PHRAGMIPEDIUM: Lady Slipper Orchid

Pronounced: frag-muh-PEE-dee-um

These South American relatives of our native lady slippers typically grow rapidly and often form large plants with tall flower stems. The flowers may be in shades of green and brown possibly with long hanging petals. Other varieties, usually of a somewhat more modest plant size, provide flowers in shades of bright pink, orange and red. Phragmipedium require much different growing conditions than their Asian counterparts, the Paphiopedilum.

Healthy Phragmipedium start with healthy roots:

- ☐ Pot in a fine medium. Fir bark mixtures are best, with 0.5 to 1.0 cm chunks of bark, perlite and charcoal.
- ☐ Repot annually as new growths start. These plants require a lot of moisture and this breaks the medium down quickly.
- ☐ Remove old medium if it is loose and any rotting roots; choose a plastic pot that will only just hold the roots of the plant and center plant in new pot.
- ☐ Roots should be moist at all times. Water when medium has just begun to dry out. Water thoroughly, with a volume of water at least equal to that of the pot. Some grow Phragmipedium with the pot sitting in a small tray of water, perhaps 1 cm deep, to provide continuous moisture.
- ☐ Do not use water softened in salt-consuming water softeners. Low mineral water is preferred, such as naturally soft water or rain water. If hard water is used, water very heavily to flush minerals.
- ☐ Avoid leaving water standing in the crown of the plant as this can lead to fatal rot.
- ☐ Fertilize weakly and frequently with a balanced fertilizer. One-eighth to one-quarter strength recommended by manufacturer for house plants every week in spring and summer and every two weeks in autumn and winter.

Healthy leaves produce more and bigger flowers:

- ☐ High light levels are appropriate. Leaves should be a light green, not yellowish (too much light) or dark green (too little light). They should be firm, not long and floppy (more light needed). Brighter light (short of burning the leaves) will result in more colorful flowers. Potential leaf burn can be avoided by feeling the temperature of the leaves during the brightest part of the day: if they feel hot, they are in danger of burning: increase air circulation or reduce light.
- ☐ Four hours of sunshine on a windowsill (West or South) or 15-30 cm under an eight tube fluorescent fixture or under an HID sodium or metal halide lamp.
- ☐ Leaves should be firm; if soft and desiccated, check roots for rot, and repot if necessary. High humidity (such as enclosing the plant in a plastic bag) will aid recovery if most or all of roots lost, but be careful of rot.
- ☐ Phragmipedium do best with 60-70% humidity but when mature will grow and bloom, although more slowly, in lower humidity. Use humidifier to raise humidity – humidity pans and misting rarely effective. Enclosing plant growing areas is effective but ensure fresh air and air movement to avoid mold and rot.
- ☐ Grow Phragmipedium in intermediate temperatures with 14°C minimum winter nights and 29°C summer day maximum. Ensure 6-12°C day/night difference to aid flower formation. Cooler night temperatures, dropping as low as 8°C will result in more colorful flowers.

Phragmipedium usually bloom annually and the flowers individually last for a couple of weeks:

- ☐ Maintain plant orientation while spike is growing for best display.
- ☐ Flowers of Phragmipedium naturally fall off the spike before they wilt.
- ☐ Phragmipedium often provide much superior flower size and color as mature plants than as first bloom seedlings.

Space prevents more detail here. The general “Orchid Culture” sheets in this series, available from your society or on the web at http://www.canadianorchidcongress.ca/ provide further cultural information. For specific help with your orchids or further information join your local orchid society.

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