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Traditional Values and Worshiping of Vascular Plants from Selected Sacred Groves of Kasaragod District, Kerala, India

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ABSTRACT

The current paper highlights the traditional and religious significance of sacred vascular plants, of two sacred groves (Uliya Kavu 1 & 2) of district, Kasaragod, Kerala. During the study, there were about 20 species of vascular plants belonging to 14 different families were listed. The religious power of these plants and their role in worship of the god / goddess was also painted. This paper also highlights the importance of maintaining such holines spatches are an urgent need, because changes in public belief, modern development, and erosion of cultural practices are at stake or factors that contribute to the damage to the heritage of the ancient centre.

***Key words**: Sacred groves, Vascular plants, Plant families, Biodiversity conservation, Traditional values.*

Introduction

Sacred groves are sacred forest or patches of forest protected by the power of religious belief as a place for God and Goddess. It is believed that the existence of the sacred forest comes from a far a few thousand years when human society is in a state of disrepair first phase of development. Ancestor habits of animism focussed on forest worship patches were considered a sacred abode of various kinds Gods/ deities. Sacred grove also performs various functions directly and indirectly to maintain the health or stability of ecosystem and life in the ecosystem. Their array of interactions influences the microclimate of the particular region. Sacred groves are believed to be a treasure house or place for various rare and endemic, medicinally important flowering or vascular plants and also for animal community.

Sacred groves are a very old and widespread phenomenon in the ancient world culture. Such trees are one of the best examples of traditional conservation practices in the area. These are the patches of natural vegetation of trees and associate groups of organisms managed as a part of regional cultural traditional cultural practices. sacred groves represent the vegetation that reaches its peak and show diversity of species such as trees, climbers, other shade-loving herbs. People worship the sacred trees associated with the sacred grove. These trees are species of medicinal or edible plants and they are protected by the natives because of their cultural and religious significance. Sacred groves also play significant role in protecting the local peoples from any natural disaster and famine and provide food, oxygen, medicine etc, for survival.

Materials and Methods

Study area: The present study is confined to two undisturbed sacred groves Uliya kavu 1 and Uliya kavu 2, in Kasaragod district, Kerala, is one of the 14 districts of the state Kerala. Kasaragod is a northern district of Kerala and is also known as Saptha Bhasha Sangama Bhoomi (Land of seven languages) as seven languages namely, Malayalam, Tulu, Kannada, Marathi, Konkani, Beary, and Urdu are spoken, unlike other provinces in Kerala. The district is the northernmost district of the State of Kerala. Kasargod is located at 12.5°N 75.0°E. It has an average elevation of 19 metres (62 feet). Ranipuram or Madathumala (1016 m) peak is the highest peak in the Kasargod district of Kerala, located in the Ranipuram Wildlife Sanctuary (Figure 1 A-B).

Uliya Kavu 1 & 2: Uliya (1 & 2) are the sacred groves located in Madhur village of Kasaragod district; which is characterised by shrubs and tree species. The sacred grove 1 & 2 covers an area of approximately 0.405 ha and 0.302 ha respectively. Theses sacrd groves or land is devoted to snake; hence these are regarded as "*Naga kavu*" or "*Naga bana*". The sacred groves are maintained by the members of Uliya family, generation after generation. The members of Uliya perform pooja once in every year and only the members are allowed to enter the sacred groves during the occasion (Figure 2 A, B & C).

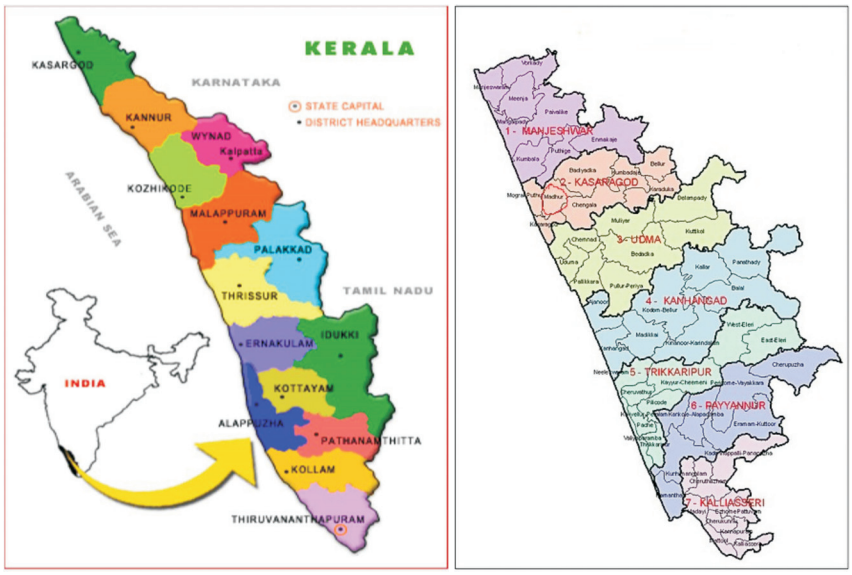
Documentation: The present study was based on

Fig. 2. A: Uliya House

Fig. 2B. Uliya kavu 1 (*Naga Kavu 1*)

Fig. 2C. Uliya kavu (*Naga kavu 2*)

Fig. 2. (A, B and C) – Images of study area showing Uliya House (A) and two sacred groves (B and C)



A. Map of India showing State Kerala B. Map of Kasaragod district

Fig. 1. A-B: Map of Kerala state and Kasaragod district

Table 1. List of plants from the study area showing common name and traditional or religious importance

Sl. No	Botanical Name	Common name	Family	Religious or traditional importance
1.	*Abrus precatorius* L.	Kannikuru	Fabaceae	Usually planted in the temple surroundings, seeds are offered to lord Krishna.
2.	*Adenanthera pavonina* L.	Manjadi	Fabaceae	The seeds are beloved of Lord Vishnu in Hindu religion.
3.	*Aerva lanata* (L.) Juss.	Cherula	Amaranthaceae	One among the "Dashapushpham". Usually found in the temple premises. Offered during "pitrekarma" (ritual after the death of any person).
4.	*Albizia saman* (Jacq.) Merr.	Urakkathungim-aram	Fabaceae	Usually found in temple premises and the decoction of the bark is used in in pooja rituals.
5.	*Alstonia scholaris* (L.) R. Br.	Paala maram	Apocynaceae	The milky latex from this plant is consumed by "Tuluva community" during the month of July or August (*Aaati Amavase*)
6.	*Asparagus racemosus* Willd.	Sathavari	Asparagaceae	The roots mostly used in the preparation of "Kashaya" for the pooja rituals. Also, a very good medicinal plant.
7.	*Argostemma courtallense* Arn.	Rubiaceae	Not specified	
8.	*Biophytum sensitivum* (L.) DC.	Mukkutti	Oxalidaceae	One among the "Dashapuspham". Found usually in and around temple and used in pooja rituals.
9.	*Cardiospermum halicacabum* L.	Uzhinja	Sapindaceae	One among the "Dashapuspham". Used during "Thiruvathira" during "Dhanu" month of Malayalam calendar.
10.	*Caryota urens* L.	Pana	Arecaceae	Usually found in the sacred groves and toddy from the plant is used in some of rituals that is followed by tribals. And the leaves are usually a feed of elephants in the temples.
11.	*Clerodendrum paniculatum* L.	Hanuman kireedam	Lamiaceae	Usually cultivated as garden plant and flowers are offered to gods.
12.	*Cynodon dactylon* (L.) Pers.	Karuka	Poaceae	one of Kerala's ten sacred flowers, the "Dasapushpam". It is utilised for religious events, festivals, weddings, and other celebrations. Additionally, a plant is utilised during childbirth to communicate with the married child's father woman. It was also connected to Lord Ganesh.
13.	*Cleome viscosa* L.	Ariyavela	Cleomaceae	The entire plant is used in pooja rituals in Kerala. And also, the decoction from the plant is used in pooja.
14.	*Curculigo orchioides* Gaertn.	Nilapana	Hypoxidaceae	Plant is one among the "Dashapuspham" and usually used during "Thiruvathira" art.
15.	*Cyathula prostrata* (L.) Blume.	Kadaladi	Amaranthaceae	The entire plant is used in pooja as "kadaladi chamada"
16.	*Calotropis gigantea* (L.) W. T. Aiton	Vellaerikku	Apocynaceae	The flowers are offered to lord "Shiva". Usually planted in temple premises.
17.	*Cassia fistula* L.	Kanikonna	Fabaceae	It is the state flower of Kerala and flowers are placed during the celebration of Vishu (State festival of kerala) during the month of April.
18.	*Dioscorea bulbifera* L.	Kaachil	Dioscoreaceae	Medicinally important plant.
19.	*Eclipta prostrata* (L.) L.	Kayyunni	Asteraceae	One among the "Dashapuspham". Used during "Thiruvathira" of "Dhanu" month in Malayalam calender.
20.	*Evolvulus alsinoides* (L.) L.	Vishnukranthi	Convolvulaceae	One among the "Dashapuspham". Used during "Thiruvathira" of "Dhanu" month in Malayalam calender.

Table 1. *Continued ...*

Sl. No	Botanical Name	Common name	Family	Religious or traditional importance
21.	*Glycosmis pentaphylla* (Retz.) Correa.	Panal	Rutaceae	Medicinally important plant.
22.	*Hydnocarpus pentandrus* (Buch.-Ham.) Oken.	Neerutti	Achariaceae	Medicinally important plant. The bark used in the preparation of "Kashaya".
23.	*Ipomoea obscra* (L.) Ker Gawler.	Tiruthali	Convolvulaceae	One among the "Dashapuspham", used during "Thiruvathira" in Kerala.
24.	*Ixora coccinea* L.	Thechi	Rubiaceae	Used in pooja rituals in Hindu religion. Used cultivated as garden plants and also planted in temple premises.
25.	*Leucas indica* (L.) R.Br. ex Vatke.	Tumba	Lamiaceae	The flower is known as Mahabali's favourite flower, the most propelled king of the Puranas. Thus used in "Pookalam" during Onam festival of Kerala.
26.	*Mesua ferrea* L.	Nagapoovu	Calophyllaceae	Seeds are known to yield oil and this oil is used in lighting the light in temples and also in other rituals.
27.	*Murraya paniculata* (L.) Jack.	Mara mulla	Rutaceae	The fragrant flowers are offered to different lords in Hindu religion.
28.	*Magnolia champaca* (L.) Baill. ex Pierre.	Chambakam	Magnoliaceae	The fragrant flowers are offered to different lords in Hindu religion.
29.	*Mimusops elengi* L.	Elengi	Sapotaceae	One of the favourite flowers of Lord Shiva and usually found in temple premises and also in sacred groves.
30.	*Nyctanthes arbortristis* L.	Parijatham	Oleaceae	It is believed that the flower is sacred and in puranas there is a mention of this plant named as "Parijata", usually offered to all the gods in Hindu religion.
31.	*Nothapodytes nimmoniana* (J.Graham) Mabb.	Pinaari	Stemonuraceae	Medicinally important and prepare Kashaya using the leaves.
32.	*Ocimum tenuiflorum* L.	Tulasi	Lamiaceae	The plant is used in Hindu rituals and it is believed that tulasi is beloved of lord Krishna. Hindus worship tulasi in their home. There is a beleave in Hindu that if the plant is kept over head of dead body the person would go to heaven. Brahmins consider tulasi as wife of lord Vishnu.
33.	*Santalum album* L.	Chandanam	Santalaceae	The paste obtained from grinding of wood of sandal wood is used in pooja rituals in Hindu religion, which is commonly called as "Chandanam" and is sign of devotion.
34.	*Syzygium caryophyllatum* (L.) Alston	Njaara	Myrtaceae	The bark of the tree is used in the preparation of Kashaya and also the fruits are edible.
35.	*Saraca asoca* (Roxb.) Willd.	Asokamaram	Fabaceae	Ashoka flower buds are known to be consumed ceremonially by married ladies in India.
36.	*Tectona grandis* L.f.	Theak	Lamiaceae	The wood is used in the preparation of certain tools which is required for pooja purpose. The leaves are also used as a part of Hindu rituals.
37.	*Tylophora indica* (Burm. f.) Merr.	Vallipala	Apocynaceae	Plant is used in the preparation of Kashaya in ayurveda.
38.	*Uvaria narum* A.DC.	Koorivalli	Annonaceae	Plant is used in the preparation of Kashaya in ayurveda.
39.	*Vernonia cinerea* (L.) Less.	Poovankurunila	Asteraceae	One among the "Dashapuspham" and used in some pooja purposes.


Abrus precatorius L.


Adenanthera pavonina (L.)


Aerva lanata L. Juss.


Albizia saman (Jacq.) Merr.


Alstonia scholaris (L.) R. Br.


Asparagus racemosus Willd.


Argostemma courtallense Arn.


Biophytum sensitivum (L.) DC.


Cardiospermum halicacabum L.


Caryota urens L.


Clerodendrum paniculatum L.


Cynodon dactylon (L.) Pers.


Cleome viscosa L.


Curculigo orchioides Gaertn.


Cyathula prostrata (L.) Blume.


Calotropis gigantea (L.) W. T. Aiton


Cassia fistula L


Dioscorea bulbifera L.


Eclipta prostrata (L.) L.


Evolvulus alsinoides (L.) L.


Glycosmis pentaphylla (Retz.) Correa


Hydnocarpus pentandrus (Buch.-Ham.)


Ipomoea obscra (L.) Oken


Ixora coccinea L. Ker Gawler.


Leucas indica (L.) R.Br. ex Vatke


Mesua ferrea L. (L.) Jack


Murraya paniculata


Magnolia champaca (L.) Baill. ex Pierre.


Mimusops elengi L.


Nyctanthes arbor-tristis L.

Nothapodytes nimmoniana (J.Graham) Mabb. | *Ocimum tenuiflorum* L. | *Santalum album* L.

Syzygium caryophyllatum (L.) Alston (Roxb.) | *Saraca asoca* Willd. L.f. | *Tectona grandis*

Tylophora indica (Burm. f.) Merr. | *Uvaria narum* A.DC. | *Vernonia cinerea* (L.) Less.

Fig. 3. Sacred vascular plants (Angiosperms) in study area

extensive survey and field observations during the year 2020 June – December 2021. The study made an attempt to document and analyse religious and traditional importance of plants among the vegetation cover of two sacred groves of Madhur village of Kasaragod district, Kerala. The study and documentation were mainly based on field observations, discussions with family members as well as scrutinizing the literature review. The plants specimens were collected in different seasons of flowering and fruiting and were identified taxonomically with locally available floras.

Results and Discussion

During the study there was a documentation of 39 species of flowering plants belonging to 39 genera and 25 families. Among these, Fabaceae and Lamiaceae were the dominant families with 5 and 4 species respectively; followed by the families like Apocynaceae, Rubiaceae, Rutaceae, Amaranthaceae etc with single species representation. It is also documented that religious and traditional importance of these plants and role in worshiping god/goddess. The identified and documented vascular plants belongs to a category of herbs, shrubs, trees and climbers (woody climbers).

Conclusion

The various studies on two sacred groves in Madhur, Kasaragod District reveal that, the rich species diversity in these groves indicates its importance to be considered as a conserved area. The gradual erosion of belief system and traditional culture of human societies results in accelerated degradation of such conserved areas like sacred groves. Major threats faced by these sacredgroves are thanks to developmental activities, encroachment urbanization and changing socio-economic values. Anthropogenic activities like collection of firewood, dumping of waste and other many anti-social elements are the key other threats to the gene pool of those fragile ecosystems. Moreover, the invasion of weeds becomes another major problem within the ecological functioning of the sacred grove and it's going to affect the existing biodiversity. Sacred grove forests viewed as traditional method of *insitu* conservation practice. Change within the human attitude towards the biodiversity is critical for the success of these conservation efforts. Thus, religious belief has been a keyforce in determining human attitudes towards conservation and sustainable utilization of natural resources.

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