

## **Flora of Sacred Groves at Sriharikota Island, Andhra Pradesh, India**

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**Issued: April 01, 2010**

### **Abstract**

Sriharikota is botanically interesting place in Andhra Pradesh by virtue of being an island in Nellore District harbouring a rich vegetation and a popular place also because of establishment of Rocket Launching Station. The anecdote behind the same Sriharikota is that there are half a million of Siva Lingams present in the island. The legend derived its strength from the words 'arc' (half) and cotti (crore), 'Sri' being a qualifying term. However, the fact is that there are a good number of dilapidated temples around which note-worthy vegetation, worth a critical study. It is said that a number of idols also were found during excavation operations while construction programme of SHAR establishment was carried out. One such idol is presently installed at newly constructed temple in the area. Hence a study of flora of sacred groves is undertaken. A good number of medicinal plants are recorded around the sacred groves. However 18 plants only of high importance are reported here, such as *Albizia amara*, *Lannea coromandelica*, *Loesneriella obtusifolia*, *Strychnos nux-vomica* and *Strychnos potatorum* etc.

### **Introduction**

Tribal People generally live in isolated hamlets in forests on the hilly ranges. To offer prayers they established certain idols under semi permanent or temporary temples, around such prayer centres dense forest components having good medicinal value and other uses are present. Very often they also grow some more plants of ornamental value and /or of medicinal value. Further they take extra care to protect their flora of these prayer centres such places are known as Sacred groves very often even civic people also construct temples either on hilly areas or along the sea coast. It is customary that around all such temples a good number of plants are grown along with the natural flora already available there. They have been considered as sacred, it is usually a self imposed taboo on indiscriminate destruction of the flora by tribals. It is well known fact that most of our popular pilgrim centres are on hilly areas amidst deep forests. Natural floristic components of endemic and rare species are usually found around such sacred groves in

addition to the plants of certain good medicinal value. Thus the sacred groves serve as eco-bio-conservation centres. Therefore in the present context of high degradation of natural forests, an intensive study of sacred groves is very much needed. It is with this view flora of sacred groves at Sriharikota Island is taken up (maps as well as illustrations of the people of Sriharikota are published in *Ethnobotanical Leaflets* 12: 896-911, 2008; and *EBL* 14: 95-107, 2010).

### Topography

Sriharikota Island geomatically is located at 80° .21' E and 13° .22' to 14° N. It is a spindle shaped land mass sandwiched between Bay of Bengal on the East and Pulicat lake on the West. It is 18 km east of Sullurupet, the nearest railway Station connecting Chennai –Kolkata trunk line. Chennai is 98 km away from Sriharikota.

### Etimology

The anecdote behind the name Sriharikota is that there area half a million of Shiva – Lingams present in the island. The legend derived its strength from the words ‘arc’ (Half) and ‘cotti’ (Crore), sri being a qualifying term. However the fact is that there are a good number of dilapidated temples around which noteworthy vegetation, worth a critical study. It is said that a number of idols also were found during excavation operations while construction programme for SHAR establishment was carried out. One such idol is presently installed at newly constructed temple in the area.

Sriharikota Island a few families of aboriginal tribe ‘Yanadies’ are living in interior of the island forests. Quite a few dilapidated temples are a few idols half buried in the sand in the vicinity of tribal hamlets.

### Field Study

A few tours were planned so as study the flora of sacred groves. Based on our preliminary studies on the flora sacred groves in the island 18 species of tribal medicinal value presented here (Table 1)

### Enumeration of Plants of Sacred Groves species

The list of plants enumerated below is given in the alphabetical order along with family, local names and tribal medicinal use. For each species earlier recorded medicinal uses also are furnished.

**Table 1. Flora of Sacred Grove at Sriharikota Island - A.P.**

S.No.	Plant Name, Loc. Name & Family	Island Use(s)	Elsewhere
1	2	3	4

1. <i>Acacia caesia</i> Ln: Korinda (Mimosaceae)	Root- Paste applied for wounds and knife cuts.	Flowers used by 'Santal' women in deranged courses.
2. <i>Aegle marmelos</i> Ln: Maredu/Bilva (Rutaceae)	Root-decoction taken orally (Dose: 1-2 oz.) twice a day to give relief from (High B.P.) High Blood Pressure.	Pulp of ripe fruit cooling, laxative fruit astringent, digestion.
3. <i>Albizia amara</i> Ln: Chikireni (Mimosaceae)	Leaf- decoction taken orally for cooling. Leaf and stem bark powder applied on head, taken oil bath to give relief from body pains, removes dandruff.	Seeds astringent given in piles, diarrhoea and gonorrhoea. Flowers externally applied to inflammations boils and ulcers. Leaves useful in Ophthalmia.
4. <i>Azadirachta indica</i> emollient Ln: Vepa (Meliaceae)	Seed- Paste applied on itches, Scabies and boils of skin.	Berries-purgative Anthelmintic. Leaves as poultice applied to boils.
5. <i>Cissus quadrangularis</i> alterative Ln: Nalleru in (Vitaceae)	Stem- chutney acts as vermifugal removes White worms in stomach.	Leaves and young shoots Stomachic used in powder form digestive troubles. Juice of stem used in irregular menstruation and scurvy.
6. <i>Cissus vitigenia</i> on Ln: Adavigummidi (Vitaceae)	Root- crushed and warmed applied on Itches and Swellings of hands	Leaf mildly heated and applied wounds of cattle.
7. <i>Coccinia grandis</i> Ln: Donda (Cucurbitaceae)	Tuberous Root- well ground and juice (Milk) warmed with <i>Foeniculum vulgare</i> and it is applied for curing rheumatic pains.	Root paste applied on forehead to relief head ache. Leaves are mashed in water and bandaged over filarial swellings.
8. <i>Ficus benghalensis</i> astringent, Ln: Marri (Moraceae)	Latex- applied to give relief from joint pains and muscular pains.	Infusion of bark-tonic, used in dysentery, diabetes.
9. <i>Ficus microcarpa</i> Ln: Kalizuvu	Fruits- ground well with pepper and applied on wounds and Itches.	Root bark and leaves boiled in oil application for wounds

and (Moraceae)		burises.
10. <i>Glycosmis pentaphylla</i> Ln: Gonji (Rutaceae)	Root-paste as antidote for snake bite.	Root pounded and mixed with Sugar given in low fever. Wood used in snake bite.
11. <i>Gmelina asiatica</i> Ln: Gummalangi/ Adivigummidi (Verbenaceae)	Fruit- paste as antidote. Root –paste on head for cooling.	Root-demulcent, alterative, used for rheumatism, gonorrhoea.
12. <i>Grewia rhamnifolia</i> Ln: Tegali (Tiliaceae)	Fruit-juice taken orally in case of stomach ache and digestion problems.	----
13. <i>Lannea coromandelica</i> Ln: Gumphini (Anacardiaceae)	Leaf- juice taken orally to give relief ulcers. Stem bark-paste applied to give relief from body pains.	Bark- astringent, used as a lotion in impetigenous eruptions and ulcers. Leaves boiled and applied for
tooth  avoid evil spirits.	Wood – used to make cots, agri- implements, and used to	ache
14. <i>Loeseneriella obtusifolia</i> Ln: Mediteega (Hippocreataceae)	Wiry Branches –as binding fibre tying to make tough roofs.	-----
15. <i>Morinda pubecens</i> Ln: Peddapapidi/ Toguru (Rubiaceae)	Stem Bark- patse applied to give relief from body pains. Wood – used to make cots and agri- implements.	Root used internally as an astringent.
16. <i>Seurinega leucopyrus</i> Ln: Tellapurugudu (Euphorbiaceae)	Root-paste mixed with <i>Mollugo pentaphylla</i> root + <i>Glycosmis pentaphylla</i> root + <i>Boerhavia diffusa</i> root powder decoction is given to pregnant ladies as a medicine (for 3 days).	Leaves –made into paste with tobacco used to destroy worms in sores.
17. <i>Strychnos nux-vomica</i> Ln: Musthi (Loganiaceae) said to	Seed- paste applied in fevers and dysentery. Root- paste applied as antidote for  snake bite.	Root bark – ground up into a Fine paste with lime juice and made into pills which are  be effectual in cholera. Leaves – applied as poultice, to sloughing wounds and ulcers. Seeds – with aromatics given in  colic.
18. <i>Strychnos potatorum</i> application Ln: Chilla	Seed – paste applied for snake bite.  Seeds- used to clear turbid water.	Seeds – used as a local  in eye diseases, diabetes and in

**ACKNOWLEDGEMENTS:**

The author is thankful to the Director, SHAR Centre, Sriharikota for providing facilities and encouragement, at Laboratory and in the field respectively. Author is thankful to Dr. V. Veerraju, Head, C&LD. Division, SHAR Centre for his keen interest and consistent support to conduct the field work smoothly. The author is thankful to the Chairman, DOS-ISRO, Bangalore for Financial assistance to conduct the project. He is also grateful to the Principal, Visvodaya Government College, Venkatagiri

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*\*Presented at National Symposium on **Emerging Trends in Plant Sciences**, Organized by Department of Botany, S.V. University, Tirupati. March. 15-17, 1999.*