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Sacred Plants with Medicinal Uses

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ABSTRACT

India is a country of farmers and festivals. On every occasion there is a festival (with various names in different parts of country) with rituals. Many God and Goddess have been worshipped here. Whole plant or plant parts such as twigs, leaves, bark, buds, flowers, fruit, seeds etc have been utilized by peoples during worshipping. This report discussed about eight plant species named as *Ficus religiosa, Prosopis cineraria, Emblica officinalis, Mangifera indica, Curcuma longa, Oryza sativa, Hordeum vulgare* and *Triticum aestivum* and its parts utilized in Aurangabad district in religious rituals and ceremonies. These plants also have medicinal values, used for treatment of various diseases.

KEYWORDS: Plants, Rituals, Medicinal, Diseases.

INTRODUCTION

Plants fulfill the basic necessities of human life i.e. Roti, Kapadaaur Makan (Food, Cloth and Shelter) from ancient period. Peoples utilized various plants or its parts in different ways for keeping himself fit and fine. Purposes of utilization of plants or its parts are obtaining nutrients, vitamins, fibres, medicines etc. for healthy life in low cost with least or no side effects.

For psychological satisfaction, good health and wealth traditionally man pray the various god and goddess in daily life. In religious rituals like Yagya, Puja, Vrat etc. man utilized various plants and its parts for protection, perfection and betterment of life (Dixit 1997, Ghate 1998, Pandey 1989, Schultes and Hoffman 1979, Sinha 1979 and Dhiman 2003). Present paper deals with the use of eight plants and plant parts utilized to worship the god and goddess by peoples of Aurangabad (Bihar).

MATERIALS AND METHODS

Regular survey of different regions of Aurangabad of Bihar like Deo, Madanpur, Amba, Daudnagar, Haspura, Goh, Rafiganj, Obra, Barun, Nabinagar etc. has been conducted for recording the plant and plants parts utilized in worshipping god and goddess on different occasions. Local peoples, priest, saint, sadhus, shopkeepers have been contacted during the survey. Author also visited the temples and recorded the utilized plant parts in form of twigs, leaves, flower, bark, fruit etc. For knowledge about the medicinal uses of these plants and plant parts Vaidya, Ojha, Guni, herbal shopkeepers were contacted. Various published literature are also concerned.

Enumeration

Data of sacred plants are arranged in following sequences. Botanical name, family, vernacular name, availability status, characteristics, medicinal uses and parts utilized for worship.

RESULT AND DISCUSSION

This report includes about the eight most important plants species used in worship and have much medicinal properties. According to Mahrishi Charak there is no plant without medicinal values same is the belief that if we use any plant for performing Puja, it has the potential to improve the health and piece.

1. *Ficus religiosa* L (Moraceae, Pipal)

Wild / planted, large, perennial tree, Dicot, tap root, erect, branched, simple petiolated leaf with entire margin and acute leaf tip, reticulate venation, hypostomatic and stomata – paracytic and anomocytic. Inflorescence: Hypanthodium.

Chemical present in stem bark is phenols, flavonoids, tannins, steroids, alkaloids, Beta-sitosteryl- D- glucoside, vitamin K, Lanosterol, n- octacosanol, methyl oleanolate. stigmasterol, lupen-3-one (Sheetal *et al.,* 2008).

In root bark chemicals present are Beta-sitosteryl-D-glucoside (showed hypoglycemic effect in fasting).

Fruit contain protein having the essential amino acids, phenylalanine and isoleucine (Oliver, 1977).

Plant showed antiulcer, antibacterial (bark) antdiabetic, antidiarrhoeal properties used in treatment of skin diseases (leaves) and gonorrhea. It is useful in colic, asthma, constipation and whooping cough (Kumari, 2016). Leaves are antivenum. It helps in regulating the menstrual cycle (Kalpana, 2009, Chopra *et al.,* 1958). It also used for treatment of cancer, inflammation and infectious diseases (Uddin *et al.,* 2009). Tender branches used as tooth brush in high fever. Fruits used as laxatives (Shah, 1982). Latex used as tonic. Fruit powder has been utilized to treat asthma (Singh *et al.,* 2002, Ananda and Kunjani 2000). Fruits are purgative and used in heart diseases (Dhiman, 2003). Dried leaf powder is mixed with water and taken orally to get relief from body pain (Kumari, 2016). Bark powder is applied to wounds (Joshi *et al*., 2003).

Whole plant worshipped during Vishnu and Pitrapuja. Women worship the plant on Saturday and Shomi Amawasya.

2. *Prosopis cineraria* (L.) Druce (Mimosaceae, Shammi)

Wild / planted tree with 3-5 m height. Bipinnate compound leaves with 7-14 leaflets. Branches are thorned. Small, creamy, yellow coloured flowers and pod fruit. It shows tolerance of highly saline and alkaline condition and act as indicator of a deep water table, Bark of roots and stem are used in dysentery / diarrhea (Joshi *et al*., 2003). Extract from unripe pod, ameliorate artificially-induced damage to testes in an animal model (Ramalinganam *et al*., 2020).

It is used for worshipping Dusshera (Goddess Durga) festival (Edward 1932). Women worship whole plant on Saturday. Leaf utilized to worship shivling (Shankarji). Wood utilized in hawan. Leaf also utilized in Ganesha Puja.

3. *Emblica officinalis* Gaertn (Phyllanthaceae, Amla)

Wild / planted deciduous tree. Pinnate compound leaves. Flowers are unisexual but both types of flowers i.e. male and female flowers borne on same tree. Colour of flowers are pale green and borne in clusters.

All parts of the plant i.e. Root, leaf, bark, flowers, fruits and seeds are used in different herbal preparations.

Fruit is astringent (Kashya) and sour in taste with sweet, pungent and bitter secondary tastes, have light and dry qualities. It's post digestive effect is sweet and energy is cooling, so specially utilized in pitta (Ayurveda). It balancesvata (due to sour taste) and kapha (due to astringent taste and drying action). It may be used as a rejuvenative rasayana to promote longevity. It enhance digestion, purify blood, treat constipation, alleviate asthma, reduced fever and cough, strengthen heart, stimulate hair growth, enliven the body and increases intellect. It is beneficial for the eyes. Dry fruits have been used to treat diarrhoea and dysentery. Seeds are beneficial in asthma. In Ayurvedic polyhedral formulations, amla is a common constituent. In Chawanprash, it is the primary ingredient. Liquor from fruits is useful in heart troubles, indigestion, jaundice and anemia (Kumari, 2016). The fruit are chief source of vitamin C. It has dietary and culinary uses. It is used in anemia, jaundice, hyperacidity, urinal anomalies, diarrhea, eye inflammation, cough, leucorrhea and liver complaints. It possesses antibacterial, antifungal, antiatherosclerotic, antidiarrheal, antidiabetic, antiviral, antihypercholesterolemia, antioxidant, antimutagenic, antiulcerogenic, antianemia, antiinflammatory, antipyretic, antitussive, antiatherogenic characteristics.

It is hypolipidemic, analgesic, adaptogenic, immunomodulatory, gastroprotective, hepatoprotective, nephroprotective, neuroprotective having free radical scavenging, wound healing and snake venom neutralizing properties (Baliga and Rao, 2019.)

Whole plant worshiped in Akshaya Navami. Fruits are a part of sup during Ardhya of sun in Chhath Puja.

4. *Mangifera indica* L. (Anacardiaceae, Aam, Mango)

Wild / planted perennial, branched tree with tap root system. Leaves are simple with entire margin and reticulate venation. Flowering (mojar) takes place at the end of winter and beginning of spring. Male, female and neutral flowers borne on same tree. It is the national tree of Bangladesh and national fruit of India, Pakistan and Philippines. Fruit is greenish yellow coloured irregular drupe have egg shaped, round, oval, heart or kidney shaped structure with 8-12 cm length. It's interior flesh is bright orange and soft with a large, flat pit in the middle for location of seed. Common popular varieties are Dashehari, Neelam, Alphonso, Kathamitha, Amrapali, Fazli, Anderson, Duncan, Mallika, Maldah, Biju, Dudhiya, Sukul, Bombaiya, Chausa, Pewandia etc. Raw mangoes used in pickles and chutneys.

A pharmacologically active hydroxylated Xanthone C-glycoside named as Mangiferin is extracted from the young leaves (172g / kg), bark (107g / kg) and old leaves) 94g / kg) of mango. (Barreto *et al.,* 2008). Urushiols, an allergenic compound are present in fruit peel which can trigger contact dermatitis.

Ripe fruits are tasty, astringent, diuretic and laxative utilizes in hemorrhage of lungs, intestine and uterus, Seed powder utilized in diabetes.

Leaves used in all religious ceremonies. It is a part of Kalash on which dakkhan, deep, Akshat etc keep. It is also used as pallave in all Pujas. Leaves with twig utilized to prepare toran har during festivals and other functions. Dried twigs used in hawan for sacred fire. Unripe fruit has been eaten with sattu during shattuani festival. Fruit uses in marriage ceremonies as a number of at least five types of fruits. Wood utilized to prepare prasad during Khai-Nahai, Chhath and other festivals. Young twigs utilized as tooth brush (datwan) before breaking the fasting.

5. *Curcuma longa* (Zingiberaceae, Haldi, Turmeric)

Cultivated, annual plant with rhizome (Utilized for propagation and spices).

It is used in the traditional and folk medicine for the cure of inflammation, infectious diseases, and gastric hepatic and blood disorders. Paste of Haldi Powder mixed with small amount of chunna paste and applied in swelling parts during chot-moch etc. for restoring normal condition. Small quantity of Haldi powder with milk, intake once a daily for protection from bacterial and viral diseases like N-Covid 19 etc.

Amajor polyphenol curcumin, extracted fromits rhizome. It has antimicrobial, antioxidant, antitumor, antiinflammatory and hepatoprotective activities.

Whole haldi plant uses duringChhath puja for aradhya to sun. Haldi uses to colour the threads and clothes during various occasions like marriages, Yagyopavit etc. It is utilized to prepare swastika on different occasions and also utilized for tilak.

6. *Oryza sativa* (Poaceae, Dhan)

Cultivated, annual, monocot plant with adventitious fibrous root. Leaf is simple, linear with sharp margin (due to deposition of silica) and acute apex. Leaf base forms sheath which covers stem upto some distance. Venation is parallel. Its genome consisting of 430 mb across twelve chromosomes. Rice may be white, brown, black, purple and red coloured (Shad et *al.,* 2019) used as nutritious food.

Paddy have two major subspecies, "Japonica or Sinica variety" (produces sticky, short grains) and "Indica variety"(produces non sticky, long grains). 3rd subspecies is "Javonica" (produces broad grains).

On the basis of isozymes, Glaszmann (1987) classified *O. sativa* in six groups- Japonica, Aromatic, Indica, Aus, Rayada and Ashina.

On the basis of simple sequences repeats, Garris *et al.,* divided *O. sativa* into five groups. They divided "Japonica" varieties into three groups i.e. Temperate Japonica, Tropical Japonica and aromatic whereas "Indica" verities divided in two groups like" Indica and Aus".

Fruits and seed grain used in Puja sacrifice. It is part of Kalash during different occasions. During marriage, there is a tradition of paddy exchange. During new yield, tuft of plant part with paddy grains hanged on door and other places for birds. During Holika dahan, paddy had given to priest with gur and ghee. Lord Ganesha, made up by cow dung, is positioned on the cluster of paddy grains before balancing the grainsin khalihan (barn). A small quantity of grains also offered to Badhawan baba before balancing.

7. *Hordeum vulgare L* (Poaceae, Jai)

A cultivated annual plant with adventitious roots. It is a self pollinating diploid species with spike inflorescences. Length of Kernelis 4 to 15 mm.

The genome of Barley is composed of seven pairs of nuclear chromosomes (*n*=7, *2n*=14), one mitochondrial and one chloroplast chromosomes with a total of 5000 mbp.

It has penolics like caffeic acid, p- coumaric acid, ferulic acid 5, 5'- diferulic acid. Flavonoids are catechin- 7-0-glucoside (Wolfgang and Rudolf, 2002), Saponarin (Kamiyama and Shibamoto 2012) Catechin, Procyanidin B3, Procyanidin C2 and prodelphinidin B3 and alkaloid hordenine.

Tender plant juice is nutritious. Seed juice used in calculi. It also used to improve digestion.

Seed is used in marriage ceremony and in samhitas. In ancient Mesopotamia, a stalk of barley was the primary symbol of the goddess: Shala: (Black and Green, 1992). It has a prominent role in the Israelite sacrifices described in the Pentateuch. A religious importance extended into the middle ages in Europe and saw barley's use in justice via alphitomancy and the corshed.

8. *Triticum aestivum* L (Poaceae,Gehun, Wheat)

Cultivated, annual erect plant with adventitious root system. Simple linear leaf with sheathing leaf base and sharp margin and parallel venation.

An allohexaploid (anallpolyploid with six sets of chromosomes: two sets of chromosomes each from *Triticum urartu, Aegilops speltoides* and *Triticum turgidum.*

Seeds grains are utilized as cooling, fattening and tonic to increase the appetite.

Seeds grains offered as shrines in various ceremonies. Grains flour utilized to make Puaa to offer the goddess like Kali Mata, Devi Jee etc. Puaa is also a part of dish during Holi. It also utilized to prepare thekua and khajoor as prasad during Ramnavami and chhath puja.

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