SACRED TREES OF TEMPLES OF TIRUCHIRAPPALLI, TAMIL NADU –
THE NATURAL AND ECOLOGICAL HERITAGE OF INDIA

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ABSTRACT

Sacred trees (Sthalavrikshas) representing one form of nature worship are common in the temples of Tamil Nadu and other parts of India. Sacred trees (Sthalavrikshas) are important not only for their botanical, economical, medicinal, environmental, religious and mythical values but also forms an important biological heritage of our nation that plays role in the conservation of environment and biodiversity. The present study dealt with the survey of the trees of some temples in and around Tiruchirappalli, Tamil Nadu. The study documented about fifteen plants associated with twenty temples.

Key words: Sacred Trees, Biological uses, Ecological heritage, sthalavrikshas, Tiruchirappalli.
INTRODUCTION

Sacred Trees (Sthalavrikhas) have a unique place in the fabric of Indian heritage. Trees symbolize knowledge and spirituality. In ancient times, the trees were worshipped along with Gods and established in the temples as Sthalavrikhas i.e. trees associated with the deity in the temple and become an inseparable part of the faith. Such trees were guarded and their saplings from mother plants were given to other temples. Trees such as Ficus, Neem and Tamarind are the abode trees of spirits and propitiated by tying toy cradles when desiring a child or at the birth of an infant. Similarly, they tie a black cloth sometimes with salt in it to ward off the evil eye. Similarly, yellow and white cloths are tied in fulfillment of a vow. Ayurvedic and Siddha physicians come to the temple market, not only to gather herbs but also to swap information about many medicinal properties. They also conduct clinics during sojourn. Many temples have Sthalavrikhas, as in worship of Shiva, Aegle marmelos (Vilvam) is preferred. Similarly, Ocimum sanctum (Tulasi) is favoured for the worship of Vishnu, while Nymphaea stellata (Lotus) is a popular choice for offering to all deities. The leaves, flowers and roots may also be added to create fragrant garlands and garlands may be wrapped in either leaf or bark of the plantain. The sheath of the leaf base of Areca tree may also be used to pack and transport flower garlands. The common plants in use are Jasmine, oleander, marigold, leafy branches of Tulasi, tender shoots of Marikozhundhu, Vilvam and roots of Vettiver.

Sthalavrikhas are valued for their botanical, medicinal, environmental, religious and mythical importance. The Sthalavrikhas of Tamil Nadu constitute a part of genetic resources for the conservation of species diversity. Many living organisms including man depend upon the plants for their food, shelter and medicine. Propagation of Sthalavrikhas in temples contributes to the conservation of our floral diversity. Some trees are important for their economic role in ship building or in the timber industry, some for their produce, some for providing homes for various animals, birds and others for their medicinal and air purifying qualities. Usually Ocimum sanctum and Aegle marmelos are given to the worshippers after their prayer in Vishnu and Shiva temples respectively. This habit shows characteristically the importance of medicinal plants in Indian System of Medicine. Medicinal parts of the Sacred Trees (Sthalavrikhas) are used in different forms. It is given in the form of paste, juice, dried powder and made into tablets and juices mixed with sugar and honey to cure various diseases. (Trivedi Priya Rajan 1996; Amirthalingam 1998; Jain 2004). Since no serious attempt has been made so far to study the Sacred Trees (Sthalavrikhas) of Tiruchirappalli, the present study was under taken to survey and document the Sacred Trees associated with various temples.

MATERIALS AND METHODS

Twenty temples of Tiruchirappalli were visited during the period of June 2008 to May 2009 and sixteen Sacred Trees were recorded (Table 1) & (photo slides 1–4). It was noted that the same species appeared in more than one temple. Herbarium of the Sacred Trees was preserved at the Department of Botany, Holy Cross College (Autonomous), Tiruchirappalli, Tamil Nadu.

Tiruchirappalli, an ancient city of the Cauvery delta is one of the greatest cities of south India situated at the very centre of Tamil Nadu, is equidistant from almost all the major cities of the south including Chennai, Bangalore, Tirupati and Trivandrum. It enjoys a strategic importance which is in tune with its age old agriculture pre-eminence, and its ever growing industrial, commercial and educational advancement. Tiruchirappalli not only abounds in temples but also harbours lot of medicinal plant wealth. It is one of the places of historical importance in Tamil Nadu. The temples in and around the town, the Mainguard gate and the church with its tall pinnacle speak of its glorious past. It is a place of pilgrimage for people of all religions. It is encircled by a number of other pilgrim centers like Srirangam, Thiruvani kovil, Samayapuram and Vayalur.
RESULTS AND DISCUSSION

The Sacred Trees documented from various temples visited are presented in Table-1 along with the name of the place, temple, deity, binomial and common name. The botanical features, ecological, economic and medicinal potentials were enumerated based on the literature surveyed (Chakraberty 1993; Gamble 1967; Airy Shaw 1973; Ambasta 1986; Bentley Robert & Trimen Henry 2000; Mathew 1983; Sood et al., 2005).

*Aegle marmelos* Corr. (Rutaceae) is a small medium sized thorny tree with a spreading crown. The transpiration of leaves helps in maintaining the humidity of the immediate surroundings. The root system helps in retention of water in the soil. The wood is suitable for making charcoal. The gummy substances in which the seeds remain embedded are used as an adhesive, varnish and in cementing. The yellow dye is obtained from the unripe fruits. A drug balae fructose extracted from the fruits with mucilage and pectin content is very useful for treating chronic diarrhoea, dysentery, hemorrhoids and swellings. The leaf juice mixed with black pepper is used to treat jaundice. The antibiotic potential of the leaf, fruit and root helps in curing diarrhoea, dysentery, asthma and fever. The bark and root are soaked in water over night in a copper vessel are used to cure blood pressure, diabetes and leprosy (Venkatesan et al., 2009; Rajan et al., 2011).

*Ficus religiosa* L. (Moraceae) is a large tree with well-developed crown and few low buttresses. The tree releases a considerable amount of oxygen and one tree can supply the oxygen requirement of 6 persons per day. It is a suitable plant species to be planted around the industrial area. The smoke of the twigs possesses germicidal and antimicrobial effect that kills the germs of the environment. The twigs of the plant are used in *yagnas*. Leaves are used as good fodder for elephant and cattle. Wood is used for making packing cases, articles and match sticks. Bark is used in tanning. Fruits and tender leaf buds are eaten. Latex after hardening is used as lac or sealing wax. The juice of the bark is astringent and used as mouth wash for curing toothache and strengthening gums. The juice extracted by soaking pieces of tender bark in water over night is given for excessive urination during jaundice. The dried fruits are pulverized and given to women during child birth as folk remedy (Uma et al., 2009; Inder Kumar Makhija et al., 2010).
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<thead>
<tr>
<th>No</th>
<th>Name of the place</th>
<th>Name of the temple</th>
<th>Deity of the temple</th>
<th>Name of the Sacred trees (Sthalavrikshas)</th>
<th>Common name</th>
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<td>2.</td>
<td>BHEL</td>
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<td>Shivan &amp; Murugan</td>
<td>Aeglemarmelos, Corr. Ficus religiosa, L.</td>
<td>Vilva maram Arasa maram</td>
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<td>5.</td>
<td>Keelaputhur</td>
<td>Sri Bala Vinayagar, Sri Selva Mariyamman Sri Vallitheivanai Kovil</td>
<td>Vinayagar, Mariyamman Theivanai</td>
<td>Musa paradisiaca, L.</td>
<td>Vazhai</td>
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<td>6.</td>
<td>MalaiKotta</td>
<td>Sri Selva Vinayagar Kovil</td>
<td>Vinayagar</td>
<td>Ficus religiosa, L.</td>
<td>Arasa maram</td>
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<td>7.</td>
<td>OFT (Ordinance Factory Tiruchirappalli)</td>
<td>Raja Vinayagar Kovil</td>
<td>Vinayagar</td>
<td>Ficus religiosa, L. Ocimum sanctum, L.</td>
<td>Arasa maram Tulasi</td>
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<td>8.</td>
<td>Palanganangudi</td>
<td>(i) Thanagamani Kovil, (ii) Mariyamman Kovil</td>
<td>Thanagamani Mariyamman</td>
<td>Azadirachta indica, A. Juss Ficus virens, Aiton</td>
<td>Vembu Itchi maram</td>
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<td>9.</td>
<td>Samayapuram</td>
<td>Mariyamman Kovil</td>
<td>Mariyamman</td>
<td>Azadirachta indica, A. Juss</td>
<td>Vembu</td>
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<td>10.</td>
<td>Sangilianda Puram</td>
<td>Sri Selva Kaliyamman Kovil</td>
<td>Kaliyamman &amp; Vinayagar</td>
<td>Ficus religiosa, L. Azadirachta indica, A. Juss</td>
<td>Arasa maram Vembu</td>
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<td>11.</td>
<td>Srirangam</td>
<td>Sri Ranganathar Kovil</td>
<td>Ranganthar</td>
<td>Calophyllum inophyllum L</td>
<td>Pinna</td>
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### Azadirachta indica

*A. Juss.* (Meliaceae) is a large evergreen tree with an irregularly rounded crown. It releases lot of oxygen and purifies the environment. The wood is used for carving the images of the Gods, toys and for making agricultural implements, carts, boards and panels. The mature leaves and seed cake is used to feed cattle to increase the output of milk. The bark is used in preparing a dye for colouring fine textured fabrics. The seeds yield deepest yellow oil used as an antiseptic and used in preparing tooth paste and soap making. Capsules of neem oil have been recommended to treat diabetes. Sodium nimbate obtained from neem oil is used in birth control. Nimbin and Nimbidine obtained from the seeds are used in curing skin diseases. Neem oil is also applied as an antiseptic dressing in leprosy, scabies and ring worm (Khan *et al*., 1999; Amal kumar Ghimeray *et al*., 2009).

### Ficus virens

*A. Juss.* (Moraceae) is a densely foliaceous tree with a crown of equal spread. The plant releases good amount of oxygen and maintains the moisture content of the atmosphere. Fruits are edible and the succulent leaves are relished by animals. Wood and bark are good source of paper pulp. The bark is diaphoretic. Decoction of bark is used in sore throat.
**Calophyllum inophyllum** L. (Clusiaceae) is an evergreen tree with sweet scented flowers and the spreading crown. The scent emitted from the flowers kills the germs around. The timber is fairly hard and is used in ships and boat making, railway sleeper and plywood. The oil obtained from the seeds is used for soap making and illumination purposes. The fruit yields valuable gum. The bark of the tree has an antimicrobial effect. Oil extracted from the seed kernel is used as a remedy for pain in the joints and muscles. The refined oil is injected intramuscularly to relieve pain in leprosy. The flower juice is used to treat nervous disorders and paralysis (Minh Hien et al., 2009; Uma Shankar Mishra et al., 2010).

**Photo Slides 3 & 4**

3. Anna Nagar - Varasakthi Vinayagar temple- Aegle marmelos

4. Malai Kottai – Sri Selva Vinayagar Kovil- Ficus religiosa L.

**Syzygium cumini** (L.) Skeels (Myrtaceae) An evergreen tree with a round crown, white flowers and purple fruits. The tree is pollution tolerant, assimilates more carbon dioxide from the atmosphere and liberates oxygen, balancing the ratio of oxygen and carbon dioxide in the atmosphere. Fruits are edible, good in taste and used in puddings. Wood is hard and durable. Used for building and agricultural purposes. Leaves are used as fodder. Fruit pulp is useful in treating diabetes and the decoction of the bark is used as a mouth wash to treat spongy gums (Jeethu Anu Mathews et al., 2011; Shanbhag et al., 2011).

**Ficus racemosa** L. (Moraceae) is a large tree with a well developed crown. It is pollution tolerant and absorbs pollutants from the atmosphere. It is a suitable plant to be planted in the industrial area. Wood is used for making packing cases and household articles. Roasted fruits are used as a mouth wash to treat spongy gums (Jeethu Anu Mathews et al., 2011; Poongothai et al., 2011).

**Butea monosperma** (Lamk.) Taubert. (Fabaceae) is a medium sized tree with compound leaves. It is a valuable host tree for the lac insects. Leaves are used for making plates and cups. Dried leaves are used as beedi wrappers. Ropes are made out of roots. The coarse fibre of the inner bark is used for boat making. The gum obtained from the tree is rich in gallic and tannic acids. The seeds contain proteolytic and lipolytic enzymes. The bark is astringent and used to treat tumors and menstrual disorders (Ambersing Raj put et al., 2011; Rmanjaneyulu et al., 2011).

**Diospyros ebenum** J.Konig. ex Retz. (Ebenaceae) an evergreen tree with a spreading crown. Fruits are edible. Tannin from raw fruits is used as preservative for wood.

**Musa paradisiaca** L. (Musaceae) is a large herbaceous plant with a pseudo stem and a globose perennial rhizome. The flowers and pseudo stem are used as a vegetable. The fibre is used for making ropes, mats, coarse paper and pulp. Peeled leaf sheaths are used as packing material. The juice of the stem dissolves kidney stones and acts as an antidote for snake biting. Unripe fruits and cooked flowers are good for diabetes (Azizah Mahmood et al., 2011; Mohammed Zafar Imam et al., 2011).
**Ocimum sanctum** L. (Lamiaceae) it is an aromatic shrub and environment purifier. The stem is made into beads and used as rosaries by Hindus. The leaf juice mixed with honey cures cough, cold, fever and bronchitis. Oil obtained from the leaf is an antiseptic and has an antimicrobial and insecticidal property (Baskaran 2008; Dipak koche *et al.*, 2011).

**Calotropis gigantea** (L.) Dryand. (Apocynaceae, previously under Asclepiadaceae) is a large milky shrub and plant parts are covered with loose soft white wool. The latex is used in tannin industry to decolorizing, for removing hair and imparting yellow colour to hides. The floss obtained from the seeds is used for stuffing purposes (Chandrabhan Seniya *et al.*, 2011; Himanshu Josi *et al.*, 2011).

**Imperata cylindrica** (L.) Rauesch. (Poaceae) an erect perennial herb with a leafy culm. It is a good sand binder and protects the soil from erosion. The root of the grass is sweet, has a cooling effect and increases the flow of milk. Good fodder for cattle. The plant is used in Unani drug for treating snake bite. It is recommended in urinary disorders.

**Allmania nodiflora** R. Br. Ex. Wight (Amaranthaceae) an erect straggling herb. Spikes yellowish flame coloured. The leaves are used as vegetable. It gives good organic manure to soil.

**Achyranthes aspera** L. (Amaranthaceae) a branched woody herb with spicate inflorescence. The plant is rich in potash and valued as green organic manure. The plant is pungent, purgative, diuretic and astringent. The flowering spikes ground into paste are used as an external application for poisonous insect bites (Niranjan Sutar *et al.*, 2011; Sharma Raj Neeta *et al.*, 2011).

**CONCLUSION**

The temples of India are the hoary treasure not only for this country but also for the whole world. The present work ensures that our ancient ecological tradition and respect for the natural heritage is not lost in today’s fast changing life style and reminds the duty of every citizen to protect it. These Sacred Trees preserved through millennia by our ancestors as potential bio resources should be respected and conserved for the future generations.

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