

Miltoniopsis

Mil-toe-knee-AHp-sis

This unusual group of Neotropical orchids offers a lot of bang for your buck in terms of flower size and blooming frequency. Also known as the “pansy orchid” group, Miltoniopsis and its sister genus Miltonia are all fantastic orchids to grow indoors that can bloom up to 3x a year, for several weeks at a time with large fragrant flowers. While they do have a pseudobulb, they are thin-leaved orchids, and need significantly more frequent waterings than most. They come in many colors and patterns and are perfect for indoor growing. While they may have gotten a reputation for being “cool growers”, they can tolerate hot day temperatures, as long as the nighttime cools off to room temperature or cooler. Miltoniopsis hail from Southern Central America and Northern South America, right along the equator at various elevations. Most are highland species that dwell in cloud-forests, with some being lowland species that deal with hot and humid conditions. Either way, the environments they come from are perpetually moist or wet.

LIGHT should be considered with temperature. You can give more light, as long as the plants do not get too hot. This is why growing indoors is ideal for these plants (or in a temperate-zone greenhouse). The best flowering happens when the plants get some direct sun exposure.

- If using artificial lights, they should be on for 10 to 14 hours a day.
- In a greenhouse, 70% to 80% shade cloth is required to reach about 10,750-26,900 lumens/1,000-2,500 foot-candles.
- In the home, east, north or west windows where they will get about 1-5 hours of direct sun are ideal.

TEMPERATURES Depends on the hybrid/species, but in general, Miltoniopsis are happy with 55F-72F (12.7C-22.2C) nights and 70F-85F (21.1C-29.4C) days. If growing indoors, no need to worry about temperature; room temperature all the time is fine. When growing outdoors or in a greenhouse, err on the side of cooler, wetter, and shadier conditions if your growing space gets too hot.

WATER When thinking about Miltoniopsis water needs, think about the environments that they come from – equatorial. That means that these plants should not dry out. If not enough water is given, or there's too much time between waterings, the plants will exhibit “accordion” growth. Regardless

of growing indoors or in a greenhouse, water should be liberally applied. Potting mix should be perpetually moist and dry slightly between waterings. Plants should not dry out completely, or if they do, water needs to be immediately applied when the media hits dryness. If growing indoors, you may keep the plant sitting in a tray of water that's about ½” deep. If adding more water, always add to the top of the media. Avoid wetting foliage, as they are rather susceptible to various infections.

- In a greenhouse – water daily; twice a day if the temperatures are above 85F regardless of whether or not it's potted or mounted.
- Indoors – Miltoniopsis should only be grown potted, and you should keep the media perpetually lightly moist like a wrung-out sponge. This can be done by an occasional light watering.

The frequency of watering will depend on how fast it takes for the media to dry in your conditions. Indoors, you can get away with watering less frequently by letting them sit in their own flow-through and by using a more water-retentive mix. Use lukewarm water! Water temperature below 50 F may injure plants, as will hard water or water softened by the addition of salts.

HUMIDITY is not necessary if you have mastered how to water these plants. Because they are kept perpetually moist,

they have water at the roots to draw from, and will not need air humidity. However, if you are a forgetful waterer, or your greenhouse gets hot, then humidity will be essential to ensuring that the media does not dry out as fast. If you do need to worry about humidity, anything >50% should be alright. Be sure to incorporate airflow if conditions are soggy, or the humidity is >75%.

FERTILIZE less frequently than other orchids. Miltoniopsis are from equatorial, rainy environments, so they actually have adapted to a lower nutrient environment than other orchids (the rain washes away any would-be nutrients quickly). Therefore, it's easier to burn the plants, as evidenced by black tips. Use a ½- ¼ strength dilution of a high nitrogen formulation (such as 30-10-10) for most of the year, periodically switching to a ½ - ¼ strength dilution of a high phosphorus 10-20-10 to promote flowering.

POTTING should be timed to coincide with the initiation of new growth, usually in the spring, but these equatorial plants tend to grow year-round, so anytime is the right time, so long as they are not in spike. New roots will be produced quickly at the time of new growth, and plants will experience minimal setback. These plants have vigorous root systems and require a moist, but breathable potting medium during the growing season. Even though they can be

mounted, many greenhouse growers pot their Miltoniopsis to ensure that they don't dry out.

In greenhouses, plant in anything from 100% sphagnum to 50% sphagnum and 50% fine-grade orchid bark mix. Planting in 100% tree fern fiber (or mixed with some sphagnum) also works.

Indoors, plant in either 100% tree fern fiber or 50% sphagnum and 50% tree fern fiber. Planting in 100% sphagnum also works, as long as it's not sitting in water with the 100% sphagnum. For Miltoniopsis to sit in a tray of water indoors, 100% tree fern fiber is recommended.

When well-grown, these orchids can be divided down to one mature pseudobulb and will then flower on the next mature growth.

OTHER Bud blast most commonly occurs from a sudden change in temperature or watering. Spider mites are a common pest of these orchids. Control spider mites by keeping humidity high and/or spraying with recommended miticides. If multiple applications of pesticide are needed, wash the plant off after every 2x applications to protect the sensitive thin leaves from damaging.

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