

Vinca

Names and Synonyms

Arabic: الونكا

English: Vinca (Periwinkle)

Scientific name and Family

Vinca rosea

Family: Apocynaceae.



Morphology and Histology of the plant

- Flower and Fruit: This herbaceous plant grows to 80 cm to 1 m high and blooms continuously year-round with pink, purple, or white flowers. There are two common cultivars of *C. roseus* named based on their flower color, one producing pink flower “Rosea” and the other, white flowers “Alba”.
- Leaves, Stem and Roots: The leaves are oval to oblong, 2.5- 9.0 cm. long and 1- 3.5 cm. broad glossy green hairless with a pale midrib and a short petiole about 1- 1.8 cm. long and they are arranged in opposite pairs.

Active constituents

- Indole alkaloids: Vinblastine, vincrestine, vindesine, vindeline, tabersonine are mainly present in aerial parts whereas ajmalicine, vinceine, vineamine, raubasin, reserpine, catharanthine are present in roots and basal stem.
- Flavonoids: kempferol-3-O-rhamnoside-7-O-glucoside, kempferol-3-O-rhamnoglucoside-3-O-galactoside, kempferol-3-O-rhamnoglucoside-3-O-glucoside, quercetin-3-O-rhamnoglucoside-7-O-glucoside.

Pharmacological applications

Internally

- Anticancer: treatment of leukemias, lymphomas, and testicular cancer.
- Circulatory disorders
- Cerebral circulatory impairment and support for the metabolism of the brain.
- Loss of memory
- Hypertension
- Cystitis
- Gastritis
- Enteritis
- Diarrhea

Externally

- Nose bleeds
- Bruising abscesses, eczema and to stop bleeding.

Suitable methods of administration

Whole, cut and powdered drug. For vinca alkaloids, they are available in the form of capsules, ampules, coated and filmed tablets, and compound preparations.

Side effects

Nausea, vomiting, hair loss, hearing loss, dizziness, bleeding, nerve problems, seizures, liver damage, low blood sugar.

Contraindications

- Pregnancy and breast-feeding: likely unsafe
- Diabetes: There is some concern that it might lower blood sugar too much in people with diabetes who are using antidiabetic medications.

Examples of drugs in the market.



References

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