



The pretty Madagascar or rosy periwinkle looks insignificant but has enormous medicinal value. It's a powerhouse of healing chemicals

In Sri Lanka, hope blooms where the rosy periwinkle grows

Words Daleena Samara | **Photographs** Rasika Surasena

If you spot a rosy periwinkle on a lawn, stop and take a closer look. Few flowers are such a bundle of contradictions: modest yet exceptional, abundant yet uncommonly precious, healing yet hazardous. They're easy to spot anywhere in Sri Lanka: hardy and plentiful in the wild and in private gardens alike.

The Madagascar or rosy periwinkle is an alien to the Island, introduced probably around the 1700s for ornamental purposes. It took on a new persona here, named *nayantara* and *minimal* (death flower), the latter because of its presence in cemeteries. Its close proximity to the departed gave rise to a superstition that it was unlucky. But recognition of its curative power has restored its honour.

The Madagascar periwinkle falls under the genus *Catharanthus*, to which eight flowering periwinkle species, seven endemic to Madagascar, belong. It's also associated with the *Vinca* genus. In Sri Lanka, it was the *Catharanthus roseus* that took firm root.

A perfect garden plant, the periwinkle has thick glossy leaves and pretty five-petalled flowers in mauve, red or white. Over the years, plenty of colourful cultivars have been developed: the Cooler Apricot, for example, which has lovely pastel apricot blossoms; and the blazing Aztec Pink Magic.

The periwinkle is a survivor. Its floral pollination structure is accessible to insects, and it also self-pollinates, explains Dr Nalin Perera, a homeopath and acupuncturist who has conducted substantial research into the Island's medicinal plants.

"Plants that self-pollinate are able to survive in new environments. When a plant is taken to a new place, its natural pollinators are missing. If it is unable to self-pollinate, it dies. So some plants self-pollinate and survive. After some years, an insect takes over the job."

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That's how the periwinkle came to be widely naturalised around the world. In his travels around the region, Nalin has found abundant wild periwinkle in the forests of Myanmar and Langkawi. The ability to self-propagate ensured the proliferation of the species in Sri Lanka.

It's the *Catharanthus roseus* that has been the focus of medical science since the early 20th century, although other varieties of periwinkle also have curative value. Across the world, traditional medicine systems from West to East have used its various parts to cure all manner of ailments: regulating blood sugar, reducing toothaches and high blood pressure, soothing insect bites, improving memory and circulation, healing wounds, and more. Nalin's research shows that in Sri Lanka, rosy periwinkle roots have been successfully used to treat the symptoms of malaria and eliminate constipation, while its leaves are well known as a treatment for diabetes.

Its use in native medicine caught the attention of the Western medical world as early as the 1920s, when researchers began to delve into its efficacy as a folk remedy for diabetes in Jamaica. Scientific analysis isolated two powerful alkaloids, vincristine and vinblastine initially, that were then developed into medicines to treat leukemia, cancer of the blood and bone marrow, and Hodgkin's lymphoma - a debilitating disorder of the lymphatic system. The plant has been under intense scientific scrutiny ever since.

"Western science has so far isolated 66 active alkaloids in the *Catharanthus roseus*," says Nalin. "In Sri Lanka too, it's now being tested in combination with two other herbs as an ayurvedic cancer cure."

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But the rosy periwinkle has a darker side. Botany and pharmaceutical authorities have listed it among the world's most hazardous and mind-altering plants, says Nalin. It can damage the respiratory and digestive systems as well as the eyesight, hearing and white blood cell count. All parts of the plant contain toxins that can kill animals. In other words, consumption in anything other than tiny amounts is potentially lethal.

Locally, Sri Lanka's southern shamans include its flowers in exorcism rituals. While the origins of the practice are a mystery, those shamans may be on to something: Europe's medieval magicians attributed supernatural powers to the periwinkle too. In 15th -century Europe, it was known as the 'sorcerer's violet', believed to have the power to restore love

and expel spirits from the possessed.

The 14th-century translation of *Macer's Herbal*, a compendium on herbs with curative properties, recommends the periwinkle for protection against "wykked spirits". The 4th-century *Herbarium of Apuleius Platonicus* lists the periwinkle as able to fight against "devil sickness and demoniacal possession", snakes, wild beasts, poisons, envy and terror, and attract grace, prosperity and acceptance. Other titles, like the 13th-century *The Boke of Secretes of Albartus Magnus of the Vertues of Herbs, Stones and certaine Beasts* recommends adding periwinkle to a potion for eternal love between husband and wife.

In medieval Europe, it was also used to garland those awaiting execution, and laid on the biers of dead children. The Germans called it the "flower of immortality", the Italians "the flower of death" and the French, "an emblem of friendship".

In Sri Lanka, it is the white periwinkle that commands pride of place in traditional medicine. Ayurveda posits that only plants of naturally-occurring colour should be used for medicinal purposes, says Nalin, which eliminates therapeutic use of colourful hybrids such as the apricot periwinkle. Ayurveda also prefers the use of white flowers over coloured. And so it is always the white periwinkle that is harnessed to heal, although the natural coloured ones are just as potent.

The periwinkle today has been established as a wonder plant. In Sri Lanka, our ayurvedic healers tested it against the standards of the *pancha mahabhuta*, the five qualities that determine the properties and actions of a substance, says Nalin. The *Catharanthus roseus* obviously passed the test. Cross fertilisation of ancient wisdom with modern science will benefit humanity greatly, spelling hope wherever the periwinkle grows.

Nature's healer

