



SOME IMPORTANT USES OF PLANTS OF VERBINACEAE FAMILY

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ABSTRACT

The Verbenaceae family plants are well known for their uses in the traditional medicinal systems of various countries. In Ayurvedic classics the members of verbenaceae like Nirgundi, Agnimantha, Gambhari, are explained under Guducyadi varga, Bharangi in Haritakyadi varga and Priyangu in Karpuradi Varga by Bhavamishra. Agnimantha and Gambhari are included in Dashamool which is commonly used in the preparation of many Ayurvedic formulation. Other members of verbenaceae family like Nirgundi, Bharangi, Priyangu are also using in the treatment of many Disease.

KEYWORDS :**INTRODUCTION**

The Verbenaceae family of plants, which is also commonly known as the verbena or vervain family consists of trees, shrubs and herbs. They are mainly flowering plants found in the tropical regions of the world. The family includes some 35 genera and around 1,200 species. Agnimantha, Gambhari, Nirgundi, Bharangi, Priyangu are the members of verbenaceae family which is mentioned in Ayurvedic classics.

Callicarpa macrophylla is an Ayurveda coolant herb used for the treatment of headache, diarrhea mixed with blood (Ulcerative colitis), general debility, fever, pain in the joints, skin diseases etc.

Agnimantha is a medicinal tree. Agni means fire. Mantha means churning. Its wood pieces was rubbed with each other to generate fire in ancient times.

Clerodendron serratum Spreng is a well known plant used in the treatment of cold, cough, asthma, eosinophilia, sore throat, tonsillitis etc.

Vitex negundo is a very good muscle relaxant, pain relieving, anti mosquito, anti anxiety, anti asthma and so on, herb of Ayurveda. There are very less herbs as multi-talented and as versatile as Nirgundi is.

Gambhari is one among Dashamoola group of herbs (group of ten roots). Its botanical name is *Gmelina arborea*. Its fruits bear nourishing qualities, brain tonic while the root is anti inflammatory (reduces pain, swelling, etc).

Taxonomic position of the family Verbenaceae (Cronquist, 1981)

Division : Magnoliophyta

Class : Magnoliopsida

Subclass : Asteridae

Order : Lamiales see

Family : Verbenaceae

English name of verbenaceae plants:

Nirgundi - Five-Leaved chaste

Bharangi - Blue Glory, Beetle Killer

Gambhari - Coomb Teak, Cashmeri Tree

Agnimantha - Indian Headache Tree

Priyangu - Beauty berry

Characters of Verbenaceae:

Plants herbs, shrubs or trees, leaves simple, exstipulate, opposite or whorled; inflorescence cymose, racemose or spike, flowers hermaphrodite, zygomorphic, hypogynous,

calyx gamosepalous, persistent; corolla 5 lobed, gamopetalous sometimes 2 lipped, stamens four, didynamous, unequally paired, epipetalous; carpels two, syncarpous, superior, axile placentation, fruit drupe.

Distribution of Verbenaceae:

The family is commonly called Verbena family. It includes 77 genera and 3,020 species, out of which 21 genera and 125 species occur in India. The members of family are inhabitants of tropical and subtropical regions, they also extend into temperate lands.

Economic Importance of Verbenaceae:

The family is of fairly great economic importance.

1. Timber:

The wood of *Tectona grandis* (Teak, H. Sagwan) is extremely hard and lasting. The wood is largely used in manufacturing of ships and good quality furniture. Teak is grown in forests of Burma, Madhya Pradesh and Assam. The wood of *Gmelina arborea* is used in making drums, sitars and other musical instruments.

2. Medicinal:

The roots of *Clerodendron* are used in asthma and cough. The decoction of leaves of *Lantana camara* is given in tetanus and rheumatism. The leave's juice of *Gmelina arborea* is used in gonorrhoea, cough and ulcers.

3. Oils:

Lippia alba produces a valuable oil

LITERATURE REVIEW

Important medical plants of verbenaceae family explained in Ayurvedic classics are:-

Karpuradi Varga*Priyangu (*Callicarpa macrophylla* Linn.)**Guducyadi varga***Nirgundi (*Vitex negundo* Linn.)*Gambhari (*Gmelina arborea* Roxb.)*Agnimantha (*Premna integrifolia* Linn.)**Haritakyadi varga***Bharangi (*Clerodendrum serratum* Spreng.)

Table (1) below shows the medicinal properties of these plants according to

Bhavprakash nightntu

Medicinal plant	Rasa	Guna	Veerya	Vipaka	Doshakarma prabhav
Nirgundi	Katu, Tikat	Laghu, Rukasha	Uashan	Katu	Kaphavata shamak

Bharangi	Tikat, katu	Laghu , Rukasha	Uashan	Katu	Kaphavata shamak
Gambhari	Tikat, kashya, Madhur	Guru	Ushan	Katu	Tridosha shamak
Agnimanth	Tikat, katu, Kashya, Madhur	Rukasha, Laghu	Ushan	Katu	Kaphavata shamak
Priyangu	Tikat, kashya, Madhur	Guru, Rukasha	Sheeta	Katu	Tridosha shamak

Importance In Ayurveda

The word nirgundi derived from the Sanskrit verse gudi rakshayam means which protects the body from disease. Its leaves are widely used in widely used in panchkarma procedures like snehana , swedana , and basti. It is used in the treatment of pratishyay (common cold) , kasa (cough) , shool (pain) , kushta (skin disease) , smritiprada (enhances memory power) , keshya (hair tonic).

The term "Bharangi" indicates its effectiveness in respiratory tract disorders like kasa and shwasa. Sushruta and Bhavamishra had described this plant particularly for respiratory complaints viz. cold , bronchial asthma and tuberculosis as it effectively liquefies the mucus. Roots and leaves of Bharangi have great medicinal value and are claimed to be useful in shool (pain) , shoth (inflammation) , amavata (rheumatism) , shwasa (respiratory disorders) , jwara (fever).

The word Gambhari is derived from the phrase ga gati bibhati iti, which means the one who grows fast. Charak considered Gambhari fruit as best raktasangrahi and raktapittashamak dravya. Roots are used in Deepan (appetizer), pachan (digestive), Krimighna (anthelmintic), Shothahara (anti-inflammatory), Jwaraghna (antipyretic).

The word Premna is derived from Greek word Premnon which means tree stump, referring to the short and twisted trunk of a tree. It is one of the important constituents of a famous formulation called Dashamool that is used to treat a number of ailments. In Ayurvedic lexicons and nighantus, Agnimanth is described as having shothahara (anti-inflammatory), Deepan (carminative), Jwaraghna (antipyretic), Medohara (antiobesity), Balya (tonic) and thermogenic properties. Commonly known as Priyangu in Sanskrit & Hindi is an important Ayurvedic drug used in treatment of various ailments. In Ayurvedic system of medicine, the plant is also known as Phalawati and used for obstetric conditions.

Table(2) Below Shows The Therapeutic Properties And Important Chemical Constituents Of These Plants.

Medicinal plants	Official parts used	Main action	Chemical constituents
Nirgundi (vitex negundo Linn.)	Root, Leaves, Seed	Vishaghna, keshya, Smritiprada, Kandughna	Alkaloids, Essential oil, Vitexin, flavonoids
Agnimantha (Premna integrifolia Linn.)	Root, Bark, Leaves	Medohara, Kaphavatahara, Jwaraghna	Sterols, Premnine, Betulin , Linoleic
Bharangi (Clerodendrum serratum Spreng.)	Root, Leaves	Swasahara, Raktashodhan, Shwedajanana	Saponins, carbohydrate, Terpenes, Steroids

Gambhari (Gmelina arborea Linn.)	Mulatwak, phala, patra Mula	Dipana, pachana, medhya, anulomana	Alkaloids, Gmelanone, Lignas, Palmitic
Priyangu (Callicarpa macrophylla Linn.)	Puspa, patra, Twak, phala	Jwaraghna, Balya, Vishaghna, Atisarahara	Calliterpene Crategolic acid

CONCLUSION

The verbenaceae family include some 35 Genera, 1200 species. Mostly Tropical Plants Trees, Shrubs, Herbs. Noted for Heads, Spikes or clusters of Small Flowers (Many of Which Are Aromatic). Many Plants used in Native Traditional for Medicinal Value. The present review indicates the importance of varbenaceae family one of the classical medicinal plants. It is the main ingredient of famous Ayurvedic preparations. It bears all the basic properties of a drug described by Acharyas and has proved to be an important source of therapeutic agents for some trouble some diseases like- Soth, Atisarahara, Visa roga, Jwara. The pharmacological activities proved are yet to be further evaluated and revalidated by clinical trials. Thus, the utility of verbenaceae family as a medicinal plant has increased many folds over a period of time.

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