

Cyclamen: Attractive Flowering Pot Plants

Lekhana L. M¹,
Spoorti Tirki ²,
Sateesh R Patil³
Sampada Sanjay Deshmane⁴

¹M.Sc. Scholar, Department of Floriculture and Landscape Architecture, University of Horticultural Sciences, Udyanagiri, Bagalkot, Karnataka 587104.

²Ph.D. Scholar, Department of Floriculture and Landscape Architecture, University of Horticultural Sciences, Udyanagiri, Bagalkot, Karnataka 587104.

³Professor, Department of Floriculture and Landscape Architecture, University of Horticultural Sciences, Udyanagiri, Bagalkot, Karnataka 587104.

Ph.D. Research Scholar, Department of Floriculture and Landscape Architecture, College of Horticulture, University of Horticultural Sciences, Bagalkot, Karnataka, India-587104



Open Access

*Corresponding Author

Lekhana L. M *

Article History

Received: 23. 5.2026

Revised: 28. 5.2026

Accepted: 02. 6.2026

This article is published under the terms of the [Creative Commons Attribution License 4.0](https://creativecommons.org/licenses/by/4.0/).

INTRODUCTION

Cyclamen is one of the most beautiful flowering pot plants widely cultivated for its colourful blooms and attractive foliage. It belongs to the family Primulaceae and is native to the Mediterranean region, including countries such as Greece, Turkey and parts of Europe. The name *Cyclamen* is derived from the Greek word *Kyklos*, meaning circle, referring to the rounded tuber from which the plant grows. Cyclamen is highly valued as an ornamental potted plant because of its elegant flowers, long blooming period and decorative leaves.

Cyclamen plants produce flowers in shades of pink, red, white, purple, salmon and magenta. The flowers are uniquely shaped with reflexed petals that appear like fluttering butterflies above the foliage. In addition to flowers, the plants possess heart-shaped leaves with attractive silver and green marbling patterns that enhance ornamental appeal even when the plant is not flowering.

Due to their compact growth habit and vibrant flowers, cyclamens are extensively used for indoor decoration, balconies, windowsills, patios and greenhouse displays. They are especially popular during winter and festive seasons because they flower profusely under cool climatic conditions. Their increasing demand in ornamental horticulture has made cyclamen one of the most commercially important flowering pot plants worldwide.



Natural Habitat and Growing Conditions

Cyclamen naturally grows in cool and humid woodland environments where the plants receive filtered sunlight and moderate temperatures. In their native habitat, they commonly grow beneath trees and rocky slopes where the soil remains well-drained and rich in organic matter. Because of this adaptation, cyclamens prefer cool climatic conditions and partial shade for optimum growth and flowering.

The plants perform best under temperatures ranging between 10–20°C. High temperatures above 25°C adversely affect flowering and may induce dormancy. Cool nights and mild daytime temperatures encourage vigorous flowering and improve flower colour intensity. Cyclamen also requires moderate humidity and good air circulation for healthy growth.

These plants are commonly cultivated in pots under greenhouse conditions, shade net structures and indoor environments with indirect light. Excessive direct sunlight may scorch

leaves and flowers, whereas very low light conditions may reduce flowering performance.

Botanical Features

Cyclamen is a herbaceous perennial plant growing from a rounded underground tuber that stores food and water. The tuber serves as the main storage organ and helps the plant survive adverse conditions. Leaves arise directly from the tuber through long petioles and form a compact rosette arrangement.

The leaves are heart-shaped or rounded with decorative silver, grey or light green patterns on dark green surfaces. The undersides of leaves often possess reddish or purple coloration. The foliage itself contributes significantly to the ornamental beauty of the plant.

Flowers are borne on long slender stalks above the foliage. The petals are reflexed backward, giving the flowers a unique butterfly-like appearance. Flower colours vary depending on species and cultivars. The plant produces numerous flowers over a long blooming period under favourable conditions.

Species and Popular Cultivars



Several species and cultivars of cyclamen are cultivated for ornamental purposes. Among them, *Cyclamen persicum* is the most commercially important species used for pot plant production throughout the world. It

produces large attractive flowers in various colours and is widely used in indoor decoration.

Cyclamen hederifolium is known for its ivy-shaped leaves and fragrant pink flowers, while *Cyclamen coum* produces smaller flowers suitable for rock gardens and landscape use.

Modern hybrids have been developed with improved flower size, colour range, fragrance and compact growth habit.

Popular cultivars include:

- Sierra Series
- Laser Series
- Halios Series
- Miracle Series
- Latinia Series

Climate and Soil Requirements

Cyclamen grows best under cool climatic conditions with moderate humidity. The ideal temperature for growth ranges between 15–18°C during the day and 10–12°C at night. Excessively high temperatures reduce flower quality and may force plants into dormancy.

The crop prefers light, porous and well-drained growing media rich in organic matter. Potting mixtures containing cocopeat, peat moss, perlite, sand and compost are commonly used for cultivation. Proper drainage is essential because water stagnation may cause tuber rot and fungal diseases. A slightly acidic to neutral pH range of 5.5–6.5 is considered suitable for healthy root and tuber development. Good aeration and balanced moisture levels are essential for maintaining vigorous plant growth and flowering.

Cultivation Practices

Propagation

Cyclamen is mainly propagated through seeds. Healthy seeds are sown in trays or nursery beds containing sterile growing media. Seed germination usually occurs within 3–6 weeks under cool and humid conditions. Seed propagation is preferred commercially because it helps produce uniform flowering plants. Tissue culture techniques are also used for rapid multiplication of elite cultivars and disease-free planting material. Proper sanitation and temperature management are important during propagation stages.

Planting

Seedlings are transplanted into pots after developing sufficient leaves and healthy roots. Pots are filled with porous and nutrient-rich growing media to support proper root and tuber

development. Care should be taken not to bury the tuber too deeply because excessive moisture around the tuber may cause rotting.

Plants are usually maintained under greenhouse or shade net conditions with adequate spacing to ensure proper air circulation. Decorative pots are commonly used to enhance market value and ornamental appearance.

Irrigation

Cyclamen requires careful irrigation management because both overwatering and underwatering can damage the plants. Watering should be done regularly to maintain moderate soil moisture without water stagnation. Excess irrigation may lead to tuber rot and fungal diseases, while insufficient irrigation results in wilting and poor flowering.

Bottom watering is often preferred to avoid wetting leaves and flowers, thereby reducing disease incidence. During flowering, proper moisture management helps maintain flower quality and prolong blooming duration.

Manuring and Fertilization

Balanced fertilization is essential for healthy foliage growth and abundant flowering. Organic manures such as compost and vermicompost improve soil fertility and moisture retention. Water-soluble fertilizers rich in phosphorus and potassium promote flower production and improve flower quality.

NPK fertilizers such as 19:19:19 and 13:0:45 are commonly applied during vegetative and flowering stages. Excess nitrogen should be avoided because it may encourage excessive leaf growth at the expense of flowers.

Humidity and Temperature Management

Cyclamen performs best under cool and moderately humid conditions. Greenhouse ventilation and cooling systems are often used in commercial production to maintain suitable temperatures during warm seasons. High humidity combined with poor ventilation may increase fungal disease incidence. Therefore, maintaining balanced humidity and proper air movement is essential for healthy plant growth.

Weed Control

Weed growth in pots and nursery beds should be controlled regularly to reduce competition for nutrients and moisture. Manual weeding is commonly practiced because chemical weed control may damage delicate roots and tubers.

Growth Regulators

Growth regulators are occasionally used in commercial cyclamen cultivation to improve compactness and flowering quality. Chemicals such as CCC (Cycocel) and paclobutrazol help reduce excessive vegetative growth and produce compact plants suitable for pot culture. Proper application of growth regulators enhances plant symmetry, flower stalk strength and overall market quality.

Harvesting and Marketing

Cyclamen plants are marketed mainly as flowering potted ornamentals. Plants with uniform growth, attractive foliage and abundant flowers command higher market prices. Flowering plants are carefully selected and graded according to pot size, number of flowers and plant quality.

Proper packaging is essential during transportation because flowers and leaves are delicate and easily damaged. Decorative sleeves and cartons are commonly used for packing and marketing. Cyclamen is highly popular during winter festivals, interior decoration events and gift plant markets due to its vibrant flowers and long-lasting beauty.

Post-Harvest Handling

Proper post-harvest handling is important for maintaining flower freshness and plant quality during transportation and display. Plants should be watered adequately before packing to reduce stress and wilting. Storage temperatures around 10–15°C help extend flowering duration and maintain freshness. Plants should be protected from direct sunlight, excessive heat and rough handling during transport.

Uses of Cyclamen

Cyclamen is widely used for:

- Indoor decoration
- Balcony and patio gardening
- Tabletop ornamental displays
- Greenhouse flowering pot production
- Festive and seasonal decoration
- Gift plant purposes

Its colourful flowers and attractive foliage make it one of the most preferred flowering pot plants in ornamental horticulture.

Insect Pests

Common insect pests affecting cyclamen include aphids, spider mites, thrips and cyclamen mites. These pests damage leaves, flowers and buds by sucking plant sap, resulting in curling, discoloration and reduced flowering.

Cyclamen mites are particularly serious because they remain hidden within buds and young leaves, causing deformation and stunted growth. Neem oil sprays and suitable insecticides are commonly used for effective pest control.

Diseases

Cyclamen is susceptible to fungal and bacterial diseases, especially under excessive moisture and poor ventilation conditions. Botrytis blight, Fusarium wilt and tuber rot are among the most important diseases affecting the crop.

Botrytis causes grey mould development on flowers and leaves, particularly under cool and humid conditions. Tuber rot caused by fungal pathogens leads to decay and plant collapse. Proper drainage, balanced irrigation, healthy planting material and greenhouse sanitation help minimize disease problems. Fungicidal treatments are also used when necessary for disease management.

CONCLUSION

Cyclamen is one of the most attractive flowering pot plants cultivated for its elegant flowers, colourful foliage and excellent ornamental value. Its compact growth habit and long flowering period make it highly suitable for indoor decoration and greenhouse pot culture. With proper temperature, irrigation, humidity and nutrient management, cyclamen can be

successfully cultivated as a premium ornamental flowering plant. The growing popularity of indoor gardening and decorative pot plants continues to increase the commercial importance of cyclamen in modern ornamental horticulture.

REFERENCES

- Arora, J. S. (2012). *Introductory ornamental horticulture*. Kalyani Publ., New Delhi.
- Bose, T. K., & Yadav, L. P. (1989). *Commercial flowers*. Naya Prokash, Kolkata.
- Dole, J. M., & Wilkins, H. F. (2005). *Floriculture: Principles and species* (2nd ed.). Pearson Educ., New Jersey.
- Larson, R. A. (1992). *Introduction to floriculture* (2nd ed.). Academic Press, California.
- Hartmann, H. T., Kester, D. E., Davies, F. T., & Geneve, R. L. (2011). *Plant propagation: Principles and practices* (8th ed.). Prentice Hall, New Jersey.
- Widmer, R. E. (1997). Cyclamen production and postharvest management. *HortScience*, 32(6), 1012–1015.
- Halevy, A. H. (1985). *Handbook of flowering*. CRC Press, Florida.
- Joiner, J. N. (1994). *Foliage and flowering potted plant production*. Prentice Hall, New Jersey.
- Nelson, P. V. (2003). *Greenhouse operation and management* (6th ed.). Prentice Hall, New Jersey.
- Pirone, P. P. (1978). *Diseases and pests of ornamental plants*. John Wiley & Sons, New York.