



Herbal Garden (Muligai Vanam)



Periwinkle

R. Vengatachalam

Project Officer

C.P.R. Environmental Education Centre

Chennai

Botanical Name:	<i>Catharanthus roseus</i> (L) G.Don..
Tamil Name:	Nithya kalyani
Sanskrit Name:	Sadampuspa
English Name:	Periwinkle

Distribution and Habitat

Catharanthus roseus is native to Madagascar, where it is now endangered due to habitat destruction. It has been cultivated as an ornamental plant throughout tropical and subtropical regions and thus it has become naturalized in many regions in Asia, Africa, America, southern Europe and Oceania. Perennial herb, woody at base, up to 1 m tall and usually with white latex and an unpleasant smell. **Stem:** Herbaceous erect, cylindrical, solid, branched, and green. **Leaves:** opposite decussate, simple, ovate. **Flower:** Pinkish white and white. Sepals 5, green. Petals 5, gamopetalous, salver-shaped, rotate, pink with long corolla tube, throat of the corolla tube hairy forming a corona, twisted. Stamens 5.



Parts used

Whole plant

Medicinal uses

The leaves and aerial parts of the plant have a wide range of traditional uses. Well known as an oral hypoglycaemic agent, the plant is also considered to be depurative, diaphoretic, diuretic, emetic, purgative and vermifuge. A decoction is taken to treat hypertension, asthma, menstrual irregularities, chronic constipation, diarrhoea, indigestion, dyspepsis, malaria, dengue fever, diabetes, cancer and skin diseases. Extracts prepared from the leaves have been applied externally as antiseptic agents for the healing of wounds; to relieve the effects of wasp stings; against haemorrhage, skin rash and as a mouthwash to treat toothache. The leaves are harvested when the plant is flowering, and can be dried for later use. An infusion of the flowers is used to treat mild diabetes. A decoction of the roots is taken to treat dysmenorrhoea. Ethanol extract from

Catharanthus roseus is used in healing wounds.

Anti-cancer activity: The anticancer alkaloids Vinblastine and Vincristine are derived from stem and leaf of this plant. These alkaloids have growth inhibition effect to some human tumors. **Anti-microbial activity:** Crude extracts from different parts of the plant was tested for anti-bacterial activity. Extract from leaves showed significantly higher efficacy. **Anti-ulcer property:** Vincamine and Vindoline alkaloids of the plant showed anti-ulcer property.



Conclusion

Catharanthus roseus L. (Apocyanaceae) is used in the treatment of various diseases like diabetes, and tumours all over the world from the last several decades. Every part of *Catharanthus* like root, stem, bark and flower are rich sources of several bioactive compounds.

