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Catharanthus roseus: Periwinkle, Madagascar Periwinkle, Vinca[1]

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https://ffl.ifas.ufl.edu/

IFAS Assessment

South

Caution

Caution - manage to prevent escape. May be recommended by IFAS. Will be reassessed in two years.

view assessment

IFAS Assessment

Central

Not a problem species (documented)

Not considered a problem species at this time. May be recommended by IFAS. Reassessed every 10 years.

view assessment

IFAS Assessment

North

Not a problem species (un-documented)

Not considered a problem species at this time. May be recommended by IFAS. Reassessed every 10 years.

view assessment

This Florida-Friendly Landscaping™ publication is part of a series originally written by Edward F. Gilman. Visit https://ffl.ifas.ufl.edu/ to learn more about creating and maintaining attractive landscapes that protect Florida's water resources and environment.

Introduction

Madagascar periwinkle (*Catharanthus roseus*) is a tender evergreen perennial that is often grown as a warm season annual in frost-prone hardiness zones. This plant has a rounded growth habit and reaches a height and spread up to two feet, depending upon cultivar selection (Figure 1). Cultivars with carpet-like or upright growth habits are also available. The semi-evergreen foliage is elliptic and has a glossy sheen and pale midrib (Figure 2). This species produces showy tubular flowers with five petals that may be white, pink, red, or lavender (Figure 3). Madagascar periwinkle has a long bloom period, and flowering is prolific from summer through fall., Although plants may establish poorly in very hot weather, this plant tolerates heat and flowers in the hottest weather better than most other flowering groundcovers. This plant may be used in a variety of settings in the landscape including as edging or a border, utilized as a groundcover or in a mass planting, or may be used in hanging baskets or for a cascading effect when planted near a wall.



Figure 1. Full form—*Catharanthus roseus*: Madagascar periwinkle.
Credit: Ryan Fessenden



Figure 2. Leaf—*Catharanthus roseus*: Madagascar periwinkle.
Credit: © Naveen Pandey, some rights reserved (CC BY-NC) via iNaturalist



Figure 3. Flower—*Catharanthus roseus*: Madagascar periwinkle.
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General Information

Scientific name: *Catharanthus roseus*

Previous name(s): *Vinca rosea, Vinca multiflora*

Pronunciation: kath-uh-RANTH-us ROE-zee-us

Common name(s): periwinkle, vinca, Madagascar periwinkle

Family: *Apocynaceae*

Plant type: annual; perennial; herbaceous; groundcover

USDA hardiness zones: 9B through 11B (Figures 4 and 5); may be planted in all zones as a warm season annual

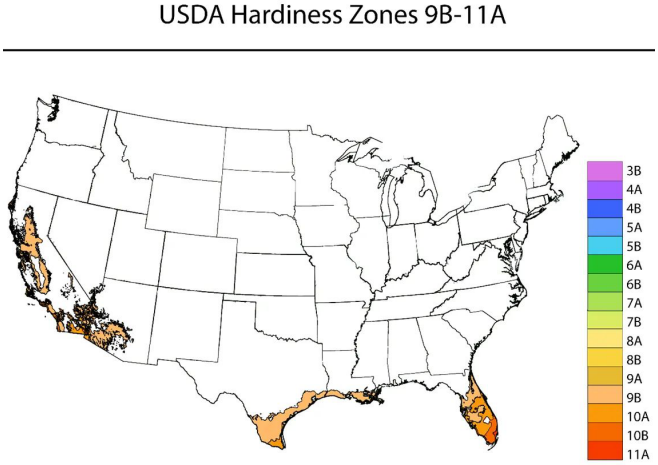


Figure 4. Shaded area represents potential planting zone—USDA Hardiness Zones 9B–11A; 11B within planting zone but not pictured on map.
Credit: This map is based on the 2023 USDA Plant Hardiness Zone Map. Visit https://planthardiness.ars.usda.gov/ for specific zone information.

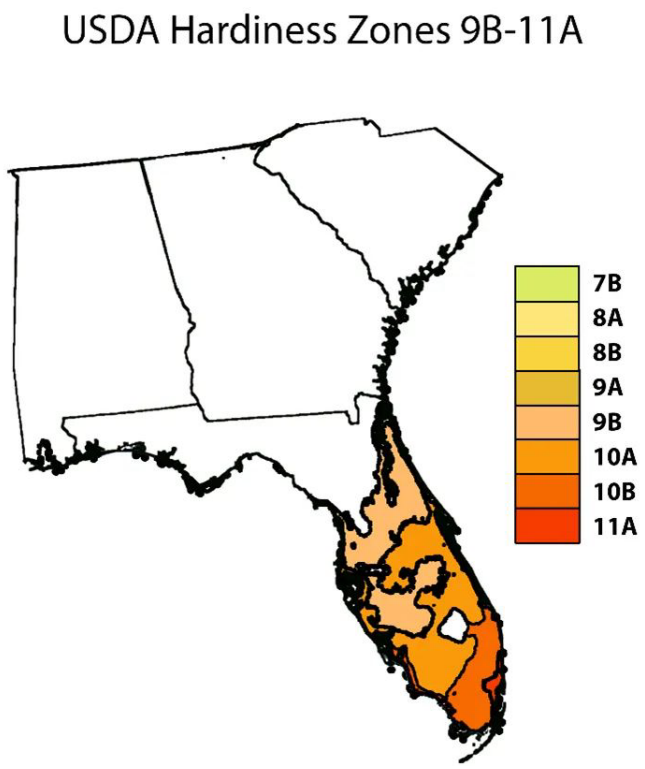


Figure 5. Shaded area represents potential planting zone in the SE Region—USDA Hardiness Zones 9B–11; 11B within planting zone but not pictured on map. Credit: This map is based on the 2023 USDA Plant Hardiness Zone Map. Visit https://planthardiness.ars.usda.gov/ for specific zone information.

Planting month for zone 7: Jun

Planting month for zone 8: May; Jun

Planting month for zone 9: Apr; May; Jun; Sep; Oct

Planting month for zones 10 and 11: Feb; Mar; Apr; May; Sep; Oct; Nov; Dec

Origin: native to Africa

Invasive potential: Caution in South Florida—may be recommended by UF/IFAS faculty but should be managed to prevent its escape (reassess in 2 years)

Uses: edging; groundcover; mass planting; naturalizing; hanging basket; container or above ground planter; cascading down a wall; border

Availability: generally available in many areas within its hardiness range

Description

Height: 1 to 2 feet; dependent upon cultivar selection

Spread: 1 to 2 feet; dependent upon cultivar selection

Plant habit: round; spreading

Plant density: moderate

Growth rate: moderate

Texture: medium

Foliage

Leaf arrangement: opposite/subopposite

Leaf type: simple

Leaf margin: entire

Leaf shape: elliptic (oval)

Leaf venation: pinnate

Leaf type and persistence: deciduous

Leaf blade length: 2 to 4 inches

Leaf color: green

Fall color: not applicable

Fall characteristic: not applicable

Flower

Flower color: pink; red; purple; lavender; white

Flower characteristic: spring flowering; summer flowering; fall flowering; showy

Fruit

Fruit shape: pod or pod-like

Fruit length: 1/2 to 1 inch

Fruit cover: dry or hard

Fruit color: green

Fruit characteristic: inconspicuous and not showy

Trunk and Branches

Trunk/bark/branches: not applicable

Current year stem/twig color: green

Current year stem/twig thickness: medium

Culture

Light requirement: plant grows in partial shade; plant grows in full sun

Soil tolerances: acidic; slightly alkaline; clay; sand; loam

Drought tolerance: high

Soil salt tolerances: appears to have some salt tolerance

Plant spacing: 12 to 18 inches

Other

Roots: not applicable

Winter interest: this species is semi-evergreen in USDA zones 10 and 11

Pest resistance: very sensitive to *Phytophthora* root rot and other diseases listed below; improved cultivars exhibit increased disease resistance

Toxicity: this plant exhibits low toxicity traits; all parts of this plant contain vinca alkaloids; consuming large amounts causes a variety of symptoms

Use and Management

Madagascar periwinkle may be located in full sun to partial shade. Full sun locations will promote increased blooms; however, the plant may struggle to establish in hardiness zones with warmer temperatures. This plant is adaptable to a variety of soil conditions, given that the soil is well drained. Over-irrigation of this plant will cause root rot and other disease issues. Irrigation frequency should be reduced once established, particularly during the rainy summer season.

Madagascar periwinkle is a semi-evergreen plant that is generally planted as a warm season annual. Once plants are removed in the fall, this plant may be replaced with another annual to finish the season, if desired. This plant may also be used in a container with well-drained soil. Spaced 12 to 20 inches apart, plants will form a solid mass of mounded foliage. Periwinkle will cascade over a wall or container and makes a nice hanging basket. Plants may reseed themselves into the landscape. Improved cultivars are available with increased disease resistance, various growth forms, and additional flower colors. Cultivars from the Cora® Group and Nirvana® Group are resistant to *Phytophthora* and other diseases, while plants from the Titan™ Group and Pacifica Group have increased drought tolerance.

Propagation is by seed or cuttings. Softwood cuttings can be taken and rooted during summer. The seed germinates in one week at a temperature of 70°F to 75°F. Keep the flat of seeds in the dark until the seed germinates and do not overwater. Planting may be done at any time during the year in USDA hardiness zones 10 and 11.

Design Considerations

Madagascar periwinkle delivers continuous, high-impact color from late spring to frost. Its simple, pinwheel flowers and glossy dark green foliage create a polished look that thrives in extreme heat.

Ideal for any hot, sunny, well-drained location; it excels in mass plantings, as a uniform border edge, or to fill gaps in foundation beds. Trailing varieties are particularly effective in containers, window boxes, and hanging baskets.

Pair it with other heat-lovers for contrasting form and texture, such as the upright spires of Angelonia (*Angelonia angustifolia*), the colorful trailing foliage of sweet potato vine (*Ipomoea batatas*), and the butterfly-attracting flower clusters of wild sage (*Lantana involucrata*).

Pests and Diseases

No pests are of major concern. Disease issues include Fusarium wilt, blight (black spots on the leaf caused by overcrowding plants), canker and dieback (death of the plant starting at the top, caused by overwatering), *Phytophthora* root rot and stem rot (caused by overwatering). Fungal leaf spots are generally harmless. Selecting disease-resistant cultivars and using proper cultural practices (spacing plants properly and avoiding overhead irrigation and over-irrigation) promotes plant health.

[1] This document is FPS112, one of a series of the Department of Environmental Horticulture, UF/IFAS Extension. Original publication date October 1999. Revised March 2023 and April 2026. Visit the Ask IFAS website at https://ask.ifas.ufl.edu/ for the currently supported version of this publication. *To learn more about creating and maintaining attractive landscapes that protect Florida's water and natural resources, visit ffl.ifas.ufl.edu/*.

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