



Herbal Garden (Muligai Vanam)

Kandankathiri



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Botanical Name	:	<i>Solanum xanthocarpum</i> L. / <i>Solanum virginianum</i> L.
Tamil Name	:	Kandankathiri
Sanskrit Name	:	Kantkari
English Name	:	Indian Solanum; Thorny Nightshade

Distribution and Habitat:

S. xanthocarpum is a small, semi prostrate, annual and herbaceous plant belongs to the family Solanaceae. The plant is distributed worldwide in the tropical and sub-tropical areas. It grows as a weed in open spaces, along roadsides and in wastelands throughout India.



It is a green prickly perennial climbing herb having a woody base and stem that is zigzag. Its branches are numerous and prickles are compressed and yellow, glabrous and shining which are 1.3 cm in length. Leaves simple, alternate, lobed and unequal, 1-2 cm in diameter, 2-5 cm length, petioles 1-2.4 cm. Fruits 1.3-2 cm diameter, green and having white stripes at the young stage, and yellow on aging, connected with enlarged calyx which is 1.3 cm long, hairy. Seeds 2.5 mm diameter, glabrous, lobes 11 mm long, hairy.

Parts used: Leaves, fruit, roots and seeds

Phyto-chemical constituents:

Steroidal saponins, flavonoids, glycosides, phytosterols, tannins, terpenoids, amide derivatives, amino acids, proteins, Solasodine, Solamargine, solanacarpine, caffeic acid, coumarins, aesculin, aesculetin, steroids, triterpenes, diosgenin, campesterol, daucosterol, stigmasteryl glucoside, cycloartanol, and sitosterol.

Medicinal uses:

This herb is used in various treatments of diseases like asthma, bronchial asthma, cough, chest pain, leprosy, itching, scabies and various skin diseases. Root paste is used by the Mukundara tribals of Rajasthan in the treatment of hernia. The plant produces yellow berries with



expanded calyxes that have been used for generations in folk medicine to treat a wide range of illnesses such as inflammation and throat infections. The ripe fruit extracts is used as traditional medicine by the Kondh tribes of Odisha and Bihar to cure diabetes mellitus (Gupta et al. 2015). Fruits and flowers are used in the burning sensation of the foot. Leaves are powdered, mixed with coconut oil, boiled and filtered. This is then used as a deodorant to get rid of body odour. Decoction of the root is a remedy for cough, asthma and fever (Sudhakar, 2007). Plant decoction is used for treating gonorrhoea; paste is used in the treatment of swellings and pimples, seeds used as expectorant in cough and asthma. The plant is used as an ingredient in many formulations like Chavanaprasha, and Dasamoolarishta. It is used in Ayurvedic medicinal practices and acknowledged in the Hindu *Materia Medica* for its anti-bacterial, anti-asthmatic, hypo-glycemic, hepato-protective and insect repellent properties. Clinical trials have proved the efficacy as anti-inflammatory, antiallergenic, antitumor and immune-modulation power (Parmer, 2010).

Conclusion:

S. xanthocarpum one of the popular and important medicinal plants of tropical and subtropical areas of the world. The whole plant has been reported for its biochemical and pharmacological activities such as diuretic, antihypertensive, anti-hyperlipidemic, cardio-protective, anti-diabetic, anticancer, hepato-protective, anthelmintic, anti-bacterial, analgesic, anti-inflammatory, and anti-oxidant activity.

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