Herbal Garden (Muligai Vanam)

Asthisamhara (Pirandai)

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Botanical Name : *Cissus quadrangularis* Linn
Tamil Name : Pirandai, Perandai
Sanskrit Name : Asthisamha
English Name : Edible stemmed vine.

**Distribution and Habitat**

*Cissus quadrangularis* L. is a succulent plant of the family *Vitaceae* commonly found throughout the hotter parts of India. It can be cultivated in plains, coastal areas, jungles and wastelands up to 500 m elevation. The plant is propagated using cuttings. The surface of the shrub is smooth glabrous buff coloured with a greenish tinge, the angular portion of the plant has a reddish-brown hue. Flowering occurs in the month of June-December (Guha-bakshi et al., 2001). Flowers are small, greenish-white bisexual tetramerous and occur in umbellate cyme, opposite to the leaves, the presence of 4-5 petals is observed which is imbricate; internodes measure 4-5 cm long and 1-2 cm thick with occasional tendril at nodes. Cup shaped calyx is short, entire and deciduous in nature. The roots are aerial and develop during the rainy season. It is a one seeded plant and seeds are ellipsoid or pyriform in shape. Its alternate, simple leaves are also thick and ovate with serrated margins (Sen et al., 2012).

**Parts used**

Whole part of the plant

**Edible uses**

In India, stems are eaten as fried or curried.
**Medicinal uses**

It is an ancient medicinal plant used widely in the traditional Ayurvedic system of medicine for its weight management, profound bone healing and bone mending properties (Mustafa et al., 2002). The plant has been documented for the treatment of osteoarthritis, rheumatoid arthritis and osteoporosis (Paulsen et al., 2007). The stem part is used to block the muscle damaging effect of cortisol and leads to the formation of new muscles. In Siddha medicine it is considered a tonic and analgesic, and is believed to help heal broken bones. The leaves of the young shoots of the plants are considered alternative and stomachic and their powder is given in digestive problems. The fresh stem and leaves are used for the treatment of haemorrhoids, menstrual disorder, scurvy and as anti-flatulence (Yoga-narasimhan, 2000). The root powder is used orally in constipation and gout (Singh et al., 1983). The plant is useful in helminthiasis, anorexia, dyspepsia, colic, flatulence, skin diseases, leprosy, haemorrhage, epilepsy, convulsion, haemoptysis, tumours, chronic ulcers and swellings. The stout fleshy quadrangular stem is traditionally used for treatment of gastritis constipation, eye diseases, piles and anaemia (Kirtikar and Basu, 1996).

**Conclusion**

*Cissus quadrangularis* has drawn much attention nowadays for its medicinal uses because of its efficacy and safety for human use. The plant is considered as a versatile medicinal plant in both Ayurvedic and modern drug development areas for its valuable medicinal uses. Based on various research reports, the plant does not produce any toxic effects when used orally and due to its various inherent pharmacognostic properties, also *C. quadrangularis* is recommended as a supplementary drug to aid in the healing of fractures.