

# Paphiopedilum

Paphiopedilums, or slipper orchids, originate from the jungles of the Far East and Indonesia. They are semi-terrestrial, growing in humus and other material on the forest floor, on cliffs in pockets and occasionally in trees. They're easy to grow in the home, under lights or in the greenhouse.

**LIGHT** is easier to provide for "paphs", as we will call them, than many other types of orchids. They like shady conditions, as in the home in an east or west window, or near a shaded south window. In the greenhouse, heavy shade must be provided - - giving them about 1,000 to 1,500 foot-candles. They are often grown under the bench, provided precautions are taken to prevent rot. Fluorescent light is excellent; use 2 or 4 tubes just over the leaves.

**TEMPERATURES** for paphs range considerably. Many growers separate paphs into two groups, the warmgrowing mottled-leaf types and the cool-growing, green-leaf types. Warm-growing types should be 60 to 65 degrees F at night and 75 to 80 degrees F or more during the day. Cool-growing types should be 50 to 60 degrees F at night, 75 to 80 degrees F during the day. Many growers grow all plants in the same temperature range with excellent results. The plants can stand night temperatures in the 40's if necessary (as when grown outside in mild climates), as well as temperatures to 95 degrees F. Care must be taken to protect the plants from rot when cold (keep humidity low, and do not let water stand on leaves or in the crowns of the plants), and also to protect from burning when hot (shade more heavily and increase humidity and air movement).

**WATER** must be available at the plant's roots constantly, since they have no pseudobulbs, and therefore store most of their water in their leaves. They need a moist medium -- never soggy, but never dry. Water once or twice a week. Humidity for paphs should be moderate, between 40% and 50%, which can be maintained in the home by setting the plants on trays of gravel, partially filled with water, so that the plants never sit in water. In dry climates, misting (in the morning only) can help increase humidity. In a green house, average humidity is sufficient; spraying the floor or using an evaporative cooling system in warm climates can increase the humidity. Air movement is essential, especially when humidity is high.

**FERTILIZER** must be applied on a regular schedule, but care must be taken to avoid burning of the fleshy, hairy roots. High- nitrogen fertilizers (like 30-10-10) are recommended when potted in any fir bark mix. In warm weather, some growers use half-strength applications every two weeks; others use 1/4 strength every watering. It's important to flush with clear water monthly to leach excess fertilizer, which can burn roots. In cool weather, fertilizer applications once a month are sufficient.

**POTTING** should be done about every two years, or as the medium decomposes. Seedlings are often repotted annually. Mixes vary tremendously; most are fine- and/or medium-grade fir bark, with varying additives -- perlite (sponge-rock), coarse sand, sphagnum moss, etc. Moisture retention with excellent drainage is needed. Divide large plants by pulling or cutting the fans of the leaves apart, into clumps of 3 to 5 growths. Smaller divisions will grow, but may not bloom as well. 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 1/2" deep in the center of the pot. Do not overpot; an average plant should have a 4 to 6" pot.