

Plant Profile: *Argyrea speciosa* L.

Vidhara

Scientific name *Argyrea speciosa* L.

Family Solanaceae

Common names: Hindi: घाव बेल Ghav Bel, विधर, समुद्र शोख, समुन्दर का पाट, English: Elephant Creeper, woolly Morning Glory, Gujrati: Samudrusoka, Samndrashoka, Hindi: Sumundar-ka-put, Suruudrashok, Kannada: Chandrapada, Malalam: Samudrapala, Marathi: Samudrashokha, Oriya: Bryddhotereko, Tamil: Samuddirapacchai, Telugu: Chandrapada, Samudrapala.

Habitat Found all over India, ascending to 300 m.

Plant Description

An extensive woody climber with a stout stem; young shoots and branches covered by a silky white pubescence. Leaves ovate-cordate, apiculate at tip, 7.5-30 cm in diam., glabrous above, white tomentose (velvety) beneath. Flowers rose-purple with 7.5-30 cm long white-tomentose peduncles, borne in axillary many-flowered cymes; bracts ovate-lanceolate, acuminate, 3-4 cm long. Fruits (berries) globose, 2 cm in diam, apiculate, indehiscent. large climber. Leaves ovate, or sub-orbicular, cordate, acute, chartaceous, glabrous above, grey tomentose beneath.; petiole white tomentose. Flowers in axillary capitate cymes, Corolla white tinged with light rose. Fruit depressed apiculate. Found generally in the foot hills and forest fringes

Chemical Composition:

The leaves were found rich in quercetin. Extraction of the leaves with 90% methanol led to the isolation of the flavonoids, quercetin and kaempferol, The seeds yielded fatty oil which found to contain the glycerides of palmitate, stearic, linoleic, linolenic and oleic acids. The free amino acids reported in the seeds were glutamic acid, glycine, isoleucine, leucine, lysine, phenylalanine, tyrosine, praline and α -amino butyric acid.

Medicinal Uses

Centuries of Ayurvedic medical experience using *Withania somnifera* have revealed it to have pharmacological value as an adaptogen, antibiotic, abortifacient, aphrodisiac, astringent, anti-inflammatory, deobstruent, diuretic, narcotic, sedative, and tonic. Ashwagandha has been found to: Provide potent antioxidant protection.

Anti-inflammatory Activity

Withaferin A exhibits fairly potent anti-arthritic and anti-inflammatory activities. Anti-inflammatory activity has been attributed to biologically active steroids, of which Withaferin A is a major component.

Anti-Stress Activity

Researchers using *Withania somnifera* discovered the animals given the herb an hour before the foot shock experienced a significantly reduced level of stress. This research confirms the theory that Ashwagandha has a significant anti-stress adaptogenic effect.

Antibacterial Activity

The antibiotic activity of the roots as well as leaves has recently been shown experimentally. Withaferin A in concentration of 10 μ g/ml inhibited the growth of various Gram-positive bacteria, acid-fast and aerobic bacilli, and pathogenic fungi. It was active against *Micrococcus pyogenes* var *aureus* and partially inhibited the activity of *Bacillus subtilis*.

Anti-oxidant Activity

The active principles of WS, sitoindosides VII-X and withaferin A (glycowithanolides), have been tested for antioxidant activity using the major free-radical scavenging enzymes, superoxide dismutase (SOD), catalase (CAT), and glutathione peroxidase (GPX) levels in the rat brain frontal cortex and striatum.

Antiparkinsonian properties

Withania significantly inhibited haloperidol or reserpine-induced catalepsy and provide hope for treatment of Parkinson's disease

Anti ageing property

Anti convulsing activity

