

**MILTONIOPSIS CULTURE**  
by Joan and David Rosenfeld

Most orchid growers in the Delaware Valley shy away from growing miltoniopsis, labeling the genus as difficult to grow. This is unfortunate, since this genus is one of the most beautiful. The cool growing 'pansy' orchid may not have the ease of culture of its warm growing relative from Brazil, the miltonia, but it can be grown successfully in our area if a few simple requirements are met.

As with all orchids the easiest way to flower these beautiful pansy orchids is to duplicate the conditions of their natural habitat.

Luckily, there are only five species of miltoniopsis, and only three are commonly used in hybridizing: Milt. vexillaria, Milt. roezlii, and Milt. phalaenopsis. All are native to Colombia and prefer relatively cool conditions. They are found growing in the tops of trees of dense mountain forests at elevations between 1000 to 7500 feet, where they are exposed to continuous air movement, frequent mists and showers, and moderate amounts of light. Here in the U.S., these conditions are most easily reproduced in the Pacific Northwest. Since the weather in the Delaware Valley has more extremes of both humidity and temperature, we must modify the environment to grow miltoniopsis.

- \* Repot the plants every year. Miltoniopsis detest a stale medium.
- \* Do not repot in the spring or summer when repotting most other plants. Miltoniopsis are stressed by hot summer weather and do not grow in our summers--they are just trying to survive. These plants should be repotted like all orchids, during periods of active growth. Ideally, repot them when new growths are about 1 1/2 inch tall. Repotting during the fall or early winter is generally best. The most common causes for the demise of plants are infrequent repotting and repotting at the wrong time.
- \* Another important guide to good culture is to pot the plants in a small pot with alot of drainage material at the bottom. Miltoniopsis have fine roots which do not like to penetrate deeply into the potting medium. Fill the pot at least one-third with styrofoam peanuts or other non-water absorbing material.
- \* The medium itself can vary, but must retain water and yet drain well. We use a combination of 60% fine fir bark, 20% medium bark, 20% fine perlite, and a small amount of New Zealand sphagnum moss.
- \* With a small pot and alot of drainage material, watering becomes somewhat of an art. The medium must be moist at all times but not 'mushy.' Watering twice a week is usually satisfactory, except in the summer when you may have to water every other day. This frequency will work adequately as long as your medium is fresh and drains well. The frequency also serves to indicate that the medium has sufficient drainage.
- \* A dilute high nitrogen fertilizer will work fine. The fertilizer

is not nearly as important as the frequent potting and watering schedules.

- \* The optimal temperature range is 70 to 80° during the day, and 55 to 60° at night.
- \* Miltoniopsis like a moist environment with good air movement. An ideal humidity of 50 to 70% should be supplemented by good air movement to prevent bacterial and fungal problems. During the summer when 90° days are common in the Delaware Valley, good air circulation is critical. If the plants are in a greenhouse with an evaporative cooler, place them near the cooler for the summer.
- \* These plants like a light intensity between that required by phalaenopsis and cattleyas, or approximately 1400 foot candles. Luckily, the plant will tell you when it is receiving maximal light by turning its leaf tips slightly pink. The remainder of the leaf should be light green, erect, and stiff.

All of this may seem overwhelming, but the requirements are similar to those of other genera. Just remember that annual repotting at the right time, using a small pot, good drainage, frequent watering, and good air movement are critical. The rewards are great every spring. The pansy-shaped blossoms arching gracefully in shades of red, pink, white, and yellow are a sight to please any orchid lover. Plants of display quality with multiple spikes are common and are especially stunning.

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