Desmodium adscendens

(Sw.)DC.

Fabaceae - Papilionoideae

LOCAL NAMES
English (hard stick,hard man,beggar-lice,tropical clover,tick trefoil,tick clover,strong back); Fijian (kandakanda,matite); Vietnamese (bai ngai)

BOTANIC DESCRIPTION
A creeping or ascending, weedy, perennial herb or low shrub, up to 1.3 m tall, sometimes forming tussocks with ascending branches.

Leaves 3-foliolate, stipules obliquely ovate-lanceolate, persistent; terminal leaflet elliptical-obovate.

Inflorescence a terminal or axillary raceme, 4-20 cm long, lax-flowered; flowers in pairs, calyx 5-lobed, covered in hairs, petals are pink to blue or pale purple.

Fruits green in small, sticky, beanlike pods, 10-25 mm x 3-4 mm, 3-6 jointed , dehiscent, densely covered in hairs; seeds flattened ellipsoid, 2.5-5.0 mm x 1.5 mm.

BIOLOGY
Flowers and fruits occur throughout the year. The legume appears to be dispersed by animals and humans.

ECOLOGY
Desmodium adscendens is indigenous to many tropical countries and grows in open forests, pastures, along roadsides, open hillsides, and like many weeds - just about anywhere the soil is disturbed. It grows wild in the Amazon rainforest of Peru and other South American countries and on the West Coast of Africa as well. It prefers shady, humid locations, on stream banks and on bands of rice fields.

BIOPHYSICAL LIMITS
Altitude: 200-1000 m
Temperature: 23ºC
Rainfall: 1000-1600 mm
Soil type: moist sandy loam soil.

DOCUMENTED SPECIES DISTRIBUTION

Native: Angola, Belize, Bolivia, Brazil, Burundi, Cameroon, Canada, Colombia, Costa Rica, Cote d'Ivoire, Ecuador, Equatorial Guinea, Ethiopia, France, French Guiana, Gabon, Ghana, Guatemala, Guinea, Guinea-Bissau, Kenya, Liberia, Madagascar, Malawi, Malaysia, Mauritius, Mexico, Mozambique, Nicaragua, Nigeria, Panama, Papua New Guinea, Peru, Rwanda, Sao Tome et Principe, Senegal, Sierra Leone, South Africa, Swaziland, Tanzania, Thailand, Togo, Uganda, Venezuela, Zambia, Zimbabwe

Exotic: Fiji, Marshall Islands, New Caledonia, Seychelles



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

PRODUCTS
Medicine: Has been utilized very effectively by native peoples for a wide variety of conditions including: hepatitis, liver cancer, nervousness, arthritis, muscle, for wounds, and a leaf infusion for convulsions and venereal sores, back, malaria, chronic hepatitis, liver dysfunctions, tendon, and spinal pain, dysentery, rheumatism, asthma and eczema. Rio Pastaza natives in the Amazon brew a leaf tea and wash the breasts of mothers with it to promote milk flow. A leaf tea is used as a blood cleanser; to detoxify the body from environmental toxins and chemicals; as a urinary tract cleanser; and to treat ovarian and uterine problems such as inflammation and irritation, vaginal discharges, and hemorrhages.

Forage: D. adscendens is a good source of forage for all livestock, and game animals, especially during the dry season when the grasses are very dry. It has a high dry-matter yield, and high content of crude protein; exhibits remarkable persistence in grasslands under grazing conditions.

SERVICES
Soil improver: The legume could be used as a soil cover and green manure. In Indo-China, Malaysia, East and South Africa, it is planted in tea and coffee plantations as a cover and for green manure. The profuse natural nodulation of the legume is important in increasing pasture productivity, soil fertility through nitrogen fixation thereby enhancing subsequent crop yields.

TREE MANAGEMENT
Application of single superphosphate fertilizer to encourage root formation and growth is advised. Once established, they form several prostrate shoots which grow rapidly, and these can be used to plant in other paddocks.

GERMPLASM MANAGEMENT
Storage behaviour is orthodox; seeds can store a long time and germination rate can only change from 100% to 80% in 11 years of storage.

PESTS AND DISEASES
No serious pests and diseases attack D. adscendens.

FURTHER READNG

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SUGGESTED CITATION

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