



PHALAENOPSIS

Perhaps the most popular of orchids, these grow on trees or rocks in tropical Asia. When blooms fade, cut stems below the last flower, just above a node. In around 70 percent of cases, stems branch and re-flower.

Ease of care: Easiest in the home. Thrive in warm, low-light conditions. If space is limited choose a miniature hybrid, 15cm (6in) tall in flower.

Flower colour: All but blue and black.

Light: No direct sun. Can cope with the low light of a north-facing window, but prefer east-facing.

Temperature: Winter low 18°C (65°F), summer high 29°C (85°F); cooler conditions inhibit flowering.

Humidity: Stand on a pebble tray, and group plants. Mist leaves and any green-tipped roots that are exposed.

Winter care: Three weeks of cooler conditions in autumn can help reluctant-to-bloom plants initiate flower buds; 16–18°C (60–65°F) is ideal.



Orchids at home



Popular as house plants for their elegant, exotic looks, orchids need specific conditions to keep them happy.

Sarah Brooks profiles those best suited for home cultivation.

Photography
by Tim Sandall

ORCHIDS ARE ONE OF the most bewitching of plant groups. Their levels of diversity and adaptability in the wild are unparalleled. Some have no leaves so their roots photosynthesize instead, while many are able to thrive without the need for soil, growing epiphytically on branches or on rocks. They can be found growing wild on every continent except Antarctica; there are more than 26,000 species and 143,000 hybrids (about 1,500 are naturally occurring), with a further 3,000–4,000 man-made hybrids registered every year with the RHS (the International Cultivar Registration Authority for orchid hybrids).

Despite this great diversity, orchids usually sold as house plants are a selection of tried-and-tested hybrids, from better-known genera such as *Phalaenopsis*, *Paphiopedilum* and *Dendrobium*. Reliable favourites able to cope with limited light and central heating, and sit comfortably on a windowsill, are now reproduced by the millions in a process known as meristem culture. Cells from the growing tip of the plant are grown on in laboratories to create genetically identical clones of the parent. Taiwan currently exports the largest number of these plants to markets in the West.

This revolution in propagation is why orchids have recently become freely available and affordable. They are now a staple of garden centres and even supermarkets, and regularly top the charts as the most popular house plant in Britain, Europe and the USA. With the annual turnover of the orchid industry ▶ 799

WITH THANKS TO THE BUTTERS GROUP, SUPPLIERS OF ORCHIDS AND OTHER PLANTS TO UK RETAILERS



MILTONIOPSIS

Producing a single leaf from the top of each pseudobulb (swollen bulb-like stem) and pansy-like flowers, *Miltoniopsis* (pansy orchid) grows wild on tree branches in Colombia, Peru, Costa Rica and Ecuador. Related *Miltonia* are similar and have been used with *Miltoniopsis* to create a range of hybrids.

Ease of care: Moderately easy. Try to avoid fluctuations in temperature, watering or humidity.

Flower colours: Combinations of pink, red, yellow and white; many with central contrasting 'mask' or 'waterfall'.

Light: Shade from direct sun.

Temperature: Winter low 10°C (50°F), summer high 21°C (70°F).

Humidity: Keep humidity high with a pebble tray, and by grouping. Misting can damage the leaves.

Winter care: As temperatures, daylength and light levels decline, reduce watering and feeding.



CAMBRIA

The name originates from the man-made multi-generic hybrid x *Vuykstekeara* Cambria. It is now used as a selling name for all vuykstekearas, and for many other related multi-generic hybrids that require similar conditions, such as x *Beallara* (bottom left).

Ease of care: Easy in the home. Use half-strength orchid fertiliser.

Flower colours: Red, orange, purple, pink, yellow and white.

Light: Some shade needed. The ideal spot is a north- or west-facing window.

Temperature: Winter low 13°C (55°F), summer high 24°C (75°F), though best in a daytime temperature of 19°C (66°F).

Humidity: Group with other plants and use a pebble tray to raise humidity, especially in higher temperatures.

Winter care: As temperatures, daylength and light levels decline, reduce watering and feeding.



PAPHIOPEDILUM

These ground-dwellers (occasionally found on rocks and trees) grow in tropical and subtropical Asia. They lack pseudobulbs, and are easily identifiable by their pouch-shaped lip, which gives them their common name slipper orchid. There are slipper orchids in other parts of the world too, such as *Phragmipedium* in tropical America.

Ease of care: Widely available hybrids, such as *P. Maudiae* and *P. Pinocchio*, are easily grown as house plants.

Flower colours: White, green, brown, claret, red, yellow, pink.

Light: Shade from direct sun. Green-leaved hybrids will tolerate cooler conditions than selections with mottled leaves.

Temperature: Winter low 13°C (55°F), summer high 24°C (75°F).

Humidity: Use a pebble tray to increase humidity as misting can cause leaves to rot at the base.

Winter care: Reduce watering and feeding in winter.



DENDROBIUM

The species grow on trees in tropical Southeast Asia, Australia and New Zealand. Hybrids using *D. phalaenopsis* or *D. nobile* are widely available as house plants, sometimes called Singapore orchids (above left) and cane dendrobiums (above right) respectively.

Ease of care: Both make easy house plants, liking an airy but not drafty spot.

Flower colours: Usually white, pink, claret, purple, green.

Light: Bright, filtered light all year. Shade from hot summer sun.

Temperature: Cane dendrobiums: cool winters (about 8–10°C/46–50°F) and warm summers (highs about 20°C/68°F). Singapore orchids need even warmth: year-round, daytime highs of 20–27°C (68–80°F) and night lows of 16°C (60°F).

Humidity: Use pebble trays for both. Mist Singapore orchids every morning, and cane dendrobiums daily in summer.

Winter care: To re-flower, cane dendrobiums need a 90-day winter cool period with no water, just misting; Singapore orchids need reduced watering and feeding.



currently topping £9 billion, the 21st could well turn out to be the century of the orchid.

How to grow

Orchids have a reputation for being difficult to grow, but this is a misunderstanding. Those sold as house plants are easy, but it is important to remember that orchids have requirements different to most traditional house plants, such as watering regimes, higher humidity, and weak but regular feeding. Most orchids that die in the home are killed with kindness – usually overwatering. Water plants from the top, with room-temperature water, preferably rainwater. Alternatively, soak the pot and compost in the sink for an hour to saturate the compost, then allow to drain. Do not water until the compost is dry again.

Raise humidity by grouping plants together with other moisture-lovers, such as ferns. In a warm, dry room, stand plants on a 3–5cm (1–2in) layer of pea gravel in a saucer kept constantly moist. The water gradually evaporates, raising humidity around plants. Some orchids respond well to misting of leaves and aerial roots (see panels, left). Mist in the morning so plants are not wet overnight. If water collects at the base of a leaf or centre of the plant, it can lead to rot, so use a twisted paper tissue to draw it out.

Specially formulated orchid food is available for bloom or leaf growth. Add food three waterings out of four, and

flush compost with water on the fourth to prevent build up of salts. Use specialist orchid compost, which is bark based and free draining. Place plants in bright, indirect light; an east-facing window is ideal. Orchids that tolerate lower light (such as *Phalaenopsis*) may thrive at a north- or west-facing window, or a spot further inside the room, out of direct sun. Avoid radiators, draughts and winter chill behind closed curtains.

Orchids are relatively pest and disease free. Aphids, occasionally mealybugs, scale insects or, usually in a glasshouse, red spider mite may affect them. All can be wiped off, or sprayed with an insecticidal soap. Leaf rots are rare and usually caused by overwatering or water sitting on plants. If much of the plant is affected it is probably terminal, but small areas can be removed, the cuts dusted with sulphur powder.

Many commonly offered orchids are easy to grow and make long-lasting and spectacular, rewarding house plants, once you understand and meet their usually modest requirements. ■

Sarah Brooks works on *The Orchid Review* and is a member of the RHS Orchid Committee

@ For further information about suppliers, and more orchid selections that can be grown in the home, visit: www.rhs.org.uk/thegarden
● How to repot orchids and help them to rebloom: see RHS Advice, p835

HOW TO FIND OUT MORE

Read a recommended book

- *RHS Simple Steps to Success: Orchids*, by Liz Johnson, Dorling Kindersley, due out March 2010, £6.99, ISBN 9781405348843.
- *RHS The Amazing World of Orchids*, by Wilma and Brian Rittershausen, Quadrille, March 2009, £20, ISBN 9781844007110

Visit an orchid nursery

- Burnham Nurseries, Devon; 01626 352233; www.orchids.uk.com
- McBean's Orchids, East Sussex; 01273 400228; www.mcbeansorchids.co.uk
- See RHS Online www.rhs.org.uk/thegarden for a list of some more orchid nurseries open by appointment.

Go to an orchid show

RHS London Orchid Show, 20–21 Mar 2010, RHS Lawrence Hall, Westminster, 10–5pm, £3 members, £5 public. Preview: 19 Mar, 6.30–9pm, £8; call 0845 612 1253 to book

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