

# Ficus Species and its Significance

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**Abstract**—There is great importance of the genus *Ficus* among the living beings since time immemorial. Besides aesthetic and religious values, many species of this genus are in use in day to day life as food and in traditional medicine. The present study, spanning from 2007 to 2011, unfurled many species having socio-culturally intrinsic relations with the Assamese people notable among them are *F. religiosa*, *F. bengalensis*, *F. hispida*, *F. racemosa*, *F. curtipes*, *F. rumphi*, *F. elastica* and so on any species have great commercial potentials and these species need proper value addition.

**Keywords**—*Ficus* species, aesthetics, medicinal values, commercial potentials.

## I. INTRODUCTION

From time immemorial, many medicinal plants were well known in India. Use of herbal medicine can be traced to the remote past. In Rig Veda (4500 B.C. - 1000 B.C.), healing properties of some herbs are mentioned in the form of sonnets, which were often recited in religious rituals.

Charakas treaties described 1500 plants and identified 350 of them as valuable for medicinal purposes (Patnaik, 1993). During the glorious days of Buddha philosophy (600 BC- 400 AD), there was a friendly mingling of therapeutic values of plants through religious norms were different. Scholars practicing medicine were quite familiar with wild medicinal plants growing in jungles. (Joshi- 2000)

The oldest living plant of known planting date is a Peepal tree known as the Sri Moha Bodhi planted in the temple Sri Lanka (At Anuradhapuram) by king Tissa in 288 B.C.

Gautam Buddha is traditionally held to have found enlightenment while meditating under a sacred fig tree. It is also one of the two sacred trees of Islam. In East Asia, figs are pivotal in Buddhism, Hinduism and Jainism.

The plant is often found in old temple complexes. The vast shady expanse beneath the tree makes it a popular gathering spot in many villages of India as well as Assam. This tree considered as God. In Folklore beliefs Aswathama, son of Dronacharya transformed into a Peepal tree (Sharma, Dr N, 1995).

Various tribes, sub-tribes and races of the great Assamese society have valued several species of *Ficus* in their own way. As the genus is rich in diversity, this region possesses tremendous scope of exploitation of its members, as many species belonging to this genus have

carried good properties for uses for the benefit of mankind. With an aim to find out various uses of *Ficus* species in the Assamese society, this ethno-botanical study was initiated. It has great commercial potentials.

## II. MATERIALS AND METHODS

The study area was the Brahmaputra valley of Assam. The study was initiated in the year 2007. Different places of Assam were visited and people of different tribes and races were interviewed. Voucher specimens were collected, thoroughly studied in respect of their morphology and identified with the help of published literature, and Botanical Survey of India, Eastern Circle, Shillong.

## III. RESULTS AND DISCUSSION

*Ficus* (Moraceae) is one of the largest genera occurring in Assam and is represented by nearly 60 taxa under 50 species. Since long past many species of this genus are associated with people. *Ficus religiosa*, *F. elastica*, *F. benghalensis*, *F. rumphi*, etc. are well known for their aesthetic as well as medicinal values. This information of *Ficus* species collected during the investigation are discussed below:

### A. *Ficus Altissima* Blume

Vern. Name: Dhup, (Asm.).

A large tree. Leaves are ovate-elliptic or ovate-lanceolate, entire, obtuse and coriaceous. Hypenthodia are sessile, in axillary pairs, yellow when ripe.

The plant is often conserved as avenue tree in roadsides and temple premises, and considered as sacred tree by Assamese Hindus. A red dye is also obtained from the decoction of its barks mixing with lime (Kanjilal et al., 1940).

### B. *Ficus benghalensis* L

Vern. Name: Bor (Asm.); Indian Banyan Tree (Eng.)

This plant has a special place in the Indian culture and is believed as a sacred tree. It is very often found in old temple complexes, road sides and other public places as well as in forests throughout the state. The hanging roots are anti-emetic. The paste prepared from the bark is applied in cuts and wounds and joint pains

#### 1) *Ficus Curtipes* Corner; Gard

Vern. Name: Kotholua-jori; Kothal-potia-bor (Asm).

A large tree usually starts as epiphyte, glabrous throughout. Leaves are oblong-elliptic or obovate elliptic and thickly coriaceous. Hypenthodia are globose, sessile and axillary.

Leaves are used by the Mishings for fermenting liquor to make the liquor clear and light, in preparing their traditional country liquor “Apong”. The leaves are also cooked with pork.

2) *F. elastica Roxb. ex Hornem.*

Vern name-Rubber gach

A big and glabrous tree. Leaves are elliptic-oblong, abruptly caudate and coriaceous.

The plant is cultivated as ornamental tree. Young red shoots are eaten cooked. Latex are used to treat intestinal worms.

4. *Ficus heterophylla* L.

Vern. Name: Konai dimoru (Asm.).

A creeping and trailing much branched hispid scandent shrub with axillary solitary hypenthodia.

The plant is commonly cultivated ornamental trailer on walls or tree trunks. Its bark and root powder is medicinal in cough, asthma and chest pain (Dutta, 2006) and Assamese people administered it mixing with coriander.

3) *Ficus hirta* Vahl.

Vern. Name: Khongal dimoru (Asm.)

A rusty-pubescent shrub with hollow stem and broad-ovate leaves. Hypenthodia are axillary, in pairs, globose and tomentose. The plant is common in upper Assam and hilly districts.

Its ripe fruits are eaten fresh and very young top shoots are cooked by Mishings.

4) *Ficus hispida* L.

Vern. Name: E0a Dimoru (Asm.);

A small to medium sized tree with hollow branches, obovate to elliptic serrate leaves and paired or clustered hypenthodia. The plant is quite common throughout the state with somewhat weedy nature.

The green figs are cooked as vegetables and ripe figs are eaten fresh. Both figs and leaves possess antidiabetic properties. Leaves are cooked with pork by Mishings and Thengal Kacharis. Mishings also use its leaves for fermenting their country liquor “Apong”. Boro people believe that feeding ripe fruits to mothers promote milk secretion.

Roots and leaves are known as antidiarrhoeal (Subhash & Mandal 2002), antidiabetic (Ghosh & Sharotchandra, 2004) and cardioprotective (Shanmugarjan & Arunsunda, 2008). A mixture of honey and the juice of these fruits is a good antihemorrhagic (Nadkarni, 1996).

5) 7. *Ficus racemosa* L.

Vern. Name: Gular (Hindi.); Jagya-dimoru (Asm.)

The plant is a large deciduous tree. Hypenthodia are pyriform, large, peduncled, in short paniced fascicles on the trunk.

The leaves and young shoots are eaten cooked by Mishings. Ripe hypenthodia are eaten fresh by many. Leaves are used as fodder. Hypenthodia and leaves are also used in many religious functions of Assamese Hindus.

Tender fruits are astringent, stomachic, refrigerant, and also administered in dry cough, burning sensation, fatigue (Chopra et al., 1992). It is one of the popular trees in indigenous Indian System of Medicine (ISM) like Ayurveda and its various parts are used in dysentery, diarrhoea, diabetes, bilious affections, menorrhage, hymoptysis, piles, etc. (Paarakh, 2009).

6) 8. *Ficus religiosa* L.

Vern. Name: Aanhot (Asm.); Pipal-tree (Eng.)

A large deciduous tree. Leaves are used in marriage ceremony and some other religious functions of Hindus in Assam. Leaves are also used as fodder. The bark is astringent. The seeds are cooling and the fruits are laxative. The leaves and young shoots are given as purgative. The bark is used for tanning

9. *F. rumphi* Vern. Name: Jori; (Asm.)

A large deciduous tree. Leaves are ovate, acuminate and glabrous. Hypenthodia are sessile, ovoid, in axillary pairs. The plant is quite common in road sides, open-places and forests, and sometimes appears as industrial weed.

Leaves are good fodder, and used in treating mouth diseases of cattle in Assam. Fruit juice is medicinal in asthma and prescribed with black-pepper, turmeric and ghee (Dutta, 2006). Lac insects are reared on this tree (Kanjilal et al., 1940; Dutta, 2006).

#### IV. CONCLUSION

From the above discussion, it can be understood that Ficus have great significance among the people of Assam. Other than aesthetic and religious value, it has medicinal and food value as well. Ficus species have therapeutic value and are used by different tribes and races and rural inhabitants of Assam.

The total number of plants species in the world is more than 3,00,000. India has lost more than 78% of its forests (World Resource Institute, 1992). Most of the wild species of Ficus of Assam are threatened by human pressure. These trees must be protected and conserved for existence of the rich socio culture of the great Assamese society. Some of them need further value addition since they have great commercial potentials.

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