Hemidesmus indicus R.Br.

Synonyms : *Periploca indica* Linn.
Family : Apocynaceae
Group : Rejuvenatives
Parts Used : Root , Leaf, Stem
Vernacular Names
English : Indian sarasaparilla
Malayalam : Naruneenti, Nannari
Hindi : Anantamul
Sanskrit : Anantamulah, Sariba
Bengali : Anantamul
Kannada : Namadaballi
Tamil : Nannari
Telungu : Sugandapala

Distribution and Habitat: Distributed throughout India, the Moluccas and Sri Lanka.
Botany: It is a perennial, laticiferous with numerous slender, terete stems having thickened nodes.
• ***Leaves:*** Simple, opposite, very variable from elliptic-oblong to linear-lanceolate, variegated with white above and silvery white and pubescent beneath.
• ***Flowers***: Greenish outside, purplish inside, crowded in sub-sessile cymes in the opposite leaf-axils.
• ***Fruits***: Slender follicles, cylindrical, 10 cm long, tapering to a point at the apex. Seeds are flattened, black, ovate-oblong and silvery white coma.
Properties: The root is alterative, febrifuge, antileucorrhoeic, antisyphilitic, demulcent, diaphoretic, diuretic, tonic, galactogenic, antidote for scorpion-sting and snake-bite, antidiarrhoeal, blood purifier, antirheumatic and aperitive. Essential oil from root is anti-bacterial and the plant is antiviral.
Chemical constituents: The twigs of the plant give a pregnane ester diglycoside named desinine. Roots give β-sitosterol, 2-hydroxy-4-methoxy benzaldehyde, α-amyrin, β-amyrin and its acetate, hexatriacontane, lupeol and its acetate. Leaves, stem and root cultures give cholesterol, campesterol, β -sitosterol and 16-dehydro-pregnenolone.
Uses:
• The roots are useful in vitiated conditions of *pitta*, burning sensation, leucoderma, leprosy, skin diseases, pruritus, asthma, bronchitis, hyperdipsia, opthalmopathy, hemicrania, epileptic fits, dyspepsia, helminthiasis, diarrhoea, dysentery, haemorrhoids, strangury, leucorrhoea, syphilis, abscess, arthralgia, fever and general debility.
• The leaves are useful in vomiting, wounds and leucoderma.
• The stems are bitter, diaphoretic and laxative and are useful in inflammations, cerebropathy, hepatopathy, nephropathy, syphilis, metropathy, leucoderma, odontalgia, cough and asthma.
• The latex is good for conjunctivitis.
Formulations: Saribadyasava, Pindataila, Vidaryadi lehya, Draksadi kasaya, Jatyadi ghrita Sharihanavamthikthakam kasayam
Formulations: Sarivadyarishta, Chandrakala rasa, Sarivadyasava

Agrotechnology
Propagation: It is propagated through root cuttings. The root cuttings of length 3-5cm can be planted in polybags or in the field. They can be planted in flat beds or on ridges. Planting is done usually at a spacing of 50 x 20 cm. It can also propagated *in vitro* through tissue culture by using nodal sectors and leaf as explants on MS medium containing BAP (2-4 mg/l) and IAA (1-2 mg/l)
Manures and fertilizers: Heavy application of organic manure is essential for good growth and root yield. Inorganic fertilizers are not usually applied. Frequent weeding and earthing up are required, as the plant is only slow growing. Provision of standards for twining will further improve the growth and yield of the plant.