

# PUNARNVA

**Botanical Name -Boerhaavia diffusa**

- Family Name- nyctaginaceae
- Common Name – Red Hogweed, Spreading Hogweed, Horse purslane, Red spiderling, Pigweed, Tarvine
- Part Used –whole plant, roots
- Habitat-India, Australia, united states, south Africa.

## SYNONYMS

- पुनर्नवा -punarnva

one which renews the body, that is, which brings back the youth

- शोफघ्नी - Shophagni

Which relieves swelling.

- प्रवरीषयनी - Pravrishayani

It is perennial regenerating in rainy season.

- मण्डलपत्रिका - Mandalpatrika

It is a spreading herb with round leaves.

- रक्तकांड -Raktakanda-

Its reddish stem.

- रक्त पुष्पिका -Raktapushpika-

Its red flowers.

- विषघ्नी - Vishaghni-

It also eliminates toxins and anti-poisonous.

**Spanish name:** Hierba de cabro, Yierba de puerco, Matapavo

**Varieties:**

- It has two varieties Red Punarnva and White Punarnva.

## Plant Description

- Punarnva is a perennial diffuse herb that has a horizontal stem that is usually purple. Plant length about 0.75-1 m. But sometimes it rises to 4 meters in the rainy season and in summer it dries up.
- Punarnva leaves are usually 2.5-4cm long, white and smooth at the bottom with rough green and smooth hairs on the upper surface.
- The flowers are small in size and red in color.
- Fruits are round or circular, about 1 cm long.
- Punarnva roots are yellowish-brown to brown, long, rounded and twisted when the surface is dry.

## PROPERTIES AND ACTION

Rasa- Madhura(sweet), Tikta(bitter), Kashaya(astringent)

Guna- Laghu (light), Rooksha(dry)

Virya- Ushan(hot)

Vipaka- Katu(spicy)

Karma- Sophaghan (reduce oedema)

Dosha effect- Vat sman

### Charak Samhita

- Swedopaga (an adjunct to sweating therapy),
- Anuvasanopaga (an adjunct to oleating therapy),
- Kasahara (anti-tussive),
- Vayasthapana (rejuvenator)

It is mentioned in Vamana dravya, Virechana drvaya

### Sushruta Samhita

- Vidaarigandhadi gana,
- Vatashanshamana varga,
- Tikta varga
- Shaka varga.

Sushruta quoted 'Punarnva shakam visheshat shophanashanam' mentioned in vegetable used as anti-inflammatory. Meaning of that is punarnva leaves vegetable curry us best anti-inflammatory.

## Therapeutic use

पुनर्नवा श्वेतमूला शोथघ्नी दीर्घपत्रिका ।  
कटु कषायानुरसा पाण्डुघ्नी दीपनी परा ।  
शोफानिलगरश्लेष्महरी व्रणयोदरप्रणुत् ॥

White punarnva is katu and kshay ras, it cures anemia, appetizer, anti-inflammatory, varny (improve complexion), and vat and kapha saman.

पुनर्नवारुणा तिक्ता कटुपाका हिमा लघुः ।  
वातला ग्राहिणी श्लेष्मपित्तरक्तविनाशिनी ॥

Red punarnva is tikat, katu, laghu and shita virya and it subside the vata and kapha it is also help to bind the stool and subside the rakat dosha.

- It is mentioned in Punarnavaristha i.e., indicated for sotha (swelling).
- It is mentioned in Punarnva mandoor i.e., indicated in anemia, inflammation.
- Taila (oil), ghrita (ghee) and mishraka (both oil and ghee) prepared with the combination of drugs including Punarnva is indicated for vatavikara.
- Punarnva paste with milk mentioned in Udraroga.
- Milk boiled with punarnva i.e., ksheerapaka is indicated in mutrghata and ashmari(stone)
- Root of Punarnva with Dhatura mentioned in Alarka visha (Dog bite).
- vishanashaka yavagoo (soup for anti-poison) prepared with koshtaki, chitraka, patha, punarnva etc. drugs are best for sarvavisha (all the poisons).
- Kwath (decoction) prepared with sinduvaar, tagara, shigru, bilva root, punarnava etc. is used in alarka visha (dog bite) and mushika visha (rat poison) along with madhu (honey).
- Punarnava is an ingredient of Shaishuka sneha which is best for Basti karma (enema therapy) and indicated for bala roga (disorders of children's).
- Kashaya prepared with punarnava, Gokshura, brihati, eranda etc. which is indicated in vatika charmadala (type of skin disease) for stanyashodhana (lactodepurants).

## Research on punarnva

### 1)Analgesic and anti-inflammatory activity

punarnva roots methanol extract was able to inhibit the contractions induced by acetylcholine (ACh) in the isolated guinea pig ileum.

### 2) Antibacterial activity

Experimental studies showed that the aqueous, ethanolic and methanolic extracts of B. diffusa (leaf) has substantial antibacterial property against gram-positive and gram-negative pathogenic bacteria.

### 3)Hepatoprotective activity

Extracts of the aerial part and roots of the plant show potential for hepatoprotection against acetaminophen-induced hepatotoxicity in rats.

### 4)Bronchial asthma

Dried leaves of the Punarnava are used as dhoomapana for the treatment of asthma. Leaf decoction is reported for its expectorant properties when combined with ginger juice and black pepper.

### 5)Anticancer Activity

A dose-dependent in-vitro cytotoxic effect of root extract and leaf in HeLa and U-87 tumor cell lines was reported

### 6) Diuretic activity:

Maximum diuretic and anti-inflammatory activities of Punarnava have been observed in samples collected during the rainy season. Due to the combination of these two activities, Punarnava is regarded therapeutically highly efficacious for the treatment of renal inflammatory diseases and common clinical problems Antiurolithiatic Activity:

### 7)Antidiabetic activity

The observations indicated that Boerhaavia diffusa and its leaf extracts with various solvents revealed the antihyperglycemic activities in alloxan and streptozotocin induced hyperglycemic in experimental rat.

## Traditional use

Punarnava used traditionally used worldwide.

- At Brazil it uses in for albuminuria, beriberi, bile insufficiency, cystitis, edema, gallbladder problems, gallstones, guinea worms, hepatitis, hypertension, jaundice, kidney disorders, kidney stones, liver disorders, liver support, nephritis, renal disorders, snakebite, spleen (enlarged) and gonorrhoea.
- At Iran it uses in edema, gonorrhoea, hives, intestinal gas, jaundice, joint pain, lumbago, nephritis, and as an appetite stimulant, diuretic and expectorant.
- At Nigeria it uses in abscesses, asthma, boils, convulsions, epilepsy, fever, guinea worms, as expectorant and laxative.
- At West Africa it uses in abortion, guinea worms, menstrual irregularities and as aphrodisiac.
- At Philippines it uses in fever, purgative, diuretic and vermifuge.
- At Ghana it uses in Asthma and Boils