

Paphiopedilum

Paff-ee-oh-PED-ih-lum

Paphiopedilums, the lady's-slipper orchids, originate in the tropical and semitropical regions ~~jungles~~ of Southeast Asia, China, India, and as far south as Papua New Guinea. They are semiterrestrial, growing in humus, leaf litter, and other debris on the forest floor, as well as in humus or mossy deposits on cliffs or knolls, and occasionally, on the lower parts of sloping or fallen trees. They are easy to grow in the home in windows, under lights, or in the greenhouse.

LIGHT needs are easy to fulfill for a Paphiopedilum. They can receive ambient light in a greenhouse or North window at the least, to 4 hours of direct sun at the most. Most will thrive with two to three hours of direct sun a day.

- In a greenhouse, shade cloth is required to reach about 10,750-21,500 lumens/1,000-2,000 foot-candles, depending on the plants.
- In the home, east, north or west windows where they will get about 1-4 hours of direct sun are ideal.

Many types of Paphiopedilum will grow well under artificial light. Use lightbulbs/LEDs of your choice that are about 1-2 feet above the plant and emit >10,000 lumens per square yard/square meter. The lowest amount of lumens for growth is about 2000 lumens, though flowering may be poor.

TEMPERATURES

Depends on the hybrid/species, but in general, Paphiopedilum are happy with 55F-72F (12.7C-22.2C) nights and 70F-85F (21.1C-29.4C) days. There are three types of Paphiopedilum:

- Mottled-leaf type – prefer warmer conditions.
- Green leaf type – prefer cooler conditions.
- Multifloral/strap-leaf types – prefer warmer conditions.

If growing indoors, no need to worry about temperature; room temperature all the time is fine. If growing in a greenhouse, grow them in the coolest, shadiest part of the greenhouse. Crown rot or blanching of the plant may occur if the plant is getting too much heat/light.

WATER consistently enough to keep the medium moist, but not sopping wet.

Though, as terrestrials, many varieties can tolerate sitting in a bit of water, they still need to dry out enough to prevent root rot. Indoors, water as soon as the media hits dry, and in greenhouses, water daily.

HUMIDITY is not a factor for terrestrial plants if they are well-watered.

FERTILIZE on a regular schedule year-round. While Paphiopedilum are terrestrial plants, and in general, terrestrial plants can tolerate more fertilizer than epiphytes can, Paphiopedilum are generally from environments that are so rainy, that any nutrients that would be in the soil are washed away. Old-school growers use ¼ strength doses of strong fertilizer (such as a 30-30-30 or 20-20-20), but it's recommended to use the full-strength of a weaker fertilizer (such as anything between a 5-5-5 and 10-10-10), to eliminate the possibility of mixing too strong of a dose. If you notice salt buildup on the plant or medium, flush the plant out with distilled or rainwater. In general, many Paphiopedilum growers flush out their plants on a monthly or quarterly basis as a good practice.

POTTING should be done about every two years, or as the medium decomposes. Seedlings and smaller plants (non-blooming size) are often repotted annually. Mixes vary tremendously. Most contain fine or medium-grade fir bark and additives such as perlite (sponge rock), coarse sand and sphagnum moss. Other growers use an entire mix of New Zealand tree fern fiber. Moisture retention with excellent drainage is needed. Large plants can be divided by pulling or cutting the fan-like clumps of the leaves apart into clumps of three to five growths. Smaller divisions of single fans will grow, but may not flower at first. Spread the roots over a small amount of

medium in the bottom of the pot and fill with medium, so that the junction of roots and stem is buried ½ inch deep in the center of the pot. Be advised that there are many species within this genus that are affectionately referred to as "limeys", because they require calcareous, alkaline media to grow in. If you have one of those plants, or hybrids with ancestors that require calcareous or limey conditions, you can add unpolished marble chunks, calcite chunks, and/or horticultural-grade oyster shells. If you choose to use unpolished marble or calcite, the more finely-ground they are, the better.

The American Orchid Society is the world's leading provider of information about and related to orchids. We invite you to join us and learn about the world's most fascinating flowers and plants. Your membership entitles you to our monthly award-winning magazine, *Orchids*, 10 percent discount on items purchased at the AOS online store, free and discounted admission to more than 200 botanical gardens and arboreta and exclusive members only online content.

American Orchid Society

At Fairchild Tropical Botanic Garden
10901 Old Cutler Road, Coral Gables, FL 33156
www.aos.org