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## Catharanthus roseus



**Scientific name:** Catharanthus roseus

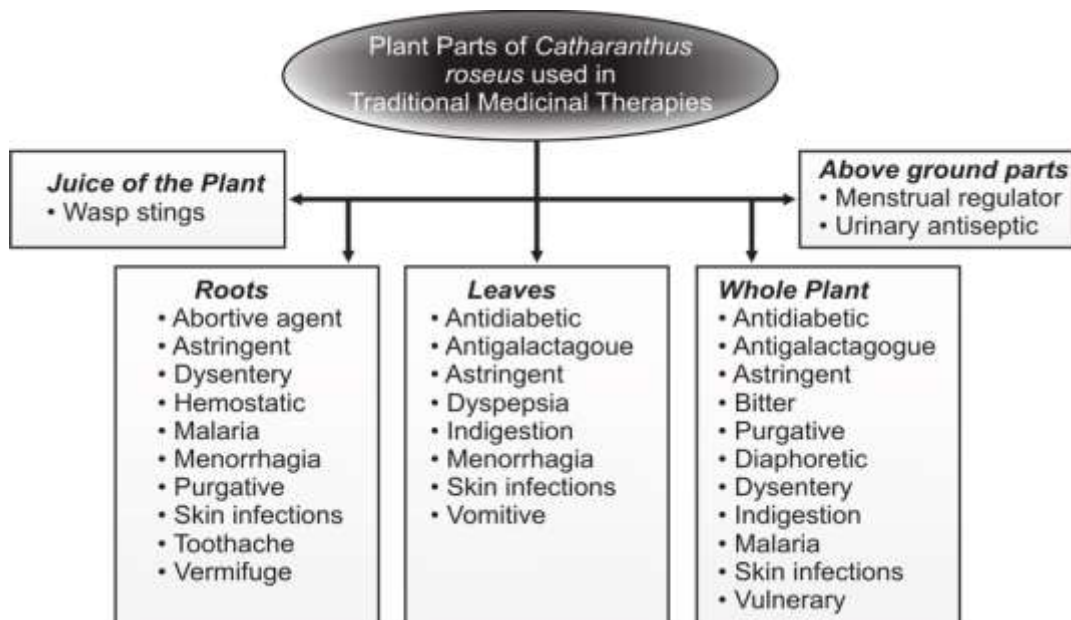
**Family:** Apocynaceae

Catharanthus roseus, commonly known as bright eyes, Cape periwinkle, graveyard plant, Madagascar periwinkle, old maid, pink periwinkle, rose periwinkle, is a species of flowering plant in the family Apocynaceae.

Uses. In traditional medicine, the periwinkle has been used for relieving muscle pain, depression of the central nervous system, also used for

applying to wasp stings and to heal wounds. Its application ranges widely from the prevention of diabetes to treatment of stomach ache. *Catharanthus roseus* produces the powerful anticancer drugs vinblastine and vincristine, which are derived from the dimerization of the MIAs, vindoline and catharanthine.

The parts that grow above the ground and the root are used to make medicine. Madagascar periwinkle is used for diabetes, cancer, sore throat, cough, insect bite, and many other conditions, but there is no good scientific evidence to support these uses. Using Madagascar periwinkle can also be unsafe.



## 2. Morphological features :

- This plant is perennial.
- The colour of leaves of this plant is green .
- The colour of flowers are violet, pinkish white or carmine red.
- Roots are pale grey in colour.
- Vinca has characteristic odour and taste is bitter.
- Flowers are hermaphrodite i.e. contain both male and female organs.
- The leaves of vinca are petiolate, entire margin.
- Leaves are ovate or oblong in shape and have glossy appearance.
- Leaves have acute apex.
- Fruits of vinca are follicles with numerous black seeds.
- It is a herbaceous subshrub, having height 40-80cm.
- Leaves are oppositely arranged.
- Flowers are tubiform and 2-7cm broad with generally 5 petals joined together at the base to form a tubule.

- The fruits are divergent follicle.

### 3. Chemical constituents :

- Vinca contain indole alkaloids in large amount, mainly vincristine and vinblastine.
- Vinca also contain other alkaloids such as ajmalicine, serpentine and lochnerine as a chemical compound.
- When coupling of indole alkaloids such as catharanthine and vindoline occur, they produce vinca alkaloids.

### 5. Uses/Medicinal Uses :

- It is used to treat lymphomas
- The Hodgkin's disease is treated by vinca because it contains vinblastin as a chemical constituent.
- Also it helps to treat non-Hodgkin's lymphomas .
- Acute lymphocytic leukemia is treated by the help of vincristine part of vinca herb