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RESEARCH ARTICLE

DOCUMENTATION OF MEDICINAL PLANTS OF SELECTED SACRED GROVES OF TRICHUR DISTRICT

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ABSTRACT

Twenty sacred groves situated in Trichur District, Kerala, were selected for the study. 92 medicinal plant species are identified. The plants include 40 trees, 14 shrubs, 14 climbers and 24 herbs. The dicotyledons are 73 in number and Monocotyledons, 19. The identified plant species belonged to 46 families.

INTRODUCTION

Sacred groves are small patches of native vegetation, traditionally protected on the grounds of religious faith. These protected forest patches dedicated to gods and goddesses, they survive in the area of development because of conservation and ethics, coupled with 'taboos' and traditions. Sacred groves are nature's laboratories for evolution of wild species and repositories of significant genetic and ecosystem diversity. Sacred groves act as an abode for many rare endemic, endangered species and economically important plants of fruit bearing and medicinal properties. Comparative studies conducted between sacred groves and natural forest with reference to the richness and regeneration of medicinal plants among sacred groves was almost twice as that of reserve forests. In view of the adverse effects of biodiversity degradation, ecologists, and environmentalists have made conservation of biodiversity an issue of global, national and regional significance. As an ecosystem, sacred groves help in soil and water conservation, besides preserving biological wealth. These groves are good repositories of humus, which is formed by litter decomposition. Present day groves are under various pressures which are mostly human induced. Changing social structure plays an important role in gradual declination of sacred grove system. Sacred groves represent ancient Indian way of *in-situ* conservation of genetic diversity. It acts as a nursery and storehouse of many of the local ayurvedic, tribal and folk medicines. Sacred groves in different parts of India is already well documented Kailash *et al.* (2001), Kushalappa

and Bhagwat (2001), Kushalappa *et al.* (2001), Tripathi (2001), Anthwal *et al.* (2006), Sandhya *et al.* (2006), Bhakat and Sen (2008), Khan *et al.* (2008), Sukumaran and Jeeva (2008), Ganesan *et al.* (2009) and Ambarasan *et al.* (2010). The present study was carried out to document medicinal plants in different sacred groves of Trichur district, Kerala.

STUDY AREA

Twenty sacred groves situated in Kodungallur, Annamanada, Mala and Puthenchira panchayath of Trichur District were selected. Most of the *Kavus* were associated with temples and houses. *Kavus* are managed by different social groups. Some are owned by individual families and others held by trusts of families. Many *Kavus* have more than one deity. The deities include 'Nagaraja', 'Nagayakshi', 'Karinagam', and 'Maninagam'.

MATERIALS AND METHODS

Information was collected about the existence of sacred groves in the selected area of Thrissur district. Totally 20 sacred groves were observed. Through field surveys were carried out. Floristic composition of each grove was analysed. Plants were collected and identified using the standard Floras (Gamble and Fischer (1957), and Sasidharan, (2004) Plants were arranged under various families according to the system of classification of Bentham and Hooker (1862-83). (Table 1). The details of the plant including their vernacular name, useful part and medicinal uses were tabulated. The plants were classified based on their use

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Table 1. Plant species recorded in the selected sacred groves of Thrissur District

No	PLANT NAME	FAMILY	LOCAL NAME	PART USED	THERAPEUTIC USES
TREES					
1.	<i>Artocarpus communis</i> J. & G. Forst.	Moraceae	kadaplavu	Fruit, Latex	Anorexia, Local inflammations
2.	<i>Artocarpus heterophyllus</i> Lam.	Moraceae	Plavu	Flower, Leaves, Bark	Wound, Diarrhoea, Skin diseases.
3.	<i>Artocarpus hirtus</i> Lam.	Moraceae	Ayini	Fruit, Leaves, Bark	Anorexia, Burning sensations, Sexual weakness, Diarrhoea, pimples, ulcers.
4.	<i>Anacardium occidentale</i> Linn.	Anacardiaceae	Kashumavu	Root, Bark, Fruit, Leaves	Snake bite, Ulitis, Leprosy, Ring worm, Skin diseases, Dysentery, Anorexia
5.	<i>Adenanthera pavonina</i> Linn.	Mimosaceae	Manchadi	Young leaves, Flowers, Seed, Wood	Rheumatism
6.	<i>Areca catechu</i> Linn.	Palmae	Kamuku	Root, Bark, Seeds	Haemorrhage
7.	<i>Azadirachta indica</i> A.Juss.	Meliaceae	Aryaveppu	Whole plant	Fever, Intrinsic haemorrhage, Bleeding piles, wound, Arthritis, Skin diseases, Diabetes, Eye diseases, Leucorrhoea, Poison, Jaundice, Heart diseases, Specific Digestive and diseases of Vagina.
8.	<i>Alstonia scholaris</i> R.Br.	Apocynaceae	Ezhilam pala	Bark, Latex, Flower.	Asthma, Wounds, Poisoning, Fever.
	PLANT NAME	FAMILY	LOCAL NAME	PART USED	THERAPEUTIC USES
9.	<i>Albizia lebbek</i> Benth.	Mimosaceae	Vaka	Stem, Bark	High blood cholesterol, Asthma, Hey fever, Eczema.
10.	<i>Bambusa arundinaceae</i> Willd.	Bambusaceae	Illy	Leaves, Bark shavings	Fever, Mental illness
11.	<i>Bombax ceiba</i> Linn.	Malvaceae	Ilavu	Root, Gum, Bark, Leaves, Flowers	Dysentery, Burning sensations, Skin eruptions, ulcers, Gonorrhoea.
12.	<i>Carica papaya</i> Linn.	Caricaceae	Papaya	Fruit, Leaves, Latex, Seeds	Skin diseases, Indigestion, worms, heart diseases, Cough, Fever.
13.	<i>Caryota urens</i> Linn.	Palmae	Choondappana	Tender leaves, Nuts.	Hyperdipsia, Arthritis, Burning sensation, Migraine and general weakness.
14.	<i>Cocos nucifera</i> Linn.	Palmae	Thengu	Roots, Inflorescences, seeds.	Bronchitis, Helminthiasis, Asthma, Baldness, colds, Constipation, Cough, Dysentery, fever, painful menstruation, jaundice, kidney stones, Nausea, Scabies, Scurvy, Skin infections, syphilis, Tooth ache, Tuberculosis, Tumours, ulcer, wounds.
15.	<i>Cinnamomum zeylanicum</i> Blume.	Lauraceae	Karuka	Bark, Oil	Bronchitis, Asthma, Cephalalgia, Cardiac Diseases, Diarrhoea..
16.	<i>Calophyllum inophyllum</i> Linn.	Guttiferae	Punna	Bark, Leaves, Flowers	Eye diseases, Rheumatism, Arthritis and skin diseases.
17.	<i>Cassia fistula</i> Linn.	Cesalpiniaceae	Kanikonna	Fruit pulp, Root, Bark, Leaves.	Fever, Jaundice, Diabetes, Skin diseases, Wounds, Rheumatic ailments, .
18.	<i>Erythrina indica</i> Lam.	Fabaceae	Murikku	Bark, Leaves	Worm, Lactation, Menstruation, rheumatic joints.
19.	<i>Ficus hispida</i> Linn.f	Moraceae	Parakam	Bark, Leaves	Ulcers, Leucoderma, Anaemia, Haemorrhoids, Jaundice, Inflammations, Intermittent Fever.
20.	<i>Ficus Bengalensis</i> Linn.	Moraceae	Peral	Bark, Root, Seeds	Ulcers, Erysepalas, Vomiting, Vaginal complaints, Fever, Inflammations, Leprosy.
21.	<i>Ficus religiosa</i> Linn.	Moraceae	Arayal	Root, Bark, Leaves, Fruit	Heal wounds, gum diseases, vomiting, heart diseases, asthma, and urinary troubles.
22.	<i>Garcinia gummi-gutta</i> (L) Robs.	Guttiferae	Codapuli	Leaves, Dried fruits.	Obesity, Hypercholestremia, Diarrhoea, Colic, Ulcers, inflammation, hyper perspiration.

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23	<i>Hydenocarpus petandra</i> (Buch-Ham)Oken.	Bixaceae	Marotti	Seeds,oil	Leprosy, Skin diseases, Leucoderma, eczema, sprains, Bruises, chronic ulcers, worm infestations, diabetes, wounds, ulcers, scald head.
24	<i>Mangifera indica</i> Linn.	Anacardiaceae	Mavu	Leaves, Bark, Flowers	Leucorrhoea, Dysmenorrhoea, Menstrual disorders, eczema, Dysentery, diabetes, cholera, constipation, psoriasis,scorpion bites, ring worms.
25	<i>Memecyclon umbellatum</i> Bum.f.	Melastomaceae	Kayambu	Roots,Leaves	Ophthalmia,gonorrhoea.
26	<i>Mimusops elengi</i> Linn.	Sapotaceae	Elengi	Bark,Seeds	Making the moving teeth stable.
27	<i>Pandanus kaida</i> Kurz.	Pandanaceae	Kaitha	Root,Leaves,Flowers	Skin diseases, leprosy, wounds, ulcers, colic fever, diabetes, sterility, tumours, small pox, syphilis, scabies, leucoderma, Pruritus, otalgia, cephalalgia, Leucoderma, skin eruptions, arthritis.
28	<i>Pongamia pinnata</i> (L.)Pierre.	Fabaceae	Ungu	Root,Bark,Leaves	Strengthening gums, Gonorrhoea, Haemorrhoids, beri beri, ophthalmopathy, dermatopathy, vaginopathy, and ulcer.
29	<i>Psidium guajava</i> Linn.	Myrtaceae	Pera	Bark, Leaves, immature fruit	Wounds, ulcer, Rheumatic pain, tooth ache, cough, diarrhoea, dysentery.
30	<i>Plumeria alba</i> Linn.	Apocynaceae	Velutharali	Bark, Leaves, Latex, Flower	Tooth ache, itching, asthma, Diabetes.
31	<i>Strychnos nux-vomica</i> Linn.	Loganiaceae	Kanjiram	Seed	Fever, loss of digestive power.
32	<i>Santalum album</i> Linn.	Santalaceae	Chandanam	Wood	Skin diseases, gonorrhoea, excessive sweating and fever.
33	<i>Syzygium cumini</i> (L.)Skeels.	Myrtaceae	Njaval	Whole plant	Anaemia, Diabetes, Reduce the blood sugar level, Dyesntery, Bleeding gums.
34	<i>Syzygium aryophyllaeum</i> (L.)Alston.	Myrtaceae	Njara	Bark, Leaves, Fruits.	Diarrhoea, diabetes, Leucorrhoea, fever, skin diseases.
35	<i>Swietenia mahagoni</i> Linn.	Meliaceae	Mahagany	Seeds	Blood sugar regulation, sexual health.
36	<i>Thespesia populnea</i> cav.	Malvaceae	Poovarasu	Leaves,Flowers, Bark.	Skin diseases,Leucoderma.
37	<i>Terminalia bellerica</i> Roxb.	Combretaceae	Thanni	Roots,Seeds	Inflammation.
38	<i>Tabernaemontana alternifolia</i> Linn.	Apocynaceae	Kuruttu pala	Flower	Eye diseases.
39	<i>Tectona grandis</i> Linn.f.	Verbinaceae	Tekku	Flower,Wood.	Piles, Leucoderma, dysentery, Bronchitis, urinary problems, head ache,burning sensation.pain.
No	PLANT NAME	FAMILY	LOCAL NAME	PART USED	THERAPEUTIC USES
40	<i>Samadera indica</i> Gaertn.	Simarubaceae	Karinjotta	Bark,seed oil	Arthritis, Oedema, Itching, Skin diseases, Constipation.
SHRUBS					
41	<i>Bauhinia accuminata</i> Linn.	Fabaceae	Mandharam	Bark, Leaves, Flowers, Roots	Gastro intestinal diseases, Cold, Cough, Bladder stones, Leprosy.
42	<i>Canthium parviflorum</i> Lam.	Rubiaceae	Cherukara	Root, Leaves	Diarrhoea, Strangury, fever, Leucorrhoea, Intestinal worms
43	<i>Clerodendrum viscosum</i> H.W.Moldenke.	Verbenaceae	Peruku	Leaves	Helminthiasis, Abcess, Tumours, Leprosy, Skin seases, Ulcers, Cough, Bronchitis, Inflammations, Intermittent fever.
44	<i>Clerodendrum paniculatum</i> Linn.	Verbenaceae	Krishna kireedam	Whole plant	Ulcers, Wounds, Skin diseases.
45	<i>Ervatamia coronaria</i> Stapf in Fl.	Apocynaceae	Nanthyarvattam	Root, Leaves, Flowers	Paralysis, Strangury, Tooth ache.

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46	<i>Grewia microcos</i> Linn.	Tiliaceae	Kottakka	Whole plant	Dysentery, Small pox
47	<i>Hibiscus rosa-sinensis</i> Linn.	Malvaceae	Chemparathy	Whole plant	Cough, Liver disorder, High blood pressure, Stomach problems.
48	<i>Hibiscus surratensis</i> Linn.	Malvaceae	Chemparathy	Leaf, Root, Flower	Paralysis, Epilepsy, Tumour and Cancer.
49	<i>Ixora coccinea</i> Linn.	Rubiaceae	Thechi	Root, Leaves, Flowers	Cough Fever, Gonorrhoea, Anorexia, Diarrhoea, Dysentery, ulcers, Skin diseases.
50	<i>Justicia beddomei</i> (Clarke) Bennet.	Acanthaceae	Adalodakam	Whole plant	Irritable cough.
No	PLANT NAME	FAMILY	LOCAL NAME	PART USED	THERAPEUTIC USES
51	<i>Lantana camara</i> Linn.	Verbenaceae	Arippu	Whole plant	Tetanus, Malaria, epilepsy, Tumours, Rheumatism.
52	<i>Mussaenda frondosa</i> Linn.	Rubiaceae	Vellilathali	Whole plant	Cough, Bronchitis, fever, Inflammations, Ulcers, Leucoderma, Pruritus, Ophthalmopathy, Jaundice, Uropathy.
53	<i>Sida rhombifolia</i> Linn.	Malvaceae	Van kurumthoti	Root, Stem	Diarrhoea, Tuberculosis, Leucorrhoea, Strangury, Burning sensation.
54	<i>Zizipus rugosa</i> Lamk.	Rhamnaceae	Taddali mullu	Fruit	Irritability, Insomnia, Heart palpitations.
CLIMBERS AND STRAGGLERS					
55	<i>Abrus precatorius</i> Linn.	Fabaceae	kunnykuru	Root, Leaves, Seeds	Jaundice, Tumours, Hair growth, Joint stiffness, Paralysis.
56	<i>Anamirta cocculus</i> W&A.	Menispermaceae	Pollakkaya	Fruit, Leaves.	Ulcer, Inflammations, Bronchitis, Cough, prolapsed uterus.
57	<i>Asparagus racemosus</i> Willd.	Liliaceae	Sathavari	Root	Intrinsic haemorrhage, Diarrhoea, Piles, Cough, Arthritis, Poisoning, fever.
58	<i>Calycopteris floribunda</i> Lam.	Combretaceae	Pullani	Leaves, Fruits	Skin diseases, Burning sensation, Constipation, Worms, Colic, Malaria, Ulcers, Jaundice and Pruritus.
59	<i>Cyclea peltata</i> Diels.	Menispermaceae	Pada valli	Roots, Leaves	Wounds, Sinus, Skin diseases, Snake bite.
60	<i>Discorea bulbifera</i> Linn.	Discoreaceae	Kattukachil	Tubers	Dysentery, syphilis, wounds, asthma.
61	<i>Gloriosa superba</i> Linn.	Liliaceae	Menthonni	Root, Seeds	Arthritis, Baldness, Scrophula, Ear diseases
62	<i>Ichnocarpus frutescens</i> R.Br.	Apocynaceae	Parvalli	Root	Wound, asthma, Erysipelas, Poisoning, Rejuvenation therapy in children
63	<i>Jasminum angustifolium</i> Vahl.	Oleaceae	Katumulla	Root, Leaves	Skin diseases, Ulcers.
No	PLANT NAME	FAMILY	LOCAL NAME	PART USED	THERAPEUTIC USES
64	<i>Jasminum arborescens</i> Roxb.	Oleaceae	Nagamallika	Flowers, Leaves	Worms, Jaundice, ulcers, Skin diseases, Eye disorders, Breast tumour, Cancer.
65	<i>Mikania cordata</i> (Burm.F.) R.L. Robinson.	Asteraceae	Dhritharashtra pacha	Leaves	Sore eyes, Snake & Scorpion bites itches.
66	<i>Piper Longum</i> Linn	Piperaceae	Tippali	Fruit, Root	Fever, diarrhoea, piles, cough, asthma, vomiting, edema, eye diseases, jaundice.
67	<i>Piper nigrum</i> Linn	Piperaceae	Kuru mulagu	Whole plant	Pain relief, rheumatism, colds, nausea, paralytic, arthritic disorder.
68	<i>Pothos scandense</i> Linn.	Areaceae	Paruvakodi	Leaves, Roots	Abcess, epilepsy, asthma.
69	<i>Acalypha indica</i> Linn	Euphorbiaceae	Kupameni	Whole plant	Cephalalgia, Cough, Strangury
71	<i>Ananus sativus</i> Schults.	Bromeliaceae	Kaitha chakka	Fruit, Stem	Cancer, Arthritis, Swellings, Wounds, Blood clots, Indigestion, boost immune system.
72	<i>Boerhaavia diffusa</i> Linn.	Nyctaginaceae	Thazhuthayma	Roots, Leaves	Anaemia, Oedema, Internal abcess, inducing sleep.
73	<i>Biophytum sensitivum</i> Dc.	Geraniaceae	Mukkutti	Whole plant	Strangury, Leucorrhoea, Ophthalmia, Scabies, Cardiac disorder, Jaundice, Anaemia, Dyspesia, Constipation, Cough, Bronchitis, General debility.

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74	<i>Cleome viscosa</i> Linn.	Capparidaceae	Kattukaduku	Whole plant	Intestinal worms, diarrhoea, fever, dyspepsia.
75	<i>Colocasia antiquorum</i> Schott.	Araceae	Chempu	Leaves, Corms	Internal haemorrhage, Otaglia, Ottorrhoea, Adenitis, buboes.
76	<i>Costus speciosus</i> Sm.	Zingiberaceae	Kannakuva	Rhizomes	Burning sensations, flatulence, Constipation, Helminthiasis, Leprosy, Skin diseases, fever, asthma, bronchitis, inflammation, and anaemia.
77	<i>Cymbopogon citrates</i> Stapf.	Poaceae	Inchippullu	Whole plant	Cough, fever, depression, asthma, urinary infection, head ache, promote sweating.
78	<i>Cynodon dactylon</i> Pers.	Poaceae	Karuka pullu	Whole plant	Piles, Psychotic disorder
79	<i>Cyperus rotundus</i> Linn.	Cyperaceae	Muttanga	Tubers	Hyperdipsia, inflammations, Leprosy, Skin diseases, anorexia, cough.
80	<i>Eupatorium odoratum</i> Linn.	Asteraceae	Kammunist pacha	Leaves	Skin wound.
81	<i>Euphorbia hirta</i> Linn.	Euphorbiaceae	Nilapala	Whole plant	Asthma, Bronchitis, pulmonary cardiac diseases, Skin diseases, prevent vomoiting, chronic diarrhoea, snake bite.
82	<i>Heliotropium Keralense</i> Siv.&Manl.	Boraginaceae	Thelkada	Whole plant	Local application for ulcers, sores, wounds, Sting of insects, Rheumatism and ophthalmopathy.
83	<i>Kaempferia rotunda</i> Linn.	Zingiberaceae	Chenganeer kizhangu	Tubers	Gasropathy, Inflammations, Wounds, Ulcers, blood clots, tumours, Cancerous swellings.
84	<i>Kyllinga monosephala</i> Rottb.	Cyperaceae	Mottenga	Rhizome	Malaria, itching
85	<i>Leucas aspera</i> Spreng.	Lamiaceae	Thumba	Leaves, Flowers	Dyspepsia, colic, verminosis, arthralgia, cough, intermittent fever and ulcer.
86	<i>Maranta arundinaceae</i> Linn.	Marantaceae	Kuva	Roots	Poisonous wounds caused by insect sting.
87	<i>Mimosa pudica</i> Linn.	Mimosaceae	Thotta vadi	Root, leaves, flower.	Biliousness, Leprosy, dysentery, Vaginal and uterine complaints, Inflammations, Asthma, Leucoderma, Blood diseases.
88	<i>Naregamia alata</i> W&A.	Meliaceae	Nilanaragam	Whole plant	Wounds, Ulcers, Cough, Asthma, bronchitis, scabies, dysentery, dyspepsia, anaemia, Chronic and malarial fever.
No	PLANT NAME	FAMILY	LOCAL NAME	PART USED	THERAPEUTIC USES
89	<i>Aerva lanata</i> Juss.	Euphorbiaceae	Cherula	Whole plant	Cephalalgia, Cough, Strangury.
90	<i>Solanum indicum</i> Linn.	Solanaceae	Cheru chunda	Fruit	Pruritus, Leucoderma, bronchitis, vomiting, cardiac weakness, Urinary troubles.
91	<i>Chassalia curvifloa</i> Thw. Var.	Rubiaceae	Vella kurinji	Roots, Leaves	Ear and eye diseases, ulcers, Rheumatism, Pneumonia
92	<i>Pouzolzia indica</i> Gaud.	Urticaceae	Neycheera	Whole plant	Snake bite

92 Medicinal Plant species are identified. The Plants include 40 trees, 14 shrubs, 14 climbers and 24 herbs (fig.1). The dicotyledons are 73 in number and monocotyledons, 19. The identified plant species belonged to 46 families.

The dominant tree forms observed were *Artocarpus hirtus*, *Hydenocarpus petandra*, *Caryota urens*, *Ficus hispida*, *Mimusops elengi*, *Plumeria alba*, *Strychnos nux-vomica*. (Table 1) *Ixora coccinea*, *Mussaenda frondosa*, *Ervatamia coronaria*, *Tabernaemontana alternifolia*, *Clerodendrum viscosum*, *Clerodendrum paniculatum*, are dominant shrubs. *Abrus precatorius*, *Anamirta cocculus*, *Cyclea peltata*, *Calycopteris floribunda*, *Pothos scandense* are dominant climbers and stragglers. The herbaceous plants found dominating in Kavus are *Cleome viscosa*, *Costus speciosus*, *Euphorbia hirta*, *Aerva lanata*, *Boerhaavia diffusa* and *Chassalia curviflora*. Analysis of plant diversity in each grove show that *Plumeria alba*, present in (12 sg), *Artocarpus hirtus*

(10 sg), *Caryota urens* (8 sg) *Hydenocarpus petandra* (7 sg), *Mimusops elengi* (6 sg), *Ficus hispida* (6 sg). Shrubs *Clerodendrum paniculatum* (13 sg), *Mussaenda frondosa* (12 sg), *Ervatamia coronaria* (11 sg), *Tabernaemontana alternifolia* (10 sg). *Clerodendrum viscosum* (9 sg), *Ixora coccinea* (9 sg). Climbers and Stragglers *Abrus precatorius* (7 sg), *Anamirta cocculus* (14 sg), *Cyclea peltata* (14 sg), *Calycopteris floribunda* (5 sg), *Pothos scandense* (10 sg), *Ichnocarpus frutescens* (11 sg), *Discorea bulbifera* (5 sg). Herbaceous plants *Chassalia curviflora* (17sg), *Cleome viscosa* (8 sg), *Costus speciosus* (7 sg), *Boerhaavia diffusa* (6 sg), *Euphorbia hirta* (5 sg), *Aerva lanata* (4 sg) are dominant.

Leguminosae (8 plant species) Moraceae (6 plant species) Malvaceae (5 Plant species), Apocynaceae (4), Verbenaceae (4) are the dominant families. (Table 2). Sacred groves are a collection of medicinal plants which are a remedy for many complicated diseases, like Tumour, Cancer, Cardiac diseases, and also for common diseases such as Fever, Cold, and Cough. *Cyclea peltata* used for head ache, skin diseases. *Discorea bulbifera* used for syphilis, asthma, wound. *Calycoptis floribunda* used for Jaundice. *Asparagus racemosus* used for sexual disorders, haemorrhage, poison. *Anamirta cocculus* used for bronchitis, *Ervatamia coronaria* used for eye diseases. *Mussaenda frondosa* used for pruritis, bronchitis. *Ixora coccinea* used for anorexia, ulcers. *Clerodendron viscosum* used for bronchitis, ulcer, skin diseases, *Clerodendrum paniculatum* used for wound. (Fig.3).

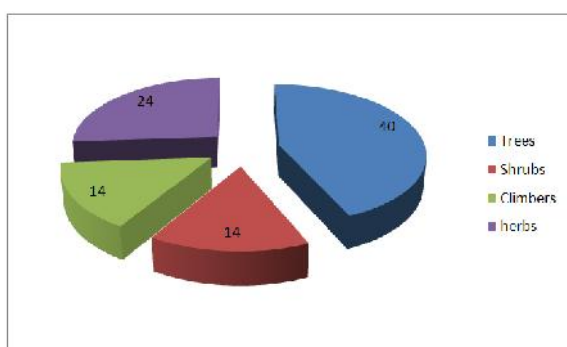


Figure 1. Lifeforms documented

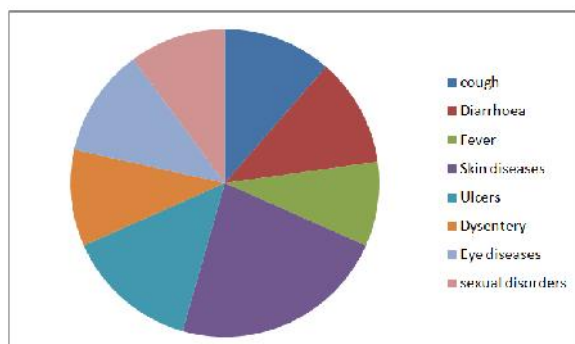


Fig. 3.

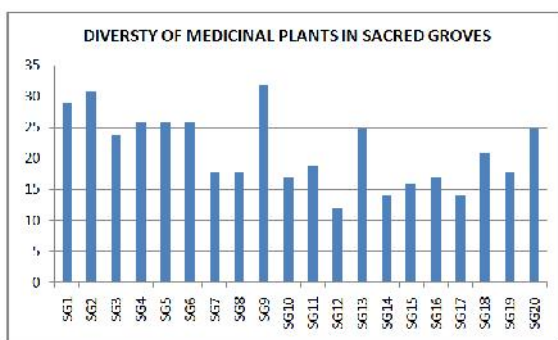


Figure 4. Total number of plant species in each sacred groves

The Fig 4 shows that SG9 (Thailakattu nagayakshi in Annamanada) and SG2 (Thaiakattil nagayakshi in Mala) have greater diversity of medicinal plants. More than 30 medicinal plant species are identified in these groves. More than 20 plant species are observed in SG1 (Thaikattil karinagam in Mala),

SG3 (Palakkattu Mala), SG4 (Sivakshetram in Kodungallur), SG5 (Kallampilly madam in Kodungallur), SG6 (Sree Krishna swami kshethram in Kodungallur), SG13 (Pottakkal in Puthenchira), SG17 (Pallathery mana in puthenchira), SG19 (Chanassery in Puthenchira), SG (Koluthappilly in puthenchira).

DISCUSSION

92 medicinal plant species were identified during the present study. The plants include 40 trees, 14 shrubs, 14 climbers and 24 herbs, indicating that trees were the dominant life forms. There were 73 dicotyledons and 19 Monocotyledons. These plant species belongs to 46 families. Floristic composition and practices on the selected sacred groves of Pallapatty village a total of 113 genera distributed among 51 families were identified and reported by Ganesan *et al.* (2009). In the present study 92 plants were recorded. Leguminosae with 8 plant species was the largest family in the Sacred Groves, studied. Leguminosae with 13 species was the largest genera in Agastheeswaram Sacred grove (Jeeva *et al.*, 2004). The present study also agrees that Leguminosae is the dominant family in different sacred groves analysed. It has been found that most kavus are invaded by weeds such as *Mikania cordata*, *Eupatorium odoratum*, and *Lantana camara* (Geetha and Simon 2002). *Garcinia gummi gutta*, *Cyclea peltata*, *Discorea bulbifera*, *Calycoptis floribunda*, *Asparagus racemosus*, *Anamirta cocculus*, *Ervatamia coronaria*, *Mussaenda frondosa*, *Ixora coccinea*, *Clerodendron viscosum* and *Clerodendrum paniculatum* commonly seen in Sacred groves, have a great medicinal value. For diseases like cough, Tumour, Diarrhoea, Fever, Helminthiasis, Skin diseases, Ulcers, Bronchitis, Dysentery, Eyediseases, Asthma, wound, Rheumatism, Pruritus, Jaundice, Arthritis, Poison, sexual disorders, Cardiac diseases, Anaemia, diabetes etc., more than three plants are used. Certain plants are used for various treatments like healing wounds, throat infection, diarrhea, itches, skin diseases, cure headache, stomach ulcer, tumor, ear-ache, eye pain, diabetes, colds and cough in general is also documented by Anbarashan *et al.* (2010).

Summary and Conclusion

The present study documents 92 Medicinal Plant species. The Plants include 40 trees, 14 shrubs, 14 climbers and 24 herbs. There are 73 dicotyledons and 19 monocotyledons, belonging to 46 families. Leguminosae, Moraceae, Malvaceae, Apocynaceae, Verbenaceae are dominant. It is recommended that by appropriate management practices many of the sacred groves should be taken up or atleast they should be kept in their existing condition. Neglecting smaller groves will lead to the disappearance of both vegetation and cultural diversity.

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