

# 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

(as when grown outside in mild climates), as well as temperatures to 95°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

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



## Paphiopedilum

Unlike many cultivated orchids, paphiopedilums are semi-terrestrial plants. They are excellent houseplants, needing only bright light or very little sun. They grow and flower well under artificial lights. Since they have no pseudobulbs, they need more constant moisture than other orchids and resent too much fertilizer. Flowers are long-lasting.

**Light**—Bright light is important; most windows are sufficient.

**GIVE:** Bright light, very little direct sun.

In the home, an east, west or shaded south window. In the greenhouse, 70% to 85% shade.

**Temperature**—Two groups exist: green-leaf and mottled-leaf. Mottled-leaf types should be about 10° warmer at night than green-leaf plants.

**GIVE:** Nights of 50° to 60°F; days of 75° to 85°F.

Paphiopedilums can stand hot summer days up to 95°F if shading, humidity and air circulation are increased and if nights are cool.

**Water**—

**GIVE:** Keep moist year-round, letting only top layer of potting medium become dry.

Keep pots on a tray of moist pebbles in home to increase humidity. A humidity of 40% to 50% is ideal. Water standing in leaves causes rot.

**Fertilizer**—Must be provided only occasionally because roots are sensitive to excess.

**GIVE:** 30-10-10 if plants are in fir bark mixes; best at 1/2 strength every other week.

Flush pots with clear water often to reduce fertilizer buildup. Less fertilizer is needed in winter. Once a month is usually sufficient.

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 warm-growing mottled-leaf types and the cool-growing, green-leaf types. Warm-growing types should be 60° to 65°F at night, and 75° to 85°F or more during the day. Cool-growing types should be 50° to 60°F at night, 75° to 80°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

plants on trays of gravel, partially filled with water, so that the plants never sit in water. In dry climates, misting (in the mornings only) can help increase humidity. In a greenhouse, 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

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.

Prepared by: Education Committee, American Orchid Society, 6000 S. Olive Ave., West Palm Beach, FL 33405 (407) 585-8666.