

Cultural Requirements of Miltoniopsis

By James Riopelle

Imitation may be the sincerest form of flattery, but the pansy orchids have achieved for themselves a beauty and charm surpassing that of their namesake. *Miltoniopsis* is a genus of perhaps six species, mostly native to Colombia, which was once lumped into *Miltonia*. Three species of pansy orchids are responsible for all present-day hybrids in this genus: *Miltoniopsis vexillaria, Miltoniopsis roezlii* and *Miltoniopsis phalaenopsis*. These three species are still frequently called miltonias by many orchid growers.

The major blooming season extends from spring to autumn. However, some species and hybrids may flower at other times of the year. The attractive plants are of moderate size, of sympodial growth, with thin, light green leaves, one of which crowns each growing pseudobulb. The lanceolate leaves fan up from the base of the narrow edges of the mature pseudobulbs. From within the snug inner fold of a maturing basal leaf, the

inflorescence emerges as a slender, tender, budding growth to produce an arching or drooping spray of two to 10 large, flat, colorful pansy-like flowers. Although fragil looking, these lovely flowers last from 15 to 60 days on the plant; unfortunately their use as cut flowers is limited.

Temperature and Humidity While miltoniopsis will tolerate temperatures of 90 F an above for short periods, keep day temperatures below 80 F by either increasing the shading or providing evaporative cooling. Night temperatures of 55 to 60 F are optimal. The humidity should be moderate when the temperature is low and fairly high when the temperature is high. A humidity range from 50 to 70 percent, such as that given for cattleyas and phalaenopsis, is highly recommended.



Light Pansy orchids require about 1,000 to 1,500 foot-candles of diffused light and will grow well in the vicinity of mottled-leaved paphiopedilums. One alternative is to the side of a south-facing window, protected by shading. Another is to one side of fluorescent lights, perferably next to a cool wall. Increase shading when the temperatures exceed 80 F. Miltoniopsis leaves should be light green or light bluish green. If the leaves are dark green, increase light. If the leaves turn yellowish green, increasing shading. Slightly pink leaves indicate maximum acceptable light. Red leaves are a sign of too much light.

Air Movement Brisk movement of mild air is beneficial to all mitoniopsis. Avoid hot and cold drafts.

Watering The watering demands of pansy orchids are similar to those of thin-leaved cymbidiums. Keep them moist at all times. Inadequate water will cause leaves on new growths to crinkle in accordion-pleated fashion. However, do not let the containers stand in water. During warm weather, and bright winter days in the greenhouse, pansy orchids may require watering daily. When the humidity falls below 30 percent, mist the foliage so that leaves will dry before sunset.

Fertilizing In osmunda, a very dilute solution of an 18-18-18 water-soluble fertilizer used monthly at the rate of $\frac{1}{4}$ teaspoon per gallon during the growing season is sufficient. Miltoniopsis are moderate feeders, and osmunda supplies some nutrients. In fir bark culture, administer 30-10-10 fertilizer weekly at the rate $\frac{1}{2}$ teaspoon per gallon of water. Alternate with a lower nitrogen formulation (10-30-20) every fourth application. Because pansy orchids are not deciduous, continue to fertilize them during the winter at the rate of $\frac{1}{4}$

teaspoon per gallon, but only if the plants need water. Use a well-balanced water-soluble fertilizer incorporating desirable micronutrients (beneficial trace elements including iron and magnesium).

Potting Pansy orchids are cultivated in many ways using a wide variety of potting composts and containers. Whatever medium is chosen, it should retain some moisture and at the same time permit water to drain away quickly. Do not allow the medium to become sodden. Osmunda, with or without sphagnum, was once considered the best potting medium for Miltoniopsis. Since osmunda has become less available and more expensive, fir bark mixed with sphagnum (to retain moisture) and perlite or other granular material (to assure drainage), is now quite popular and satisfactory. Add a bit of horticultural charcoal (not from the barbeque) to "sweeten" the mix. To make a bark compost, blend three parts perlite, three parts #4 charcoal, two parts sphagnum (peat) moss and one part cracked oyster shell, with 16 parts of fine fir bark. Recently potted pansy orchids benefit from a top-dressing of live sphagnum moss. A few granules of snail bait (metaldehyde) will control bush snails.

Pansy orchids should not be potted in excessively large containers. Keep them potbound. Divide miltoniopsis when the new growing cycle begins. Accomplished growers may divide them at any time. Do not break up the tichtly clustered pseudobulbs into divisions of less than three or four growths. Individual backbulbs do not propagate readily.

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