

Paphiopedilum and Cypripedium Culture Information

Probably the best known of all the orchids are Paphiopedilum (*paf-e-o-PED-e-lum*) and Cypripedium (*sip-rip-EED-e-um*); they make ideal houseplants. Commonly known as slipper orchids, they are easily recognisable by the shape of the flower, which has a pronounced lip shaped like a bucket or slipper. The Cypripedium, also known as the Lady's slipper or Venus's slipper, originates from Europe and North America whilst the Paphiopedilum comes from India Malaysia and New Guinea. (As Paphiopedilum is the more widely used name, this name will be used to refer to both Paphiopedilum and Cypripedium.)



The leaves of a Paphiopedilum grow in pairs close to the base of the plant forming a rosette from which one or more flower stems develop. The plants keep these leaves for several years as the plant develops into a large clump. They do not produce pseudo-bulbs so have no way of storing water or nutrient. For this reason they do not have a rest period or like to be kept too dry, although, as with all orchids, they do like good drainage. Paphiopedilum can be grown into mature specimen plants or propagated by division as they mature. They are evergreen with some of the cooler growing varieties having plain green leaves while the warmer growing plants have mottled leaves with some really beautiful markings making them attractive even when not in flower.

Most species are terrestrial, meaning they grow in the ground, but a few are lithophytic and grow in rocks. They are relatively easy to grow with their flowers lasting 8 to 10 weeks; even as cut bloom they will last several weeks. Most of the pot plants sold are hybrids offering a huge selection of colours and sizes.

There are a few notable species plants that adapt well to "windowsill" culture, two being Paphiopedilum callosum and Paphiopedilum sukhakulii. Both come from Thailand, flower in the autumn and require intermediate to warm conditions. If you have good conditions for growing Phalaenopsis you should be able to grow Paphiopedilum and they are well worth a try!

Temperature: Plants divide into two main groups: As a general rule, plain green leaved varieties like cool to intermediate conditions with a nighttime temperature of 13-16°C and daytime temperature of 18-24°C; intermediate to warm growing varieties with mottled leaves ideally like a nighttime temperature of 16-18°C and daytime temperature of 21-25°C.

Light: Paphiopedilum do not like full sun. As house plants, they are usually fine provided they get good light, especially in the winter. If they are kept in a greenhouse or shade-house they require semi-shade conditions; direct sunlight during the summer would be too strong. If light levels are too low they will not flower and too high light levels can cause yellowing of the leaves and scorch marks.

Water: Plants need to be watered all year round, once every 5 to 7 days in summer and once a week in winter. It is important that the plant is kept moist, but not water-logged, at all times as they have no storage organs to hold reserves of water. If the compost becomes too dry, the roots may be damaged. Always water from the top of the pot and never allow the plant to sit in water or for the plant to become waterlogged. Clean rainwater is preferred but you can use filtered tap water.

NOTE: NEVER STAND THE PLANT IN WATER OR ALLOW THE PLANT TO BECOME WATERLOGGED. This will cause the roots to rot and kill the plant.

Feed: Whilst these plants do benefit from occasional feeding they do not like high concentrations of feed so little and often is the rule. Always feed with a weak solution of orchid specific fertilizer, such as Ivens Orchids' Orchid Feed. Feed once every two weeks during spring and summer and once every four weeks during autumn and winter.

Air Humidity: Moist air and good ventilation (not drafts) are essential, especially in the summer as this helps to reduce the risk of bacterial and fungal infections, (sooty mould or Botrytis,) and prevents plants drying out too quickly. The humidity can be raised by placing the plant on a tray of moist gravel or pebbles. 50% humidity is ideal.

After Flowering: Cut off old flowering stems at the base of plant.

Repotting: Hybrids benefit from being repotted annually, ideally in the spring. Paphiopedilums don't mind being repotted, it is even possible to repot whilst they are in bud if care is taken not to damage the bud or flowering stem. Repot or divide in spring after flowering. Do not be tempted to over pot your plant because it will always do better in a pot that is just big enough for next years growth. A specimen plant can be achieved by potting up regularly. A larger plant usually produces more spikes but sometimes a plant that has been mistreated or has become too old may benefit from dividing as this will help to regenerate it.

You may find that your plant is growing excessive amounts of top growth but not flowering. This can happen when a plant is in poor health and could be a sign of root damage, perhaps due to over-watering or compost compaction. Such plants will need to be repotted regardless of the time of year.

Use orchid compost that is free draining, such as Ivens Orchids medium bark. Repotting and dividing classes are available from Ivens Orchids.

Basic Repotting Technique: Remove the plant from its old pot and inspect the condition of the root-ball. Shake off old compost. If roots are firm and in good condition, pot up allowing space for next years growth. If using bark based compost, soak it well, (for a day or so,) before potting. Using a clean pot that is big enough to take the new growth expected in the next year, support the plant centrally in the pot while you feed fresh orchid compost around the root-ball – The roots are quite fragile and care should be taken to minimize any damage during repotting. Do not pack the compost in too firmly as these plants prefer a free draining pot. Water plants about 10 days after potting but do not allow compost to dry out completely after re-potting. After this, continue watering as normal.

Dividing: The plant can be divided by gently pulling the growths apart. Try to maintain reasonable size pieces of 2 or 3 rosettes/growth, making sure the division has a new growth as well as a flowered growth. Pot up as before using an appropriate sized pot.

Pests: Prevention is always better than cure so look for good healthy plants to start with and keep them that way with a clean environment for your plants. Throw away old, weak or infested houseplants and maintain good housekeeping in the greenhouse. There are no specific pests associated with Paphiopedilum but general houseplant pests may be seen such as scale insect, mealy bug, thrip and aphids that will weaken the plant if left unchecked. These may be cleaned off with soapy water, if found early enough, otherwise treat with a specific systemic insecticide.

Buying Tips: Always buy good quality orchids from a reputable supplier and look for clean healthy plants. If buying plants in flower, check the flowers are not damaged by gently feeling the lip of the flower to check it is firm; a soft or marked lip may mean the flower has been out a while. Check for new growths and developing buds.

Handy Hint: To help prevent flower and bud drop, keep plants away from drafts, radiators and other heat sources.

Special Notes: Limp leaves can be a sign of overheating or under watering and, since Paphiopedilum are grown in small pots with very free draining compost, they can dry out quite quickly. Watering is the most important aspect to looking after these plants in the house and the golden rule is to keep them cool and moist.

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