

## ***Catharanthus roseus* (L.) G.Don**

Family: Apocynaceae

Bengali/tribal name: Nayantara/Chirabasanta

English name: Madagascar periwinkle or vinca

*Catharanthus roseus*, commonly known as Madagascar periwinkle or vinca, is a medicinal plant with a long history of use in traditional medicine systems around the world. It contains numerous bioactive compounds that contribute to its therapeutic properties.

Here are some of its reported medicinal uses:



1. **Anticancer Properties:** *Catharanthus roseus* contains alkaloids such as vincristine and vinblastine, which are well-known for their anticancer effects. These compounds interfere with the growth of cancer cells and are used in the treatment of various types of cancer, including leukemia, lymphoma, and certain solid tumors. Vincristine and vinblastine are important chemotherapy drugs that have been derived from *Catharanthus roseus*.
2. **Hypoglycemic Activity:** Some studies suggest that *Catharanthus roseus* may have hypoglycemic effects, helping to lower blood sugar levels. It is used in traditional medicine to manage diabetes and improve glucose metabolism. Compounds found in *Catharanthus roseus* may help regulate insulin secretion and increase glucose uptake by cells.
3. **Antimicrobial Effects:** *Catharanthus roseus* exhibits antimicrobial properties due to the presence of various bioactive compounds. It has been used traditionally to treat bacterial, fungal, and parasitic infections. *Catharanthus roseus* extracts may help combat pathogens responsible for infections such as urinary tract infections, respiratory infections, and skin infections.
4. **Cardiovascular Support:** *Catharanthus roseus* is believed to have cardio-protective effects. It may help regulate blood pressure, improve

circulation, and reduce the risk of heart disease. Some bioactive compounds in *Catharanthus roseus* may help dilate blood vessels and improve cardiac function.

5. **Antioxidant Activity:** *Catharanthus roseus* is rich in antioxidants, including flavonoids and phenolic compounds. These antioxidants help neutralize harmful free radicals in the body, protect cells from oxidative damage, and reduce the risk of chronic diseases such as cardiovascular disease, cancer, and neurodegenerative disorders.
6. **Anti-inflammatory Effects:** *Catharanthus roseus* contains compounds with anti-inflammatory properties. It has been used traditionally to alleviate inflammation associated with conditions such as arthritis, rheumatism, and skin irritations. *Catharanthus roseus* extracts may help reduce pain and swelling caused by inflammation.
7. **Wound Healing:** *Catharanthus roseus* extracts have been applied topically to promote wound healing. Its antimicrobial and anti-inflammatory properties help prevent infection, reduce inflammation, and accelerate the healing process when applied to wounds, cuts, and abrasions.
8. **Diuretic Properties:** *Catharanthus roseus* has diuretic properties, meaning it helps increase urine production and promote the elimination of excess fluids from the body. It may be used to treat conditions such as edema and fluid retention.

While *Catharanthus roseus* offers numerous potential health benefits, it's essential to use it under the guidance of a qualified healthcare practitioner, especially if you have any underlying health conditions or are taking medications. As with any herbal remedy, individual responses may vary, and it's advisable to consult with a healthcare professional before incorporating *Catharanthus roseus* into your healthcare regimen.