Herbal Garden (Muligai Vanam)

Sirukurunja

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<table>
<thead>
<tr>
<th>Botanical Name</th>
<th>Gymnema sylvestre (Retz.) R.Br.</th>
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</thead>
<tbody>
<tr>
<td>Tamil Name</td>
<td>Sirukurunja, Sarkkarai Kolli</td>
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<tr>
<td>Sanskrit Name</td>
<td>Madhunashini</td>
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<tr>
<td>English Name</td>
<td>Cow plant</td>
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</tbody>
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**Distribution and Habitat**

*Gymnema sylvestre* (Retz.) R.Br. is a large, stout, woody climbing shrub belonging to the family Apocynaceae. The plant is found in tropical and sub-tropical regions, well distributed in parts of central and southern India and in the southern part of China, tropical Africa, Malaysia, and Sri Lanka. The leaves are elliptic and opposite, 2.5 – 6 cm long, flowers are small and yellow in colour; calyx long, ovate and obtuse. Stem is aerial, hard, twinning and branched. The taste of the leaf is slightly bitter and astringent. It also possesses remarkable property of paralyzing the sense of the taste for sweet substance for few hours while chewing the leaves. Hence it is commonly called as sugar destroyer.

**Parts used**

Leaves, flower, fruit, stem, roots, and bark.

**Phytochemical constituents**

Stigmasterol, triterpenoids, saponin, anthraquinones, cardiac glycosides, tannin, quinones, flavonoids, phenols, coumarin, glycosides and fixed oils.

**Uses**

As it is useful against major diseases such as cardiovascular diseases, asthma, cancer, diabetes and obesity, different formulation of this plant is found in a number of preparations such as tea bags, health tablets, and food supplements.
**Medicinal uses**

*G. sylvestre* is a therapeutic herb having multiple potentials as mentioned in folk medicine, Ayurveda, Siddha and Homeopathic systems of medicine. The plant has been used in traditional medicine, most notably to control blood sugar. Traditionally, it has been used to treat diabetes, malaria and snake bites as well as to treat diseases caused by phlegm and piles (Kanetkar *et al.* 2007). The leaves have been used for stomach ailments, constipation, hemorrhoids, water retention, and liver disease. The flowers, leaves, and fruits have been used in the treatment of alterations of blood pressure and heart rhythms. The bark is useful as an emetic and expectorant. It is also used for malaria, digestive stimulant, laxative, appetite suppressant and diuretic (Mathew, 2004). Various parts of this plant are used by different tribes in India such as the Sahariya tribe of Madhya Pradesh, Junglee Irulas of Nilgiri hills, Kol tribe of Chhattisgarh, and the Nayaks of Karnataka, to mainly treat asthma, eye and gastric problems, Parkinsonism, urinary problems, and diabetes (Potawale *et al.* 2008).

**Conclusion**

*G. sylvestre* is widely used as a traditional therapy for different ailments. Even now it is being used as a dietary supplement due to its numerous therapeutic uses. It is known to have blood glucose lowering potential and, thus, is widely used in traditional and Ayurvedic systems of medicine due to the presence of phyto-chemicals. *G. sylvestre* is also known to have antioxidant, antibiotic, anti-inflammatory, antiviral, gastro and hepato-protective, and lipid-lowering activities.