A Review on *Ficus religiosa* (Sacred Fig)

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**ABSTRACT:** Nature renders the primary necessities of individuals to be alive or self-care. With basic demands of particulars as food & shelter, nature also possesses the therapeutic attributes which are due to the presence of various complex chemical substances as secondary plant metabolites in one or more parts of these plants. These natural substances reveal strong efficacy against several assorted diseases and promote health and alleviate illness. The present review emphasizes on traditional uses and clinical potentials of *Ficus religiosa* Linn. *F. religiosa* is a large evergreen tree found throughout the world as the wild plant or cultivated. It has great mythological, religious, medical importance and considered as the oldest tree in Indian history. The review also covers comprehensive data of *F. religiosa*'s ethnobotanical, natural product chemistry, pharmacological data.

**Key Words:** Therapeutic; Mythological; Medical; Pharmacological

**INTRODUCTION:**  
Plants are livestock that supplies basic need of universe in form of food, clothing, and shelter. With this key fulfils, these also possess the therapeutically properties which is utilized in form of pharmaceuticals, tobacco, coffee, alcohol, and other drugs throughout the planet (Vaidya, 1997; Aiyegoro and Okoh, 2009). Since the Vedas time, plants are using as a medicine in mode of Homeopathy, Allopathy, Unani and Ayurvedic medicine (Jawla et al., 2009; Husain et al., 1992). There is Sushruta Samhita, Charaka Samhita and Bhagvat are three preliminary texts which build the base of Ayush and milestone in medical sciences (Sharma et al., 2014; Nair and Chanda, 2007). From opening of 20th century, allopathic systems of medicine have popularity among people, which was based on fast therapeutic actions of synthetic drugs but unfortunately it has several side effects. Due to it, the present route of healthcare system is being changed from synthetic to herbal trend. It is termed as “Return to the Nature” (Krishnaraju et al., 2005; Singh, 2007). The natural remedies by plants have an assorted data of phytochemicals and essential oils which reveals therapeutics importance for human (Krishna et al., 2008; Sharma et al., 2014). *F. religiosa* (Peepal Tree) is a gift to world population from nature which is an oldest medicinal plant and most sacred tree in the Hindu mythology (Singh et al., 2011). Traditionally, Peepal is being used to cure different disorders including asthma, diabetes, diarrhea, epilepsy, gastric problems, and inflammatory disorders, infectious and sexual disorders (Sirisha et al., 2010).

**DISTRIBUTION:**  
*Ficus religiosa* is endemic to the Asia-Tropical regions including Bangladesh, India, Nepal, Pakistan, China, Myanmar, Thailand, Vietnam, and Iraq. The plant natively belongs to tropical Asia (Chad, India, Nepal, and Thailand) from where it has now been introduced, spread and cultivated throughout everywhere of the world. Ecologically, it is scattered in forests, where it propagates as an epiphyte on other trees (Orwa et al., 2009). Apart from the wide distribution of *Ficus religiosa*, it is endured with more than 150 names around the world.

**Table-1:** Terrestrial identities of Wide distributed “*Ficus religiosa*”

<table>
<thead>
<tr>
<th>Sr no</th>
<th>Country</th>
<th>Country Popular Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>India</td>
<td>Arachu, Arasu, Ashathwa, Ashvallia Pipla, Ashvatha Pipla, Bodh Tree, Jari, Peepal, Pipul</td>
</tr>
<tr>
<td>2.</td>
<td>Spanish</td>
<td>Higuera de Agua</td>
</tr>
<tr>
<td>3.</td>
<td>French</td>
<td>Arbre bo, Arbre de Dieu, Figuier des Pagodes</td>
</tr>
<tr>
<td>4.</td>
<td>Chinese</td>
<td>Puti Shu, Putishu</td>
</tr>
<tr>
<td>5.</td>
<td>Brazil</td>
<td>Figueira-dos-Pagodes, Figueira religiosa</td>
</tr>
<tr>
<td>6.</td>
<td>Cuba</td>
<td>Alamo</td>
</tr>
<tr>
<td>7.</td>
<td>Dominican Republic</td>
<td>Higuillo</td>
</tr>
</tbody>
</table>
Ficus religiosa, is the most popular member of the Moraceae family. Ficus religiosa has mythological, religious and medicinal importance in Indian culture. References to Ficus religiosa are seen in numerous ancient holy texts like Arthasastra, Puranas, Upanishads, Ramayana, Mahabharata, Bhagavadgita and Buddhistic literature etc (Prasad et al., 2006). According to Vedic archives cited in the Brahma Purana, Padma Purana and Skanda Purana, the peepal is a representative of Lord Vishnu. It also believed that all Trimurti’s are born under this tree (Panchawa, 2012; Rutuja et al., 2015). As a mythological assumption, the root of peepal is devoted as a figure of Brahma, the trunk is Lord Vishnu and the leaves are regarded as Maha Shiva. The tree propagates very fast and roots are appended with trunk and seem like supportive pillars. It is sometimes also called kalpvriksha (Warrier et al., 1995).Thus, the basis of different historical beliefs; Peepal tree is distinguished with various vernacular names.

VERNACULAR NAME:

Table-2: Vernacular Names of Ficus religiosa

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Language</th>
<th>Vernacular Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assamese</td>
<td>Ahant</td>
</tr>
<tr>
<td>2</td>
<td>Bengali</td>
<td>Asvattha, Ashud, Ashvattha</td>
</tr>
<tr>
<td>3</td>
<td>English</td>
<td>Pipal tree, bo tree, bodhi, botree fig, peepul tree, sacred fig, sacred tree</td>
</tr>
<tr>
<td>4</td>
<td>Guajarati</td>
<td>Piplo, Jari, Piparo, Pipalo, Pipers</td>
</tr>
<tr>
<td>5</td>
<td>Hindi</td>
<td>Pipali, bodhi tree, peepul tree Pipala, Pipal</td>
</tr>
<tr>
<td>6</td>
<td>Kannarese</td>
<td>Arani, Ashwatha mara, Pippala, Ragi</td>
</tr>
<tr>
<td>7</td>
<td>Kannada</td>
<td>Ranji, Basri, Ashvatthanara, Ashwatha, Aralimara, Arelagida, Ashvathomara</td>
</tr>
<tr>
<td>8</td>
<td>Kashmiri</td>
<td>Bad</td>
</tr>
<tr>
<td>9</td>
<td>Malayalam</td>
<td>Arayal</td>
</tr>
<tr>
<td>10</td>
<td>Marathi</td>
<td>Pipal, Pimpal, Pippal, Pimpala</td>
</tr>
<tr>
<td>11</td>
<td>Tamil</td>
<td>Ashwarthan, Arasamaram, Arasan, Arasu, Arara</td>
</tr>
<tr>
<td>12</td>
<td>Telugu</td>
<td>Ravichettu</td>
</tr>
<tr>
<td>13</td>
<td>Punjabi</td>
<td>Pipal, Pippal</td>
</tr>
<tr>
<td>14</td>
<td>Sanskrit</td>
<td>Ashvattha, Bodhidruma, Pippala, Shuchidruma, Vrikshraj, yajnika</td>
</tr>
<tr>
<td>15</td>
<td>Oriya</td>
<td>Ashwatha Punjabi: Pipal, Pippal</td>
</tr>
</tbody>
</table>

Kala, 2004; Gupta and Singh, 2012; Singh and Jaiswal 2014

BOTANICAL DESCRIPTION

F. religiosa is a long lifespan tree with an average life ranging between 900–1,500 years. It grows at sea plain heights ranging from 33 ft up to 4,990 ft. Ficus religiosa is cultivated by specialty tree plant nurseries for use as an ornamental tree, in gardens and parks in tropical and subtropical climates (Choudhary, 2006). Habitually, the bodhi tree is semi-evergreen tree that has up to 98 ft tall and a trunk of about 9.8 ft. It is usually epiphytic with the drooping branches having long-petiole, ovate, cordate shiny leaves. Leaves are bright green, 10–17 centimeters long and 8–12 centimeters broad, with a 6–10 centimeters petiole. The apex dropped into a linear-lanceolate end as the foremost portion of the leaf. The bark is flat or slightly curved, varying from 5 to 8 mm in thickness. The outer cover is grey or ash with membranous layers and oftentimes it is also covered with crustose lichen brown or ash colored surface (Warrier, 1996; Babu et al., 2010). The fruits are small figs, in paired, 1–1.5 centimeters in diameter, green to purple during ripening. Flowers are positioned as axillary sessile and are unisexual. With morphological characteristics, Banyans is distinguished as male and female trees (Singh and Jaiswal, 2014).
**Classification**

Kingdom                      Plantae
Subkingdom                   Viridaeplantae
Phylum                       Tracheophyta
Subphylum                    Spermatophytina
Infrafamily                  Angiospermae
Class                        Magnoliopsida
Subclass                     Dilleniidae
Super order:                 Urticaceae
Order                        Urticales
Family                       Moraceae
Division                     Magnoliophyta
Tribe                        Ficace
Genus                        Ficus
Specific                     religiosa L.
Preferred Scientific Name    Ficus religiosa L
Preferred Common Name        Sacred Fig Tree

Figure-1: *Ficus religiosa* Tree (Sacred Fig).

The word 'Ficus' is originally from the Latin word 'Fig' which means the fruit of the tree whereas 'religiosa' refers to 'religion' that reflects sarcasm of plant in both Hinduism and Buddhism and by which is very frequently planted in temples.

**NUTRITIONAL COMPOSITION**

The tree of *F. religiosa* has significant nutritional composition in its all parts. The fruits are rich in macronutrients and micronutrients. Fruits of *F. religiosa* are a healthy source of carbohydrates, protein, fat Dietary fiber, calcium and iron which is used in fresh or dried form (Bhogaonkar et al., 2014; Verma and Gupta, 2015). Besides fruit, leaves and bark of *F. religiosa* are also rich in carbohydrates, proteins and fat (Wangkheirakpam and Laitonjam, 2012). A detailed composition of the various parts of *F. religiosa* is described in Table.

<table>
<thead>
<tr>
<th>Plant Parts</th>
<th>Moisture content</th>
<th>Carbohydrates</th>
<th>Proteins</th>
<th>Fats</th>
<th>Crude / Dietary fiber</th>
<th>Ash content</th>
<th>Calcium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh fruits</td>
<td>62.40g</td>
<td>21.20g</td>
<td>2.50g</td>
<td>1.70g</td>
<td>9.90g</td>
<td>2.30g</td>
<td>289mg</td>
</tr>
<tr>
<td>Dried fruits</td>
<td>18.80g</td>
<td>68.33g</td>
<td>8.48g</td>
<td>0.15g</td>
<td>69.43g</td>
<td>4.44g</td>
<td>848mg</td>
</tr>
<tr>
<td>Leaves</td>
<td>50.50g</td>
<td>19.20g</td>
<td>13.55g</td>
<td>2.50g</td>
<td>26.10g</td>
<td>12.90g</td>
<td>1.67mg</td>
</tr>
<tr>
<td>Bark</td>
<td>62.40g</td>
<td>15.40g</td>
<td>2.50g</td>
<td>1.70g</td>
<td>9.90g</td>
<td>13.10g</td>
<td>16.10mg</td>
</tr>
</tbody>
</table>

Wangkheirakpam and Laitonjam, 2012; Bhogaonkar et al., 2014; Verma and Gupta, 2015; Singh et al., 2015; Kumar et al., 2018

**ACTIVE CONSTITUENTS:**

Phytochemistry word is used to define the chemical nature of natural commodities which are utilized as novel drugs. Preliminary *F. religiosa* is rich in tannins, saponins, flavonoids, steroids, terpenoids and cardiac glycosides, wax etc (Babu et al., 2010; Taskeen et al., 2009; Jiwala et al., 2008; Gautam et al., 2014; Singh et al., 2015). The barks of *F. religiosa* possess enormous bearing of bergapten, lanosterol, β-sitosterol, stigmasterol, lupen-3-one, β-sitosterol-d-glucoside, leucocyanidin-3-0-β-D-glucopyranoside, leucopelargonidin3-0-β-D-glucopyranoside, lupeol, ceryl behenate, lupeol acetate, α-amyрин acetate (Swami et al., 1996; Swami et al., 1989; Ambike et al., 1967; Singh and Goela, 2009). Leaves of peepal have abundance with campesterol, α-amyrin, lupeol, tannic acid, n-nonacosane, hexacosanol and n-octacosane (Panda et al., 1976; Verma et al., 1986; Behari et al., 1984). The fruit part comprises (e)-β-ocimene, α-thujene, α-pinene, α-terpinene, limonene, α-ylangene, α-copaene, β-caryophyllene, α-humulene, γ-cadinene and δ-cadinene (Grison et al., 2002).

**MEDICINAL USES:**

Peepal is extensively used in ancestral systems of medicine like Ayurveda, Unani and Siddha in the form of various formulations. The entire parts of the *F. religiosa* exhibit a wide spectrum of medicinal importance as...
an anticancer, antioxidant, antidiabetic, antimicrobial, anticonvulsant, anthelmintic, antiulcer, antiasthmatic, anti amnesic etc (Makhija et al., 2010). traditionally, *Ficus religiosa* is using as folk medicine to treat asthma, cough, sexual disorders, diarrhea, haematuria, earache and toothache, migraine, eye troubles, gastric problems and scabies. Leaf decoction possesses analgesic attribute for toothache.

**Figure-2:** Medicinal Importance of *F. religiosa*

The stem bark of peepal is practiced to manage gonorrhea, bleeding, paralysis, diabetes, ulcers, various skin diseases, bone fracture, antiseptic, astringent and antidote (Ripu and Rainer, 2006). Bark’s phytosterols are utilized as powerful central nervous system stimulant (Gupta and Sharma, 2009; Parasharami et al., 2014). Fruit is laxative and digestive. The fruit powder enhances fertility rate and is used in the treatment of dysentery, uterine troubles, ulcers, bilioussness, bitter tonic, in blood diseases. The ripe fruit is used as tonic, alexipharmic, suitable for burning sensation, bilioussness and diseases of blood and heart (Kirtikar and Basu, 1998; Banskota et al., 2000; De Feudis et al., 2003). Ficus Seeds are laxative and taken during menstruation in women for a long time.

**CONCLUSION:**

The world is enriched with a rich wealth of medicinal plants. Universally, there is an expanding concern in herbal medicines characterized by extended laboratory research into the pharmacological qualities of the bioactive constituents and their strength to treat various diseases. *F. religiosa* is branched tree with heart-shaped, long-tipped leaves which are widely used in the Indian system of medicine to cure several disorders and infections. The present review reveals about *F. religiosa* that comprises numerous phytoconstituents and dispenses various pharmacological activities.

**References:**


