

Botanic name : *Vinca rosea* L. -- Syst. Nat., ed. 10. 2: 944. 1759 [7 Jun 1759] (IK)
[syn. *Catharanthus roseus* {L.} G. Don]

Common name : Periwinkle, Nayantara

Family : Apocynaceae

Habitat : Terrestrial

Distribution : India; pantropical

Description : An annual evergreen sub herb or herbaceous plant growing to 1 m. tall and secretes milky latex; stems are cylindrical (terete), longitudinally ridged or narrowly winged, pubescent at least when young; leaves oval to oblong, glossy green above and pale green below with a pale midrib and a short petiole about 1- 1.8 cm, arranged in the opposite pairs; flowers pentamerous, actinomorphic, white to dark pink, with a dark red center, with a basal tube about 2.5- 3 cm. long and a corolla about 2-5 cm. diameter with five petal like lobes; fruit is a pair of follicles about 2-4 cm. long and 3 mm broad, with numerous black seeds

Phytochemicals: Alkaloids (> 400), Ajmalicine, serpentine and reserpine, Vincaalkaloids –vincristine (in the List of Essential Medicines of WHO), vinblastine, vinorelbine and vindesine. Leaf alkaloid- Catharanthine, Vindoline, Vindolidine, Vindolicine, Vindolinine, ibogaine, yohimbine, raubasine, Vinblastine, Vincristine, Leurosine, Lochnerine. Stem alkaloid- Leurosine, Lochnerine, Catharanthine, Vindoline. Root alkaloid-Ajmalicine, Serpentine, Catharanthine, Vindoline, Leurosine, Lochnerine, Reserpine, Alstonine, Tabersonine, Horhammericine, lochnericine, echitovenine. Flower alkaloid- Catharanthine, Vindoline, Leurosine, Lochnerine, Tricin (Flavones); Seed alkaloid-Vingramine, Methylvingramine. Glycosides, flavonoids, tannin, saponins, monoterpenoidindole alkaloids

Medicinal/Economic uses : Since time immemorial, medicinal value of *V. rosea* has been known. The plant contains enormous phytoconstituents which are used in traditional Indian system of Ayurvedic medicine and conventional Chinese medication and other curative systems. Hypotensive, anti-diabetic, anti-microbial, anthelmintic, anti-diarrheal, wound-healing, anti-oxidant and antispasmodic. In India-antidiabetic, Juice of leaves used for bee stings, anticancer (some leukemias, lymphomas, and childhood cancers, as well as several other types of cancer). The Philippines- Decoction of leaves used in diabetes & stomach cramps. Root decoction for intestinal parasitism; as emmenagogue; may produce abortion. Infusion of leaves used for treating menorrhagia. Has anticancer activity and used for dysentery (roots). Mauritius-The bitter and astringent leaves used as vomitive; roots used as purgative, vermifuge, depurative, hemostatic and toothache remedy. Infusion of leaves used for indigestion and dyspepsia. Malayasia/SE Asia- Flower decoction used for asthma. Plant decoction used for diabetes, hypertension, insomnia and cancer. China- Used for dysmenorrhea, diabetes & malaria.