



## A REVIEW ARTICLE ON PARIJAT

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## ABSTRACT

Nyctanthes arbortristis (N. arbortristis) is one of the most useful traditional medicinal plants in India. It is distributed widely in sub-Himalayan regions and Southwards to Godavari. Each part of the plant has some important medicinal value and is thus commercially exploitable. It is now considered as a valuable source of several unique products for the medicines against various diseases and also for the development of some industrial products. The present review is to focus on the potential phyto-chemicals and pharmacological activity of plant N. Arbortristis. Various parts of the plant like seeds, leaves, flowers, bark and fruits have been investigated for their significant pharmacological activity. Phyto-chemicals like flavanoid, glycoside, pleanic acid, essential oils, tannic acid, carotene, friedeline, lupcol, glucose, benzoic acid have been reported for significant hair tonic, hepatoprotective anti-leishmaniasis, anti-viral, anti-fungal, anti-pyretic, anti-histaminic, anti-material, antiinflammatory and anti-oxidant activities of Night jasmine and emphasized the need for further exploring available information.

**KEYWORDS:** Nyctanthes arbor-tristis, N. Arbortristis, anti-inflammatory, anti-bacterial, hepatoprotective, antimicrobial, Harshingar, Night jasmine.

## 1. INTRODUCTION

Nyctanthes arbortristis (N. arbortristis) is a valuable medicinal plant which belongs to the family Oleaceae. The plant generally grows in tropical and subtropical region. N. arbortristis commonly known as Night jasmine, Harsinghar & Parijat. The flowers start falling after midnight and by the day break, the plant appears dull. The generic name 'Nyctanthes' has been coined from two Greek words 'Nykhta' (Night) and 'anthos' (flower)<sup>[1,2]</sup> It is usually a shrub or a small tree having brilliant, highly fragrant flowers, which bloom at night and fall off before sunrise, giving the ground underneath a pleasing blend of white and red. Thus, during the day the plant loses all its brightness and hence is called "Tree of sadness" (arbor-tristis). It is also known as Harsinghar, Coral Jasmine, Parijat, queen of the night and night flowering jasmine.<sup>[3]</sup> It is a Nyctanthes arbortristis of India, distributed in sub-Himalayan region and also found in Indian garden as ornamental plant.

The plant is tolerant to moderate shade and can grow on rocky ground in dry hill shades, dry deciduous forests or at sea-level up to 1500 m altitude with a wide range of rainfall patterns, from seasonal to non seasonal and is tolerant to moderate shade. It is often cultivated in gardens due to its most pleasant and peculiar fragrance.<sup>[4,5]</sup> In India, it grows in the outer Himalayas

and is found in tracts of Jammu and Kashmir, Nepal to East of Assam, Bengal, Tripura extended through the Central region up to Godavari in the South. Flowering usually occurs from July to October. N.arbortristis prefers a secluded and semi-shady place to grow.<sup>[6]</sup> N. arbortristis is one of the well known medicinal plant. It is a common wild hardy large shrub or small tree. Different parts of this plant are used in Indian systems of medicine for various pharmacological actions like as anti-leishmaniasis, anti-viral, anti-fungal, anti-pyretic, anti-histaminic, anti-malarial, anti-oxidant,<sup>[7]</sup> anti-inflammatory<sup>[8]</sup> and many more activities.

Herbs have been always the main principle form of medicine since traditions in India and now a day it becomes most popular throughout the world. Important large shrub of tropical and subtropical regions of the world that has been traditionally used to provoke menstruation, for treatment of scabies and other skin infections as hair tonic,<sup>[9]</sup> catalogue and Herbal medicines are not only providing traditional and ethnic medicine but also promising for highly efficient novel bioactive molecules. Since ages, man has been dependent on N. arbortristis for curing various body diseases. From ancient civilization various parts of different plants were used to pain, control suffering and counteract disease. Most of the drugs used in primitive medicine.

**SYNONYMS**

|               |   |   |
|---------------|---|---|
| Raaga-pushpi  | : | Its flowers have very beautiful and attractive colours. |
| Shephalika    | : | Plenty of honey bees reside on this tree.               |
| Khara-patraka | : | Its leaves are rough in texture.                        |
| Naala-Kumkuma | : | Corolla tube is orange in colour.                       |
| Hara-singhara | : | Lord hari is decorated by Parijata pushpa.              |
| Rakta-kesara  | : | Red colour corolla.                                     |

**Vernacular Nomenclature<sup>[9]</sup>**

|         |   |  |
|---------|---|--|
| Eng     | - | Night jasmine, Coral jasmine.  |
| Hindi   | - | Parja, <i>Hāra</i> , <i>Siharu</i> , <i>Hāra sin gāra</i> , <i>Sahervā</i> , <i>Seoli</i> , <i>Nibāri</i> .          |
| Beng    | - | <i>Singāra</i> , <i>Hāra sin gāra</i> , <i>Sephalikā</i> .   |
| Guj     | - | <i>Jayaparvati</i> .   |
| Kan     | - | <i>Pārijata</i> , <i>Har sin g</i> .   |
| Mal     | - | <i>Pavilamalli</i> , <i>Pārijatam</i> , <i>Pavizhamalli</i> , <i>Pārijatakam</i> .                                   |
| Mar     | - | Khurashli, <i>Pārijataka</i> , <i>Pārijata</i> .   |
| Punj    | - | Pakura, Laduri, harasingara, Kuri, Shaili.   |
| Tam     | - | Pavilamalligai, Manja-pu, Pavazhamalligai.   |
| Tel     | - | Pagadamalli, Swetasarasa, Paghada, Karchia, Karuchiya, Pari-jalamu Kapilanagadusty, Pagadamalle, <i>Pārijatamu</i> . |
| Oria    | - | Ganga-siunli, <i>Sephali</i> , Singdahara  |
| Santhal | - | Saparom.   |

**Description of Parijata in different Ayurvedic literatures**

In different ancient literatures Parijata is described under different varga. Regarding the etymology, synonyms, morphological description, therapeutic use there are enormous descriptions found in all most all samhitas and nighantus.

Placement of Parijata under different varga by different literature.

Observing the morphology, therapeutic effect, habit and habitat different Acharyas have placed Parijata under different varga (group) for convenient of study.

**Mythological origin of parijata**

Mythological story reveals that, the drug Parijata is a heavenly tree brought to earth by Lord Krishna. A quarrel over it ensued between Satyabhama and Rukmini, Krishna's wives. But Krishna planted the tree in Satyabhama's courtyard in a way, that when the tree flowered, the flowers fell in Rukmini's courtyard.

**Etymology**

Etymology of Parijata is "Paarinaha Samudrath jaatho va parijatah":- It is called Parijata, because of its origin from samudra (Ocean) as a result of (parinaha) extensive searching.

| S. No. | Therapeutic use                        | Name of text with reference   |
|--------|--|---|
| 1.     | Jwaraghna                              | Shaligram nighantu, priya nighantu, Data base of Medicinal plant, GOI |
| 2.     | Yakrut, pliha vrudhi                   | Priya nighantu  |
| 3.     | Krimi                                  | Priya nighantu  |
| 4.     | Gridrasi                               | Priya nighantu, Data base of Medicinal plant, GOI                     |
| 5.     | Vataghna                               | Priya nighantu  |
| 6.     | Sandi-vataghna                         | Raj nighantu, Data base of Medicinal plant, GOI                       |
| 7.     | Vedanasthapana                         | Data base of Medicinal plant, GOI                                     |
| 8.     | Jantughna                              | Data base of Medicinal plant, GOI                                     |
| 9.     | Kaphagna                               | Data base of Medicinal plant, GOI                                     |
| 10.    | Sweda janana                           | Data base of Medicinal plant, GOI                                     |
| 11.    | Vishaghna                              | Data base of medicinal plant, GOI                                     |
| 12.    | Deepana                                | Data base of Medicinal GOI  |
| 13.    | Twak rogahara                          | Shaligram nighantu  |
| 14.    | Kasa-hara                              | Shaligram nighantu  |
| 15.    | Pramehghna                             | Sushruta samhita  |
| 16.    | Lekhana-karma in kustha as Anu-Shastra | Sushruta samhita  |

Following chemical constituents are found in Parijata.

#### **D-Mannitol**

Mannitol is an organic compound. Mannitol is used clinically to reduce acutely raised intracranial pressure and used as an osmotic diuretic agent and a weak renal vasodilator.

#### **Tannin**

Tannins are astringent, bitter plant polyphenols that either bind and precipitate or shrink proteins and various other organic compounds including amino acids and alkaloids.

#### **Linoleic acid**

Linoleic acid is an unsaturated omega-6 fatty acid. It is a colorless liquid. Linoleic acid is beneficial in cystic fibrosis, cancer prevention, dermatitis and diabetes.

#### **Modern Pharmacological Properties**

Due to presence of lots of chemicals and phytochemicals it has a many pharmacological actions like Analgesic, Anti-inflammatory, Anti-spasmodic, Anti-viral, Anti-allergic, Anti-fungal, Anti-bacterial, Anti-pyretic, Immunomodulator, Insecticidal, Respiratory stimulant and Anti-malarial.

#### **Different Medical Uses Described in Modern Literatures**

The leaves are bitter and pungent in taste. It is used to treat fever, fungal skin, infection also used as antibacterial, anti-inflammatory and antihelminthic. Bitter leaves extract is given to children for the expulsion of roundworms and threadworms. Leaf juice is used in sciatica, rheumatism and fever, as an antidote for reptile venoms and snake bite. The flowers are bitter and astringent in taste.

It is used in obstinate remittent fever, sciatica and rheumatism. Because of mild purgative in nature it is very useful in constipation of children.

It is used in treatment of bronchitis and also as an antidote to snake bite.

In India, Indonesia (Java) and Malaysia, the flowers are used medicinally to provoke menstruation.

The bark of this tree is used in eye diseases, ulcers and as a Bark decoction is used for bleeding gums.

The seeds, leaves, flowers of *Nyctanthus arbortristis* possess hepato-protective, anti-leishmanial, immunostimulant, antiviral and antifungal activities.

The fresh leaves are also used for the preparation of homoeopathic medicines.

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