

Punarnava

(*Boerhaavia diffusa*)



Punarnava is the ayurvedic herb presented by our Mother Nature. The Latin name of *Punarnava* is *Boerhaavia diffusa* and its English name is Spreading hogweed. It is extensively found in India. *Punarnava* is the word derived from two different words "punar", which means "again" and "nava" means new". *Punarnava* has long been used in the treatment of various diseases in India and same is authenticated by ancient texts.

Punarnava has many therapeutic uses. The root is used to treat asthma, urinary disorders, leucorrhoea and rheumatism. In addition, the plant has many pharmacological, clinical and antimicrobial properties.

Punarnava, in India is found in warmer parts of the country and throughout up to 2,000 m altitude in the Himalayan region. *Punarnava* a perennial creeping weed, prostrate or ascending herb, up to 1 m long or more having spreading branches. The plant grows profusely in the rainy season, and mature seeds are formed in October-November. Due to its sticky nature, the plant gets stuck on the clothes of human beings and on the legs of animals, which helps in its dispersal from one place to another.¹

Active contents:

Generally whole plant consists the following phytochemical constituents; those are Punarnavine (Alkaloids), β -sitosterol (Phytosterols), Liriodendrin (lignans), Punarnavoside (Rotenoids), Boerhavine (Xanthenes) and Potassium nitrate (Salts). The roots contain the rotenoids boeravinones A1, B1, C2, D, E and F besides the new dihydroisofurenoxanthin, Alanine, Arachidic Acid, Aspartic Acid, Behenic Acid, Boerhaavic Acid, Boerhavone, Campesterol, Daucosterol, Beta-Ecdysone, Flavone, 5-7-dihydroxy-3'-4'-dimethoxy, XY-6-8-dimethyl, Galactose, Glutamic Acid, Glutamine, Glycerol, Glycine, Hentriacontane N, Heptadecyclic Acid, Histidine, Hypoxanthine-9-*l*-arabinofuranoside, Leucine, Liriodendrin, Methionine, Oleic Acid, Oxalic Acid, Palmitic Acid, Proline, hydroxyl Serine, Sitosterol Oleate, Sitosterol Palmitate, Stearic Acid, Stigmasterol, Syringaresinol-mono-beta-d-glucoside, Threonine, Triacontan-1-OL, Tyrosine, Ursolic Acid, Valine, Xylose, triacontanolhentriacontane 5, 7-dihydroxy-3, 4-dimethoxy-6, 8-dimethyl flavone, and an unidentified ketone (mp 86°).^{2,3}

Herb actions:

Urinary tract infection: This herb is diuretic and useful in treating the diseases of the urinary tract like dysuria and formation of urinary stones. The diuretic action of the herb is due to the presence of the xanthone beta-ecdysone. *Punarnava* also has antimicrobial, anti-inflammatory and antispasmodic properties, which are beneficial in treating urinary tract disorders such as chronic and recurrent urinary tract infections (UTIs).

Hepato-protective: In a number of disorders of the liver such as hepatitis, jaundice, iron deficiency anaemia, anorexia and sluggish liver etc, *Punarnava* comes as the drug of choice for an Ayurvedic physician. Research has established that this herb reconditions the liver, purifies the blood and aids in increasing the basic hemoglobin of an individual.

Indications: Urinary tract infections, Edema (swelling), Liver disorders.

Contraindication: None

Dose: 1 Capsule two to three times a day or as advised by the Physician.

Composition: Each capsule contains 400 mg of standardized extract of *Punarnava* (*Boerhaavia diffusa*).

References :

1. International Journal of Pharmacy and Pharmaceutical Sciences ISSN- 0975-1491 Vol 6, Issue 8, 2014.
2. Mahesh AR, Kumar H, Ranganath MK, Raviraj AD. Detail study on *Boerhaavia diffusa* plant for its medicinal importance- A Review. Res J of Pharm Sci 2012;1(1):28-36.
3. Santhosha D, Ramesh A, Prasad MS, Kumar DS, Kumar BP, Dhanalakshmi. *Punarnava*-a review, Res J of Pharm Biological and Chemical Sci 2011;2(4):427-35.