

# Study on the use of Plants and Plant parts in Durga Puja for Worshipping of the Goddess Durga in Odisha, India

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**Abstract-** Biodiversity is a vital endowment of nature that gives every fundamental necessity to human presence. Plants have assumed a critical job in human development. Hinduism has been known as the oldest religion on the planet and prevailing in Indian subcontinent. Durga puja is the vast festival of Hindus, one of the prime festivals of Odisha and one of the most popular festivals of India, which is celebrated by worshipping Hindu goddess Durga. It is also known the Sharadiya Durga puja, Dussehra, Durgotsav etc. Traditionally Hindu people use a large number of plant species and plant parts for worshipping different gods and goddess. It has been observed that large number of plants is being used for worshipping of goddess Durga. The present paper analyzed different plant species and plant parts are used in Durga puja for worshipping of the goddess Durga in Odisha, India. The data about importance of plant species, uses of plants and plant parts, use in worship of goddess Durga were collected through the interaction with Priests and some knowledgeable old persons who are involved in Sharadiya Durga puja practices. The plant species with their botanical name, local name, family, habit, plant part use and form of use are recorded. A total of 102 species under 86 genera and 46 families were recorded during the study. Plant parts such as leaves like *Musa paradisiaca* L., *Aegle marmelos* (L.) Correa, *Sesbania sesban* (L.) Merr., *Piper betle* L. etc. are used for worshipping of goddess Durga ; flowers like *Clitoria ternatea* L., *Hibiscus rosa-sinensis* L., *Nelumbo nucifera* Gaertn. etc. are used in the form of garland; bark of plants like *Ficus religiosa* L., *Ficus benghalensis* L., *Terminalia arjuna* (Roxb.) Wight & Arn. etc. are used in the form of paste; twig of plants like *Aegle marmelos* (L.) Correa, *Mangifera indica* L. etc. are used for worshipping of goddess Durga. Prasad is one of the most important elements of worship which is prepared with different varieties of fruits and cereals. Fruits like *Malus pumila* Mill., *Cocos nucifera* L., *Musa paradisiaca* L. etc. and cereal grains like *Oryza sativa* L., *Vigna radiate* (L.) R. Wilczek, *Vigna mungo* (L.) Hepper etc. are some important species utilized for the collection of Prasad. Truth be told, the Prasad are rich in supplements and considered exceptionally healthy.

**Keywords:** Aegle marmelos, Biodiversity, Durga puja, Hinduism, Worshipping

## 1. INTRODUCTION

The Hindu is one of the largest and oldest religions in the globe. The importance of plants for worshipping god and goddesses has been described in different Vedas. Traditionally Hindu people use a large number of plant species and plant parts for worshipping different gods and goddesses. This information has been transmitted from generation to generation. The Hindu religious populaces are very much concern about the use of plants for each and every occasions and festivals. The traditional festivals and occasions ceremony literatures regarding Hindu beliefs and worship is insignificant and proper scientific study in this area is very poor [1].

Durga puja is the great festival of Hindus, which celebrated by worshipping Hindu goddess Durga. It is also known the Sharadiya Durga puja, Dussehra, Durga puja, Durgotsav etc. Durga is known by the name Shakti, is the goddess of strength and holds various weapons in her ten hands [2]. Goddess Durga is among the sacred goddess of Odisha. Durga puja is one of the prime festivals of Odisha and is one of the most popular festivals of India [3]. It is the famous festival in the most places such as Odisha, West Bengal, Assam, Tripura, Jharkhand and Manipur. It celebrates at villages, temples as well as cities [2]. People in Odisha celebrate it on a large scale for bringing the happiness and peace in the mind [3]. Durga puja celebrate in the month of Ashwin i.e. October for ten days, although there is more enthusiasm during the last four days. The last day of Durga puja is called Vijaya Dashami, considered to be an auspicious day which is celebrated a victory of Rama, who have killed to the Ravana. On this day, people worship their tools, instruments and other objects because it helps to achieve the goals and pray for bringing the happiness in the life [2]. The Durga puja is celebrated in two different ways in Odisha : in Shakti peethas (temple of goddess) the Durga puja is observed with proper rituals for 16 days, starting from Krishna paksha Ashtami to Shukla paksha Navami of the Hindu Oriya Calendar known as Shodasa dinatmak Upachara and in pandals, the idols of Durga are installed and decorated beautifully and celebrate Durga puja from Mahashashthi to Vijaya Dashami [4]. Various types of plants and plant parts are used in Durga puja for worshipping of the goddess Durga in Odisha. Thus the present paper attempts to emphasis on the use of plants and plant parts in Durga puja for worshipping of the goddess Durga in Odisha, India.

## 2. MATERIALS AND METHODS

Study on documentation of plant and plant parts are used in Durga puja for worshipping of goddess Durga in different village areas, cities, pandals of Odisha, was carried out during the time of Durga puja (Fig.1). The data about importance of plant species, uses of plants and plant parts, use in Sharadiya Durga puja for worshipping of goddess Data were collected through interaction with the specialized persons like priests, who worship goddess Durga in temple and pandals and some knowledgeable old persons who are involved in Sharadiya Durga puja practices. The botanical names of the plants are documented and identified with the help of "The Flora of Orissa" [5] as well as with the help of Department of Botany, Centurion University of Technology and Management, Odisha, India. Finally, the plant specimens are deposited in the Department of Botany, Centurion University of Technology and Management, Odisha.

## 3. RESULTS AND DISCUSSION

A total numbers of 102 plant species under 86 genera and 46 families were reported from the present study. In Hindu tradition, it has been believed that different gods and goddess have some specific character and they love different plant depending upon their colour, fragrant etc. [6]. Flower of plants like *Hibiscus rosa-sinensis* and *Clitoria ternatea* are the main, important and favorite flowers of goddess Durga. It was recorded that during Durga puja, the first day there is a tradition to worship the *Aegle marmelos* tree and it has been believed that goddess Durga comes from this plant. *Desmostachya bipinnata* (Kusha) is commonly used for making finger ring during the worship of goddess Durga. Twig of *Mangifera indica* plant with 5 or 7 leaves are kept in earthen pot with water and used for worshipping. *Musa* sp. is very important plant and all parts of the plant are widely used during the worship of goddess Durga. Each and every part of *Musa paradisiaca* is important from worship point of view. *Benincasa hispida* is worshipped called as "Boli" in Durga puja. *Piper betle* and *Areca catechu* are two most important component used for worshipping of goddess Durga. Details of the recorded 102 plant species in terms of their botanical name, local name, family, habit, plant part use and form of use are given in Table 1.

Table 1: List of Plants and Plant parts used in Sharadiya Durga puja for worshipping of the Goddess Durga in Odisha, India

Sl. No.	Botanical Name	Local Name	Family	Habit	Part use	Form of use
1.	<i>Crossandra infundibuliformis</i> (L.) Nees	Itimola	Acanthaceae	Shrub	Flower	Use for decoration in worship of goddess Durga
2.	<i>Amaranthus cruentus</i> L.	Rajgiri	Amaranthaceae	Herb	Seed	Use in the form of powder
3.	<i>Mangifera indica</i> L.	Amba	Anacardiaceae	Tree	Twig	Twig use for worshipping of goddess Durga
4.	<i>Anacardium occidentale</i> L.	Lanka amba	Anacardiaceae	Tree	Seed	Use in the form of dry cashew nut
5.	<i>Annona squamosa</i> L.	Ata	Annonaceae	Tree	Fruit	Use in the form of slices
6.	<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. &Schult.	Tagar	Apocynaceae	Shrub	Flower	Use in the form of garland
7.	<i>Cascabela thevetia</i> (L.) Lippold	Kaniara	Apocynaceae	Shrub	Flower	Use for worshipping of Goddess Durga
8.	<i>Allamanda cathartica</i> L.	Lata kaniar	Apocynaceae	Vine or Shrubby climber	Flower	Use for worshipping of Goddess Durga
9.	<i>Nerium oleander</i> L.	Karvira	Apocynaceae	Shrub/ small tree	Flower	Use in the form of garland for decoration
10.	<i>Colocasia esculenta</i> (L.) Schott	Saru	Araceae	Herb	Leaf	Use for worshipping of Goddess Durga
11.	<i>Cocos nucifera</i> L.	Nadia	Arecaceae	Tree	Fruit, Fibre, Water	Coconut with stalk, fibre and water of coconut use
12.	<i>Areca catechu</i> L.	Gua	Arecaceae	Tree	Fruit	Use in the dry form of fruit for worshipping of Goddess Durga
13.	<i>Calamus guruba</i> Buch.-Ham. ex Mart.	Beta	Arecaceae	Shrub	Stem, Root	Use a short stem and use root in the form of paste
14.	<i>Phoenix sylvestris</i> (L.) Roxb.	Khajuri	Arecaceae	Tree	Branch	Use for decoration
15.	<i>Bismarckia nobilis</i> Hildebr. & H. Wendl.	Tala gachha	Arecaceae	Tree	Seed	Use in the form of dry seed for worshipping of Goddess Durga
16.	<i>Hemidesmus indicus</i> (L.) R.Br. ex Schult.	Anantamula	Asclepiadaceae	Twiner	Root	Use in powder form of root
17.	<i>Polianthes tuberosa</i> L.	Rajanigandha	Asparagaceae	Herb	Flower	Use in the form of garland
18.	<i>Tagetes erecta</i> L.	Gendu	Asteraceae	Herb	Flower	Use in the form of garland
19.	<i>Tagetes patula</i> L.	Makamali	Asteraceae	Herb	Flower	Use in the form of garland
20.	<i>Dahlia pinnata</i> Cav.	Dahlia	Asteraceae	Herb	Flower	Use for worshipping of Goddess Durga

21.	<i>Gerbera jamesonii</i> Bolus ex Hooker f.	Gerbera	Asteraceae	Herb	Flower	Use for decoration
22.	<i>Impatiens balsamina</i> L.	Haragaura	Balsaminaceae	Herb	Flower	Use for worshipping of Goddess Durga
23.	<i>Berberis aristata</i> DC.	Daruhaldi	Berberidaceae	Shrub	Leaf	Use for worshipping of Goddess Durga
24.	<i>Sinapis alba</i> L.	Shweta sorisa	Brassicaceae	Herb	Seed	Use for worshipping of Goddess Durga
25.	<i>Terminalia arjuna</i> (Roxb.) Wight & Arn.	Arjun	Combretaceae	Tree	Bark	Use bark in the form of paste
26.	<i>Terminalia bellirica</i> (Gaertn.) Roxb.	Bahada	Combretaceae	Tree	Fruit	Use in the form of dry fruit
27.	<i>Terminalia chebula</i> Retz.	Harida	Combretaceae	Tree	Fruit	Use dry fruit and also use in the form of powder
28.	<i>Combretum indicum</i> (L.) DeFilipps	Madhumalati	Combretaceae	Climbing Shrub	Flower	Use for worshipping of Goddess Durga
29.	<i>Benincasa hispida</i> (Thunb.) Cogn.	Panikakharu	Cucurbitaceae	Climbing herb	Fruit	Use for worshipping of Goddess Durga
30.	<i>Cucumis sativus</i> L.	Kakudi	Cucurbitaceae	Creeping Vine	Fruit	Use in the form of circular slices
31.	<i>Cyperus rotundus</i> L.	Mutha	Cyperaceae	Herb	Tuber	Use in the paste form of tuber
32.	<i>Shorea robusta</i> C. F. Gaertn.	sala	Dipterocarpaceae	Tree	Leaf, Wax	Use dry leaves and wax in the form of powder(Jhuna)
33.	<i>Clitoria ternatea</i> L.	Aparajita	Fabaceae	Climber	Flower	Use in the form of garland for worshipping of Goddess Durga
34.	<i>Vigna radiate</i> (L.) R.Wilczek	Muga	Fabaceae	Herb	Seed	Use for offering food
35.	<i>Pterocarpus santalinus</i> L.f.	Raktachandan	Fabaceae	Tree	Stem	Use in the form of sandalwood paste
36.	<i>Vigna mungo</i> (L.) Hepper	Biri	Fabaceae	Herb	Seed	Use for offering food to Goddess Durga
37.	<i>Saraca asoca</i> (Roxb.) Willd.	Ashok	Fabaceae	Tree	Flower, Leaf	Use for worshipping of Goddess Durga
38.	<i>Sesbania sesban</i> (L.) Merr.	Jayanti	Fabaceae	Tree	Leaf	Use for worshipping of Goddess Durga
39.	<i>Cassia fistula</i> L.	Sunari	Fabaceae	Tree	Leaf	Use for worshipping of Goddess Durga
40.	<i>Caesalpinia pulcherrima</i> (L.) Sw.	Tarra	Fabaceae	Shrub	Flower	Use for worshipping of Goddess Durga
41.	<i>Arachis hypogaea</i> L.	Chinabadam	Fabaceae	Herb	Seed	Use in dry form of seed
42.	<i>Aeschynomene aspera</i> L.	Sola	Fabaceae	Shrub	Stem	Small pieces of dry stem use in the form of garland for decoration
43.	<i>Crocus sativus</i> L.	Keshara	Iridaceae	Herb	Flower(Red stigma)	Use in the dry form of red stigma
44.	<i>Ocimum basilicum</i> L.	Kapurkanti	Lamiaceae	Herb	Leaf	Use for worshipping of Goddess Durga
45.	<i>Punica granatum</i> L.	Dalimba	Lythraceae	Shrub	Fruit, Leaf	Use fruit for offering food and leaf use for

						worshipping of Goddess Durga
46.	<i>Michelia champaca</i> (L.) Baill. ex Pierre	Swarna Champa	Magnoliaceae	Tree	Flower	Use for worshipping of Goddess Durga
47.	<i>Hibiscus rosa-sinensis</i> L.	Mandar	Malvaceae	Shrub	Flower	Use in the form of garland
48.	<i>Bombax cebia</i> L.	Simili	Malvaceae	Tree	Bark	Use bark in the form of paste
49.	<i>Sida acuta</i> Burm. f.	Bala	Malvaceae	Undershrub	Bark	Use bark in the form of paste
50.	<i>Corchorus capsularis</i> L.	Jhota	Malvaceae	Herb	Fibre	Use for worshipping of Goddess Durga
51.	<i>Artocarpus heterophyllus</i> Lam.	Panas	Moraceae	Tree	Leaf	Bhog likes fruits keep in leaves use for offering food
52.	<i>Ficus religiosa</i> L.	Osta	Moraceae	Tree	Bark	Use bark in the form of paste
53.	<i>Ficus benghalensis</i> L.	Bara	Moraceae	Tree	Early shoot apex and Bark	Use early shoot apex and bark in the form of paste
54.	<i>Ficus racemosa</i> L.	Dimri	Moraceae	Tree	Twig	Use twig for worshipping of Goddess Durga
55.	<i>Musa paradisiaca</i> L.	Kadali	Musaceae	Shrub	Whole plant	Whole plant, leaf and fruit use
56.	<i>Myristica fragrans</i> Houtt.	Jaifal	Myristicaceae	Tree	Fruit	Use fruit and also use in the form of powder
57.	<i>Psidium guajava</i> L.	Pijuli	Myrtaceae	Shrub	Fruit	Use in the form of Slices
58.	<i>Syzygium aromaticum</i> (L.) Merrill & Perry	Labanga	Myrtaceae	Tree	Flower bud	Use in the dry form of flower bud
59.	<i>Syzygium cumini</i> (L.) Skeels.	Jamu	Myrtaceae	Tree	Twig	Use twig for worshipping of Goddess Durga
60.	<i>Nelumbo nucifera</i> Gaertn.	Padma	Nelumbonaceae	Herb	Flower	Use in the form of garland
61.	<i>Nymphaea pubescens</i> Willd.	Dhalakain	Nymphaeaceae	Herb	Flower	Use in the form of garland
62.	<i>Nymphaea pubescens</i> Willd.	Nalikain	Nymphaeaceae	Herb	Flower	Use in the form of garland
63.	<i>Nymphaea nouchali</i> Burm.f.	Nilakain	Nymphaeaceae	Herb	Flower	Use in the form of garland
64.	<i>Mirabilis jalapa</i> L.	Rangini	Nyctaginaceae	Herb	Flower	Use in the form of garland
65.	<i>Jasminum sambac</i> (L.) Aiton	Malli	Oleaceae	Shrub	Flower	Use for worshipping of Goddess Durga
66.	<i>Jasminum auriculatum</i> Vahl	Jui	Oleaceae	Shrub	Flower	Use for worshipping of Goddess Durga
67.	<i>Jasminum grandiflorum</i> L.	Jai	Oleaceae	Shrub	Flower	Use for worshipping of Goddess Durga
68.	<i>Nyctanthes arbor-tristis</i> L.	Gangasiuli	Oleaceae	Shrub	Flower	Use for worshipping of Goddess Durga
69.	<i>Sesamum indicum</i> L.	Raashi	Pedaliaceae	Herb	Seed	Use for worshipping of Goddess Durga
70.	<i>Phyllanthus emblica</i> L.	Amla	Phyllanthaceae	Tree	Fruit	Use for worshipping

						of Goddess Durga
71.	<i>Cedrus deodara</i> (Roxb.) G.Don	Debadaru	Pinaceae	Tree	Twig	Use twig for worshipping of Goddess Durga
72.	<i>Piper betle</i> L.	Paan	Piperaceae	Climber	Leaf	Leaf use for worshipping of Goddess Durga
73.	<i>Piper nigrum</i> L.	Golamaricha	Piperaceae	Vine	Fruit	Use in the dry form of fruit
74.	<i>Piper longum</i> L.	Pippali	Piperaceae	Climber	Fruit	Use fruit in the powder form
75.	<i>Cynodon dactylon</i> (L.) Pers.	Duba	Poaceae	Grass	Whole plant without root	Use in the form of small pieces of whole plant without root
76.	<i>Saccharum officinarum</i> L.	Akhu	Poaceae	Shrub	Whole plant, Stem	Whole plant use and small pieces of stem use
77.	<i>Oryza sativa</i> L.	Dhan	Poaceae	Grass	Seed, Whole plant	Seed in the form of grains i.e rice and whole plant use for worshipping of Goddess Durga
78.	<i>Desmostachya bipinnata</i> (L.) Stapf	Kusha	Poaceae	Herb	Stem	Use in dry form for making finger ring
79.	<i>Bambusa vulgaris</i> Schrad. ex J.C. Wendl.	Baunsa	Poaceae	Grass	Twig	Use twig for worshipping of Goddess Durga
80.	<i>Triticum aestivum</i> L.	Gaham	Poaceae	Grass	Seed	Use for offering food to goddess Durga
81.	<i>Hordeum vulgare</i> L.	Barley	Poaceae	Grass	Seed	Use for worshipping of Goddess Durga
82.	<i>Pennisetum glaucum</i> (L.) R.Br.	Bajara	Poaceae	Grass	Seed (Grain)	Use for offering food
83.	<i>Vetiveria zizanioides</i> (L.) Nash	Bena	Poaceae	Herb	Root	Use in the form of paste of root
84.	<i>Oryza</i> spp.	Suan Dhan	Poaceae	Grass	Leaf	Use for worshipping of Goddess Durga
85.	<i>Saccharum spontaneum</i> L.	Kasatandi	Poaceae	Grass	Flower	Use for worshipping of Goddess Durga
86.	<i>Fagopyrum esculentum</i> Moench	Kutu (Buckwheat)	Polygonaceae	Herb	Seed	Use for worshipping of Goddess Durga
87.	<i>Ziziphus jujuba</i> Mill.	Barakoli	Rhamnaceae	Tree	Leaf	Use for worshipping of Goddess Durga
88.	<i>Malus pumila</i> Mill.	Seo	Rosaceae	Tree	Fruit	Use in the form of slices for offering food
89.	<i>Rosa indica</i> L.	Golap	Rosaceae	Shrub	Flower	Use for worshipping of Goddess Durga
90.	<i>Pyrus communis</i> L.	Naspati	Rosaceae	Tree	Fruit	Use in the form of slices
91.	<i>Prunus dulcis</i> (Mill.) D. A. Webb	Badam	Rosaceae	Tree	Seed	Use in dry form of seed
92.	<i>Ixora coccinea</i> L.	Ramani phula	Rubiaceae	Shrub	Flower	Use for worshipping of Goddess Durga
93.	<i>Aegle marmelos</i> (L.) Corrêa	Bel	Rutaceae	Tree	Leaf, Twig, Fruit	Leaves use in the form of garland, twig



						and fruit use
94.	<i>Citrus sinensis</i> (L.) Osbeck (Pro. Sp.)	Kamala	Rutaceae	Tree	Fruit	Use in the form of slices
95.	<i>Citrus maxima</i> Merr.	Batapi	Rutaceae	Tree	Fruit	Use for worshipping of Goddess Durga
96.	<i>Santalum album</i> L.	Shweta Chandan	Santalaceae	Tree	Stem	Stem in the form of dry wood pieces use for homa (havan)
97.	<i>Schleichera oleosa</i> (Lour.) Merr.	Kusum	Sapindaceae	Tree	Flower	Use for worshipping of Goddess Durga
98.	<i>Mimusops elengi</i> L.	Bakul	Sapotaceae	Tree	Bark	Use in the paste form of bark
99.	<i>Vitis vinifera</i> L.	Angura	Vitaceae	Climber	Fruit	Use for worshipping of Goddess Durga
100.	<i>Curcuma longa</i> L.	Haladi	Zingiberaceae	Herb	Rhizome	Use in the form of powder
101.	<i>Elettaria cardamomum</i> (L.) Maton	Gujurati	Zingiberaceae	Herb	Fruit	Use in the dry form of fruit
102.	<i>Zingiber officinale</i> Roscoe	Ada	zingiberaceae	Herb	Rhizome	Use in the form of small pieces

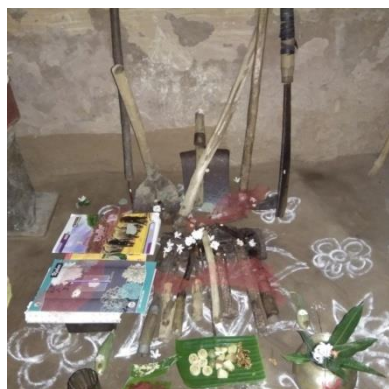




Fig. 1. Data collection through the survey of different temples of Odisha and interaction with Priests.

#### 4. CONCLUSION

The study on religious plants and plant parts used in Durga puja for worshipping goddess Durga exhibits the important role of plants in human life. The present study helps to understand how Hindu indigenous community of Odisha is contributing towards the conservation of plants and forest in general of their own interest to safeguard their inherent socio-cultural and religious activities. Such movement of monitoring and utilizing plant species for the sake of worshipping and socio-social convictions uncovers a solid immensity in the present worry of biodiversity preservation.

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