

Paphiopedilum Culture (Paf-ee-oh-ped-i-lum)

Paph. Acker's
Wonderland



Paphiopedilum, commonly known as the lady's slipper, is a relatively small group of orchids consisting of approximately 87 naturally occurring species. These semi-terrestrial plants are native to South China, India, Southeast Asia and the Pacific Islands. Paphiopedilums (Paphs) are excellent plants for the novice and make great house plants due to their basic environmental needs. Their flowers can last anywhere from 1 to 3 months or more in some varieties.

LIGHT

In the Midwestern climate, the Paphiopedilum prefers to be grown in a bright area where they will receive some direct sun. The best exposure is a bright east window where the plant will receive direct sun on the leaves during the morning hours. South or western exposure is also suitable, but the plant should receive no more than two hours of direct sun daily.

During the winter months, south exposure in the Midwestern latitude is very bright due to the sun being so low on the horizon. The best position for the Paphiopedilum in a southern window would be where it will receive no more than two hours of direct sun daily. More direct sunlight on the Paphiopedilum can damage the leaves. During the summer months, the south exposure has the opposite effect where the sun's angle is very high, and no direct light should be received. Then you should move the plant to an east or west exposure to ensure proper light levels. Or you can move the plant to a shaded outdoor location or supplement light with an artificial plant light.

Whichever exposure you choose for your Paphiopedilum, try to provide as much light as possible throughout the year without causing sunburn on the leaves. Once your Paphiopedilum is in the flowering stage, it is best to shade it from any direct sun to prolong the life of the blooms.

Paphiopedilum can also be grown and flowered successfully under artificial plant lights, such as fluorescent or LED lights. When using any artificial plant light source, be sure to arrange the plants under the lights per the needs of the plants.



Paph. sanderianum 'Jungle King'
Photos by Chuck Acker

TEMPERATURE

Paphiopedilums are separated into two major groups. The warm growing varieties generally have a beautiful mottled or tessellated leaf pattern to them. This variety prefers to be grown with a temperature range between 65 degrees at night and 85 degrees during the day.

The cooler growing varieties generally have glossy solid green leaves. This variety prefers to be grown with a temperature range between 55 degrees minimum at night and 75 degrees maximum during the day. The successful growth of these two variants can be achieved by raising them both in the same area, whether on the warm side or the cool side. Keep in mind that it is generally the cooler nighttime temperature during the fall or early winter that helps stimulate the plant into flower.



Paph. Chuck's Surprise 'Happy Face' HCC/AOS

WATER

As with any orchid, many factors dictate how often your individual plant will need watering; however, the main rule is that the Paphiopedilum does prefer to dry out somewhat between watering cycles (contrary to past cultural information). In most cases, watering every 7 days is a suitable interval. However, pots of 5 inches or larger tend to stay moist longer and may need an extra day or two between watering, while pots of 4 inches or smaller may need more frequent attention.

Proper watering for Paphiopedilum would be to drench the pot thoroughly until water runs freely from the bottom of the pot. This can be done at the sink or somewhere you can do a good flushing of the pot. Remove pot from any decorative container to allow for proper drainage. Never leave your Paphiopedilum to stand in water, as this will cause root rot. Paphiopedilums benefit highly from rainwater, reverse osmosis, bottled water or any other low mineral water source. Never use softened water on any of your orchids.

FERTILIZER

The roots of a Paphiopedilum are covered with very fine hair-like details that are sensitive to dissolved salts common in most fertilizers. Therefore, it is recommended to water thoroughly your Paphiopedilum to ensure the potting mix is moist before applying the fertilizer solution.



Paph. concolor

When using low mineral water, use a fertilizer that is specifically blended for that water type. One of the best fertilizers with low mineral water is MSU 13-3-15, or similar type fertilizer applied once every 2 weeks. If you are using tap or well water, it would be best to use a balanced-type fertilizer such as a 20-20-20 or equivalent. Prepare all your fertilizer solutions by diluting one level teaspoon of fertilizer into one gallon of water. Do not over-fertilize as this will cause permanent root damage.

HUMIDITY

Like many orchids, Paphiopedilum enjoys a moderately humid climate of 50% or greater. When growing these plants indoors, increase humidity around the plant by placing your plants on a humidity tray, misting them adequately in the morning, or grouping your plants all together in one area.



BLOOMS

Paphiopedilum flowers can last from 1 to 3 months, and during blooming, it is best to shade the plant from any direct sun to prolong the life of the flowers. When the flowers are finished blooming, cut the stem off at the point where it emerged from the leaves.



REPOTTING

Paphiopedilum needs to be repotted every year, to every year and a half. If you are not experienced or comfortable doing this yourself, call upon someone you know who can help you through the process. A recently purchased Paphiopedilum may be ready for repotting as soon as it has finished flowering. Inquire with the seller as to when your specific plant was last repotted.

Good indicators for Paphiopedilum to be repotted are:

1. When the bark has broken down, rotted, or retains moisture for an extended period;
2. When roots are becoming abundant at the surface; or
3. When the pot is completely root-bound.

It is not advised to repot Paphs between Nov. through Feb. The days are too short unless you are growing under artificial lights and can control the day length.

A note about orchid viruses: most commonly, the transmission of orchid viruses is caused by using the



Paph. Ho Chi Minh 'Traveler' HCC

same cutting tool on multiple plants. The most effective method to reduce virus transmission from plant to plant is to briefly flame-sterilize your cutting tools between each plant. A simple Butane torch or a gas stove are handy items for this purpose. This practice should be implemented when repotting as well as when cutting off perished flowering stems.

Repot your Paphiopedilum:

1. Remove it from the pot and let the existing potting mix fall away from the roots. Once you have all the mixture away from the roots, you can distinguish the healthy roots from the not-so-healthy, rotted roots. Trim away any rotted or dead roots. If your Paphiopedilum is completely root-bound, then no potting mix will fall away, no root trimming will be needed, and your potting process will continue from there.
2. Selecting the proper size pot is a crucial aspect in repotting a Paphiopedilum. Select a pot that is only large enough to accommodate the roots comfortably. If you need to force the root mass into the container, then it is not large enough. The rule of thumb is to use a pot that comfortably accommodates the roots. It should be a new pot with adequate drain holes in the bottom.
3. Set your plant into the pot and begin adding moistened fir bark orchid potting mix. Work the mixture between the roots by gently shaking or tapping the pot to allow the mix to fill in between the root crevasses naturally. Position the plant so the junction of plant and root is just below the surface of the mix. This will allow the new roots to enter the fresh mixture immediately. Once the pot is nearly full of mix, firmly pack the mix to anchor the plant properly. Sometimes a blunt tool is needed to firm up the mixture properly. Wait one week and then water the plant thoroughly.



Paph. bellatulum

Paphiopedilums can be divided, providing the plant has enough growths to do so. This is a somewhat technical process and is best done by someone who has experience dividing a Paphiopedilum. If you want to divide your Paphiopedilum yourself, the rule of thumb is to have at least six mature growths to start. A safe division will then be three to four growths apiece. Dividing is accomplished by cutting the rhizome and root zone to make the minimum growth division.

Chuck Acker

Good luck and Happy Growing!