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Review Article

### A BIRDS EYE VIEW ON PRIYANGU

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#### ABSTRACT

By the name Priyangu three different species are used in different parts of India viz. *Callicarpa macrophylla vahl.*, *Prunus mahaleb linn.*, *Agalia roxburghia miq.* In present paper an effort has been made to review detailed information on these three species, Ayurvedic aspects of Classical *Priyangu*, also Recent researches on these species have been reviewed, so that this literary research will be helpful in further researches on *Priyangu* for the scholars & to the clinicians for practical application of these species.

**Keywords:** *Priyangu*, *Callicarpa Macrophylla Vahl.*, *Prunus Mahaleb Linn.*, *Agalia Roxburghia Miq.*

#### INTRODUCTION

*Priyangu* is one of the popular herb in *Ayurveda* for its medicinal uses as well it controversy. In classics two types of priyangu are mentioned 1. *Priyangu* 2. *Gandhapriyangu*. First one is taken as *Callicarpa macrophylla vahl.* & second one as *Prunus mahaleb linn.* At present three plants are in used in the name of *Priyangu* viz *Callicarpa macrophylla*, *Prunus mahaleb* & *Agalia roxburghia miq.* All of them belong to three different families & are used as *Priyangu* in different parts of India. The detailed information on *Priyangu* regarding Ayurvedic aspects, taxonomy, uses, and recent researches is as follows,

#### GANAS & PARYAYANAMA

NIGHANTU	GANNA	PARYAYA
Dhanwantari Nighantu <sup>1</sup>	Chandanadi varga	Falini, Priya, Gochandani, Priyaavalli, Varnabhedini, Kanguni, Vrutta,
Kaiyadev Nighantu <sup>2</sup>	Oushadhi varga	Falini, Kanta, Vanitalata, Godantini, Shyama, Kanguni, Vrutta,
Raj nighantu <sup>3</sup>	Aamradi varga	Falini, Falapriya Gauri, Vanitalata, Gochandani, Gauravalli, Parnabhedini, Kanguni, Vrutta,
Bhavaprakash Nighantu <sup>4</sup>	Karpuradi varga	Falini, Kanta, lata, Godantini, mahilavya, Vishwaksenpriya, shyama, Gundra, Vrutta,

1. *Callicarpa macrophylla Vahl.*

Family: Verbinaceae

The Bengali vaidyas as well as in Nepal & Kumau regions this plant is used as *Priyangu*.

#### BOTANICAL CLASSIFICATION

Kingdom	Plantae
Subkingdom	Trachebionta- vascular plants
Division	Magnoliophyta -Flowering plants
Class	Magnoliopsida-Dicotyledons
Subclass	Asterids
Order	Lamiales
Family	Verbinaceae
Genus	Callicarpa
Species	Macrophylla

#### MORPHOLOGY

It is a perennial shrub 4 to 8 Ft. height, densely clothed with wool like structure, leaves 5 to 10 inch long ovate or ovate-lanceolate, acute apex, upper surface glabrous, lower surface t, margins are creneate. Flower pink coloured crowded in axillary, stalked cymes, calyx bell shaped. Fruit succulent, globose, white with one seed.

#### HABITATE

This plant occurs in sub Himalayan tracts from Hazara eastwards to Assam, also occurs in Dehradun region, & Bihar.

#### CHEMICAL COMPOSITION

Seeds & leaves contain Caliterpenone & its Monoacetate, Betasitosterol, in addition seed contains fatty acids<sup>5</sup>.

#### USEFUL PART

*Pushpa* (Flower)

2. *Prunus mahaleb linn.*

Family: Rosacea

Indian Vaidyas of Mumbai Region use its *Phalamajja* (fruit pulp) as Priyangu.

#### BOTANICAL CLASSIFICATION

Kingdom	Plantae- plants
Subkingdom	Trachebionta- vascular plants
Division	Magnoliophyta-Flowering plants
Class	Magnoliopsida-Dicotyledons
Subclass	Rosidae-
Order	Rosales
Family	Rosaceae- rose family
Genus	Prunus
Species	Mahaleb

#### MORPHOLOGY

It is a medium sized tree, Bark is grey-brown, with conspicuous lenticels on young stems, and shallowly fissured on old trunks. The leaves are 1.5-5 cm long, 1-4 cm. wide, alternate, clustered at the end of alternately arranged twigs, ovate to cordate, pointed, have serrate edges, longitudinal venation and are glabrous and green. The flowers are fragrant, pure white, small, 8-20 mm diameter; they are arranged 3-10 together on raceme. The fruit is a small thin-fleshed cherry-like drupe 8-10 mm in diameter, green at first, turning red then dark purple to black when mature.

#### HABITATE

It is native to Europe & West Asia, Baluchistan, introduced in India & grown as an ornamental plant.

#### CHEMICAL COMPOSITION

Its contains Coumarin, Salicylic acid, Amygdalin, & Hydrocyanic acid as major constituents.<sup>6</sup>

#### USEFUL PART

*Phala* (Fruit), *Beej* (seed)

#### 3. *Agalia roxburghiana* miq.

Family: Meliaceae

#### BOTANICAL CLASSIFICATION

Kingdom	Plantae
Subkingdom	Trachebionta- vascular plants
Division	Magnoliophyta-Flowering plants
Class	Magnoliopsida-Dicotyledons
Subclass	Rosidis
Order	Sapindalis
Family	Meliaceae
Genus	Agalia
Species	Roxburghiana

#### MORPHOLOGY

It is a large tree, wood bright red; leaves shortly petiolate, pinnate, leaflets 5, rarely 7 or 3, elliptic, glabrescent, obtuse, sometimes acute; panicles rather supra-axillary, pyramidal, elongate; flowers shortly pedicellate, small, 0.2cm in diameter, yellow; fruits subglobose, small, 0.25cm in diameter, buff-coloured, orange when ripe; very minutely pilose, rusty, persistent.

#### HABITATE

Occurs in Western Ghats, Konkan, & tropical forests of South India.

#### CHEMICAL COMPOSITION

Triterpenes roxburghiadiol A and B, Rocaglamide, bisamide alkaloids<sup>7</sup>.

#### USEFUL PART

*Phala* (Fruit)

#### RASA PANCHAK<sup>8</sup>

Rasa: Tikta, Kashaya, Madhura

Virya: Sheeta

Vipaka: Katu

Guna: Guru, Ruksha

#### KARMA

*Aacahrya Bhavamishara* has stated that it is *Vata*, *Pitta Shamak*, *Dahaprashaman*, *Vedanasthapan* (Relives Pain), *Gulmahar* (cures Tumor of Abdomen), *Jwarahar* (Antipyretic), *Vishaghna* (Antipoison).

Its *phala* (Fruit) as *aadhmaankarak* (causes Distention of abdomen), *balya* (Tonic), & *mutrasangrahi* (antidiuretic)<sup>9</sup>.

*Pandit Narahari in Rajnighatu* has added *karmas* like it is *ratadoshahara* (Blood purifier), *vakktrajaadyanashak* (relives heaviness of tongue)<sup>10</sup>.

#### RECENT RESERCHES

Ethanol extract of *C. macrophylla* leaves have anti-inflammatory effect and can be the choice to be used as anti-inflammatory drug<sup>11</sup>. Extract also possessed significant anti-arthritis activity as compared to standard drug diclofenac sodium<sup>12</sup>.

*Prunus mahaleb* ethanolic extract had antibacterial activity against *P. mirabilis*, *B. anthracis* and *S. aureus*<sup>13</sup>. Its seeds possess strong tyrosinase inhibitory activity and moderate antioxidant potential, XO inhibitory, ant cholinesterase & anti inflammatory activities<sup>14</sup>. Although no specific mention has been seen for this species, it belongs to a genus where most, if not all members of the genus produce hydrogen cyanide, a poison that gives almonds their characteristic flavour. This toxin is found mainly in the leaves and seed and is readily detected by its bitter taste. It is usually present in too small a quantity to do any harm but any very bitter seed or fruit should not be eaten. In small quantities, hydrogen cyanide has been shown to stimulate respiration and improve digestion, it is also claimed to be of benefit in the treatment of cancer. In excess, however, it can cause respiratory failure and even death<sup>15</sup>.

An extract of the stem bark of *Aglaia roxburghiana* was found to exhibit significant insecticidal activity.<sup>16</sup> Its fruit extract produced a dose-dependent reduction of the free acidity whereas, a significant reduction in ulcer score was observed for both aerial part and fruit extracts. Both the extracts also offered significant protection against aspirin-induced ulcers<sup>17</sup>.

#### DISCUSSION

Priyangu is one of the controversial drugs in ayurveda. Three different plants are used as Priyangu in different parts of India. Traditionally it is used in entities like *Jwara* (pyrexia), *raktadosha* (Blood purifier), & as *Vedanasthapan* (Relives Pain), *mutrasangrahi* (antidiuretic), recent researches have proven efficacy of *Callicarpa macrophyalla* in arthritis, inflammation where *jwara* (Pyrexia), & pain may be the symptoms, *Prunus mahaleb* extract has antibacterial activity can be correlated with its *raktadoshahra karma* where as *Aglaia roxburghiana* showed ulcer protective effect & reduced the acidity levels which shows its *Pittashamak* effect.

## RECOMMENDATION

Exact botanical identification of classical *Priyangu* has to be done & then & Clinical Researches can be carried out.

## CONCLUSION

Three different plants are in use by the name of priyangu. Classical uses of Priyangu includes *Pittashamak*, *Pitta Jwara*, *raktadoshahra* and *Vedanasthapan* properties so by the *Anumana pramana* by its *karma* (actions) it can be concluded that these three plants show similarity of action with *Priyangu*.

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