



MASDEVALLIA

Pronounced: mas-de-VAL-lee-ah

Masdevallias are the miniature jewels of the orchid family frequently covered with a cloud of white, yellow, purple, orange or red flowers. Native to the cloud forests of the higher altitudes of the Andes Mountains, they are not the easiest of orchids to grow, with their requirements for cool temperatures and high humidity, good air movement and perfect drainage.

Healthy Masdevallia 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. Add moss if watering frequency cannot maintain required level of moisture. In larger pots use larger mix (1.5 – 2.0 cm) in all but top 10 cm of pot.
- Repot annually, preferably in the autumn, to ensure that the medium does not break down. Masdevallia require continuous moisture but cannot tolerate a decaying mix – the roots must always get air as well as water.
- Remove old medium if it is loose or breaking down, rotting roots and any growths without leaves; use a plastic pot that will allow for no more than 1 cm on all sides of the plant.
- Roots should be moist at all times. Ideally, the plant is watered each morning, and has dried to dampness by evening. Grow in small pots for the plant size, to promote this rapid drying cycle. Add moss to mix if watering frequency cannot maintain constant moisture.
- Do not use water softened in salt-consuming water softeners. Low mineral content water is essential, such as naturally soft water or rain water. If hard water must be used, water very heavily to flush minerals.
- Fertilize weakly and frequently with a balanced fertilizer during growth. One-eighth strength recommended by manufacturer for house plants every week.

Healthy leaves produce more and bigger flowers:

- Low to medium 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).
- One to three hours of sunshine on windowsill (East recommended) or 15-30 cm under a two tube fluorescent fixture.
- Be careful of rot – good air movement is essential.
- Delicate leaves do not react well to most pesticides – use extreme caution. Practice preventive growing, inspecting for pests frequently and eliminating them immediately if found.
- Masdevallia do best with 70 - 90% humidity but when mature will grow and bloom, although more slowly, in somewhat lower humidity. Use humidifier to raise humidity – humidity pans and misting minimally effective. Enclosing plant growing areas is effective but ensure fresh air and air movement to avoid mold and rot.
- Loss of leaves indicates drying out, rotting roots, too high temperature or harsh pesticides or fertilizers.
- Masdevallia grow in cooler temperatures than most orchids. Different species require different degrees of coolness:
 - Cool: (10°C nights, maximum 20°C days) *coccinea*, *decumana*, *igneae*
 - Intermediate: (13°C nights, maximum 23°C days) *herraduriae*, *strobilii*, *veitchiana*
 - Warm (16°C nights, maximum 26°C days) *floribunda*, *tonduzii*, *tovarensis*
 For all ensure 6-12°C day/night difference to aid flower formation. If specific information on a species cannot be found, grow initially on the cool side of intermediate temperatures.
- Plants of genus *Dracula* closely related and require similar conditions. Must be planted in pots with open bottoms and sides (net pots) as flower spikes grow down and out the sides and bottom of the pot.

Masdevallia plants may have a few flowers continuously or flushes of flowers once or twice a year:

- Flowers will last up to two weeks.
- Maintain plant orientation while spike is growing for best display.
- Buds turning yellow, wilting and falling prior to opening is from not enough energy in the plant to open the flower often because of high temperatures or dry air.

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.

