

The plants used in Shri Ganapathi Homam in Pondicherry and their values

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SUMMARY

In Hindu religion there are several homams performed on the name of God for various obligations such as good health, wealth, prosperity, marriage, children, good welfare of people and the country. Lord Ganapathy is considered as power of Supreme Being that removes obstacles and ensures success in human endeavor. So the homam is performed on the name of Shri Ganapathy. In Ganapathy homam sixty-five plant species are used in Pondicherry. They belong to fifty-eight genera and thirty-six families. Of them sixty-four are angiosperms and one is gymnosperm. Thirty nine are cultivated and twenty six are wild. All the plants used in homam are highly medicinal, nutritive and antimicrobial. The smoke emitted while burning the plants in homam has curative properties. It is supposed to purify the atmosphere. It also drives away the poisonous insects.

Key words : Ganapathi homam, Values of plants, Pondicherry

The plants are intimately associated with human civilization. Lots of Vedic actions which are performed by our ancestors are not only based on the rituals but they have close connection with the scientific explanations. They believed in supernatural powers and use of folk medicine in the treatment of diseases and ailments (Pradhan *et al.*, 2006). They have related the medicinal value of the plants with the social and religious beliefs. One of such socio-religious beliefs is performing homam. There are hundreds of homams in India which are classified into two main groups namely Kaamya homam and Naimithika homam. Kaamya homam is performed on a particular person for his health and wealth. This can be done at home by inviting archakars who are skilled in performing various homams. Naimithika homam is performed for the enrichment of the world and peaceful life. This is performed at the temples or in the midst of the city and is done for the betterment of whole human life. Some of the familiar homams are Ganapathy homam, Sudharsana homam, Suktha homam, Gayathri homam, Maha Mrithyunjaya homam, Sri Lakshmi homam, Navagraha homam, Karuka homam, Santam Gopalam homam, Ayusha homam etc. Specific homams are performed for marital bliss, children, health, wealth and prosperity. Lord Ganapathy is considered as power of

Supreme Being that removes obstacles and ensures success in human endeavor. So the homam is performed on the name of Shri Ganapathy.

While performing homam a number of plants or plant products such as fresh fruits, dried fruits, seeds, leaves, woods, roots, barks, spices and cereals are put in fire. All the plants used in homam are highly medicinal, nutritive and antimicrobial. The smoke emitted while burning is supposed to cure a variety of diseases such as cough, bronchitis, asthma, kapha, pita and vatha. It also kills the microbes in the near vicinity and drives away the poisonous insects (Subramanyaprasad and Raveendran, 2006). The unscrupulous collection of the nutritionally and medicinally important plants leads to the loss of their diversity and environmental degradation. Our understanding of the plants used in homam may pave way for the protection of the wild plants by cultivation. The present work has been taken up to reveal the botanical names, names of families, medicinal and food values of the plants used in Shri Ganapathi homam in Pondicherry and the importance to conserve them.

MATERIALS AND METHODS

Pondicherry is a Union Territory bounded by the Bay of Bengal on the east and by the South Arcot district of Tamilnadu on all other sides. It is at the north between 11°46' and 12°3' latitudes and 79°36' and 79°53' of eastern longitude. The area of Pondicherry is 290 Square Kilometers of which 25832-hectare land is under cultivation. The total population of the enclave is 7,35,000 of which the urban population constitutes 5,06,000 (68.84 per cent) and the rural population is 2,29,000 (31.16 per cent). The climate is dry except during the Northeast monsoon. The average annual rainfall was 170 mm for

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Table 1 : Values of Plants used in Shri Ganapathi Homam

Binomial and family	Common names	Parts used and uses
<i>Ananas comosus</i> (L.) Merr. Bromiliaceae	Pine apple (E), Ananas (H), Annachi (T)	Fruits are edible, contain a valuable digestive enzyme bromelin
<i>Anethum greveolens</i> Linn. Apiaceae	Dil (E), Soya (H), Sadakuppy (T)	Fruits are used as spice and condiment, carminative
<i>Areca catechu</i> Linn. Arecaeae	Betel nut (E), Supari (H), Kalipakku (T)	Seeds are diuretic, digestive, anthelmintic, nervous tonic, useful in general debility
<i>Bambusa bambos</i> (L) Voss. Bambusaceae	Thorny bamboo (E), Banms (H), Mulmoongil, Moongilarici (T)	Grains are nutritive, eaten as food, thermogenic, laxative, useful in kapha, intestinal worms and general debility
<i>Brassica alba</i> (L) Rabenh. Brassicaceae	White mustered (E), Safad rai (H), Ven kadugu (T)	Seeds are used as spice, in pickles, they also yield fatty oil
<i>Cajanus cajan</i> (L) Millsp. Papilionaceae	Cajanpea, Redgram, Pigeonpea (E) Tur, Arhar (H), Thuvarai (T)	Seeds are nutritive and eaten as pulse. Pods and leaves are used as fodder. Straight branches are used for making baskets and as thatching material
<i>Carum capticum</i> Hiern. Apiaceae	Ammi (E), Ajwain (H), Omam (T)	Fruits are used as spice, antispasmodic, stimulant, antiseptic, carminative, antimicrobial
<i>Cedrus deodara</i> (Roxb. Ex Lamb)G.Don. Pinaceae	Deodar (E), Deodar (H), Devadaru (T)	Wood is useful in inflammations, insomnia, epilepsy, diabetes, renal and vesical calculi, vata, kapha and skin diseases. Wood is also used for construction works
<i>Capparis spinosa</i> Linn. Capparaceae	Caper berry (E), Kobra, Kiari (H), Miratimokku (T)	Flower buds are used in pickles and food preparations. They are antioxidant, hepato protective, used in inflammation, rheumatism and stranguri
<i>Cicer arietinum</i> Linn. Papilionaceae	Gram, Chickpea (E), Chana , Kala chana (H), Kadalai (T)	Seeds are nutritive and eaten as dhal, tonic, expectorant, useful in bronchitis, inflammation and skin diseases
<i>Cinnamomum zeylanicum</i> Blume Lauraceae	Cinnamon (E), Dalchini (H), Elavangam (T)	Bark of the plant is used extensively as spice and condiment. It is astringent, stimulant and carminative
<i>Citrus limon</i> (L.) Burm.f. Rutaceae	Lemon (E), Baranimbu (H), Elumichai (T)	Fruit is good source of vitamin C.It is stomachic, carminative and antimicrobial
<i>Citrus reticulata</i> Blanco. Rutaceae	Mandarin, Langerine(E), Santara (H), Kamalapazham(T)	Fruit is nutritive and good source of energy. Used in perfumeries and confectionaries
<i>Citrus sinensis</i> (L)Osbeck. Rutaceae	Sweet orange (E), Musambi (H), Sathukudi (T)	Fruit is nutritive and good source of energy. Used in perfumeries and confectionaries
<i>Coscinium fenestratum</i> (Gaertn) Coleber Menispermaceae	Tree turmeric (E), Jhori-haldi (H), Maramanjai (T)	The wood is stomachic and antiseptic. Used for debility, indigestion, vitiated conditions of pitta and kapha
<i>Costus speciosus</i> (Koen.Ex Retz) Sm. Zingiberaceae	Crape ginger, Spiral flag (E), Keu (H), Koshtum (T)	Rhizomes are astringent, cooling, purgative, aphrodisiac, anthelmintic, febrifuge and expectorant. Used in vitiated conditions of kapha, pitta and skin diseases
<i>Curcuma aromatica</i> Salisb. Zingiberaceae	Wild turmeric (E), Jangli haldi (H), Kasthoori manjal (T)	Rhizomes are tonic, carminative and antimicrobial. Used for bronchitis, cough, leucoderma and skin eruptions also used in cosmetics
<i>Curcuma zedoaria</i> (Berg.) Rose. Zingiberaceae	Zedoary (E), Mulhitti (H), Kichili kizangu (T)	Rhizomes are rich in starch. They are carminative, digestive and antimicrobial. Used in cosmetics
<i>Cyperus rotundus</i> Linn. Cyperaceae	Nut grass (E), Motha (H), Korai kizangu (T)	Root tubers are astringent, cooling, anti-inflammatory, nerve tonic, digestive, carminative, anthelmintic, stomachic, expectorant and useful in general debility, skin diseases and vitiating conditions of pitta and kapha
<i>Diospyros ebenum</i> Koenig. Ebenaceae	Ebony (E), Ebans (H), Karungali (T)	Wood is used for cabinet work and musical instruments. It is astringent, attenuant and lithontriptic
<i>Dysoxylum malabaricum</i> Bedd. Meliaceae	White cedar (E), Agar (H), Vella agil (T)	Wood is used in the manufacture of match boxes, splints and ply boards. It has larvicidal and mosquito repellent properties

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<i>Elettaria cardamomum</i> Maton. Zingiberaceae	Cardomom (E), Chhoti-elaichi (H), Yelakkai, Yela arici (T)	Seeds are called yela arici and used as spice. They are carminative, cardi tonic and expectorant. Useful in asthma, bronchitis, haemorrhoids, strangury, renal and vesical calculi and vitiated conditions of vata
<i>Embelia ribes</i> Burm. Myrcinaceae	Embelia (E), Baberang, Vidanga (H), Vayuvilangam (T)	Roots are useful in kapha, vata, asthma, bronchitis, dental caries, psychopathy and general debility
<i>Eugenia caryophyllata</i> Thumb. Myrtaceae	Clove (E), Laung (H), Lavangapathiri (T)	Dried flower buds are used as spice. They are stimulant, carminative and antifatulent. The oil is used for tooth ache
<i>Glycyrrhiza glabra</i> Linn. Papilionaceae	Licorice (E), Mulhitti (H), Adhimaduram (T)	Roots are tonic and laxative. Used in gastric ulcers, cough and sore throat. Roots are fifty times as sweet as cane sugar and used in confectionary
<i>Helicteris isora</i> Linn. Sterculiaceae	East Indian screw tree (E), Marorphali (H), Valampuri, Edampuri (T)	Fruits are astringent, refrigerant, demulcent, stomachic, vermifuge and used in pitta, ulcers, dysentery and diabetes
<i>Imperata cylindrica</i> (L) P.Beauv. Poaceae	Cogon grass (E), Ulu (H), Darkolum, Darbai (T)	The plant is antimicrobial and considered most sacred
<i>Lablab purpurea</i> Linn. Papilionaceae	Sweet bean, Horse gram (E), Sem, Kulti (H), Kollu (T)	Seeds are nutritive, astringent, laxative, diuretic, stomachic, antispasmodic and used for kapha
<i>Mangifera indica</i> Linn. Anacardiaceae	Mango (E), Amra (H), Maa (T)	Leaves are astringent, refrigerant, useful in cough, diarrhoea, dysentery, kapha and pitta
<i>Manilkara zapota</i> Linn. Sapotaceae	Sapodilla (E), Chiku (H), Sapota (T)	Fruits soaked in melted butter all night and eaten in the morning is considered to be an excellent preventive of biliousness and febrile attack
<i>Michelia champaka</i> Linn. Mangoliaceae	Chambac (E), Chamba (H), Senbagamokku (T)	Floral buds are astringent, haemostatic, digestive, carminative, anthelmintic, antipyretic and useful in malarial fever and vertigo
<i>Mollugo cerviana</i> (L) Ser. Molluginaceae	Tel (E), Parpat (H), Parpadagam (T)	Plant is used for promotion of discharge and cure for gonorrhoea
<i>Musa paradisiaca</i> Linn. Musaceae	Banana (E), Kella (H), Vazaipazham (T)	Fruits are edible, useful in nephritis, hypertension, cardiac diseases and intestinal disorders
<i>Mesua nagassarinus</i> (Burm.f.) Kostarm. Clusiaceae	Iron wood (E), Nag kesar (H), Sirunagapoo (T)	Flower buds are used in cosmetics. They are astringent, sudarific, digestive, anthelmintic and cardio tonic. Useful in pitta, vata, asthma, cough, leprosy, scabies and impotence
<i>Myristica fragrans</i> Houtt. Myristicaceae	Nut mug (E), Jaiphal (H), Jathikkai (T)	Kernal and aril are used as spice, condiment and in medicine for stomach ache, dysentery, nausea, vomiting, malaria and rheumatism
<i>Nardostachys jatamansi</i> (D.Don) D.C.Velerianaceae	Spiknard (E), Balchhar, Jadamansi (H), Jadamasi (T)	Roots are used in perfumery, supposed to improve hair growth and blackness. Useful in epilepsy, convulsions and hysteria. Improves urination and digestion
<i>Ocimum basilicum</i> Linn. Lamiaceae	Sweet basil (E), Banfulsi (H), Thirunirupachilai, Arkaja (T)	Plants are thermogenic, anti inflammatory, carminative, digestive, useful in otalgia, cough, bronchitis and asthma
<i>Oryza sativa</i> Linn. Poaceae	Rice (E), Chaval (H), Nellsu (T)	Seeds are eaten. Important food crop of India
<i>Papavar somniferum</i> Linn. Papaveraceae	Opium, Poppy (E), Afim (H), Kasa kasa (T)	Seeds are used as condiment, induce sleep, relieve pain and relax spasm
<i>Phoenix dactylifera</i> Linn. Arecaceae	Date palm (E), Pind khajur (H), Perichai (T)	Fruits are cooling, aphrodisiac, tonic, and diuretic. Useful in nephropathy, strangury, bronchitis, cough and dyspepsia
<i>Piper betle</i> Linn. Piperaceae	Betel pepper (E), Pan (H), Vetrilai (T)	Leaves are used in mastication, useful in bronchitis, asthma, cough, otalgia, fever and cough
<i>Piper cubeba</i> Linn. Piperaceae	Cubeb (E), Sheetalchini(H), Valmilagu(T)	Fruits are used in perfumery and also as spice and condiment

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<i>Piper longum</i> Linn. Piperaceae	Long pepper (E), Piper, Piplamul (H), Thipili (T)	Fruits are used as spice and condiment, useful in gout, lumbago, dyspepsia. They are stomachic, aphrodisiac, carminative, expectorant, laxative and tonic
<i>Piper nigrum</i> Linn. Piperaceae	Black pepper (E), Kalimirch, Gol mirch(H), Milagu (T)	Fruits are used as spice and condiment. They are stomachic, stimulant and carminative. Useful in arthritis, asthma, flatulence and high cough
<i>Prunus amygdalus</i> Batsch Rosaceae	Almond (E), Badam (H), Badam (T)	Seeds are nutritive and used in perfumery
<i>Psidium guajava</i> Linn. Myrtaceae	Guava (E), Amrud (H), Koiya (T)	Ripe fruits are cooling, diuretic, carminative, digestive, cardiostonic and febrifuge
<i>Psoralea corylifolia</i> Linn. Papilionaceae	Babchi (E), Babchi (H), Karpoga arici (T)	Seeds are acrid, laxative, stomachic, diuretic, and diaphoretic
<i>Pterocarpus santalinus</i> Linn. Papilionaceae	Red sandal (E), Lalchandam (H), Semmaram (T)	Heartwood is cooling, depurative, haemostatic, anti-inflammatory and tonic. Useful in dysentery, skin diseases, leprosy, fever, ulcer, general debility and mental aberrations Tender fruits are used in diarrhoea and dysentery. Seeds are edible and nutritive
<i>Punica granatum</i> Linn. Punicaceae	Pomegranate (E), Anar (H), Mathulai (T)	
<i>Pygmaeopremna herbacea</i> (Roxb) Moldenke. Verbinaceae	Bharangi (H), Kanduparangi (T)	Roots are given with ginger for asthma, rheumatism and toothache. It has hepatoprotective functions
<i>Pyrus malus</i> Wall. Rosaceae	Apple (E), Seb (H), Apple (T)	Fruit is edible and rich in vitamin A. Medicinally recommended for diarrhoea and peptic ulcer
<i>Quercus infectoria</i> Oliver Fagaceae	Gall oak (E), Mazu (H), Masikkai (T)	Leaf galls are astringent, cooling, expectorant, digestive, febrifuge and used in vitiated conditions of pitta and kapha. They are also used in tanning and dyeing
<i>Rosa damascena</i> Mill. Rosaceae	Rose (E), Gulab (H), Roja mokku (T)	Flowers are source of rose water, essential oil and gulkand. Flower buds are astringent and used in cardiac trouble and as tonic
<i>Santalum album</i> Linn. Santalaceae	White sandal wood (E), Safad chandan (H), Santhanamaram (T)	The heartwood is used in extracting oil. The wood and oil is medicinal. It is cooling, diaphoretic, diuretic, expectorant and antimicrobial
<i>Sesamum indicum</i> Linn. Pedaliaceae	Sesame (E), Gingelly (H), Ellu (T)	Seeds are used in manufacture of margarine, soaps, cosmetics, perfumes, insecticides and pharmaceutical products
<i>Terminalia bellerica</i> (Gaertn.) Roxb. Combretaceae	Bellaric myrobalan(E), Bahara(H), Thandrikai (T)	Dried fruits are used in dyeing and tanning. Fruit pulp is purgative and used in dropsy and diarrhea. It has antibiotic properties
<i>Terminalia chebula</i> Retz. Combretaceae	Chebulic myrobalan (E), Harir, Harana (H) Kadukkai (T)	Fruits are rich in tannin and used as laxative, stomachic and tonic
<i>Tinospora cordifolia</i> (Willd.) Miers Ex. Hook.f. and Thoms. Menispermaceae	Tinospora, Heart leaf, Moon seed (E), Giloy, Guduchi, Gulancha (H), Seenthil kodi (T)	Dried stems are used as tonic and for diarrhea and chronic dysentery.
<i>Tribulus terrestris</i> Linn. Zygophyllaceae	Land caltrops (E), Gokhru (H), Nerungil (T)	Fruits have diuretic and tonic properties. Used in the treatment of calculus affection and painful micturition
<i>Triticum aestivum</i> Linn. Poaceae	Wheat (E), Gehun (H), Godumai (T)	Seeds are eaten. Wheat products are most widely used in human diet
<i>Vetiveria zizanioides</i> (L.) Nash. Poaceae	Vetiver, Khas - Khas (E), Gandar, Khas (H), Vilamichiver, Vettiver (T)	Roots yield the essential oil khus. It is used in perfumery, cosmetics and soaps. It is diaphoretic and refrigerant
<i>Vigna mungo</i> (L.) Hepper. Papilionaceae	Black gram (E), Urd (H), Ulunthu (T)	Seeds are used as one of the major pulses. They are cooling, digestible, laxative, antipyretic and useful in blood diseases
<i>Vigna radiata</i> (L.) Wilezek. Papilionaceae	Green gram (E), Mung (H), Paciparuppu (T)	Seeds are nutritive used as pulse. Useful in rheumatism, nervous disorders, fever and piles
<i>Vitis vinifera</i> Linn. Vitaceae	Wine grape (E), Angur (H), Thiratchai (T)	Fruits are nutritive and rich in vitamin C. It is laxative, stomachic, diuretic, demulcent, cooling and expectorant. Ayurvedic tonic draksha sava and chyavanaprasa are prepared from the fruits
<i>Zingiber officinale</i> Rose. Zingiberaceae	Ginger (E), Adtrak (H), Sukku, Inji (T)	The dried rhizomes called sukku are used as spice and condiment. They are carminative and stimulant

the year 2006-07. The temperature in winter ranged from 20-30°C and in summer from 30-33°C for the same period. The relative humidity of the atmosphere ranged from 75-90 per cent. The present study includes collection of data of plant materials used in Shri Ganapathy Homam in Pondicherry, procuring the plant materials, proper identification and economic values of the plants. The data regarding the plant materials were obtained from the archakars performing homam. The scientific names of the plants, families to which they belong, their English, Hindi and Tamil names were identified properly with the help of standard Floras and text books (Anonymus, 1972; Gamble, 1967; Mathew, 1991; Nadkarni, 1976; Sambamurthy and Subramanyam, 1989; Singh *et al.*, 1965 and Yoga Narasimman, 2000). The properly identified plants were photographed and the plant materials were preserved in polythene sachets for further reference. The scientific names of the plants were arranged alphabetically.

RESULTS AND DISCUSSION

Sixty five species of plants are being used in Ganapathi homam in Pondicherry which belong to 58 genera and 36 families. The Botanical name, family, common names (English-E: Hindi-H, Tamil-T), the parts used and the uses of each plant are given in Table 1. The whole plant or various parts of the plants are used. Of sixty-five plants studied sixty-four are angiosperms and only one is gymnosperm (*Cedrus deodora*). Thirty nine are cultivated and twenty six are wild (*Bambusa bambos*, *Cedrus deodara*, *Capparis spinosa*, *Coscinium fenestratum*, *Costus speciosus*, *Curcuma zedoaria*, *Cyperus rotundus*, *Diospyros ebenum*, *Dysoxylum malabaricum*, *Embelia ribes*,

Glycyrrhiza glabra, *Helicterus isora*, *Imperata cylindrica*, *Mollugo cerviana*, *Mesua nagassarinus*, *Nardostachys jatamansi*, *Phoenix dactylifera*, *Psoralea corylifolia*, *Pterocarpus santalinus*, *Pygmaeopremna herbacea*, *Quercus infectoria*, *Terminalia bellerica*, *Terminalia chebula*, *Tinospora cordifolia*, *Tribulus terrestris*, *Vetiveria zizanioides*). The earlier studies have reported the use of 54 angiospermic plants in homam (Subramanyaprasad and Raveendran, 2006).

Though the homam is concerned with religious ceremonies, the highly nutritive and medicinal properties of the plants used in rituals reveal that it has scientific values. The perusal of literature revealed that the valuable plants are gradually diminishing and the observers have suggested various strategies to conserve them. The loss of population of some medicinal plants due to excessive and unscientific exploration and the necessity to conserve them was reported (Tripathi, 1998). The urgent need to domesticate useful plant species according to their importance and the degree to which they are endangered was advocated (Khilare *et al.*, 2004). The maintenance of home gardens for preserving such plants was also suggested (Rajeena, 2007). The present study reveals that the plants used in socio-religious ceremonious such as homam are nutritive, medicinal, anti microbial, insect repellent and purify atmosphere.

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