



## RESEARCH ARTICLE

### STUDY OF SOME SACRED PLANTS OF AHMEDNAGAR DISTRICT, MAHARASHTRA, INDIA

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#### ABSTRACT

Biodiversity is an important gift of nature that provides all basic requirements for human existence. Since time immemorial plants have played an important role in human civilization. It has been observed that large number of plants being used for the worshipping of gods and goddesses as well as for socio-religious functions which serve as a useful tool for conservation of plants. A present article attempts to highlight the importance of some sacred plants which are traditionally used in Ahmednagar District of India. A total of about 57 species under 54 genera and 33 families were recorded during the study. People of the study area are highly religious. These beliefs are not only showing the human relation with plant diversity, but also help in the conservation of species.

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#### INTRODUCTION

Plant biodiversity has gained immense importance in traditional rituals in India since Vedic period. Sacrifice, in fact has immense importance not only in Hindu religion but in many other religions also. Breaking of coconut to please a God is the form of sacrifice. Similarly many different forms of sacrifice are popular in Hindu religion that includes use of flowers, fruits, leaves or seeds. People of this country have been worshipping various plants, animals and rivers since ancient time. India is famous for its rich heritage and rituals. Some ceremonial and ritual acts are common in every religions, which focused on sacred objects and symbols with the supernatural power (Sapkota, 2013). People worship them as icons of Gods and Goddesses, thereby grown or protected with special care (Manandhar, 2012). Sacred plants have been conserved by the people on the basis of their category, habitat, need and availability (Poudel, 2009). Plants like *Azadirachta indica*, *Oscimum sanctum*, *Cocos nucifera*, *Saraca indica*, *Ficus benghalensis*, *Ficus religiosa*, *Aegel marmelos*, *Terminalia arjuna* are highly respected and are planted in the public places like temple or even in the private area. People belonging to different religions have different priorities of conservation and ultimately large number of species are conserved (Shrestha *et al.*, 2010). Ber (*Zizyphus jujuba*) and bel (seeds of *Elaeocarpus*) are considered dear to Lord Siva;

kadamba (*Anthocephalus cadamba*) to Lord Krishna; pipal (*Ficus religiosa*) and sala (*Shorea robusta*) to Lord Vishnu; ashoka (*Polyalthia longifolia*) to Kamdeva; *Cynadon dactylon* to Lord Ganpati; mango (*Mangifera indica*) to Lord Hanuman; silk cotton (*Bombax malabaricum*) to the goddess Laxmi; and sriphala or coconut (*Cocos nucifera*) to Varuna or the Lord of waters, and to many other gods and goddesses. Coconut is also used while performing all the Hindu rituals and offered in all kinds of pujas. Flowers, leaves and fruits of many plants have also been regarded as a sacred and beloved of Gods and Goddesses, and hence are used in various types of worships or pujas and Yagyas. Leaves of ashoka and banana are the most common materials for decorating places for sacred rituals and for festivals. The coconut or the fruiting branch of the supari (Areca nut palm) are also commonly used. Rice and seeds such as sesame are associated with many rites. When proper statues are lacking for *puja* to the *navgraha*, the nine planets of Hindu astrology, Brahmin priests may invoke each planet by using the specific seed, spice or dal that is ritually associated with it. For the performance of *havana*, or *homa*, the Vedic fire ceremony, the twigs of some plant species are recommended. Bamboo is associated with the Brahmin thread ceremony and for worship ancestors.

Chandan, sandalwood is among the elite and most renowned of sacred trees. The wood is rubbed on stone and paste is widely used for anointing the forehead as well as for the incense and in ayurvedic preparations. Mango is another very sacred tree in India whose leaves, wood as well as fruits are used in many

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rituals. To mark any auspicious occasion, string made from mango leaves is hung on the entrance. Mango leaves are kept in the pot with coconut during Kalash Sthapana. Blossoms of mango tree are offered to Goddess Saraswati on Basant Panchami. Every part of banana plant is used in performing one or the other rituals. Like welcoming gates are made by using trunk, leaves are used to distribute *prasad*, fruit is offered to Lord Vishnu and Goddess Lakshmi. Many festivals are associated with the significance of plants in India. Unfortunately, there is no written proof and information is available regarding the uses of those plants. Therefore, first priority must be given to study those plants and documented the traditional knowledge need to be popularized. Keeping this in view, the present study was conducted as the first ever attempt to record the socio-religious role of sacred plants from Ahmednagar District of Maharashtra.

### Study area

Ahmednagar district is the largest district in the state of Maharashtra. The total geographical area of the district is 17.02 lakh hectares, constituting 5.66% of the state's geographical area. The district has a glorious history. Being a drought prone area in the state of Maharashtra, the district gets an annual rainfall of over 500 mm. Ahmednagar district lies between 18.2 to 19.9 degree North latitude and 73.9 to 75.5 degree Eastern longitude. Topographically area of the district is divided in the plains and hills. Regional taxonomical studies are very significant for getting information about vegetation diversity. The hilly regions of the study area are a treasure of vegetation with diversity of life. This region covers basins of the Godavari, Sina, Pravara, Ghod and Mula rivers. These are considered as a home for threatened and endemic species that have immense ecological, commercial and medicinal values. Vegetation from the study area is semi arid and deciduous mainly with herbaceous species. The weather, in general, can be said to be hot and dry. The average day temperature ranges from 25<sup>0c</sup> to 38<sup>0c</sup>. Relative humidity is extremely low for major part of the year (between 35 to 51%) while it is highest (83%) during monsoon. There are number of historical temples, hills as well as sacred grooves which associated with various sacred plants.

### MATERIALS AND METHODS

The present study was carried out in Ahmednagar District of Maharashtra during 2010-2012 to find out some traditionally worshipping plants used in various religious activities. The information regarding traditionally worshipping plants were collected through consulting the local people through interviews, discussions and observations (Jain and Rao, 1977). Many remote areas were visited to interact the people and gathered information related to the local name and sacred significance of the plants. Several specimens of plants were collected. Most of the plants were collected fresh, photographs of collected plant species were also made, so as to enhance their identification. The plant species obtained from the survey were identified using keys and description given in The Flora of Presidency of Bombay (Cooke, 1958), Flora of Marathwada (Vol. I and Vol. II) by V.N. Naik (1998) and Flora of Maharashtra Dicotyledons (Vol. I) by Singh and Karthikeyan (2000), Flora of Maharashtra Dicotyledons (Vol. II) by Singh *et al.* (2001). Field and herbarium methods were carried out in the same manner as suggested by Jain and Rao (1967). As

regards the botanical explorations in Ahmednagar, several people have made notable contributions, such as Pradhan and Singh, 1999; Santapau, 1951; Santapau and Irani, 1962; Shirke, 1983; Hooker, 1872-1897; Aher *et al.*, 2004; Deshmukh, 2013; Mulay and Sharma, 2012; Auti *et al.*, 2004; Waman *et al.*, 2013; Mulay and Sharma, 2013; Aher, 2015 have recorded plants from Ahmednagar District in their publications.

### RESULTS AND DISCUSSION

A total number of 57 plant species under 54 genera belonging to 33 families of Angiosperms were reported from Ahmednagar District of Maharashtra, which are being used in different social and religious customs. The dominant families of sacred interest are Fabaceae (8 species), Poaceae (5 species), Amaranthaceae, Moraceae and Arecaceae (3 species each), Oleaceae, Asteraceae, Apocynaceae, Malvaceae, Solanaceae, Rutaceae and Cucurbitaceae (2 species each) and remaining twenty one families contribute one species. Details of the recorded 57 plant species in terms of their botanical name, vernacular name, family, habit, part used and purpose of their uses are given in Table 1. In Hindu tradition, it has been believed that different gods and goddesses have some specific character and they love different plants depending upon their colour, fragrance, etc. (Sarma and Devi, 2015). Sacred plants have been conserved by the people on the basis of their habit, need, category and availability (Poudel, 2009). Plants like *Ficus bengalensis*, *F. religiosa*, *Oscimum sanctum*, *Calotropis procera*, *Plumaria rubra*, *Hibiscus rosa-sinensis*, *Nyctanthus arbortristis*, *Nymphaea alba* are highly respected and planted in the public places like temple or even in the private area.

In Hindu marriage ceremony the brides and grooms are sanctify taking bath with turmeric (*Curcuma longa*). In the marriage ceremony it has been seen that bride and grooms take oath in front of Lord Agni. During the worship whole plant of dry *Desmostechnya bipinnata*, dry woods of *Mangifera indica* and *Prosopis cineraria* are used. Twigs of *Mangifera indica* plant with 5-7 leaves are kept in earthen pot with water and used for all worship. The leaves of *Aegel marmelos* are dedicated to Lord Shiva on the occasion of Mahashivratri and other religious occasion. Flowers of *Calotropis procera* are dedicated to Lord Shiva. Leaves of *Azadirachta indica* are used to keep away the evil spirits. The fruits of *Cocos nucifera* are offered to please Gods and Goddess on the occasion of many holy functions and festivals. *Oscimum sanctum* is worshipped and cultivated in the Hindu homes. It is believed that if Tulsi is kept on the head of dying man he gets heaven. Seeds of *Sesamum indicum* (Til) are mixed with water and used for bathing at the time of makarsankranti. *Musa* sp. is very important plant and all parts of the plant are widely used during all form of a Hindu worship. Each and every part of *Musa* sp. is important from worship point of view. The seeds of urid (*Vigna mungo*) are offered to Holi. The leaves of *Calotropis procera* are as patri in the worship of Ganpati, Haritalika etc. On every Saturday leaves are made into garland and offered to God Maruti (Hanuman). During present investigation it was observed that the religious activities boost up the mental health of the local people of Ahmednagar District. A number of sacred plants are found in every household in the study area and are used in religious activities as well as health care.

Table 1. List of plants used for worshipping of Gods and Goddesses in different socio-religious practices

S.No.	Botanical Name/ Vernacular Name	Family	Habit	Plant part used	Purpose
1	<i>Abelmoschus ficulneus</i> L. Bhendi	Malvaceae	Shrub	Fruit	Leaves are offered to Lord Shiva at the time of Mahashivratri
2	<i>Acacia catechu</i> Willd. Khayer	Fabaceae	Tree	Stem	Wood is used in the religious ceremonies at the time of the havans. It is believed to provide moksha
3	<i>Achyranthus aspera</i> L. Aghada	Amaranthaceae	Subshrub	Leaves	Leaves are used for Ganesh puja
4	<i>Aegel marmelos</i> (L.) Corr. Bel	Rutaceae	Tree	Leaves and fruits	Leaves and fruits are dedicated for the worshipping of Lord Shiva
5	<i>Amaranthus polygamus</i> L. Nevsaki	Amaranthaceae	Herb	Leaves	Used as vegetable at the time of pitrupaksha
6	<i>Amaranthus tricolor</i> L. Tambada Math	Amaranthaceae	Herb	Tender stem and leaves	The amaranth flower is one of the symbols of immortality and has been used as such symbol since the time of Ancient Greece
7	<i>Areca catechu</i> L. Supari	Areaceae	Tree	Fruit	The nut is used in many religious ceremonies and offered to Lord Vishnu in Satyanarayan Katha
8	<i>Azadirachta indica</i> L. Kadulimb	Meliaceae	Tree	Whole plant	Whole plant is worshipped for good health. Leaves are hang on the door of concerning family after returning the creation to avoid bad effect of soul
9	<i>Bambusa vulgaris</i> Schrad ex J.C. Wendl. Bamboo	Poaceae	Tree	Whole plant	The tree is sacred for its association with Lord Krishna, since his Bansuri is actually made of bamboo
10	<i>Bauhinia recemosa</i> Lamk Apta	Fabaceae	Tree	Leaves	Leaves are given as a gold during Dashehara festival
11	<i>Benincasa hispida</i> (Thunb.) Cogn. Kohla	Cucurbitaceae	Climber	Fruit	Fruits are hanging in the houses to keep away evil sprits
12	<i>Bombax ceiba</i> L. Cotton/Kapas	Bombacaceae	Shrub	Fruit	Offered to Lord Laxmi
13	<i>Burea monosperma</i> (Lam.) Taub. Palas	Fabaceae	Tree	Flowers	Flowers are offered to gods for blessings in various religious activities
14	<i>Calotropis procera</i> (Ait.) R.Br. Pandhari Rui	Asclepiadaceae	Shrub	Leaves	Leaves are offered to hanuman and Shani for blessings
15	<i>Cannabis sativa</i> L. Bhang	Cannabaceae	Tree	Whole plant	The tree is considered as auspicious as it brings wealth and prosperity
16	<i>Cassia auriculata</i> L. Tarwad	Fabaceae	Shrub	Flowers	Flowers are offered to Goddess during navaratra utsav
17	<i>Chrysanthemum morifolium</i> L. Shevanti	Asteraceae	Shrub	Flowers	Flowers are used for making garland, veni and gajara
18	<i>Cicer arietinum</i> L. Harbara	Fabaceae	Herb	Fruit	Fruits are eaten as a vegetable during Makar Sankranti
19	<i>Cocos nucifera</i> L. Nariyal	Areaceae	Tree	Leaves and Fruits	Fruits are used for all worship and rituals
20	<i>Colocasia esculenta</i> (L.) Schott. Alu	Araceae	Herb	Leaves	Used as vegetable during pitrupaksha
21	<i>Curcuma longa</i> L. Haladi	Zingiberaceae	Herb	Rhizome	Paste is applied on face and body of bride and grooms for getting blessing on the day of marriage and other rituals
22	<i>Cyamopsis tetragonoloba</i> (L.) Taub. Gawar	Fabaceae	Herb	Fruits	Used as vegetable during pitrupaksha
23	<i>Cynodon dactylon</i> L. Harali	Poaceae	Herb	Whole plant	Leaves are offered to Lord Ganesh who is said to remove all obstacles in life.
24	<i>Datura stramonium</i> L. Dhotra	Solanaceae	Shrub	Flower	Flowers and fruits are offered to please Lord Shiva
25	<i>Daucus carota</i> L. Gajar	Apiaceae	Herb	Tuberous root	Used as a vegetable during makar sankranti
26	<i>Desmostachya bipinnata</i> L. Kusha Grass	Poaceae	Herb	Whole plant	The plant is used in sacred ceremonies
27	<i>Eclipta alba</i> L. Maka	Asteraceae	Herb	Whole plant	The whole plant is used during pindan vidhi
28	<i>Ficus bengalensis</i> L. Wad	Moraceae	Tree	Whole plant	This is most sacred tree and women worship to it for the longevity of their husband
29	<i>Ficus glomerata</i> Roxb. Umbar	Moraceae	Tree	Whole plant	It is believed that the tree is associated with guru Dattatraya
30	<i>Ficus religiosa</i> L. Pimpal	Moraceae	Tree	Whole plant	It is believed that sitting under this tree one will get enlightenment
31	<i>Hibiscus rosa-sinensis</i> L. Jaswand	Malvaceae	Shrub	Flowers	Flowers are offered to Lord Ganesha
32	<i>Jasminum sambac</i> L. Mogra	Oleaceae	Shrub	Flowers	Flowers are offered to Lord Shiva
33	<i>Limonia acidissima</i> L. Kavath	Rutaceae	Tree	Leaves	It has spiritual and ritual significance. Leaves are offered to Lord Shiva
34	<i>Mangifera indica</i> L. Amba/Mango	Anacardiaceae	Tree	Leaves, stem and Fruits	The leaves are used for making string for doors on all auspicious occasions to attract positive power of nature. Fruits are offered to Lord Hanuman
35	<i>Memordica charantia</i> L. Karle	Cucurbitaceae	Climber	Fruits	Used as vegetable during pitrupaksh
36	<i>Mimusops elengi</i> L. Bakul	Sapotaceae	Tree	Flower	Flowers are offered during the worship of Lord Krishna
37	<i>Musa paradisiaca</i> L. Keli/Banana	Musaceae	Herb	Whole plant	Its stem, leaves, fruits are used in festival and ceremonies and placed at the entrance of their houses on special occasions, especially at marriages and Satyanaryana puja
38	<i>Nelumbo nucifera</i> Gaertn. Kamal	Nelumbonaceae		Leaf and flower	It is believed that Goddess Laxmi resides in the flower hence, it is offered to him
39	<i>Neolamarckia cadamba</i> (Roxb.) Bosser Kadamb	Rubiaceae	Tree	Whole plant	Lord Krishna used to play his flute under the Kadamb tree. The tree is favourite among many Gods and Goddesses
40	<i>Nerium oleander</i> L. Kanher	Apocynaceae	Shrub	Flowers	The flower is offered to Lord Shiva and Vishnu
41	<i>Nyctanthes arbor-tristis</i> L. Parijatak	Oleaceae	Tree	Flowers	The flowers are offered to Goddess Lakshmi
42	<i>Ocimum sanctum</i> L. Tulasi	Lamiaceae	Herb	Whole plant	This is the most sacred plant found in every household. Women worship it by lightening a lamp every day. It is offered to Lord Vishnu
43	<i>Oryza sativa</i> L. Rice/Bhat	Poaceae	Herb	Seeds	Rice is used to put mark on the forehead along with kumkum at many social and religious occasion. Rice grain are integral part of weddings
44	<i>Phoenix sylvestris</i> Roxb. Kharik	Areaceae	Habit	Fruit	Fruits are used in all religious vocations in puja
45	<i>Piper betle</i> L. Nagwel	Piperaceae	Climber	Leaf	Wedding ceremony and all worship
46	<i>Plumeria rubra</i> L. Lal chapha	Apocynaceae	Tree	Flower	All worship
47	<i>Ricinus communis</i> L. Erand	Euphorbiaceae	Shrub	Twig	Tender stem and leaves are used on the occasion of Holi
48	<i>Rosa indica</i> L. Gulab/Rose	Rosaceae	Shrub	Flowers	The rose is a sign of love and peace and used as a gift, also for welcome parties, wedding ceremonies, and many religious events
49	<i>Saccharum officinarum</i> L. Oos	Poaceae	Herb	Stem	Stem and leaves are used on the occasion of holi. Small pieces of sugar cane are used along with grains during makar sankranti
50	<i>Santalum album</i> L. Chandan	Santalaceae	Tree	Stem	Sandalwood paste is applied on forehead or chest
51	<i>Sapindus emarginatus</i> Vahl. Symb. Ritha	Sapindaceae	Tree	Fruit	Under the tree Guru Nanak Dev sat during his Sojourn in the Himalayas
52	<i>Saraca indica</i> L. Ashoka	Annonaceae	Tree	Whole plant	It is said that Sita took shelter under this plant
53	<i>Sesamum indicum</i> L. Til	Pedaliaceae	Herb	Seeds	Til mixed with water are used for bathing at the time of makar sankranti. It is also used in havan
54	<i>Solanum melanogela</i> L. Brinjal	Solanaceae	Herb	Fruit	Used as vegetable during Makar Sankranti
55	<i>Trigonella foenum-graceum</i> L. Methi	Fabaceae	Herb	Leaves	Used as vegetable during pitrupaksh
56	<i>Vigna mungo</i> L. Urid	Fabaceae	Herb	Seeds	Seeds are offered to Agni Devata at the time of holi
57	<i>Zizyphus jujuba</i> Lamk. Ber	Rhamnaceae	Tree	Fruits	Fruits are used in laxmipoojan during diwali

## Conclusion

The study on religious plants used in various traditional worshipping exhibits the important role of plants in human life. It is believed that some plants are represented by gods and goddesses. Therefore people are worshipping plants and offer their flowers, leaves, fruits, wood, seeds etc to gods in various religious ceremonies for getting blessings. The local people of the study area are possessing sound knowledge of these plants. Therefore it is need of the hour to conserve the traditional knowledge and also to pass on this to our present and future generation effectively. It will inspire to conserve these plant species wherever possible.

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