

Punarnava(*Boerhavia diffusa* Linn.)



Family-Nyctaginaceae

Synonyms

1. Varshabhu
2. Varshketu
3. Swetmoola
4. Raktakanda
5. Raktapushpika
6. Shothaghni

Vernacular Name

English -Spreading hog weed

Hindi -Beshakapore

Habitat & Distribution

Punarnava grows commonly in waste places as a weed throughout India.

Stephania japonica is found in the Easternghats and more so in the Western ghats. It is also distributed in Formosa, Japan and Philippines.

Botanical Discription

Morphology

Habit - Annual herb

Stem - Prostrate or ascending glabrous stem with distinct swollen nodes, stem is diffusely branched.

Leaves - Opposite, unequal, exstipulate, simple, ovate with rounded or cordate base, margin is entire, apex is obtuse, dorsal surface is green and lower sur-face is silvery white in colour.

Inflorescence - Flowers crowded in heads at the end of long slender stalks forming terminal panicle.

Flowers - Bracteate, small, minute, red in colour, perianth lobes are 5, pink in colour, gamophyllous, stamens are 2 to 3 in number, slightly exerted, Gynoecium is Monocarpellary, Ovary is unilocular, superior with single basal ovule.

Fruit - A clavate and 5-ribbed achene.

Flowering - July-August

Fruiting - September-October

Phytoconstituents - Punarnava contains Punarnavine an alkaloid, Punarnavoside, g-sitosterol, Tetracosanoic, Hexacosanoic, Stearic acids, Hentriacontane, Ursolic acid, Myrsistic acid, Oxalic acid, Potassium nitrate and Asparagine.

Rasadi panchaka

Rakta punarnava

- Rasa -Tikta
- Guna- Laghu, Ruksha
- Vipaka - Katu
- Virya - Shita

Sweta Punarnava

- Rasa -Katu Kashaya
- Guna- Laghu, Ruksha
- Vipaka - Katu
- Virya -Ushna

Useful part-Mula (Root) or Panchanga (Whole plant)

Matra (Dosage)

- Swarasa (Juice) - 10 to 20 ml
- Kwatha (Decoction) -40 to 80 ml

Phytoconstituents-Punarnava contains Punarnavine an alkaloid, Punarnavoside, g-sitosterol, Tetracosanoic, Hexacosanoic, Stearic acids, Hentriacontane, Ursolic acid, Myrsistic acid, Oxalic acid, Potassium nitrate and Asparagine.

Karma (Actions)

Rakta punarnava - Grahi, Shophanashaka, Pandughna

Shweta punarnava - Dipana, Shophahara, Pandughna, Bradnahara, Udara roga hara, Kasahara, Hridroga shamaka, Shulahara, Vishahara.

Nilapunarnava - Rasayana, Hridrogahara, Pandughna, Shwayathuhara, Shwasahara.

Doshakarma (Action on Dosha)

Rakta punarnava - Pitta Kaphanashaka

Pittahara due to Shita virya and Tikta rasa and Kaphahara due to Katu vipaka and Tikta rasa.

Shweta punarnava - Vatakaphanashaka

Vatahara because of Ushna virya and Kaphanashaka due to Ushna virya, Katu vipaka and Katu Kashaya rasa.

Rogaghnata (Therapeutic indications)

Rakta punarnava - Shopha and Pandu

Shweta punarnava - Shopha, Pandu, Bradna, Kasa, Udara, Hridroga, Shula and Visha vikara.

Nilapunarnava - Hridroga, Pandu, Shwayathu and Shwasa.

Varieties

Acc to Bh. Pr.Ni, Dh.Ni and Ka.De.Ni - 2 types

Shweta punarnava (*Trianthema portulacastrum*)

Rakta punarnava (*Boerhavia diffusa*)

Acc to Raja Nighantu - 3 types

- Shweta punarnava
- Rakta punarnava
- Nilapunarnava

Substitutue

Boerhavia repanda Willd.

Grahya Laxana (Genuine Characteristics):

Roots will be 30 cm or more long, 0.5 to 1.5 cm thick, stout, tapering, somewhat knotty and twisted. Roots often crowned with stem bases. Outer surface is brown in colour, finely striated longitudinally. Peeled off surface of the root will be creamish in colour. A transversely cut portions of the root shows a thin bark, followed by a yellowish white cortical region and a central woody portion. On breaking root becomes fibrous, odour is characteristic and taste is slightly bitter.