Demulcent, alterative, astringent, diaphoretic, diuretic, tonic, anti-pyretic, and blood purifier. It is used in leprosy, skin diseases, fever, asthma, bronchitis, syphilis, pruritus and other urinary diseases, chronic rheumatism, and leucorrhoea
Family: Piperaceae		
227	<i>Piper longum</i> L. Local Name: Thippali	Herb- Used to improve appetite and digestion, as well as treat stomach ache, heartburn, indigestion, intestinal gas, diarrhea, and cholera. It is also used for lung problems including asthma, bronchitis, and cough.
228	<i>Piper nigrum</i> L. Local Name: Kurumulaku	Climber -fat deposition by blocking fat cell formation. Hence, very useful in obesity management.
Family: Plumbaginaceae		
229	<i>Plumbago zeylanica</i> L. Local Name: Koduveli	Shrub-Used in treating intestinal troubles, dysentery, leucoderma, inflammation, piles, bronchitis, itching, diseases of the liver, and consumption. The leaves of this herb work well for treating laryngitis, rheumatism, diseases of the spleen, ring worm, scabies, and it acts as an aphrodisiac
Family: Poaceae		
230	<i>Bambusa bambos</i> (L.) Voss. Local Name: Mula	Shrub-Used to treat joint pain and general debility. They are taken internally to stimulate menstruation and to help relieve period pain
231	<i>Saccharum officinarum</i> L. Local Name: Neelakarimbu	Herb- The saw edge of the sugar cane leaf is used to scar the skin, in preparation of tattooing
232	<i>Saccharum spontaneum</i> L. Local Name: Kusadarbha	Herb- Roots are sweet, astringent, emollient, refrigerant, diuretic, lithotriptic, purgative, tonic, aphrodisiac and useful in treatment of dyspepsia, burning sensation, piles, sexual weakness, gynecological troubles, respiratory troubles etc.
233	<i>Vetiveria zizanioides</i> (L.) Nash Local Name: Ramacham	Herb- It is used to treat many skin disorders and is known to have calming effect on the nervous system. Other medicinal uses include ringworm, indigestion and loss of appetite. It has been considered a high-class perfume.
Family: Pontederiaceae		
234	<i>Monochoria vaginalis</i> (Burm. f.) Presl Local Name:	Herb- Treatment of diabetes

No.	Botanical Name and Local Name	Habit, status and uses
Family: Punicaceae		
235	<i>Punica granatum</i> L. Local Name: Mathalam	Shrub-Treatment for Cancer, Osteoarthritis and Other Diseases. Treat sore throats, coughs, urinary infections, digestive disorders, skin disorders, arthritis, and to expel tapeworms.
Family: Ranunculaceae		
236	<i>Naravelia zeylanica</i> (L.) DC. Local Name: Soothravalli	Climber -Used in the treatment of pitta, helminthiasis, dermatopathy, leprosy, rheumatalgia, odontalgia, colic inflammation, wounds and ulcers
Family: Rhamnaceae		
238	<i>Ziziphus oenoplia</i> (L.) Mill. Local Name: Cheruthudali	Climber -The crushed leaves are used as a dressing for wounds. The stem bark is used as a mouthwash for sore throats, for dysentery, and for inflammation of the uterus.
239	<i>Ziziphus rugosa</i> Lam. Local Name: Malamthudali	Shrub-Its bark and wood are used medicinally for dysentery
Family: Rhizophoraceae		
240	<i>Carallia brachiata</i> (Lour.) Merr. Local Name: Vallabham	Tree-Bark is traditionally used in wound healing, treating itch, oral ulcer, inflammation of throat and stomatitis
Family: Rubiaceae		
241	<i>Chassalia curviflora</i> (Wall. ex Kurz) Thw. var. <i>ophioxylodes</i> (Wall.) Deb & Krishna Local Name: Vellakurinji	Shrub-The root and root bark are used to treat jaundice and wounds
242	<i>Ixora coccinea</i> L. Local Name: Thetti	Shrub-As an astringent and to treat dysentery and tuberculosis. An infusion of the leaves or flowers of several species is administered to treat fever, headache and colic. A decoction of the roots is used as a sedative; the roots are believed to be more potent
243	<i>Morinda citrifolia</i> L. Local Name: Cherumanjanathi	Tree-Reduce total cholesterol and triglyceride; to reduce chronic pain, painful inflammation and swelling (root extract); to treat diabetes and to treat parasitic infections
244	<i>Morinda pubescens</i> J. E. Smith Local Name: Manjanathi	Tree-Used in the Indian system to cure many disease including HIV
245	<i>Mussaenda frondosa</i> L. Local Name: Vellilathaali	Shrub-Reported to possess anti-oxidant, anti-inflammatory in different models, analgesic, antimicrobial, diuretic, antiphlogistic and antipyretic, acute gastroenteritis and dysentery, anti-fertility activity, antiviral property, antibacterial effect rarely for hepato protective activity
246	<i>Oldenlandia auricularia</i> (L.) K. Schum. Local Name: Erachiketti	Herb- The plant is known to clear heat and toxins, activate blood circulation, promote diuresis and relieve stranguria.

No.	Botanical Name and Local Name	Habit, status and uses
247	<i>Oldenlandia corymbosa</i> L. Local Name: Onathumba	Herb- The plant is known to clear heat and toxins, activate blood circulation, promote diuresis and relieve stranguria. It is also active against appendicitis, hepatitis, pneumonia, cholecystitis, urinary infection, cellulites and snake bite
248	<i>Oldenlandia diffusa</i> (Willd.) Roxb. Local Name: Parpadakapullu	Herb- It is used in combination with other herbs for the treatment of hepatitis, snake bites, and tumors of the liver, lung, stomach, and rectum
249	<i>Pavetta indica</i> L. Local Name: Pavetta	Shrub-The leaf paste is used for poulticing boils and to remove pus. The leaves decoction is used externally for piles. The root is bitter, aperient, diuretic, purgative and tonic.
250	<i>Pavetta indica</i> L. var. <i>tomentosa</i> (Roxb. ex J. E. Smith) Hook. f.	Shrub-Root diuretic, purgative, tonic, used in intestinal obstructions, intestinal disorders, dysentery, jaundice, headache, toothache, urinary diseases and dropsy; roots decoction as a postpartum remedy. Veterinary medicine, stem bark paste applied to maggot-infected sores
251	<i>Psilanthus travancorensis</i> (Wight & Arn.) Leroy, Compt. Local Name: Pushkkaramoolam	Shrub-Reported to cure anaemia, cardiac diseases, skin diseases, oedema, ulcers, inflammatory swellings etc
252	<i>Spermacoce articularis</i> L. f. Local Name: Natthachuri	Herb- Antimicrobial, antitumor, antioxidant, anti-inflammatory, hepatoprotective, larvicidal, etc
253	<i>Spermacoce hispida</i> L. Local Name: Kudalchurukki	Herb- Decreasing the blood sugar levels. In traditional medicine, used to heal stomach ailments and also used as tonic and anti dandruff
254	<i>Tarenna asiatica</i> (L.) O.Ktze. ex K. Schum. Local Name: Kuppipoovu	Shrub to small tree-Malaria, cough, and influenza. The roots contain coumarins that have antiplasmodial activity
Family: Rutaceae		
255	<i>Acronychia pedunculata</i> (L.) Miq. Local Name: Muttanari	Tree
256	<i>Aegle marmelos</i> (L.) Correa Local Name: Koovalam	Tree-Used in the treatment of chronic diarrhea, dysentery, and peptic ulcers, as a laxative and to recuperate from respiratory affections
257	<i>Citrus limon</i> (L.) Burm. f. Local Name: Cherunaregam	Tree-Lemon is also used for the common cold and flu, H1N1 (swine) flu, ringing in the ears (tinnitus), Meniere's disease, stomach upset and vomiting from pregnancy, and kidney stones.
258	<i>Citrus medica</i> L. Local Name: Ganapathi-naragam	Shrub to small tree-It is widely used for treating abdominal colic, digestive disorders, piles etc
259	<i>Glycosmis pentaphylla</i> (Retz.) DC. Local Name: Panal	Shrub-Used for cough, jaundice, inflammation, rheumatism and anemia. - In Bangladesh, used to reduce blood sugar and to relieve pain. - In traditional Indian medicine, used for jaundice and other liver afflictions.

No.	Botanical Name and Local Name	Habit, status and uses
260	<i>Murraya koenigii</i> (L.) Spreng. Local Name: Karivepu	Believed to have anti diabetic properties and are remarkable for patients suffering from the sugar disease. The leaves, the roots and the bark of the curry tree can be used as tonics as well as a stomachic.
261	<i>Murraya paniculata</i> (L.) Jack. Local Name: Maramulla	Leaves were also used to treat diarrhea and dysentery because of their stimulant and astringent activities
Family: Rosaceae		
262	<i>Prunus ceylanica</i> (Wight) Miq. Local Name: Naikambakam	Tree-Antihalitosis. The leaves are astringent, demulcent, diuretic, expectorant, febrifuge, laxative, parasiticide and mildly sedative
Family: Santalaceae		
263	<i>Santalum album</i> L. Local Name: Chandanam	Tree-This plant categorised as vulnerable is used in the treatment of common colds, bronchitis, skin disorders, heart ailments, general weakness, fever, infection of the urinary tract, inflammation of the mouth and pharynx, liver and gallbladder complaints and other maladies.
Family: Sapindaceae		
264	<i>Cardiospermum halicacabum</i> L. Local Name: Uzhinja	Climber -The whole plant is diaphoretic, diuretic, emetic, emmenagogue, laxative, refrigerant, rubefacient, stomachic and sudorific. It is used in the treatment of rheumatism, nervous diseases, stiffness of the limbs and snakebite
265	<i>Sapindus trifoliatus</i> L. Local Name: Soapinkaimaram	Tree-Used in rheumatoid arthritis, gout and paralysis. The powder of fruits is used in bronchitis and asthma as decongestant. Urinary system – it is diuretic and reduces pH of urine. It is also used in nephritis condition
266	<i>Schleichera oleosa</i> (Lour.) Oken Local Name: Poovam	Tree-Its bark is anti oxidant, used in rheumatoid arthritis, headache. Its oil, is used for treating ulcers, intestinal parasites etc
Family: Sapotaceae		
267	<i>Madhuca neriifolia</i> (Moon) H. J. Lam Local Name: Attilippa	Tree-Its flowers have the property of tonic, aphrodisiac, astringent and cooling. It can be used to cure acute and chronic tonsillitis, helminthes, pharyngitis as well bronchitis. Its leaves can be used as expectorant, cushing's disease and chronic bronchitis and can be used to cure eczema in the form of poultice
268	<i>Mimusops elengi</i> L. Local Name: Elangi	Tree-The bark, flowers, fruits, and seeds are used astringent, cooling, anthelmintic, tonic, and febrifuge. It is mainly used for dental ailments such as bleeding gums, pyorrhea, dental caries, and loose teeth.

No.	Botanical Name and Local Name	Habit, status and uses
Family: Scrophulariaceae		
269	<i>Bacopa monnieri</i> (L.) Pennell Local Name: Bhrammi	Herb- Improving memory, reducing anxiety, and treating epilepsy
Family: Smilacaceae		
270	<i>Smilax zeylanica</i> L. Local Name: Kareelanchi	Climber -Traditionally used for the treatment of ulcers
Family: Solanaceae		
271	<i>Datura metel</i> L. Local Name: Neelaummam	Shrub-Its application is useful to relieve fever. Its paste or oil is prepared and used for external application to relieve pain, inflammation, itching and infested wounds.
272	<i>Physalis angulata</i> L. Local Name: Njottanjodian	Herb- It is used to treat malaria, toothache, liver ailments including hepatitis, rheumatism, and is considered a diuretic and relaxant. Plant infusions are taken to treat gonorrhoea, indigestion, nephritis and fever.
Family: Sterculiaceae		
273	<i>Helicteres isora</i> L. Local Name: Edampiri-Valampiri	Shrub-The roots and stem barks are considered to be expectorant, demulcent, astringent and antiglactagogue. Bark is used in diarrhoea, dysentery, scabies, biliousness and is useful in gripping of the bowels. Root juice is used in antidiarrhoeal and antidysenteric formulations.
274	<i>Sterculia foetida</i> L. Local Name: Peenari	Tree-Gum is used in the medicine. The bark yields fibre. The leaves of this plant are used as herbal medicine as aperient, diuretic and as insect repellent
Family: Verbenaceae		
275	<i>Callicarpa tomentosa</i> (L.) L. Local Name: Cheruthekkku	Shrub to small tree -Root juice combined with root juice of <i>Streblus asper</i> is taken for irregular menstruation and menorrhagia by the Marma tribe. The water extract of stem as a drink gives relief from diarrhoea.
276	<i>Citharexylum spinosum</i> L. Local Name: Parijatham	Tree-This exotic ornamental plant is used in the treatment of asthma
277	<i>Clerodendrum inerme</i> (L.) Gaertn. Local Name: Puzhamulla	Shrub -Leaf is ground in water and the juice is taken orally to treat fever. It is an important medicinal plant reported to be used in the treatment of skin diseases, venereal infections, elephantiasis, asthma, topical burns and for rheumatism. It is also used as substitute of quinine.
278	<i>Clerodendrum infortunatum</i> L. Local Name: Perivelam	Shrub to small tree-Treatment of wounds, skin diseases, liver disorders, intestinal worms, fever and joint pain.

No.	Botanical Name and Local Name	Habit, status and uses
279	<i>Gmelina arborea</i> Roxb. Local Name: Kumizhu	Tree-The root and bark are stomachic, galactagogue laxative and anthelmintic; improve appetite, useful in hallucination, piles, abdominal pains, burning sensations, fevers, 'tridosha' and urinary discharge. Leaf paste is applied to relieve headache and juice is used as wash for ulcers.
280	<i>Lantana camara</i> L. Local Name: Arippoochedi	Shrub-Leaves of this exotics have antimicrobial, fungicidal and insecticidal properties. L. Camara has also been used in traditional herbal medicines for treating a variety of ailments, including cancer, skin itches, leprosy, rabies, chicken pox, measles, asthma and ulcers.
281	<i>Phyla nodiflora</i> (L.) Greene Local Name: Neerthippali	Herb- The plant is anodyne, antibacterial, deobstruent, diuretic, emmenagogue, parasiticide and refrigerant. It is used in the treatment of hookworm. The juice of the plant is cooling and is used to relieve fevers, coughs and colds. The aroma of the inhaled plant is breathed in to treat coughs and colds.
282	<i>Tectona grandis</i> L. f. Local Name: Thekku	Tree-Wood is acrid, cooling, laxative, sedative to gravid uterus and useful in treatment of piles, leucoderma and dysentery. Flowers are acrid, bitter and dry and useful in bronchitis, biliousness, urinary discharges etc.
283	<i>Vitex negundo</i> L. Ansari Local Name: Karinochi	Shrub to small tree-Analgesic, Antiinflammatory, Anticonvulsant, Antioxidant, Insecticidal, Pesticidal
Family: Violaceae		
284	<i>Hybanthus enneaspermus</i> (L.) F.v. Muell. Local Name: Orithalthamara	Herb- Used for the treatment of diarrhoea, urinary infections, leucorrhoea, dysuria, inflammation, cholera and sterility. The whole plant is used as a general tonic for pregnant women. The root infusion is used as a diuretic for gonorrhoea and urinary infections.
Family: Vitaceae		
285	<i>Cayratia trifolia</i> (L.) Domin Local Name: Vathakkodi	Climber -Whole plant is used as diuretic and astringent and is useful in tumors, neuralgia, splenopathy and treatment of leucorrhea. Leaf, root and seeds are used as poultice to ulcers and boils.
Family: Zingiberaceae		
286	<i>Costus pictus</i> D. Don ex Lindl. Local Name: Insulin plant	Herb- Oral consumption of leaf of this exotic on a daily basis is known to cure diabetes
287	<i>Costus speciosus</i> (Koenig) J.E. Smith Local Name: Channakoova	The rhizomes are bitter, astringent, acrid, cooling, aphrodisiac, purgative, anthelmintic, depurative, febrifuge, expectorant, tonic, improve digestion, and is a stimulant herb that clears toxins. It also has anti-fertility, anabolic properties.

No.	Botanical Name and Local Name	Habit, status and uses
288	<i>Curcuma longa</i> L. Local Name: Manjal	Herb- Potential to prevent heart disease, Alzheimer's and cancer. It's a potent anti-inflammatory and antioxidant and may also help improve symptoms of depression and arthritis
289	<i>Zingiber officinale</i> Rosc. Local Name: Inchi	Herb- Ginger has been used for stomach upset, motion sickness, nausea, and vomiting. Some herbal/ diet supplement products have been found to contain possibly harmful impurities/additives.
290	<i>Zingiber zerumbet</i> (L.) J.E. Smith Local Name: Kolinchi	Herb- It is used to treat many infestations such as treatment of inflammation and pain associated ailments, digestive system related ailments, cough, stomachache, asthma and also as a vermifuge. Also used in leprosy and other skin diseases.



MEDICINAL PLANTS

Cultivation and Conservation

This volume brings together case studies on the emergent approaches in cultivation and conservation of medicinal plants. It contains articles featuring systematic procedures in studying the growth conditions and habitat requirements of the medicinal species in the wild populations and deployment of this information in successful domestication and fashioning of benefit-sharing models involving cultivators and industries. Evaluation of the available agro-technologies for selected medicinal species are presented with a survey of possible integration of medicinal plants to multi-tier homestead agroforestry systems and systems of intercropping. Highlighting the need for concerted efforts in overcoming the technological and institutional barriers, this compendium envisions an intense period of innovations in medicinal plants' cultivation.

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