



Studies on the Plant diversity of Muniandavar Sacred Groves of Thiruvaiyaru, Thanjavur, Tamil Nadu, India

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Article history: Received: 18 October 2013, revised: 10 November 2013, accepted: 10 January 2014, Available online: 3 April 2014

ABSTRACT

Plan: Muniandavar Sacred Groves from Vaduvakudi at Thiruvaiyaru Taluk, Thanjavur district of Tamil Nadu was selected for floristic exploration to know the plant diversity of the vegetation, the availability of rare and endangered floras, the ecological significance, regeneration status and the anthropogenic pressures, to document the religious beliefs and spirituality and the participation of locals on conservation.

Outcome : In the present study, the flora of Muniandavar Sacred Groves comprises about 180 plant species belonging to 158 genera and 75 plant families, Key stone species available in the Sacred groves includes *Anacardium occidentale*, *Borassus flabellifer*, *Ficus benghalensis* that harbors a number of birds and other survival of many other species. Muniandavar sacred grove is in good vegetation status and the conservationists should take necessary action to protect this grove from plastic pollution. An environmental awareness programme is planned to conduct for the local people in order to safeguard this sacred grove from pollution.

Keywords: Sacred groves, Medicinal Plant, Anthropogenic Pressure, Key Stone species, Conservation.

1. INTRODUCTION

Since time immemorial, conservation of natural resources has been an integral part of several indigenous communities. Nature worship has been a key force in determining human attitudes towards conservation and sustainable utilization of biodiversity³⁴. Various indigenous communities all over the world lived in harmony with nature and thus conserved biodiversity. Furthermore, habitat alteration, over-exploitation, pollution and introduction of exotic species also threatened the global biological resources. This has led to the fast depletion of biodiversity in different ecosystems and adversely affected the ecological balance and socioeconomic status of the people. These directly or indirectly contribute to the welfare and stability of the environment and society.

Many traditional conservation practices of indigenous people in many parts of the world such as protection of small forest patches by dedicating them to the local deity, also contributed to the conservation and protection of biodiversity^{39, 15,22, 35}.



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Hygeia.J.D.Med. Vol.6 (1), April 2014© 2014 all rights reserved.

Hygeia journal for drugs and medicines, 2229 3590, 0975 6221

D.O.I: 10.15254/H.J.D.Med.6.2014.122

Such forest patches called *Sacred Groves* are tracts of virgin forest harboring rich biodiversity, protected by the local people based on their indigenous cultural and religious beliefs and taboos.

Sacred Groves are patches of natural vegetation surviving in the man-modified landscapes. They owe their preservation to their perceived importance to some form of divinity.²⁶ define '*Sacred Groves*' as segments of landscape containing trees and other forms of life and geographical features, that are delimited and protected by human societies believing that preserving such a patch of vegetation in a relatively undisturbed state is necessary for expressing one's relation to the divine or to nature. So these remain as isolated patches of forests in the midst of agricultural landscapes^{14, 15,5,36, 54, 38, 57, 60, 3, 40}. They are the repositories of rare and endemic species and can be regarded as the remnants of the primary forest left untouched by the local inhabitants due to the belief that deities reside in these forests.

Various communities in India follow nature-worship based on the premise that all creations of nature have to be protected. As a result, sacred groves still possess a great heritage of diverse gene pool of many forest species having socio-religious attachment and possessing medicinal values. There exist some fascinating examples of forest patches harboring native vegetation¹⁴. Various traditional approaches to conservation of nature require a belief system, which includes a number of prescriptions and proscriptions for restrained resource use¹⁶. The historical links of sacred groves have been traced¹⁵, the pre-agricultural, hunting and gathering stage of societies, when human society was in its primitive state. Sacred groves are found in Africa, Asia, Europe, Australia and America¹⁶. Their existence has also been reported in Ghana, Syria, Nigeria, Turkey and Japan.

In India, Sacred Groves exist in 19 out of 28 states, and it was estimated that there are between 1,00,000–1,50,000 throughout the country⁴¹. The number of Sacred Groves reported from various states are Andhra Pradesh – 750⁵³, Arunachal Pradesh – 65¹², Assam – 40, Chhattisgarh – 600, Gujarat – 29, Haryana – 248, Himachal Pradesh – 5,000, Jharkhand – 21⁹, Karnataka (1,424)²⁷, Kerala – 2000), Maharashtra (1,600)⁶⁷, Manipur – 365³⁴, Meghalaya – 79⁶³, Orissa – 322, Pondicherry – 15⁵⁷, Rajasthan – 9, Sikkim – 56¹¹, Tamil Nadu – 503¹, Uttarkhand – 12² and West Bengal – 670¹ respectively.

In Tamil Nadu, two important traditions namely *Kovilkadu* meaning sacred grove and *Sthalavriksha*, which are sacred tree, protected all over the state. Totally 503 groves have been reported from 32 districts of the state¹. C.P.R. Environmental Education Centre took up a survey of Sacred Groves in Tamil Nadu in April 1997 reported nearly 27 sacred groves have been reported from Pudukottai district which covers an area of about 11.41 hectares in total. Eastern Ghats which lack any forest cover have a large number of sacred groves than the forested districts on the western side and more than 250 *Sthalavrikshas* belongs to more than 70 species, of which most of them are trees while few are herbs have been documented. While it is difficult to determine the origins of the tradition of conserving sacred groves without historical evidence, it is thought that this dates back to pre-agrarian societies³⁹. With the advent of agriculture, people may have set aside patches of natural habitats that were considered sacred, while surrounding forests were cleared for cultivation¹⁶. The subsequent increase in population may have compelled people to use these sites for day-to-day purposes, such as fuel and food collection. It would appear that the origin of the groves was not necessarily for utilitarian purposes, but utility may have emerged as a result of their presence in the landscape.

This may have led, in turn, to the strengthening of a “social fence” in order to prevent unreasonable exploitation of the resources within these forest patches. This social fence now provides protection for a variety of species and habitats, as described in the examples below. In the dry regions of central India, some perennial hill streams and riparian gallery forests receive protection as a result of religion-based traditions.

In a village in the Koraput district (Orissa state), for example, there is a shrine hidden under stones within some bushes that grow among tall trees. While the surrounding land is barren, the trees in the vicinity of the shrine have remained untouched and protected because the shrine is considered sacred by the local community⁶². Protection of trees for religious reasons is common in southern India. Near the town of Madurai (Tamil Nadu), groups of tall trees at four separate sites are considered sacred. These tree groves provide roosting sites for colonies of the Indian flying fox (*Pteropus giganteus*). It is believed that this bat, which elsewhere is hunted for its body fat (for use in alternative medicines), receives protection because the trees are worshipped by the local people³². The sprinkling of saffron water around a piece of land is a common practice in Udaipur district (Rajasthan) in northwestern India¹⁸. The attempts of the local forest department to conserve an area of forest at a site near Udaipur were largely unsuccessful because of persistent transgressions by local people. Frustrated, the forest officers decided to sprinkle saffron water around the site, in accordance with the local tradition. This was greeted with enthusiasm, and subsequently the local people began to respect the boundaries of the conservation area¹⁸. Such social taboos exist in most cultures, so that informal practices rather than laws determine human behavior¹⁰. There are a number of examples where part or all of a terrestrial or aquatic landscape may never be subjected to resource use¹⁰.

These restrictions may not be specifically designed for nature conservation; instead, the motivation is based on traditions, practices, and beliefs passed down through generations⁴. The rationale for sacred grove conservation is therefore very different from the rationale for setting aside formal protected areas. Furthermore, enforcement and sanctioning mechanisms are also different. Formal protection depends on legal frameworks and a large number of officers to enforce the laws, while informal nature conservation is mostly enforced by community members. The former system can be expensive, while the latter is carried out voluntarily and costs little or nothing⁴⁷. The international conservation community has largely failed to recognize this approach. The Integrated Conservation and Development Projects (ICDPs), a form of international aid specifically for conserving natural resources as well as improving quality of life in developing countries, are often criticized for their failures and for their attempts to achieve two very contrasting objectives^{7,37, 48, 61}. However, argue that authoritarian protection practices overlook certain key aspects of social processes that could make conservation work more efficiently⁸.

The key aspects of non-authoritarian, social regulation of natural resources are acceptance among members of the community, as well as fair enforcement of the agreed rules, strong organizational and institutional arrangements, and constructive dialogue. We agree with⁸, and would further argue that informal conservation traditions also have a high degree of acceptance among local communities. If the merits of such traditions are recognized and legitimized within ICDPs, there is a strong possibility that ICDPs will work much better than they do at present.

2. MATERIALS AND METHODS

2.1. Study Area

The study area Muniandavar sacred grove is located at Vadukakudi (Fig -1), nearly 30 km away from Thanjavur to Thirukkattuppalli road with an area of about 4 hectares. Geographically, it is lying between 10°52'23.9700" N latitude and 79°4' 31.7676" E longitude. Temperature is moderately high and the average temperature during summer is 34°C and fewer less in winter. The average humidity ranged from 31 to 33 % during November to December.

Annual rainfall is ranging from 850 to 1000 mm. However, during the two decades the district has experienced rainfall only below normal. Most of the rains occur during north east monsoon. Soil is a ferruginous type with admixture of limestone. The soil is shallow in rocky areas and deeper in valley with little or no humus. The vegetation of Muniandavar Sacred Grove is tropical dry evergreen forest type⁹. Muniandavar sacred grove is in good vegetation status and the conservationists should take necessary action to protect this grove from plastic pollution.

Fig 1. The study area of Muniandavar sacred grove in Vadukakudi at Thiruvaiyaru Taluk, Thanjavur District



View of the Muniandavar Sacred Groves



Vegetation of Muniandavar Sacred groves

3. METHODS

Regular field visits were made during the year 2011-2012 to explore the floristic composition and the conservation status of the Muniandavar sacred grove of Thiruvaiyaru Taluk from Thanjavur district, Tamilnadu, India. The ethnobotanical survey was carried out among local people in the study area of the Vaduvakudi village. The field visit was conducted several times. Ethnobotanical information was collected according to the questionnaire, interviews and discussion among villagers in their local language. Our questionnaire allowed descriptive response on the plant prescribed, such as part of the plant used in medicinal purpose and collected detailed information. The data was collected from 45 informants between the age of 45 – 65 both men and women. Some of them were accompanied us to the sacred grove where showed us plants that are used as medicines Table- 1. Angiosperm plant specimens available in the study areas were collected for authenticity and the herbarium specimens were prepared by following the methodology²⁸. Photographs were also taken. The herbarium specimens were identified with the help of Flora of the Presidency of Madras¹⁷, The Flora of British India²⁵ and the Flora of Tamil Nadu⁴⁴. The Flora of Tamil Nadu^{23, 24, 46} has been referred for the correct binomial names for the specimens collected. The religious beliefs, spirituality and the participation of locals on conservation on these sacred groves were also documented.

Herbarium specimens were prepared for all the plants and deposited at the Department of Botany, A.V.V.M. Sri Pushpam College, Thanjavur for reference.

4. RESULTS

Floristic Analysis

In the present study, the flora of Muniandavar Sacred Grove comprises of about totally 180 Angiosperms plant species belonged to 75 families and 158 genera were recorded (Table 1). Among habit wise distribution, herbs were the dominant form represented by 33 % with 60 species followed by trees (31 % with 55 species), shrubs (22 % with 40 species), climbing herbs (9 % with 17 species) and climbing shrubs (4 % with 8 species) (Table- 1). Among the top 07 family wise distribution, Euphorbiaceae was the dominant family represented by 22 % with 15 species followed by Acanthaceae (17 % with 11 species), Fabaceae (13 % with 9 species), Mimosaceae (12 % with 8 species each), Rubiaceae and Caesalpiniaceae (11 % with 7 species each) Lamiaceae and Rutaceae (07 % with 5 species) (Table 2 & Table 3). Among top 16 generic wise distribution, the genus such as *Euphorbia*, *Justicia*, *Cassia*, was the dominant genus represented by 10 % with 4 species followed by *Barleria*, *Ruellia*, *Carrisa*, *Capparis*, *Commelina*, *Jatropha*, *Indigofera*, *Hibiscus*, *Acacia*, *Albizia*, *Atalantia*, *Cissus* (5 % with 2 species each) respectively.

Important medicinal plants mentioned in the Indian traditional medicinal system like Ayurveda, Siddha or Ethnomedicine available in this sacred grove are *Asparagus racemosus*, *Bacopa monnieri*, *Carissa carandas*, *Centella asiatica*, *Gloriosa superba* etc. and endangered medicinal plants found in this area are *Aegle marmelos*, *Cosinium fenestratum*, *Gloriosa superba*, *Strychnos potatorum* etc.

5. DISCUSSION

Floristic study of vegetation is important to determine the distribution of food plants for wildlife¹³ and prerequisite for much fundamental research in tropical community²⁹. The present findings are comparable with other studies in sacred groves of Tamil Nadu and other regions of India. In Tamil Nadu, several studies with respect to floristic inventory were reported includes 260 species in 176 genera and 62 families from Malliganatham³⁰, 224 species in 175 genera and 63 families from Vamban³¹, 35 species in 32 genera and 22 families⁵⁸, 77 species in 61 genera and 30 families⁴² from 4 Sacred Groves of Coromandel coast, 265 species from 50 Sacred Groves collectively³³, 106 species belonging to 97 genera and 54 families from Manganampatti, Nadiamman and Suranviduthi village⁶⁶ of Pudukottai district, 98 species in 38 families and 76 genera from 33 sacred groves of Theni district⁴³, 98 species in 87 genera and 43 families from 11 miniature Sacred Groves⁵⁹ of Kanniyakumari district, 133 plant species from sacred groves in Pallipatty village of Maduari district²¹. In addition⁵⁵ reported 59 species in 55 genera and 30 families from Karaikkal. Woody species diversity of four Sacred Groves in the Pondicherry region⁵². Thus, floristic diversity assessment is significant at local and regional levels to understand the present status and to make effective management strategies for conservation²⁹.

Moreover, the presence of various dry evergreen plant species such as *Albizia amara*, *Atalantia monophylla*, *Lepizanthes tetraphylla*, *Madhuca longifolia*, *Memecylon umbellatum*, *Morinda pubescens*, *Pterospermum canescens* revealed that the vegetation of the selected sacred groves is a tropical dry evergreen forest type. Similar observations are observed from several sacred groves of adjacent district of Pudukottai^{33, 64, 65} and Sivagangai district of Tamil Nadu state^{19, 20}. This is due to the presence of typical, characteristic and preferential evergreen tree species⁴⁵. The presence of big lianas such as *Combretum ovalifolium*, *Mimosa intsia*, revealed the undisturbed status of the grove. Key stone species such as *Borassus flabellifer*, *Ficus benghalensis*, *Memecylon umbellatum* found in the grove harbors a number of birds and other survival of many other species³³. Keystone species play a crucial role in biodiversity conservation through key functions that they perform in an ecosystem often they are also socially or culturally valued⁴⁹, used not only for managing pristine ecosystems⁵¹ but also for building up biodiversity in both natural and human-managed ecosystems through appropriately conceived rehabilitation strategies that will ensure people's participation⁵⁰. In this grove, the sacred pond was also seen which harbors a variety of fishes and other zooplanktons. The threatened plants recorded from the study area include *Aegle marmelos*, *Gloriosa superba*, *Madhuca longifolia* respectively similar to previous report from Pudukottai district³³.

Ecological significance

5.1. Conservation of Biodiversity

The sacred groves are important repositories of floral and faunal diversity that have been conserved by local communities in a sustainable manner. They are often the last refuge of endemic species in the geographical region.

5.2. Recharge of aquifers

The groves are often associated with ponds, streams or springs, which help meet the water requirements of the local people. The vegetative cover also helps in the recharging the aquifers.

5.3. Soil conservation

The vegetation cover of the sacred groves improves the soil stability of the area and also prevents soil erosion.

5.4. Vegetation

The vegetation of the selected sacred groves are of tropical dry evergreen forest type comprises the species include *Albizia amara*, *Atalantia monophylla*, *Crateva magna*, *Euphorbia antiquorum*, *Memecylon umbellatum*, *Morinda pubescens*, *Pongamia pinnata*, *Pterospermum canescens*, *Stychnos nux-vomica* etc. The presence of big lianas such as *Ventilago maderaspatana*, *Mimosa intsia* and *Combretum albidum* revealed the undisturbed status of the vegetation.

5.5. Key stone species

Key stone species available Muniandavar Sacred Groves includes *Anacardium occidentale*, *Borassus flabellifer*, *Ficus benghalensis*, and *Memecylon umbellatum* that harbors a number of birds and other survival of many other species. The sacred pond harbors a variety of fishes and other zooplanktons.

Herbarium No.	Botanical Names	Family	Habit	Extracts of the plant parts used	Uses
JJAP93	<i>Abrus precatorius</i> L. ssp. <i>Precatorius</i>	Fabaceae	Climbing herb	Leaves, seed	Joint pain, paralysis
JJAP119	<i>Abutilon indicum</i> (L.) ssp. <i>Indicum</i>	Malvaceae	Shrub	Seeds	Cough and fever.
JJAP128	<i>Acacia nilotica</i> (L.) Del. <i>indica</i> (Benth) Brenan	Mimosaceae	Tree	Roots, leaves, Seeds	Diarrhoea and dysentery
JJAP129	<i>Acacia polyacantha</i> Willd.	Mimosaceae	Tree	Root, leaves	Snakebites, gonorrhoea, venereal diseases, dysentery and gastrointestinal disorders.
JJAP78	<i>Acalypha indica</i> L.	Euphorbiaceae	Herb	Whole plant	Anthelmintic, mental for emetic, earache and skin disease
JJAP18	<i>Acanthospermum hispidum</i> DC.	Amaranthaceae	Herb	Leaves	Antimalarial properties
JJAP12	<i>Actiniopteris radiata</i> (Koenig & Swartz)	Actiniopteridaceae	Herb	Whole plant	Blood pressure, cough and tuberculosis
JJAP19	<i>Aegle marmelos</i> (L.) Corr.	Amaranthaceae	Tree	Fruit, bark	Diarrhoea, constipation.
JJAP161	<i>Aerva lanata</i> (L.) A.L.Juss.	Rutaceae	Herb	Whole plant	Cure kidney stones, headache, demulcent, diuretic.
JJAP94	<i>Aeschynomene aspera</i> L.	Fabaceae	Shrub	Whole plant	Tuberculosis, skin infections
JJAP13	<i>Agave americana</i> L.	Agavaceae	Shrub	Leaves, root	Diarrhoea, dysentery, antiseptic, diaphoretic, diuretic and laxative, indigestion, flatulence, constipation and jaundice.
JJAP39	<i>Ageratum conyzoides</i> L.	Asteraceae	Shrub	The whole plant	Purgative, Carminative, laxative, cough, Asthma, bronchitis, leprosy
JJAP125	<i>Aglaia elaeagnoides</i> var. <i>courtallensis</i>	Meliaceae	Tree	Leaves, fruit, seed	Antidiarrhoeal, alterative, astringent, tonic, employed in leprosy, burning sensation of the body, inflammations and febrile complaints and painful maturation
JJAP16	<i>Alangium salvifolium</i> (L.f.) wangerin.	Alangiaceae	Tree	Root, leaves, bark, fruits and seeds	Laxative, astringent, pungent and purgative
JJAP130	<i>Albizia amara</i> (Roxb.) Boivin	Mimosaceae	Tree	The whole plant	Antiseptic Property
JJAP131	<i>Albizia lebbek</i> (L.) Benth.	Mimosaceae	Tree	The whole plant	Antiseptic Property
JJAP17	<i>Aloe vera</i> (L.)Burm.f.	Aloeaceae	Herb	Whole plant	Astringent, Cooling, vermifuge and Diuretic
JJAP20	<i>Alternanthera sessilis</i> (L.) R.Br.ex DC.	Amaranthaceae	Herb	Whole plant	Diarrhoea, dysentery, stomach disorder, wounded skin, snake bite and fever.
JJAP95	<i>Alysicarpus monilifer</i> (L.) DC.	Fabaceae	Herb	Aerial parts	Anti-inflammatory and in stomach-ache
JJAP22	<i>Anacardium occidentale</i> L.	Anacardiaceae	Tree	Root	Cough leaves: anticancer
JJAP107	<i>Anisochilus carnosus</i> (L.f.) wallich.	Lamiaceae	Herb	Whole plant	Anti- inflammation in liver
JJAP149	<i>Aristida adscensionis</i> .L.Var. <i>adscensionis</i>	Poaceae	Herb	Leaves	Antifungal and antimicrobial diseases
JJAP34	<i>Aristolochia indica</i> L.	Aristolochiaceae	Climbing herb	Leaf	Liver disorder.
JJAP38	<i>Asparagus racemosus</i> Willd.	Asparagaceae	Climbing herb	Leaves, flowers and fruits	Hyperacidity, health tonic and uterine tonic
JJAP162	<i>Atalantia monophylla</i> (L.) Corr. Serr.	Rutaceae	Tree	Leaves, root	Fever, skin problem, snake bite,
JJAP163	<i>Atalantia racemosa</i> Wight&Arn	Rutaceae	Tree	Leaf, rhizome, Seed	Inflammation, diarrhea, paralysis and chronic rheumatism
JJAP26	<i>Atrabotrys odorotissimus</i> R.Br.	Annonaceae	Climbing shrub	Flowers	Aromatherapy
JJAP126	<i>Azadiracta indica</i> Adr.Juss.	Meliaceae	Tree	Whole plant	Cooling,
JJAP166	<i>Azima tetracantha</i> Lam.	Salvadoraceae	Tree	Leaves	Appetizer, laxative., analgesic, epilepsy, hypertensive
JJAP172	<i>Bacopa monneri</i> (L.) Pennell.	Scrophulariaceae	Herb	Whole plant	Snake bite, stomach pain, earache
JJAP150	<i>Bambusa arundinacea</i> (Retz.) Willd.	Poaceae	Tree	Leaf, root, shoot and seed	Nervous, memory enhancer, mental disorder.
JJAP01	<i>Barleria buxifolia</i> L.	Acanthaceae	Herb	Roots and leaves	Anti-inflammatory, antiulcer, anti-diabetic, anti-oxidant,
JJAP02	<i>Barleria cuspidata</i> Hegne ex Nees.	Acanthaceae	Herb	Leaves	Anthelmintic, antifertility, antibacterial, insecticidal and antiarthritic
JJAP47	<i>Bauhinia racemosa</i> Lam.	Caesalpinaceae	Tree	Roots and leaves:	Stomach Ache, tonic and febrifuge
JJAP154	<i>Benkara malabarica</i> (Lam.)Tirv.	Rubiaceae	Tree	Whole plant	Abdominal pain and throat infections
JJAP03	<i>Blepharis maderaspatensis</i> (L.) Roth	Acanthaceae	Herb	Leaves	Bone fracture And deep cuts.
JJAP141	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	Herb	Root, leaves	Jaundice, child birth Liver complaints
JJAP31	<i>Borassus flabellifer</i> L.	Arecaceae	Tree	Root	Cooling, diuretic and Stimulant leaves: cough
JJAP79	<i>Breynia retusa</i> (Dennst.) Alston	Euphorbiaceae	Tree	Leaves, root	Head ache, leaves are used to relieve skin inflammation and meningitis.
JJAP54	<i>Cadapa fruticosa</i> (L.) Druce.	Capparaceae	Shrub	Leaves	Cure gonorrhoea
JJAP35	<i>Calotropis procera</i> (Aiton) W.T. Aiton	Asclepiadaceae	Shrub	Root , bark	Paralysis, Swelling and Intermittent fever
JJAP155	<i>Canthium dicoccum</i> (Gaertner) teijsm & Binnend	Rubiaceae	Shrub	Bark	Flowers: stomachache
JJAP55	<i>Capparis trifoliata</i> Roxb.	Capparaceae	Shrub	Roots, leaves and seeds	Febrifuge and applied externally in fractures
JJAP56	<i>Capparis brevispina</i> DC.	Capparaceae	Shrub	Root bark, stem, leaf	Rheumatism., strangury and inflammation
JJAP36	<i>Caralluma attenuata</i> Wigh. & Arn.	Asclepiadaceae	Herb	WholePlant	Urinary and kidney, sexual problems, jaundice and liver disorders
JJAP167	<i>Cardiospermum halicacabum</i> L. Var. <i>lurid</i> (Blume)	Sapindaceae	Climbing herb	Whole Plant	Antinociceptive and anti-inflammatory, aralysis, joint pain and fever.
JJAP41	<i>Carmona retusa</i> (Vahl) Masam.	Boraginaceae	Shrub	Leaves	Stomach in pregnant women
JJAP28	<i>Carrisa carandus</i> L.	Apocynaceae	Shrub	Root, fruits	Cough, colic, diarrhea and dysentery
JJAP29	<i>Carrisa spinarum</i> L.	Apocynaceae	Shrub	Leaves, root	Stomach disorder, skin diseases and Burning Sensation
JJAP48	<i>Cassia auriculata</i> L.	Caesalpinaceae	Shrub	Roots, leaves and flowers	Rheumatism, purgative
					Diabetes and urinary Troubles.

JJAP49	<i>Cassia fistula</i> L.	Caesalpiniaceae	Tree	Bark	Diabetes and liver disorder.
JJAP50	<i>Cassia occidentalis</i> L.	Caesalpiniaceae	Herb	Seed	Cough, reduce fat from the body
JJAP51	<i>Cassia tora</i> L.	Caesalpiniaceae	Herb	Leaves	Swellings
JJAP58	<i>Cassine glauca</i> (Rottb) Kuntze. Var. glauca	Celastraceae	Tree	Leaves, root	Snake bite, swelling, headache
JJAP113	<i>Cassytha filiformis</i> L.	Lauraceae	Climbing herb	Whole plant	Tonic, alterative, in bilious affections, chronic dysentery, urethritis and skin problem
JJAP30	<i>Catharanthes roseus</i> (L.) Don.	Apocynaceae	Herb	Root, Leaves., oil	Leukemia, breast Cancer, Other related problems, sedative and Stomach ache
JJAP156	<i>Catunaregam dumetorum</i> (Retz) Tirv.	Rubiaceae	Shrub	Leaves, root	Fever, body pins
JJAP71	<i>Cayratia pedata</i> (Lour) A. L. Juss.	Cucurbitaceae	Climbing herb	Tuber	Snake bite
JJAP27	<i>Centella asiatica</i> (L.) Urban	Apiaceae	Herb	Whole Plant	Diuretic, alternative, Skin diseases, leprosy Powdered leaves: improve Memory power and Concentration of mind
JJAP44	<i>Cereus pterogonus</i> Lemaire.	Cactaceae	Shrub	Young stem	Cardiac stimulant, dropsy
JJAP61	<i>Cheilanthes mysorensis</i> Wall ex beddome	Cheilantheaceae	Shrub	Flowers. Root tuber	Healing
JJAP103	<i>Chloroxylon swietenia</i> DC.	Flindersiaceae	Tree	Whole plant	Antimicrobial, antifertility, analgesic
JJAP127	<i>Cissampelos pariera</i> L. Var. hisuta (DC.) Forman.	Menispermaceae	Climbing herb	Seeds	Snakebite
JJAP179	<i>Cissus pallida</i> Planchon	Vitaceae	Climbing herb	Leaves	Anti-inflammatory activity, phlogistic agents
JJAP1180	<i>Cissus quadrangularis</i> L.	Vitaceae	Climbing shrub	Shoot, root	Digestive troubles, helminthiasis, bone fracture
JJAP72	<i>Citrullus colocynthis</i> (L.) Schrader	Cucurbitaceae	Climbing herb	Leaves	Diabetes, hair falling
JJAP164	<i>Clausena dentate</i> (Willd.) Roemer	Rutaceae	Shrub	Leaves and fruits	Anesthetized rats
JJAP80	<i>Cleistanthus collinus</i> (Roxb) Benth. ex Hook. F	Euphorbiaceae	Tree	Leaves	Homicidal
JJAP62	<i>Cleome viscosa</i> L.	Cleomaceae	Herb	Leaves, seed	Earache, eye troubles, skin diseases
JJAP177	<i>Clerodendron inerme</i> (L.) Gaertner	Verbenaceae	Shrub	Leaves	Ringworm
JJAP73	<i>Coccinia indica</i> Wight & Arn.	Cucurbitaceae	Climbing herb	Fruits	Treat leprosy, fever, asthma, bronchitis
JJAP74	<i>Cocculus hirsutus</i> (L.) Diels	Cucurbitaceae	Climbing herb	Root	Acrid, thermogenic, laxative, emollient, alternate and digestive
JJAP32	<i>Cocos nucifera</i> L.	Arecaceae	Tree	Fruit	Diabetes, diarrhea
JJAP42	<i>Coldenia procumbens</i> L.	Boraginaceae	Herb	Leaves	Rheumatic swellings , swollen knees and joints
JJAP64	<i>Combretum ovalifolium</i> Roxb.	Combretaceae	Climbing herb	Leaves	Purgative
JJAP66	<i>Commelina benghalensis</i> L.	Commelinaceae	Herb	Whole plant	Diuretic, febrifuga
JJAP67	<i>Commelina indica</i> L.	Commelinaceae	Herb	Whole plant	Laxative, cure to burn, boils, itches, septic wounds in the breast
JJAP114	<i>Couroupita guianensis</i> Aublet	Lecithidaceae	Tree	Leaves, bark, fruit, roots	Hypertension, tumors, pain,, inflammation, common cold, stomachache, skin conditions and wounds, malaria, and toothache.
JJAP57	<i>Crateva magna</i> (Lour.) DC.	Capparaceae	Tree	Leaf and bark	Inflammation, urinary disorder, fever, vomiting and gastric irritation
JJAP04	<i>Crossandra infundibuliformis</i> (L.) Nees	Acanthaceae	Herb	Flowers	Wound healing
JJAP81	<i>Croton bonplandianum</i> Baillon	Euphorbiaceae	Herb	Leaf	Wasp sting
JJAP106	<i>Curculigo orchioides</i> Gaertner	Hypoxidaceae	Herb	Whole plant	Filarial, venereal disease and anticancer.
JJAP151	<i>Cymbopogon citratus</i> DC (ex Nees) Stapf	Poaceae	Herb	Stem	Oral thrush in hiv/aids patients, anxiolytic, hypnotic, and anticonvulsant properties
JJAP152	<i>Cynodon dactylon</i> (L.) Fers	Poaceae	Herb	Grass	Gastric ulcer, bleeding, convulsion, diuretic, skin disease and asthma.
JJAP75	<i>Cyperus rotundus</i> L.	Cyperaceae	Herb	Rhizome, roots	Stomach disorders , breasts of a mother to promote the milk flow, improve memory and the cognitive processes, heal wounds indigestion, coughs, bronchitis, to stop vomiting, spleen and pancreas.
JJAP73	<i>Datura metel</i> L.	Solanaceae	Shrub	Seeds	Persistent diarrhoea and dysentery
JJAP52	<i>Delonix elata</i> (L.) Gamble	Caesalpiniaceae	Tree	Leaf and seed	Joint pains and in flatulence reduce to the body
JJAP116	<i>Dendrophthoe falcata</i> (L. f.) Ettingsh	Loranthaceae	Tree	Whole plant	Cooling, bitter, astringent, aphrodisiac and wound healing
JJAP96	<i>Derris scandens</i> (Roxb.) Benth.	Fabaceae	Climbing shrub	Leaves	Anti-inflammatory and gastropathy conditions
JJAP132	<i>Dichrostachys cinerea</i> (L.) Wight&Arn.	Mimosaceae	Tree	Bark	Dysentery, headaches, toothaches, elephantiasis and acts as a vermifuge
JJAP76	<i>Dioscorea oppositifolia</i> L.	Dioscoreaceae	Climbing herb	Whole plant	Skin disease.
JJAP65	<i>Dodonaea viscosa</i> L.	Combretaceae	Shrub	Leaf and bark	Astringent, healing wounds
JJAP82	<i>Drypetes sepiaria</i> (Wight & Arn) Pax & Hoff.	Euphorbiaceae	Tree	Leaves	Anti-inflammatory, cytotoxic and antioxidant effects and liver disease
JJAP40	<i>Eclipta prostrata</i> (L.) L.	Asteraceae	Herb	Leaves	Hair growth and the black color of our hair
JJAP97	<i>Erythrina varigata</i> L.	Fabaceae	Tree	Leaves and bark	Menstrual disorders and issues at penis tip
JJAP77	<i>Erythroxylum monogynum</i> Roxb.	Erythroxylaceae	Tree	Bark	Administered orally to cure blood dysentery.
JJAP139	<i>Eucalyptus globulus</i> (Eucall)	Myrtaceae	Tree	Oil	Bronchitis, anti-inflammatory and wounds to prevent infection
JJAP140	<i>Eugenia bracteata</i> (Willd.) Roxb. Ex DC.	Myrtaceae	Tree	Wood hard, root paste mixed with goat milk	Tonsils and gum swellings
JJAP83	<i>Euphorbia antiquorum</i> L.	Euphorbiaceae	Shrub	Latex of the branches	Rheumatism, toothache, nervine diseases, dropsy

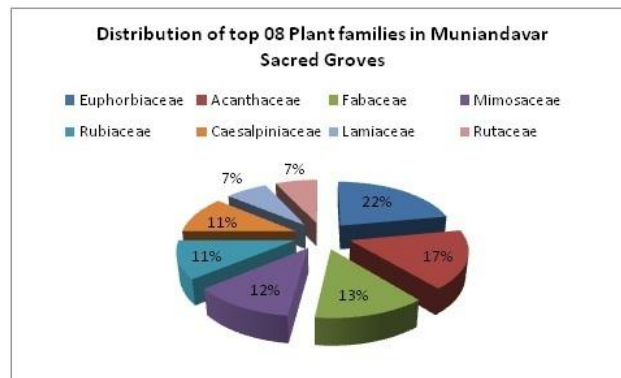
JJAP84	<i>Euphorbia hirta</i> L. <i>Euphorbia tirucalli</i> L.	Euphorbiaceae Euphorbiaceae	Herb Shrub	Whole plant Whole plant	Leucorrhoea and cool the body Asthma, cough, earache, neuralgia, rheumatism, toothache, cancer, excrescence, tumors and warts
JJAP85					
JJAP86	<i>Euphorbia tortilis</i> Rottler ex Ainslie	Euphorbiaceae	Shrub	Bark, roots,	Irritating to skin and eyes
JJAP68	<i>Evolvulus alsinoides</i> (L.) L.	Convolvulaceae	Herb	Whole plant	Memory enhancement, antiepileptic and immunomodulatory
JJAP137	<i>Ficus benghalensis</i> L.	Moraceae	Tree	Leaf, root and bark	Tooth aches.
JJAP102	<i>Flacourtia indica</i> (Burm.f) Merr.	Flacourtiaceae	Tree	Leaves , bark and roots	Snakebite., arthritis cough, and pneumonia,
JJAP63	<i>Garcinia spicata</i> (Wight & Art)	Clusiaceae	Tree	Whole plant	Pains and rheumatic swelling
JJAP15	<i>Glinus oppositifolius</i> (L.) DC.	Aizoaceae	Herb	Whole plant	Immune response, like joint pains, inflammations, fever, malaria and wounds
JJAP115	<i>Gloriosa superba</i> L.	Liliaceae	Climbing herb	Whole plant	Gout, infertility, open wounds, , typhus, itching, leprosy, bruises, sprains, hemorrhoids, cancer, impotence, nocturnal emission, smallpox, sexually transmitted diseases., childbirth to reduce pain snakebite, ulcers, arthritis, cholera.colic, kidney problems
JJAP165	<i>Glycosmis pentaphylla</i> (Retz) DC.	Rutaceae	Shrub	Root and leaves	Diarrhoea, coughs, rheumatism, anemia and jaundice
JJAP21	<i>Gomphrena decumbens</i> auct.non Jacq.	Amaranthaceae	Herb	Root	Diabetes
JJAP175	<i>Grewia tilifolia</i> M.Vahl.	Tiliaceae	Tree	Stem bark	Pneumonia, bronchitis and urinary infectious
JJAP105	<i>Gyrocarpus asiaticus</i> Willd.	Hernandiaceae	Tree	Seed and leaves	Bleeding piles. Eye-lotions, haemorrhoids
JJAP157	<i>Hedyotis umbellate</i> (L) Lam.	Rubiaceae	Herb	Leaf and root	Expectorant and bronchitis
JJAP43	<i>Heliotropium indicum</i> L.	Boraginaceae	Herb	Leaves and young shoots	Menstruation, wounds, sores, boils, gum-boils and pimples on the face, antiseptic and anti-inflammation
JJAP146	<i>Hemidesmus indicus</i> (L.) R.Br. var. indicus	Periplocaceae	Climbing herb	Whole [plant	Diarrhoea and dysentery
JJAP104	<i>Hemionitis arifolia</i> (Burm.f.) T. Mare	Hemionitidaceae	Herb	Leaves	Hypoglycaemic and anti-diabetes
JJAP120	<i>Hibiscus micranthus</i> L.f. (Dennst) Mabb	Malvaceae	Herb	Roots	Cough
JJAP121	<i>Hibiscus vitifolius</i> L.	Malvaceae	Herb	Roots and leaves	Jaundice, ractured bones and sprained muscles.
JJAP118	<i>Hiptage benghalensis</i> (L.) Kurz	Malphigiaceae	Shrub	Bark, leaves and flowers	Aromatic, bitter, acrid, stringent, refrigerant, vulnerary, expectorant, cardiotoxic, anti-inflammatory and insecticidal. They are useful in burning sensation, wounds, ulcers, cough, asthma.
JJAP176	<i>Holoptelea integrifolia</i> (Roxb) Planchon	Ulmaceae	Tree	Bark, leaves and flower	Rheumatism,
JJAP178	<i>Hybanthes enneaspermus</i> (L.) F. Muell.	Violaceae	Herb	Whole plant	Aphrodisiac activity; sexual performance.; Sexual arousal
JJAP98	<i>Indigofera aspalathoides</i> M. Vahl. Ex DC.	Fabaceae	Herb	Leaves	Wound healing
JJAP99	<i>Indigofera linnaei</i> Ali	Fabaceae	Herb	The whole plant	Diuretic And venereal diseases.
JJAP05	<i>Indonesiella echioides</i> (L.) Sreemadh.	Acanthaceae	Herb	Leaves	Diabetes
JJAP69	<i>Ipomoea staphylina</i> Roemer& schultes.	Convolvulaceae	Shrub	Whole plant	Analgesic
JJAP158	<i>Ixora malabarica</i>	Rubiaceae	Shrub	Whole plant	Dysentery, fever, gonorrhoea, bronchitis
JJAP143	<i>Jasminum angustifolia</i> (L.) Willd.	Oleaceae	Climbing herb	Leaf	Diahhroea
JJAP87	<i>Jatropha glandulifera</i> Roxb.	Euphorbiaceae	Shrub	Leaves	Fever
JJAP88	<i>Jatropha gossypifolia</i> L.	Euphorbiaceae	Shrub	Whole plant	Laxative, increases appetite
JJAP06	<i>Justicia adhatoda</i> L.	Acanthaceae	Shrub	Leaf	Cold and cough
JJAP07	<i>Justicia glauca</i> Rottler	Acanthaceae	Herb	Leaves	Wounds
JJAP08	<i>Justicia simple</i> D.Don.	Acanthaceae	Herb	Leaves	Liver diseases
JJAP09	<i>Justicia tranquebariensis</i> L.f.	Acanthaceae	Herb	Whole plant	Coughs, colds, asthma, skin infections, fevers, and inflammations
JJAP23	<i>Lannea coromendelina</i> (houutt.) Merr.	Anacardiaceae	Tree	Whole plant	Leucoderma, inflammations and skin diseases
JJAP117	<i>Lawsonia inermis</i> L.	Lythraceae	Shrub	Roots	Diarrhoea in babies.
JJAP108	<i>Leonotis nepetifolia</i> (L.) R.Br.	Lamiaceae	Shrub	Leaves	Fever, coughs, womb prolapsed and and malaria
JJAP168	<i>Lepizanthes tetraphylla</i> (M.Vahl) Radlk.	Sapindaceae	Tree	Whole plant	Eczema, psoriasis and for removing frechlets
JJAP109	<i>Leucas aspera</i> (Willd.) Link.	Lamiaceae	Herb	Leaves	Scorpion-sting
JJAP133	<i>Leucena lecephloea</i> (Lam) de Wit	Mimosaceae	Tree	Root and bark	Contraceptive, ecboic, depilatory
JJAP144	<i>Linociera zeylanica</i> (L) Gamble	Oleaceae	Tree	Leaves	Diabetes
JJAP170	<i>Madhuca longifolia</i> (Koen.) Macbr.	Sapotaceae	Tree	Bark	Astringent and toni fish
JJAP24	<i>Mangifera indica</i> L.	Anacardiaceae	Tree	Bark	Cure dysentery.
JJAP123	<i>Marsilea minuta</i> L.	Marsileaceae	Herb	Whole plant	Insomnia and other mental disorders
JJAP59	<i>Maytenus emarginata</i> (Willd.) Dinhar	Celastraceae	Shrub	Whole plant	Fever, asthma and rheumatism

JJAP124	<i>Memecylon umbellatum</i> Burm.f.	Melastomataceae	Tree	Leaf and root	Conjunctivitis, gonorrhoea, excessive menstrual discharge
JJAP70	<i>Merremia tridentata</i> (L.) Hallier.f	Convolvulaceae	Herb	Whole plant	Rheumatism, renal function and urinary system
JJAP134	<i>Mimosa intsia</i> L.	Mimosaceae	Climbing shrub	Bark	Astringent properties
JJAP171	<i>Mimosa elengi</i> L.	Sapotaceae	Tree	Leaves and seed	Snake bite, saponin, kernel yields oils
JJAP159	<i>Mitragyna parviflora</i> L.	Rubiaceae	Tree	Leaves, bark, root	Analgesic, antipyretic, anti-inflammatory, antiarthritic, anthelmintic and muscular pain
JJAP136	<i>Mollugo pentaphylla</i> L.	Molluginaceae	Herb	Leaves, fruit	Anti cancer, scabies, tumors and skin disease
JJAP160	<i>Morinda pubescens</i> var. <i>pubescens</i> Roxb.	Rubiaceae	Tree	Leaf and root	Dysentery, dyspepsia , fever.
JJAP110	<i>Mucuna pruriens</i> (L.) DC.	Lamiaceae	Herb	Whole plant	Diabetes, high blood pressure
JJAP111	<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Tree	Leaves	Cough , cold and fever.
JJAP45	<i>Ola scandens</i> Roxb.	Cactaceae	Shrub	Bark	Anaemia, diabetes, skin diseases, venereal diseases and respiratory problems
JJAP46	<i>Opuntia delenii</i> (Ker Gawl.) Haw.	Cactaceae	Shrub	Laef	Asthma , burning, whooping cough and fever
JJAP112	<i>Orthosiphon thrysiflorus</i> (Roth) Slessen	Lamiaceae	Herb	Whole plant	Skin, stomach and lung problems
JJAP145	<i>Pedaliium murex</i> L.	Pedaliaceae	Herb	Whole plant	Kidney stone.
JJAP37	<i>Perularia daemia</i> (Forsk) Chiov.	Asclepiadaceae	Climbing herb	Leaves, root	Analgesic activity, cough, biliousness and sore eyes
JJAP33	<i>Phoenix lourieri</i> Kunth.	Arecaceae	Tree	Stem bark	Welling of the joints and as a vermifuge
JJAP89	<i>Phyllanthus amarus</i> Schum&Thonn	Euphorbiaceae	Herb	Whole plant	Anemic, jaundice, dropsy.
JJAP90	<i>Phyllanthus debilis</i> Klein ex Willd.	Euphorbiaceae	Herb	Whole plant	Diabetes , jaundice, and gonorrhoea
JJAP91	<i>Phyllanthus maderaspatensis</i> L.	Euphorbiaceae	Herb	Whole plant	Flu, dropsy, diabetes, jaundice, gall and bladder calculus, liver disease
JJAP147	<i>Piper longum</i> L.	Piperaceae	Climbing shrub	Rhizome	Stomach ache and bronchitis.
JJAP142	<i>Pisonia aculeata</i> L.	Nyctaginaceae	Climbing shrub	Whole plant	Several inflammation, pain, oxidative and liver disorder
JJAP135	<i>Pithecellobium dulce</i> (Roxb) Benth.	Mimosaceae	Tree	Root bark	Dysentery
JJAP138	<i>Plecospermum spinosum</i> Trecul.	Moraceae	Tree	Stem thorn	Checks cholera
JJAP148	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	Shrub	Root, Root, bark	Appetizer, Antibacterial, Anticancer.
JJAP100	<i>Pongamia pinnata</i> 9L) Pierre.	Fabaceae	Tree	Leaves, roots , bark	Cold, cough, diarrhoea, dyspepsia, flatulence, gonorrhoea and leprosy, gums, teeth and ulcers, bleeding piles. Juices .
JJAP101	<i>Pterolobium hexapetalum</i> (Roxb) Santapau&Wagh.	Fabaceae	Climbing shrub	Leaves and stem bark	Fever, tooth ache, chest pain, delivery pains, antidote to dog bite, wound healing, constipation, piles, ulcers, skin infections, venereal diseases, jaundice and diarrhoea
JJAP174	<i>Pterospermum canescens</i> Roxb.	Sterculiaceae	Tree	Flower	Blood troubles, inflammation, ulcers
JJAP60	<i>Reissantia indica</i> (Willd) N.Halle.	Celastraceae	Climbing shrub	Root bark, stem, leaves,	Respiratory troubles, febrifuge , sores and wounds.
JJAP25	<i>Rhus mysorensis</i> Don.	Anacardiaceae	Shrub	Whole plant	Immune-modulating properties
JJAP10	<i>Ruellia prostrate</i> Poir	Acanthaceae	Herb	Leaves	Anti – ulcer
JJAP11	<i>Ruellia tuberosa</i> L.	Acanthaceae	Herb	Leaves, root	Kidney stones, fever
JJAP14	<i>Sansevieira roxburgiana</i> Schultes & Schultes.	Agavaceae	Herb	Whole plant	Antibacterial, antioxidant and anticancer properties
JJAP169	<i>Sapindus emarginatus</i> M.Vahl.	Sapindaceae	Tree	Leaves	Soapnuts in treating migraines
JJAP153	<i>Scutia myrtina</i> (Burm.f) Kutz.	Rhamnaceae	Shrub	Whole plant	Anti-inflammatory and antiallergic properties
JJAP92	<i>Secruinega leucopyrus</i> (Willd) Muell.	Euphorbiaceae	Shrub	Whole plant	Sweet, cooling, diuretic, aphrodisiac, tonic
JJAP53	<i>Senna alata</i> (L)	Caesalpinaceae	Shrub	Leaves, flower	Skin diseases, ring worm, scabies
JJAP122	<i>Sida acuta</i> Burm.f.	Malvaceae	Herb	Root	Disorders, headache, leucorrhoea, Tuberculosis, diabetes, fever and uterine disorders.

Table 1. Important Medicinal Plants recorded in Muniandavar Sacred Groves.

Table. 2. Distribution of top 08 Plant families in Muniandavar Sacred Groves

S.No.	List of families	No. of species	Percentage (%)
1	Euphorbiaceae	15	22
2	Acanthaceae	11	17
3	Fabaceae	09	13
4	Mimosaceae	08	12
5	Rubiaceae	07	11
6	Caesalpiniaceae	07	11
7	Lamiaceae	05	07
8	Rutaceae	05	07



5.6. Threatened Medicinal Plants

The threatened medicinal plants recorded from Muniandavar Sacred Groves include *Aegle marmelos*, *Strychnos potatorum*, *Gloriosa superba*, *Madhuca longifolia* and *Piper longum*.

5.7. Religious Spirituality

The god Muniandavar was worshipped as deity. It was believed that the god Muniandavar is a *Kaavalkaaran* means *Watchman* who is watching the people of this territorial region from any evil spirits. Festival during the month of November (*Karthigai* month in Tamil) is very important festival in this temple. And also, there was a special pooja on Monthly one time. Local people believe that a string tied below the Trishul has the power to do well or to cause harm to an adversary. The sacred is situated under an ironwood tree (*Memecylon umbellatum*), on which numerous cradles are tied with cloth. This practice is followed in order to be blessed with a child. The thickets of this sacred grove with Muniandavar idol make the people to think good always and the people did not even lie, because telling lie in front of the idol would be punished.

5.8. Anthropogenic Pressure

In the study area, the anthropogenic pressures such as collection of firewood, cutting of tree, collections of medicinal plants are not common. Because the people believed that the deity Muniandavar is the owner of this forest and the god may punish immediately those who create any disturbances. The major serious threat to Muniandavar Sacred Groves was environmental pollution by throwing of plastic materials.

The deities coming from various regions would throw the plastic bags without any mercy in the forest during festival times. This environmental pollution may profoundly disrupt the regeneration status of the vegetation by polluting the soil as well as ground water. Grazing is very common Muniandavar Sacred Groves by livestock animals from local surrounding villages.

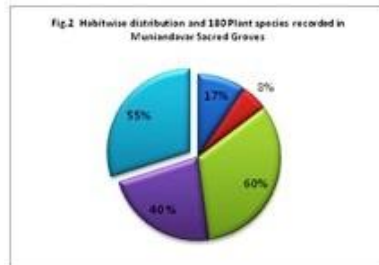


Fig.2.Habit wise distribution and 180 plant species recorded in Muniandavar Sacred Groves

Table 2. List of plant families with number of species distributed in Muniandavar Sacred Grove.

S. No.	Family	No. of species			
1	Acanthaceae	11	17	Boraginaceae	03
2	Actiniopteridaceae	01	18	Cactaceae	03
3	Agavaceae	02	19	Caesalpiniaceae	07
4	Aizoaceae	01	20	Capparaceae	04
6	Aloeaceae	01	21	Celastraceae	03
7	Amaranthaceae	04	23	Cleomaceae	01
8	Anacardiaceae	04	24	Clusiaceae	01
9	Annonaceae	01	25	Combretaceae	02
10	Apiaceae	01	26	Commelinaceae	02
11	Apocynaceae	03	27	Convolvulaceae	03
12	Arecaceae	03	28	Cucurbitaceae	04
13	Aristolochiaceae	01	29	Cyperaceae	01
14	Asclepiadaceae	03	30	Dioscoreaceae	01
15	Asparagaceae	01	31	Erythroxylaceae	01
16	Asteraceae	02	32	Euphorbiaceae	15
34	Flacourtiaceae	01	33	Fabaceae	09
35	Flindersiaceae	01	55	Nyctaginaceae	02
36	Hemionitidaceae	01	56	Olacaceae	03
37	Hernandiaceae	01	57	Pedaliaceae	01
38	Hypoxidaceae	01	58	Periplocaceae	01
39	Lamiaceae	05	59	Piperaceae	01
40	Lauraceae	01	60	Plumbaginaceae	01
41	Lecithidaceae	01	61	Poaceae	04
42	Liliaceae	01	62	Rhamnaceae	01
43	Loranthaceae	01	63	Rubiaceae	07
44	Lythraceae	01	64	Rutaceae	05
45	Malphiaceae	01	65	Salvadoraceae	01
46	Malvaceae	04	66	Sapindaceae	03
47	Marsileaceae	01	67	Sapotaceae	02
48	Melastomataceae	01	68	Scrophulariaceae	01
49	Meliaceae	02	69	Solanaceae	01
50	Menispermaceae	01	70	Sterculiaceae	01
51	Mimosaceae	08	71	Tiliaceae	01
52	Molluginaceae	01	72	Ulmaceae	01
53	Moraceae	02	73	Verbenaceae	01
54	Myrtaceae	02	74	Violaceae	01
			75	Vitaceae	02

6. CONCLUSION

The present work elucidates the species composition of 180 plant species of flowering plants which spreads in 158 genera and 75 families. The sacred grove with Plant species diversity should be preserved and conserved as a mini spot of biodiversity. Hence exploration and conservation of medicinal plants diversity of these groves is therefore most important for the management and sustainable development in these fragile ecological and life support systems. For this, an environmental awareness programmes should be conducted to the local people regarding the importance and conservation of sacred groves.

ACKNOWLEDGEMENT

The first and the third author sincerely thank the Secretary and Correspondent and Principal of A.V.V.M. Sri Pushpam College, Poondi, Thanjavur for providing the necessary facilities to carry out this research work.

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