



**MAR ATHANASIOS COLLEGE FOR ADVANCED STUDIES TIRUVALLA
(MACFAST)**



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HERBAL GARDEN



MAR ATHANASIOS COLLEGE FOR ADVANCED STUDIES TIRUVALLA (MACFAST)

Thiruvalla, Pathanamthitta, Kerala 689 101



HERBAL GARDEN

The College established a herbal garden in the campus in the year 2014. The herbal garden of MACFAST serves the functions of education, research and conservation of germplasm of medicinal and aromatic plants, wild relatives of cultivated crops, dye-bearing plants and other species of ecological or economic interests. The garden with nursery, pot culture and greenhouse facility, at present, maintains indigenous medicinal plants, including rare and endangered species. The collections include Nalpamara (composed of four species of *Ficus*, such as *F. racemosa*, *F. tinctoria* ssp *parasitica*, *F. religiosa* and *F. benghalensis*), Triphala (composed of *Phyllanthus emblica*, *Terminalia bellirica* and *T. chebula*), Safed Musali (*Chlorophytum borivilianum*) along with Arogyappacha (*Trichopus zeylanicus*), Red sandal (*Pterocarpus santalinus*) and rare species like *Adenia hondala*, *Aristolochia tagala*, *Karempferia rotunda*, *Myristica malabarica*, *Piper longum*, *Salacia reticulata*, *Semicarpus travancoricus*, etc.

According to usage plants are classified as follows:

- Medicinal plants
- Aromatic Medicinal plants
- Ornamental plants
- Commercial plants
- Timber plants
- Fruit plants
- Wild plants

GRANT DETAILS

Purpose: for establishment of herbal garden and a nursery at Mar Athanasios College for Advanced Studies Tiruvalla, 2.5 lakh approved by Ministry of AYUSH Govt. of India (National Medicinal Plants Board).

WAY OF UTILIZATION

Green house coverage, Added more plants, Supply nutrients, Painting of pot.

MAINTENANCE OF HERBAL GARDEN

Currently the students of MSc Phytomedical science and technology are maintaining the herbal garden. Proper evaluation and maintenance of the garden is conducted in every week as a part of green hour activity by the students under the supervision of concerned faculty. Regular activities of the herbal garden are as follows;

- Proper water supply
- Clearing weeds and regular inspection of the plant varieties by students and faculty
- Fertilizing and mulching. Herbs grow best in well-drained soil. Using compost and chopped leaves each season.
- Pruning to help the plants to grow properly. It can shape plants so that they grow bushy instead of tall and spindly, encourage new growth (especially useful for herbs), remove dead pieces, and increase the yield of flowers or buds.
- Harvesting

BENEFITS

- Conservation of endangered species
- Using for herbarium
- Neutraceutical evaluation of each plant



Herbal Garden maintained inside the campus

LIST OF PLANTS

Sl.No	Species Name	Family	Malayalam Name	Medicinal uses
5.	<i>Abelmoschus moschatus</i>	<i>Malvaceae</i>	Kasthoori venda	<i>Abelmoschus moschatus</i> is an aromatic medicinal plant. The seeds have a sweet, flowery, heavy fragrance similar to that of musk. Musk mallow seed oil was once frequently used as a substitute in perfumes for animal musk. The seeds are added to coffee; unripe pods, leaves and new shoots are eaten as vegetables. Different parts of the plant have uses in Ayurveda herbal medicine.
2.	<i>Acacia catechu</i>	<i>Mimosaceae</i>	Karingali	Astringent, Bactericide, Refrigerant, Stimulant, Masticator, Expectorant. The plant of <i>Acacia catechu</i> contains tannins and Flavonoids majorly. Anti fungal activity: This therapeutic plant helps in clotting blood in case of excessive bleeding. <i>Acacia catechu</i> extract is used for the purpose of gargling to relieve the problem of gingivitis.
3.	<i>Acorus calamus</i>	<i>Araceae</i>	Vayambu	<i>Calamus</i> is a greatly valued herb in Ayurveda. The leaves, stems, and roots are used in Siddha and Ayurvedic medicines. It is widely employed in modern herbal medicine for its sedative, laxative and diuretic. It is used in Ayurveda to counter the side effects of all hallucinogens.

4.	<i>Adathoda vasica</i>	<i>Acanthaceae</i>	Aadalodakam	In ayurvedic medicine, Adhatoda is mainly used to relieve respiratory disorders and cough. The leaves of Adhatoda Vasica are rich sources of carotene and Vitamin-C. The plant as a whole along with its root, leaves, bark and flowers are extensively used to relieve cough, cold, whooping-cough, asthma and bronchitis due to their pharmacological properties. Crushed leaves are applied to relieve conditions like skin ailments, worms and amavata.
5.	<i>Adenanthera pavonina</i>	<i>Mimosaceae</i>	Manjadi	Traditional medicinal herb. Pulverized wood mixed with water is taken orally for migraines, dysentery, diarrhoea and tonsillitis are treated with a bark and leaf decoction.
6.	<i>Adenia hondala</i>	<i>Passifloraceae</i>	Kari muthakku	Juice of the leaves and roots is used in skin troubles. Roots are reported to be used as an ingredient in tonic.
7.	<i>Adenocalyma Alliaceum</i>	<i>Bignoniaceae</i>	Unknown	It is an ornamental herb. It is considered analgesic, anti-inflammatory, anti-rheumatic and anti-pyretic. Both the bark and the leaves are used in tinctures and decoctions. In addition, the leaves are also used as a common remedy for coughs, colds, flu and pneumonia and as a purgative.
8.	<i>Adhatoda beddomei</i>	<i>Acanthaceae</i>	Cheriyaaadalodakam	It is a medicinal herb. Malabar Nut helps to increase the platelets in the body of the victims of snakebite.

9.	<i>Aegle marmelos</i>	<i>Rutaceae</i>	Koovalam	Hindus use the leaves to worship Lord Shiva (Bilwa patra) and keep them on Shivlinga and they consider it is very auspicious and to get the blessings of Shiva. Its fruits are used in the treatment of chronic diarrhea, dysentery, and peptic ulcers, as a laxative and to recuperate from respiratory affections in various folk medicines.
10.	<i>Aertemisia sp</i>	<i>Arteraceae</i>	Unknown	Anti inflammatory herb. The wormwood herbs are famous for their insect repelling properties and other health benefits. A nervine tonic, particularly helpful against the falling sickness and for flatulence. It is a good remedy for enfeebled digestion and debility.
11.	<i>Aloe vera</i>	<i>Liliaceae</i>	Kattarvazha	It is cultivated for agricultural and medicinal uses. Aloe also is used for decorative purposes and grows successfully indoors as a potted plant. Aloe-emodin, a compound in aloe vera leaves, could slow down the spread of breast cancer cells.
12.	<i>Alpinia calcarata</i>	<i>Zingiberaceae</i>	Chittaratha	It fights nausea, prevents or stops vomiting, and effectively treats diarrhea.
13.	<i>Alstonia venenata</i>	<i>Apocynaceae</i>	Analivegam	Poison Devil Tree is a large shrub or small tree, growing up to 6 m tall with greyish brown bark and bright yellow hard woody root. This plant Poison Devil Tree is used as snake antivenom by the tribals.
14.	<i>Anacardium occidentale</i>	<i>Anacardiaceae</i>	Kashumavu	The leaves or bark of cashew trees can be made into a tea to treat diarrhea.
15.	<i>Andrographis paniculata</i>	<i>Acanthaceae</i>	Kiriyattu	It has been traditionally used to treat infections and some diseases. Mostly the leaves and roots were used for medicinal purposes

16.	<i>Antiaris toxicaria</i>	<i>Moraceae</i>	Maravuri	<i>Antiaris toxicaria</i> is a tree in the mulberry and fig family, Moraceae. The bark has a high concentration of tannins that are used in traditional clothes dyeing and paints. The fruit is edible, and birds, bats and humans that eat it spread the seeds.
17.	<i>Antidesma ghaesembilla</i>	<i>Euphorbiaceae</i>	Unknown	The leaves are used as a poultice to treat headaches, scurf, abdominal swellings and fevers.
18.	<i>Ardisia solanacea</i>	<i>Myrsinaceae</i>	Kudimundan	The plant is sometimes harvested from the wild for local use as a food, medicine and dye plant.
19.	<i>Artabotrys hexapetalus</i>	<i>Annonaceae</i>	Manoranjini	Climbing lang-lang is a shrub found in India and its flowers are renowned for its exotic fragrance.
20.	<i>Artocarpus hirsutus</i>	<i>Moraceae</i>	Angiili	The fruit and bark of Climbing lang-lang is used to treat fever, diarrhoea, dysentery, bruises, cuts, pains, sprain, inflammation, gout, helminthiasis, leprosy, skin disease, wounds, ulcers, tumours, amenorrhoea, dysmenorrhoea, cough, asthma, bronchitis, flatulence, colic and constipation.
21.	<i>Artocarpus heterophyllus</i>	<i>Moraceae</i>	Plavu	The largest tree-borne fruit in the world, jackfruit (<i>artocarpus heterophyllus</i>) is grown on a species of tree in the mulberry family. The leaves of jackfruit tree are useful for curing fever, boils and skin diseases. When heated, they prove useful in curing wounds. The latex can also be mixed with vinegar to heal abscesses, snakebites and glandular swellings. To heal ulcers, the ash of jackfruit leaves is burnt with corn and coconut shells and used either alone or mixed with coconut oil.
22.	<i>Artocarpus communis</i>	<i>Moraceae</i>	Kadapilavu	Crushed stem tips is used for abdominal pain

23.	<i>Asparagus racemosus</i>	<i>Liliaceae</i>	Shathavari	Asparagus racemosus is a plant used in traditional Indian medicine (Ayurveda). The root is used to make medicine. People use asparagus racemosus for upset stomach (dyspepsia), constipation, stomach spasms, and stomach ulcers.
24.	<i>Asystasia sp</i>	<i>Acanthaceae</i>	Unknown	The leaves and they are used externally for wounds
25.	<i>Averrhoa carambola</i>	<i>Averrhoaceae</i>	Pulichhi	Carambola possesses huge phenolic antioxidants that provide health benefits. The huge presence of phenolics and antioxidant activity provides various benefits to the health when it is used in functional food products. The extract of ethanol, butanol fractions, ethyl acetate, hexane and flavonoids such as fucopyranoside from the leaves of carambola is used for the purpose of anti-inflammatory.
26.	<i>Azadirachta indica</i>	<i>Meliaceae</i>	Arya veppu	<i>Azadirachta indica</i> is variously known as Sacred Tree. All parts of Neem tree used as anthelmintic, anti-fungal, anti-diabetic, antibacterial, antiviral, contraceptive and sedative. Neem tree is used in many medicinal treatments 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.
27.	<i>Azima tetraacantha</i>	<i>Salvadoraceae</i>	Eshangu	The whole plant of Needle Bush is used kapha, vata, bronchitis, cough, asthma diabetes, diarrhea and arthritis. Ornamental plant.
28.	<i>Baliospermum montanum</i>	<i>Euphorbiaceae</i>	Naga denthi	It acts as a purgative. It induce diarrhea and is useful in treating liver and digestive disorders and hemorrhoids etc.

29.	<i>Barleria cristata</i>	<i>Acanthaceae</i>	Chulli	It acts as tonic, diuretic and blood purifier.
30.	<i>Basella alba</i>	<i>Basellaceae</i>	Vashala cheera	The cooked roots are used in the treatment of diarrhea and as a laxative.
31.	<i>Bauhinia variegata</i>	<i>Caesal piniaceae</i>	Manja mantharum	In Ayurveda the tree is used extensively for treating skin and glandular disease, leprosy, intestinal worms, ulcers.
32.	<i>Bixa orellana</i>	<i>Bixaceae</i>	Kurangu manjal	The shoots and young leaves are used for feverish infection including gonorrhoea, dysentery and hepatitis. The leaf and seed are used for soothe an irritated stomach suffering from ingested spicy food.
33.	<i>Bryophyllum sp</i>	<i>Crassulaceae</i>	Ila mulachi	It is used as a folkloric medicine to heal wounds and treat infections and bowel diseases.
34.	<i>Buchanania lanceolata</i>	<i>Anacardiaceae</i>	Kulamavu	The psyllium in plantain has been used as GI therapy, to treat hyperlipidemia, for anticancer effects, and for respiratory treatment. plantain has been effective for chronic bronchitis, asthma, cough, and cold.
35.	<i>Butea monosperma</i>	<i>Fabaceae</i>	Plashu	The gum of the tree can be used to relieve Diarrhea when taken in three doses regularly. The seeds of Butea can be ground into a powdered form and this powder can then be consumed to kill worms in the stomach and the intestines. The leaves of the tree help reduce blood sugar and relieve Diabetes.
36.	<i>Cafsalpinia sappan</i>	<i>Caesal piniaceae</i>	Pathimukham	It possesses medicinal abilities as an antibacterial and for its anticoagulant properties. Because of its styptic nature, it is very good in healing mouth ulcers. Hence, it is an essential ingredient in Khadiradi Vati – used in Ayurvedic treatment of bad breath, oral ulcers, diseases of teeth

				etc.
37.	<i>Callicarpatomenios a</i>	<i>Verbenaceae</i>	Venn thekku	They are some used to make herbal medicine.
38.	<i>Calophyllum inophyllum</i>	<i>Clusiaceae</i>	Punna	The tree has diuretic properties. The gum extracted from the plant is emetic and purgative and is used for the treatment of wounds and ulcers.
39.	<i>Calotropis gigantean</i>	<i>Asclepiadaceae</i>	Erukku	Used to treat common disease such as fevers, rheumatism, indigestion, cough, cold, eczema, asthma, elephantiasis, nausea, vomiting, diarrhea.
40.	<i>Canthium rheedei</i>	<i>Rubiaceae</i>	Kattakkara	The plant is also used as a topical ointment against jaundice, toothache, ulcers and to treat muscular-skeletal problems. Antioxidant.
41.	<i>Cardiospermum halicacabum</i>	<i>Sapindaceae</i>	Uzhinga	The oil prepared from the leaves acts as a very effective external application for arthritis and other painful conditions of the body. 2 to 3 drops of juice of the leaves can be used as a ear drops for ear ache, purulent discharge from ears.
42.	<i>Careya arborea</i>	<i>Barringtoniaceae</i>	Pezha	The fibrous bark has been applied medicinally for relieving body swellings. The juice of the bark, and the calices of the flowers, are astringent and mucilaginous.
43.	<i>Cassia fistula</i>	<i>Caesal piniaceae</i>	Kanikkonna	In Ayurvedic medicine, the golden shower tree is known as <i>aragvadha</i> , meaning "disease killer". The fruit pulp is considered a purgative and self-medication or any use without medical supervision is strongly advised against in Ayurvedic texts..

44.	<i>Cassia occidentalis</i>	<i>Caesal piniaceae</i>	Ponnari veeram	It improves digestion, cleanses throat, useful in cough.
45.	<i>Catharanthus roseus</i>	<i>Apocynaceae</i>	Usha malaria	Madagascar periwinkle is a popular ornamental plant found in gardens and homes across the world, and is used in the treatment of cancer.
46.	<i>Cestrum nocturnum</i>	<i>Solanaceae</i>	Unknown	Ornamental and hedge plant, but also sometimes for its medicinal uses. An extract of the plant is used as an antispasmodic and as a treatment for epilepsy.
47.	<i>Chonemorpha fragrans</i>	<i>Apocynaceae</i>	Perum karumba	Roots of Frangipani Vine is used for worms, urinary tract diseases, cardiac debility, jaundice, bronchitis, skin diseases, and fever
48.	<i>Chonemorpha grandiflora</i>	<i>Apocynaceae</i>	Perum karumba	<i>Chonemorpha grandiflora</i> is an endangered medicinal plant. It is used in different preparations, such as sudarsanasavam and kumaryasavam used in Kerala Ayurvedic system .
49.	<i>Cinnamomum verum</i>	<i>Lauraceae</i>	Karuva	It is used to treat nausea, flatulence and diarrhea. Cinnamon helps in relieving vomiting, due to its mild astringency.
50.	<i>Cissus sp</i>	<i>Vitaceae</i>	Unknown	As a source of carotenoids, triterpenoids and ascorbic acid the extracts may have potential for medical effects, including "gastroprotective activity"

51.	<i>Cissus quadrangularis</i>	<i>Vitaceae</i>	Changalaparana da	<i>Cissus</i> has been used in various Ayurvedic classical medicines to heal broken bones and injured ligaments and tendons. In <i>siddha medicine</i> it is considered a tonic and analgesic, and is believed to help heal broken bones, thus its name <i>asthisamharaka</i> .
52.	<i>Citrus medica</i>	<i>Rutaceae</i>	Ganapathi narakam	Its fruit peel, seed, pulp etc are used in Ayurvedic treatment. It is widely used for treating abdominal colic, digestive disorders, piles etc.
53.	<i>Citrus sp</i>	<i>Rutaceae</i>	Naarakam	Fruit, peels, oil, and oil obtained from the seeds include treating fever and colic, and as an astringent and diuretic.
54.	<i>Clerodendrum inerme</i>	<i>Verbenaceae</i>	Cheruchinna	The whole plants of the Glory Bower is used for rheumatism, fever, hypertension, cough, skin rashes, muscular pain, dysentery and Roots used for venereal diseases
55.	<i>Clitoria ternatea</i>	<i>Fabaceae</i>	Shanku pushpam [white]	It is ascribed various qualities including memory enhancing, nootropic, antistress, anxiolytic, antidepressant, anticonvulsant, and sedative properties.
56.	<i>Clitoria ternatea</i>	<i>Fabaceae</i>	Shanku pushpam [blue]	<i>Clitoria Ternatea</i> is one of four herbs traditionally used as <i>Shanka Pushpi</i> , an Ayurvedic medicine used to promote neurological health. It shows promise in animal models for its memory enhancing effects, and has a wide spectrum of neurological benefits.
57.	<i>Coleus aromaticus</i>	<i>Lamiaceae</i>	Panikoorkka	In treatment of coughs, sore throats and nasal congestion infections, rheumatism and flatulence
58.	<i>Commiphora mukul</i>	<i>Burseraceae</i>	Gulgulutta	<i>Commiphora Mukul</i> Herb Extracts (Guggul Gum) has been used for a long time in Ayurvedic medicine to treat obesity and other weight related problems. Used to help lower cholesterol levels and

				decrease high blood pressure.
59.	<i>Coscinium fenestratum</i>	<i>Menispermaceae</i>	Mara manjal	The bark of the tree turmeric to heal the wound caused due to viper bite and prepare medicated ghee that can be used to fight all poisons.
60.	<i>Costus pictus</i>	<i>Costaceae</i>	Unknown	Costus pictus is a medicinal plant and capable of having Magic Cure for Diabetes. Leaf of this herbal plant helps to build up insulin by strengthening beta cells of Pancreas in the Human body. The leaves of this herbal medicinal plant are used to control Blood sugar levels or in Treatment of Diabetes
61.	<i>Costus speciosus</i>	<i>Zingiberaceae</i>	Channakoova	According to Ayurveda the rhizomes are bitter, astringent, acrid, cooling, aphrodisiac, purgative, anthelmintic, depurative, febrifuge, expectorant and tonic and useful in burning sensation, constipation, lepsory, worm infection, skin diseases, fever, asthma, bronchitis, inflammations and anaemia.
62.	<i>Croton tiglium</i>	<i>Euphorbiaceae</i>	Neervaalam	It is typically used to treat skin conditions, such as itching, scabies, carbuncles, eczema, and rashes. It is also reported to treat cancerous lesions and tumors and is a common homeopathic remedy for digestive problems, such as dysentery, diarrhea and nausea.
63.	<i>Curcuma amada</i>	<i>Zingiberaceae</i>	Mangaingi	It's quite effective in boosting metabolism, asthma, bronchitis, cough. It has tremendous cancer fighting medicinal values.
64.	<i>Curcuma longa</i>	<i>Zingiberaceae</i>	Manjal	In Ayurvedic practices, turmeric has been used to treat a variety of internal disorders, such as indigestion, throat infections, common colds or liver ailments, as well as topically to cleanse wounds or treat skin sores

65.	<i>Cymbopogon citratus</i>	<i>Poyaceae</i>	Ingi pullu	The <i>Cymbopogon citratus</i> is used to strengthen the functioning of stomach and also in promoting its action. The herb is benefiting for relieving problems of indigestion and relieving stomach issues like irritable bowel syndrome, cholera as well as other gastric troubles
66.	<i>Dentrocnide sinuata</i>	<i>Urticaceae</i>	Aanaviratti	The plant is harvested from the wild for local use as a medicine and hair wash. The plant is claimed to be used as an oral contraceptive.
67.	<i>Desmodium gangeticum</i>	<i>Fabaceae</i>	Orila	Shalparni is one of the most important Ayurvedic herbs. It is one among Dashamoola. Hence used in innumerable Ayurvedic medicines.
68.	<i>Dianella longifolia</i>	<i>Liliaceae</i>	Unknown	Root extracts were antiviral against poliovirus.
69.	<i>Diospyros buxiflora</i>	<i>Ebenaceae</i>	Eli chuzhi	The edible fruits have medicinal properties as attenuant and lithontripic
70.	<i>Eclipta prostrata</i>	<i>Asteraceae</i>	Kayyonni	Powerful liver tonic. Very effective against liver injury and inflammation.
71.	<i>Ehretia sp</i>	<i>Boraginaceae</i>	Unknown	Possess antibacterial activity
72.	<i>Elettaria cardamomum</i>	<i>Zingiberaceae</i>	Ellam	Carminative, stimulant, aromatic, but rarely used alone; chiefly useful as an adjuvant or corrective.
73.	<i>Ervatamia divaricata</i>	<i>Apocynaceae</i>	Nanthyar vattum	The roots have a bitter taste. They are used in Ayurvedic medicine as an anthelmintic for ascariasis .The young stems are also good for the teeth, the latex being applied, on a

				cotton pellet, to teeth with dental caries.
74.	<i>Eryngium foetidum</i>	<i>Apiaceae</i>	African malli	<i>E. foetidum</i> has been used in traditional medicine for burns, earache, fevers, hypertension, constipation, fits, asthma, stomachache, worms, infertility complications, snake bites, diarrhea, and malaria.
75.	<i>Eucalyptus globulus</i>	<i>Myrtaceae</i>	Uukkali	Eucalyptus oil may also have antibacterial, anti-inflammatory and analgesic properties. It is used to help relieve symptoms of the common cold and is found in many cough lozenges and inhalants.
76	<i>Euphorbia nivulia</i>	<i>Euphorbiaceae</i>	Kalli chedi	Latex—used for treating jaundice, dropsy, enlargement of liver and spleen; colic; syphilis, leprosy; applied to haemorrhoids. Coagulated latex is used for bronchitis. Leaf—juice is used as a purgative.
77.	<i>Evolvulus alsinoides</i>	<i>Convolvulaceae</i>	Vishnukranthi	It is 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.
78.	<i>Ficus benghalensis</i>	<i>Moraceae</i>	Peral	The Indian Banyan is astringent to bowels and useful in treatment of biliousness, ulcers, vomiting, vaginal complaints, fever, inflammations and leprosy.
79.	<i>Ficus benjamina</i>	<i>Moraceae</i>	Vellal	The bark of the root, the root itself, and the leaves are boiled in oil and applied on wounds and bruises. The pounded leaves and bark are applied as a poultice in the treatment of rheumatic headaches.
80.	<i>Ficus hispida</i>	<i>Moraceae</i>	Therakam	The fruits are bitter, refrigerant, astringent, acrid, anti-dysenteric, anti-inflammatory, depurative, vulnerary, haemostatic and galactagogue.

81.	<i>Ficus krishna</i>	<i>Moraceae</i>	Krishnaal	According to Ayurveda, it is astringent to bowels; useful in treatment of biliousness, ulcers, erysipelas, vomiting, vaginal complaints, fever, inflammations, leprosy. According to Unani system of medicine, its latex is aphrodisiac, tonic, vulnerary, maturant, lessens inflammations.
82.	<i>Ficus religiosa</i>	<i>Moraceae</i>	Arayyal	<i>Ficus religiosa</i> is used in traditional medicine for disorders including asthma, diabetes, diarrhea, epilepsy, gastric problems, inflammatory disorders, infectious and sexual disorders
83.	<i>Ficus tinctoria</i>	<i>Moraceae</i>	Ithi	A decoction of the plant juices and leaves is mentioned as an internal remedy for weakness after childbirth. The plant juices and leaves are used as a dressing for broken bones.
84.	<i>Flacourtia indica</i>	<i>Flacourtiaceae</i>	Mulli	It is widely used in treating liver disorders, has anti malarial, anti bacterial and anti cancer potential.
85.	<i>Flacourtia montana</i>	<i>Flacourtiaceae</i>	Vayyankatha	Fruits are pleasantly acrid, eaten raw or made into jelly. Wood is heavy and is used for building purposes.
86.	<i>Gloriosa superba</i>	<i>Liliaceae</i>	Menthonni	In Ayurveda and Yunani systems of medicine it is a reputed medicine. According to Ayurveda, tuber is pungent, bitter, acrid, heating, anthelmintic, laxative, alexiteric, abortifacient, and useful in ulcers.
87.	<i>Glycosmis pentaphylla</i>	<i>Rutaceae</i>	Paanal	Ban Nimbu is a plant possessing various medicinal properties. It is believed to have wound-healing properties.
88.	<i>Gmelina arborea</i>	<i>Verbenaceae</i>	Kumizhu	Gambhari is one among Dashamoola group of herbs . Its botanical name is <i>Gmelina arborea</i> . Its fruits bear nourishing qualities, brain tonic while the root is anti inflammatory.

89.	<i>Guazuma ulmifolia</i>	<i>Sterculiaceae</i>	Bhadraksham	A beverage of crushed seeds soaked in water is used to treat diarrhea, dysentery, colds, coughs, contusions, and venereal disease. It is also used as a diuretic and astringent.
90.	<i>Gymnema sylvestre</i>	<i>Asclepiadaceae</i>	Chakkara kolli	Gymnema may help decrease cholesterol and triglyceride levels in patients with diabetes. Gymnema when taken by healthy adults with a high carbohydrate meal may also help curb the cravings for sweets.
91.	<i>Hedychium flavescens</i>	<i>Zingiberaceae</i>	Kalyana soukathikam [yellow]	<i>Hedychium gardnerianum</i> has potent cytotoxicity activity against human small cell lung cancer cells.
92.	<i>Hemigraphis cordata</i>	<i>Acanthaceae</i>	Unknown	Used to promote urination, check hemorrhages, stop dysentery, treat venereal diseases, and to heal hemorrhoids
93.	<i>Holarrhena pubescens</i>	<i>Apocynaceae</i>	Kudakapaala	The main medicinal value of this herb lies in its botanical name- <i>Holarrhena antidysenterica</i> ; that is relieve for Amoebic dysentery. This herb has been used to relieve several gastrointestinal diseases for hundreds of years and is still used by several Indian tribes to relieve ailments like epilepsy, anemia, skin infections and cholera, apart from digestive problems.
94.	<i>Ixora alba</i>	<i>Rubiaceae</i>	Vella thetti	Commonly used in Hindu worship, as well as in ayurveda and Indian folk medicine.
95.	<i>Ixora coccinea</i>	<i>Rubiaceae</i>	Thetti	Decoction of Santan leaves is used to treat wounds, skin ulcer, Nausea, Anorexia, Sore throat, Bronchitis cough, Asthma
96.	<i>Jasminum grandiflorum</i>	<i>Oleaceae</i>	Pichakam	Spanish jasmine is used as a component in the preparation of the medicine that is used to stop the oozing of the blood from the nose and the mouth of

				the victim of Viper bite
97.	<i>Jasminum sambac</i>	<i>Oleaceae</i>	Kutti mulla	Jasmine oil has proven to increase alertness and improve mood while supporting healthy blood flow and blood-oxygen levels. The aroma of jasmine has even been shown to be as effective as sedatives without any of the unpleasant side effects such as depression, dizziness, or impaired motor function.
98.	<i>Jatropha curcas</i>	<i>Euphorbiaceae</i>	Kadalavanakku	The latex of <i>Jatropha</i> contains an alkaloid known as "jatrophine" which is believed to have anti-cancerous properties. It is also used as an external application for skin diseases
99.	<i>Jatropha multifida</i>	<i>Euphorbiaceae</i>	Choorakkalli	The seed oil is sometimes used as a cathartic, although it may cause strong irritation and even poisoning. The oil is applied both internally and externally as an abortifacient.
100.	<i>Kaempferia rotunda</i>	<i>Zingiberaceae</i>	Chengazhunnerr kizhangu	The flower contains the toxin benzyl benzoate that is used to make ointments to treat scabies. This plant is boiled and its oil is used to treat itch. It has potential antioxidant effects. The tubers are used for blood clots and malignancy.
101.	<i>Kopsia fruticosa</i>	<i>Apocynaceae</i>	Unknown	Cardiac stimulant
102.	<i>Lawsonia inermis</i>	<i>Lythraceae</i>	Myllangi	Lawsonia Inermis is commonly known in India as Henna.
103.	<i>Leucas aspera</i>	<i>Lumiaceae</i>	Thumba	The seeds of the plant are useful in relieving dysentery. Jaundice and enlargement of the liver can be effectively relieved with the bark of the plant. To relieve baldness oil is made with the leaves of henna (<i>Lawsonia</i>). Henna (<i>Lawsonia</i>) flowers have the capacity to relieve headaches caused by the heat of the sun.

104.	<i>Litsea coreacea</i>	<i>Lauraceae</i>	Kuttiapanal	Traditional and indigenous Chinese medicines for the treatment of diarrhea, stomachache, dyspepsia, gastroenteritis, diabetes, edema, cold, arthritis, asthma, pain, traumatic injury, etc.
105.	<i>Mangifera indica</i>	<i>Anacardiaceae</i>	Maavu	Anti inflammatory properties that help in relieving acute cases of inflammation. The leaf and the seed of the Mango contains anti microbial properties.
106.	<i>Maranta arundinaceae</i>	<i>Marantaceae</i>	Koova	Arrowroot is chiefly valuable as an easily digested, nourishing diet for convalescents, especially in bowel complaints, as it has demulcent properties. In the proportion of a tablespoonful to a pint of water or milk, it should be prepared by being first made into a smooth paste with a little cold milk or water, and then carefully stirred while the boiling milk is added.
107.	<i>Meiogyne pannosa</i>	<i>Annonaceae</i>	Unknown	Treating skin diseases
108.	<i>Mesua ferrea</i>	<i>Clusiaceae</i>	Naagapoomaram	The plant is both medicinally and economically important. The flowers are astringent and stomachic. The woods are heavy and used for heavy construction like bridge and railway line. The parts of the plant used are root, bark, leaves, seeds, flowers and wood. Ornamental plant
109.	<i>Michelia champaca</i>	<i>Magnoliaceae</i>	Chempacam	<i>Michelia champaca</i> or Champak is a famous fragrant flowering plant. Its flowers and stem bark are useful in diabetes, quick wound healing, cardiac disorders, gout, dysuria and more.
110.	<i>Mimusops elengii</i>	<i>Sapotaceae</i>	Elangi	The bark, flowers, fruits and seeds are astringent, cooling, anthelmintic, tonic, and febrifuge. It is mainly used in dental ailments like bleeding gums, pyorrhea, dental caries and loose teeth. Extract of flowers used against heart diseases, leucorrhoea,

				menorrhagia and act as antiduretic in polyuria and antitoxin.
111.	<i>Morus alba</i>	<i>Moraceae</i>	Malbari	Anti-diabetic properties.
112.	<i>Murraya koeniyii</i>	<i>Rutaceae</i>	Karri veppu	One way to control blood sugar levels in a diabetic patient is to chew and eat a couple of curry leaves along with a few pepper corns first thing in the morning on empty stomach. The effectiveness of this remedy has led to studies on anti-diabetic property of curry leaves.
113.	<i>Myristica fragrans</i>	<i>Myristicaceae</i>	Jathi	Nutmeg and mace are used for diarrhea, nausea, stomach spasms and pain, and intestinal gas. They are also used for treating cancer, kidney disease, and trouble sleeping.
114.	<i>Myxopyrum smilacifolium</i>	<i>Oleaceae</i>	Chathura mulla	The root of is used for making pills and relives headache, back pain, asthma and fever.
115.	<i>Neolamarckia cadamba</i>	<i>Rubiaceae</i>	Kadambu	Stembark—febrifugal,antidiuretic, anthelmintic, hypoglycaemic. Fruit—cooling; anticatarrhal, blood purifier, analgesic. Flowers and root—abortifacient. Leaves—astrigent. A decoction is used for gargling in stomatitis and aphthae.
116.	<i>Nephelium lappaceum</i>	<i>Sapindaceae</i>	Ramboottan	The leaves for poulticing, and the bark as astrigent for diseases of the tongue.Fruit decoction used for diarrhea and dysentery.
117.	<i>Ocimum americanum</i>	<i>Lamiaceae</i>	Kattu thulasi	Edible pulp (aril) is used as an refrigerant in fevers. Fruit is recommended for severe dysentery, and as a warm carminative in "cold" dyspepsia.

118.	<i>Ocimum sanctum</i>	<i>Lamiaceae</i>	Krishna thulasi	Ocimum sanctum or Holy Basil is an ancient herb .It is particularly good for reducing depression, stress and anxiety. It has anti-inflammatory properties that help in curbing that inflammation caused diseases like arthritis and cancer.
119.	<i>Olea dioica</i>	<i>Oleaceae</i>	Edana	The root of cheravapali plant used for cancer in siddha Treatment.
120.	<i>Oroxylum indicum</i>	<i>Bignoniaceae</i>	Palaka payyani	The roots, leaves, fruit and seeds vata, kapha, inflammations, cough, asthma, bronchitis, anorexia, diarrhoea, dysentery, gout, vomiting, wounds, stomachic and flatulence .
121.	<i>Oryza meyeriana</i>	<i>Poaceae</i>	Unknown	<i>Oryza meyeriana</i> , a wild species of rice from China, shows high resistance to <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> , the cause of rice bacterial blight, one of the most serious rice pathogens.
122.	<i>Pandanus amaryllifolius</i>	<i>Pandanaceae</i>	Rambha	Leaf extracts have been used to reduce fever, relieve indigestion and flatulence and as a cardio-tonic.
123.	<i>Passiflora sp</i>	<i>Passifloraceae</i>	Aakashavellari	The fresh or dried leaves of maypop are used to make a tea that is used for insomnia, hysteria, and epilepsy, and is also valued for its analgesic properties.
124.	<i>Pouzolzia sp</i>	<i>Urticaceae</i>	Unknown	The juice of the plant Pouzolzia is used to treat boils, dysentery, fevers, toothaches and urinary problems.The juice of the root is used in the treatment of indigestion. A paste of the plant is applied to cuts and wounds.
125.	<i>Pavetta tomentosa</i>	<i>Rubiaceae</i>	Paavatta	External applications were often used to treat internal conditions, particularly fever, diarrhoea and for other gastrointestinal problems.
126.	<i>Persea Americana</i>	<i>Lauraceae</i>	Butter fruit	Avocado pulp is used to treat wounds with pus.Decoction from avocado seeds is used as mouthwash and to relieve toothaches. Ointment

				from pulverized seeds used to treat skin irritation.
127.	<i>Pimenta dioica</i>	<i>Myrtaceae</i>	Sarva suganthi	Allspice is widely used as a carminative, to prevent or relieve flatulence. It is used as both an aromatic stimulant and as a tonic for the gastrointestinal tract and digestive system, to treat vomiting, stomach ache, diarrhea and indigestion.
128.	<i>Piper chaba</i>	<i>Piperaceae</i>	Vanthipalli	It is pitta suppressant nad vata and kapha aggravator. It has a strong urge to suppress any kind of infection occurring in the body due to its pungent taste. It helps in expelling out the mucus that gets accumulated in the respiratory tract .
129.	<i>Plumbago rosea</i>	<i>Plumbaginaceae</i>	Chethi koduveli	The root of Leadwort plant is processed and used for Naseum (drops into the nose) a treatment to combat snake poison (Cobra) .The juice of the plant is used for making pills.
130.	<i>Plumbago rosea</i>	<i>Plumbaginaceae</i>	Chuvanna koduveli	The root of Leadwort plant is processed and used for Naseum (drops into the nose) a treatment to combat snake poison (Cobra) .The juice of the plant is used for making pills.
131.	<i>Plumbago zeylanica</i>	<i>Plumbaginaceae</i>	Vella koduveli	It is used as a stimulant digestant, expectorant, laxative and in the treatment of muscular pain and rheumatic diseases.
132.	<i>Pongamia pinnata</i>	<i>Fabaceae</i>	Ungu	Juices from the plant, as well as the oil, are antiseptic and resistant to pests. The leaves of Indian beech can be used to cure toxic skin allergies.
133.	<i>Portulaca oleraceae</i>	<i>Portulacaceae</i>	Kozhuppa	Its leaves are used for insect or snake bites on the skin, boils, sores, pain from bee stings, diarrhea, hemorrhoids and intestinal bleeding.

134.	<i>Pronus domestica</i>	<i>Rosaceae</i>	Aarookam	The soluble fiber content of plums, mainly pectin, reduces the cholesterol levels in humans as well as in animals. The regular consumption of plums or prunes, helps in the prevention of colon cancer.
135.	<i>Psidium guajava</i>	<i>Myrtaceae</i>	Peral	The Root, Leaves, Flowers and Fruits are used for used to treat gastroenteritis, vomiting, diarrhoea, dysentery, wounds, ulcers, toothache, coughs, sore throat and inflamed gums
136.	<i>Pueraria phaseoloides</i>	<i>Fabaceae</i>	Thootta payar	A decoction of the plant is used as an anti-infective agent .A poultice of the plant is applied to ulcers and boils, especially in children.
137.	<i>Punica granatum</i>	<i>Punicaceae</i>	Mathala narakam	The astringent qualities of the flower juice, rind and tree bark are considered valuable for a variety of purposes, such as stopping nose bleeds and gum bleeds, toning skin,and treating hemorrhoids. Pomegranate juice (of specific fruit strains) is also used as eyedrops as it is believed to slow the development of cataracts.
138.	<i>Putranjiva roxburghii</i>	<i>Euphorbiaceae</i>	Putranjivi	The bark, leaves, fruits and leaves of Lucky Bean Tree used as medicine for rheumatism.
139.	<i>Sansevieria sp</i>	<i>Agavaceae</i>	Unknown	<i>Sansevieria</i> species are good air purifiers by removing toxins, the plant's sap has antiseptic qualities, and the leaves are used for bandages in traditional first aid.
140.	<i>Santalum album</i>	<i>Santalaceae</i>	Chathanam	It it is also used in the preparation of decoction, medicinal ghee and its paste is used for applying on the snake bitten area (Viper bite).
141.	<i>Saraca asoca</i>	<i>Caesal piniaceae</i>	Ashokam	Useful in depression, bleeding hemorrhoids, uterine fibroid,considered a uterine sedative and tonic.

142.	<i>Sargostemma acidum</i>	<i>Asclepiadaceae</i>	Somalatha	The Roots and Leaves of the Moon plant is used viral infection, mental diseases, allergic rhinitis, and sinusitis.
143.	<i>Scaevola sericea</i>	<i>Goodeniaceae</i>	Bhadraksham	Traditional medicine and extracts have shown selective anti-viral activity against Herpes Simplex Virus-1
144.	<i>Selaginella sp</i>	<i>Selaginellaceae</i> [<i>pteridophyte</i>]	Unknown	Diuretic and astringent.
145.	<i>Smilax zeylanica</i>	<i>Smilacaceae</i>	Kareelanji	A powerful anti biotic medicinal plant in ayurveda.Action Root—used in prescriptions for venereal diseases. Decoction, used for abscesses, boils, swellings and rheumatism; also for dysentery.
146.	<i>Strobilanthes ciliatus</i>	<i>Acanthaceae</i>	Karim kuringi	The roots are bitter, sweet, thermogenic, emollient, diuretic, anti-inflammatory, expector and tonic. The leaves and bark are diaphoretic, expectorant, depurative and febrifuge, and are usefull in whooping cough, fever etc. Strobilanthus is used in the treatment for itching due to spider poison.
147.	<i>Suzygium zeylanicum</i>	<i>Myrtaceae</i>	Poocha pazham	Leaves and roots— vermifuge. Plant—stimulant, antirheumatic.
148.	<i>Swietenia mahagoni</i>	<i>Meliaceae</i>	Mahagoni	The bark extracts are used as an astringent for wounds. It is used to cure malaria, anemia diarrhea, fever, dysentery and depurative.
149.	<i>Syzygium cumini</i>	<i>Myrtaceae</i>	Njaval	The leaves are antibacterial, and are used for strengthening the teeth and gums. The fruit and seeds are sweet, acrid, sour, tonic, and cooling, and are used in diabities, diarrhoea and ringworm. The bark is astringent, sweet sour, diuretic, digestive and anthelmintic

150.	<i>Syzygium malaccense</i>	<i>Myrtaceae</i>	Panineerchamb a	The leaves and bark have in fact been shown to possess antibiotic activity, the bark is astringent, whilst the plant is also weakly hypoglycaemic. In particular the bark, leaves and roots of Malay apple are used against different ailments.
151.	<i>Tabernaemontana divaricata</i>	<i>Apocynaceae</i>	Nanthyar vattum	The Root, Flowers, and Latex of East Indian rosebay is used for purifying blood, headache, skin diseases, itching and diseases of the eye.
152.	<i>Terminalia bellerica</i>	<i>Combrataceae</i>	Thanni	It is a rejuvenative and laxative. It proves beneficial for hair, throat and eyes. The seed oil gives excellent results in skin diseases and premature graying of hair.
153.	<i>Terminallia arjuna</i>	<i>Combrataceae</i>	Neermaruthu	Uses of Arjuna include ulcer protection in the stomach .
154.	<i>Terminallia chebula</i>	<i>Combrataceae</i>	Kadukka	Chewing the Haritaki fruit causes increase in digestion power. If it is made into a paste and eaten, it clears and cleanses bowels.
155.	<i>Thottea dinghoui</i>	<i>Aristolchiaceae</i>	Unknown	Thottea are used by certain tribes against several diseases and as pain killers. The leaves are used as antidote to stings, while the root crushed with lemon juice is reputed in indigenous systems of medicine for diarrhea, dysentery treatments and against snake poison.
156.	<i>Tinospora cordifolia</i>	<i>Menispermaceae</i>	Chittamrithu	It is used for diabetes, high cholesterol, allergic rhinitis (hay fever), upset stomach, gout, lymphoma and other cancers.
157.	<i>Vateria indica</i>	<i>Dipterocarpaceae</i>	Vella kunthirikam	It is considered tonic, carminative, and expectorant and used in chronic bronchitis and throat troubles, piles, diarrhoea, rheumatism, tubercular glands and boils.

158.	<i>Vernonia cinerea</i>	<i>Asteraceae</i>	Poovam kurunthal	Used as a specific herb for leucorrhoea, dysuria, spasm of bladder, strangury and for haematological disorders, as a blood purifier and styptic.
159.	<i>Wedelia chinensis</i>	<i>Asteraceae</i>	Manja kayyonni	The leaves are alterative and hair tonic; used for promoting hair growth; useful in cough, cephalalgia, skin diseases, especially alopecia. It is also used in enlarged liver and spleen
160.	<i>Woodfordia fruticosa</i>	<i>Lythraceae</i>	Thathira poovu	Use of <i>dhataki</i> flowers with <i>giloy</i> and <i>amla</i> helps to cure fever. Powder of <i>dhataki</i> flowers with honey or rice water is useful in white discharge in females.









LIST OF NEWLY ADDED PLANTS

1.	<i>Helicterus isora</i> Linn / <i>Helicteres isora</i>	<i>Sterculiaceae</i>	Idampiri valampiri	The Fruits, Root, Bark of the Idampiri valampiri is used colic, diarrhea, wounds, flatulence, haemorrhoids and diabetes.
2	<i>Bacopa monnieri</i>	<i>Scrophulariaceae</i>	Brahmi	Bacopa has been used in traditional Ayurvedic treatment for epilepsy and asthma. It is also used in Ayurveda for ulcers, tumors, ascites.
3.	<i>Ficus benghalensis</i> Lin	<i>Moraceae</i>	Peral	The juice of the bark and leaves of Banyan tree is used for grinding the pills and making decoction in toxicology.
4..	<i>Pterocarpus santalinus</i>	<i>Fabaceae</i>	Raktachanda nam	Medicated oil extracted from the plant is used quire patches on the body due to spider bite.
5.	<i>Careya arborea</i>	<i>Lecythidaceae</i>	Aalam	Snakebite antidote (fruit and bark), in treating body pain, fever, cold, cough, and leucoderma. The plant parts are used to treat snakebite, ulcers, healing wound and cough.
6.	<i>Myxopyrum serratum</i>	<i>Oleaceae</i>	Chaturamulla	The leaves are astringent, acrid, sweet, thermogenic, anodyne, febrifuge and tonic. They are useful in vitiated conditions of kapha and vata, cough, asthma, rheumatism, cephalalgia, notalgia, consumption, fever, otopathy, neuropathy and cuts and wounds
7.	<i>Justicia gendarussa</i>	<i>Acanthaceae</i>	Vatamkolli	The whole plant of Vatamkolli is used headache cough, bronchitis, migrain, fever and fractured bone.

8.	<i>Aegle marmelos</i>	<i>Rutaceae</i>	Kuvalam	Kuvalam can act against strong poison. It is an important component in the preparation of Vilvadi tablets which is an important pill used in Toxicology.
9.	<i>Trachispermum roxburghianum</i>	<i>Apiaceae</i>	Ayamodakam	Ayamodakam are powdered and soaked in milk, which is then filtered and fed to babies
10.	<i>Murraya paniculata</i>	<i>Rutaceae</i>	Maramulla	<i>Murraya paniculata</i> is used both in traditional medicine as an analgesic and for wood
11.	<i>Cassia tora</i>	<i>Leguminosae</i>	Thakara	It is reported that Cassia tora helps in maintaining normal cholesterol levels in the body. Cassia tora is also very helpful in treating skin diseases
12.	<i>Ficus carica</i>	<i>Moraceae</i>	Athi	The latex of fig fruit (<i>Ficus carica</i>) has been used in many traditional herbal medicine remedies, most of them aimed to treat skin viral infections such as warts.
13.	<i>Aegle marmelos</i>	<i>Rutaceae</i>	Maredu	Bael 's fruit serves as stool binding. In fact it is used in condition like diarrhea, dysentery. Powder of bael leaves has anti diabetic effect. Juice of bael leaves with black pepper is helpful in jaundice
14.	<i>Indigofera tinctoria</i>	<i>Fabaceae</i>	Neelamari	Indigo or <i>Indigofera tinctoria</i> is used for the treatment of fever, liver and spleen disorders, rheumatoid arthritis, gout, grey hairs etc. The leaves promote hair growth.
15.	<i>Actiniopteris dichotoma</i>	<i>Adiantaceae</i>	Mailosikha	The whole plant of the Fan-leaved fern is used in a glass of water and taken orally in morning for control of blood pressure and tuberculosis.

16.	<i>Elephantopus scaber</i>	<i>Asteraceae</i>	Anachuvadi	Prickly leaved elephant's foot is known as a traditional medicine. It has shown to have an antitumour activity. The whole plant grained and made in to a paste then applied the toxic wounds to destroy toxic elements
17.	<i>Symplocos cochinchinensis</i>	<i>Symplocaceae</i>	Pachotti	The bark is rich in tannin and aluminium. A decoction of the bark is used to produce yellow red and brown dyes that have been used in the Batik industry in Java
18.	<i>Elaeocarpus serratus</i> W	<i>Elaeocarpaceae</i>	Kaara	The fruits are high in starch and sugar and have low amounts of protein and iron. It may help treat diarrhoea due to its constipating effet.
19.	<i>Hydnocarpus alpina</i>	<i>Flacourtiaceae</i>	Marotti	Oil extracted from these plant used for the treatment of Leprosy
20.	<i>Piper longum</i>	<i>Piperaceae.</i>	Thipali	Pippali is known for Detoxifying the lungs; it helps in Removing Cold and Congestion. It also helps to Rejuvenate the Lungs and Kapha dosha, it even helps in expelling out the mucus accumulated in the respiratory tract.
21.	<i>Premna herbacea</i>	<i>Verbenaceae</i>	Munja	Roots and Leaves-given in asthma rheumatism.
22.	<i>Hibiscus rosa-sinensis</i>	<i>Malvaceae</i>	Chemparathi	The decoction, juice, and extracts , prepared from the leaves, flowers or roots of this plant are used as diuretics, contraceptives, antidiarrheals, cough suppressants, etc.

23.	<i>Canarium strictum</i>	<i>Burseraceae</i>	Kunthirikkam	It is used as a substitute for burgundy pitch in making medicinal plasters
24.	<i>Hemidesmus indicus</i>	<i>Asclepiadaceae</i>	Naruninti.	It is used to treat stomach problems, cure rashes, ease the mind, quell the symptoms of syphilis, induce trance states and deep meditation
25.	<i>Elettaria cardamomum.</i>	<i>Zingiberaceae.</i>	Elam	Both forms of cardamom are used as flavorings and cooking spices in both food and drink, and as a medicine. <i>E. cardamomum</i> (green cardamom) is used as a spice, a masticatory, and in medicine; it is also smoked.v
26.	<i>Desmodium gyrans</i>	<i>Fabaceae</i>	Tozhukanni	Tick-trefoils produce high amounts of antixenotic allomones - chemicals which repel many insect pests - and allelopathic compounds which kill weeds
27.	<i>Curcuma zedoaria</i>	<i>Zingiberaceae</i>	Manjakoova	In the juice form, it is used to treat urine-related disorders and urinary tract infections.
28..	<i>Costus speciosus</i>	<i>Costaceae</i>	Channakoova	The plant has many historical uses in Ayurveda, where the rhizome has been used to treat fever, rash, asthma, bronchitis, and intestinal worms. It is mentioned in the Kama Sutra as an ingredient in a cosmetic to be used on the eyelashes to increase sexual attractiveness.
29.	<i>Rauvolfia tetraphylla</i>	<i>Apocynaceae</i>	Pampumkolli	The roots yield the drug deserpidine, which is an antihypertensive and tranquilizer.

30.	<i>Ficus arnottiana</i>	<i>Moraceae</i>	Kallal	The bark is astringent, sweet, sour, refrigerant, emollient, aphrodisiac, depurative, demulcent, urinary astringent and constipating. It is useful in vitiated conditions of vata and pitta, skin, diseases, leprosy, scabie etc.
31.	<i>Portulaca oleracea</i>	<i>Portulacaceae</i>	Kozhuppa	Its leaves are used for insect or snake bites on the skin, boils, sores, pain from beestings, bacillary dysentery, diarrhea, hemorrhoids, postpartum bleeding, and intestinal bleeding.
32.	<i>Wrightia tinctoria</i>	<i>Apocynaceae</i>	Dandappala	Plant pacify vitiated tridoshas, fever, stomach ache, skin diseases especially psoriasis and non-specific dermatitis. It has anti-inflammatory and anti-dandruff properties and hence is used in hair oil preparations.
33.	<i>Tectona grandis</i>	<i>Lamiaceae</i>	Teak	The whole parts of the Teak is used for anemia, inflammatory swellings, skin itching, dysentery and Wood is good for headache, burning sensation pain, and liver related troubles.
34.	<i>Canarium strictum</i>	<i>Burseraceae</i>	Karuthakunthi rikkam	The resin obtained from the trunk is used medicinally.
35.	<i>Jasminum sambac</i>	<i>Oleaceae</i>	Kuttimulla	Jasmine oil has proven to increase alertness and improve mood while supporting healthy blood flow and blood-oxygen levels. The aroma of jasmine has even been shown to be as effective as sedatives without any of the unpleasant side effects such as depression, dizziness etc.

36.	<i>Piper Longum</i>	<i>piperaceae</i>	Tippali	It is one of the best herbs for enhancing digestion, assimilation and metabolism of the foods we eat.
37.	<i>Salacia reticulata</i>	<i>Celastraceae</i>	Ekanayakam	The roots and the stems contain potent antidiabetic chemical constituents. Traditionally, The roots of <i>S. reticulata</i> were prescribed for people with diabetes mellitus.
38.	<i>Holostemma adakodien</i>	<i>Asclepiadaceae</i>	Adapathiyan	Roots has cooling, alternative, tonic and lactative properties and is also used an astringent to the bowels and is sweet. The root made into a paste is applied to eyes in ophthalmic and also for scalding in gonorrhoea. In diabetes, the root rubbed into a paste is given in cold milk.
39.	<i>Piper betle</i>	<i>Piperaceae</i>	Thulasi vetta	Paste-it is used for gargles on the throat and diphtheria. It is also used to apply on the throat related problems, breast inflammation, back pain etc. Powder –it is used in mouth disorders, indigestion and reduced peristaltic movements. It is also helpful in throat related problems and respiratory problems.
40.	<i>Vitex negundo</i>	<i>Lamiaceae</i>	Karinochi	<i>Vitex negundo</i> is used for treating stored garlic against pests . Roots and leaves are used in eczema, ringworm and other skin diseases, liver disorders, spleen enlargement, rheumatic pain, gout, abscess, backache; seeds are used as vermicide. It is also used to control population of mosquitoes.
41.	<i>Gardenia gummifera</i>	<i>Rubiaceae</i>	Somanadikayam	This species can be helpful in treating digestive problems, including dyspepsia and diarrhea; or used as an astringent and expectorant for nervous conditions

				and spasms.
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42.	<i>Osbeckia virgata</i>	<i>Melastomataceae</i>	Cherukadali	It is a plant used in traditional medicine to treat jaundice and other liver disorders
43.	<i>Ensete superbum</i>	<i>Musaceae</i>	Malavazha	It is used in the Ayurveda to treat diabetics, leucorrhea, kidney stones, bladder infections, dog bite, small pox, urinary retention etc.

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Ministry of AYUSH
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To,
The Pay & Accounts Officer (Sectt.),
Ministry of Health & Family Welfare
Nirman Bhawan,
New Delhi- 110011.

Subject: Grant-in-aid for Central Sector Scheme for the year 2018-19, release of payment of ₹0.40 Lakh in favor of Mar Athanasios College for Advance Studies, Tiruvalla, Pathanamithitta, Kerala.

Sir,

In exercise of powers delegated under DFPR rules 1978, I am directed to convey the sanction of the President to the payment of ₹0.40 (Rupees Forty Thousand Only) as 2nd installment for the project entitled "Establishment of a herbal garden and a nursery at Mar Athanasios College for Advance Studies Tiruvalla" in favour of Mar Athanasios College for Advance Studies (MACFAST), Tiruvalla, Pathanamithitta, Kerala for the year 2018-19.

This grant is of non-recurring nature and for one year in respect of 2nd installment.

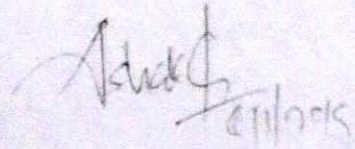
S. No.	File No. and Project No.	Name of the Grantee/ Institution	Amount (₹)
1	Z.18017/187/ CSS/HG/KE-01/2014-15- NMPB (Project No. CSS/HG/KE-01/2015)	Mar Athanasios College for Advance Studies, Tiruvalla, Pathanamithitta, Kerala	₹0.40 Lakh

The grant is to be utilized during the year 2018-19 in accordance with approve costing of the project. Payment of grant will be made directly by Real Time Gross Settlement (RTGS) payable to the office bearer viz. Mar Athanasios College for Advance Studies, Tiruvalla, Pathanamithitta, Kerala authorized to operate upon it's The South Indian Bank with account No. 0079081000000723 and to bind it financially in accordance with rules & regulations.

The grant-in-aid will be subject to the conditions laid down in Rules-228 to 245 of the General Financial Rules 2017.

The accounts of the grantee institution/ organization shall be open to inspection by the sanctioning authority and audit both by the CAG of India under the provision of CAG (DPC) Act, 1971 and internal audit wing of the O/o CCA of the Ministry, whenever the institution or organization is called upon to do so.

The grant is debitible under Demand No. 5, Ministry of AYUSH, 2210-Medical & Public Health (Major Head), 02200-Other Systems (Minor Head), 13-National Medicinal Plants Board, 130031-Grant-in-Aid (General) for the year 2018-19 (Revenue).



No UC is pending against the grantee.

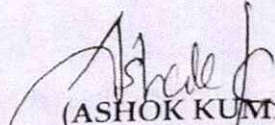
The Agency has been boarded in EAT Module.

"As the Research Project involves biological resources, the obligations under the Biological Diversity Act, 2002 as applicable shall be complied with by the Project Investigator"

Certified that no unadjusted balance is lying with the grantee and no utilization certificate is pending against the grantee organization.

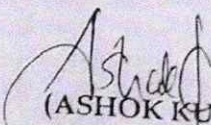
This issue with the approval of IFD vide Concurrence Dy. No C-2975 dated 01.01.2019.

Yours faithfully


(ASHOK KUMAR)
Finance & Administrative Officer
8/1/2019

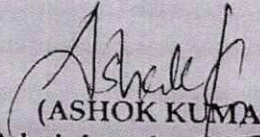
Copy to:-

1. The Under Secretary (Budget), Ministry of AYUSH, New Delhi.
2. Sh. Biju Dharmapalan, Principal Investigator, Mar Athanasios College for Advance Studies, Tiruvalla - 689101, Pathanamithitta, Kerala, kindly acknowledge the receipt of funds transferred through RTGS with the request that the following documents in original duly signed by the competent authority and certified as correct by Govt. Auditor or Chartered Accountant, as the case may be, shall also be sent to this Ministry within a period of twelve months by the grantee:-
 - (i) Utilization certificate in the prescribed Performa in GFR-12-C format to the effect that the grant has been utilized for the purpose for which it was sanctioned duly signed by competent authority and audited by Govt. Auditor or Chartered Accountant.
 - (ii) Audited accounts reflecting therein the grant-in-aid released and the item-by-item expenditure incurred there against duly signed by competent authority and audited by Govt. Auditor or Chartered Accountant.
 - (iii) A Certificate stating that grantee/institution/organization has not received financial assistance for the same purpose from any other department of the Central or State Government or any other Government Agency.
 - (iv) An achievement-cum-performance report explaining:-
 - (a) The purpose for which the grant was received.
 - (b) The manner in which it has been utilized.
 - (c) How the grant helped to improve the performance of the instt.


(ASHOK KUMAR)
Finance & Administrative Officer
8/1/2019

Copy also to:-

1. The Director of Audit, Central Revenues, I.P. Estate, New Delhi.
2. Planning Commission (Health Division), Yojna Bhawan, New Delhi.
3. The Secretary (Health) of the concerned State Governments/U.Ts
4. Chief Executive Officer, State Medicinal Plants Board, Kerala, Shornur Road, Post Thiruvambady, Thrissur - 680022, Kerala.
5. The Director/ The Regional Director, RCFC (Southern Region), Kerala Forest Research Institute (KFRI), Peechi - 680653, Thrissur, Kerala.
6. Sh. Ashok Kumar, Finance and Administrative Officer (F&AO), NMPB.
7. Dr. Jeetendra Kumar Vaishya, Research Officer (MPs/Agro.), NMPB.
8. Cash (AYUSH) section with one spare copy with the request to transfer the funds through RTGS.
9. ISM (E.III) Section/P&E Cell/Fin. Desk II/Sanction Register.
10. Account Section, NMPB.
11. Computer Operator, NMPB, for uploading the sanction order on NMPB's website.
12. Concerned file/ Sanction folder.


(ASHOK KUMAR)
Finance & Administrative Officer
8/11/2019
अशोक कुमार / ASHOK KUMAR
फाइनेंस और प्रशासनिक अधिकारी
नर्मदा प्रयोगशाला
भारत सरकार

Sh. Ashok Kumar
Finance & Administrative Officer,
NMPB
Ph: 011-24651823

Requisition form for the electronic transfer of funds

(To be submitted in duplicate)

1	Name of Grantee institute/ Other Organization	Mar Athanasios College for Advance Studies, Tiruvalla, Kerala
2	Name of the Bank	The South Indian Bank
3	Address of the Bank	P B No. 27, M T Commercial Centre, T K Road, Tiruvalla - 689101
4	Bank Branch	Tiruvalla
5	Account No.	0079081000000723
6	RTGS Code of Branch	SIBL0000079
7	MICR No.	689059004
8	Amount to be transferred	₹40,000/- (Rupees Forty Thousand only)

Signature of the Grant Sanction Authority
Other competent authority

Ashok Kumar
7/8/2018

(For the use of PAO (S) only)

Name of DDO	
Bill No	
D.V. No.	
Ch. No. & Ch. Date	
Cheque Amount	