

ONCIDIUM

This is an extraordinarily large and diverse New World genus with an equally diverse number of habitats. Oncidiums may originate anywhere from sea level in the tropics to the high elevations of the Andes. This makes cultural generalizations difficult; more specific instructions may be available from the grower. Some genera included are *Aspasia*, *Brassia*, warm-growing *Miltonias* (often called the Brazilian type) and many of their hybrids.

Light: Needs can vary from bright to nearly full direct sun depending on the species. Most will thrive with one to several hours of sun a day. Generally, thicker-leaved plants such as mule-ear and equitant Oncidiums can stand more light. In a greenhouse, 20 to 60 percent shade is required, depending on the plants. In the home, east, south or west windows are ideal. Many types of Oncidiums will grow under artificial light: four fluorescent tubes supplemented with incandescent light and placed 6 to 12 inches over the plants are necessary for proper growth. Metal-halide and sodium-vapor bulbs also provide sufficient light without needing to be so close to the plants.

Temperature: For this group, temperatures are generally considered intermediate to warm: 55 to 60 degrees at night and 80 to 85 degrees during the day. Temperatures up to 95 to 100 degrees are tolerated if humidity and air movement are increased as the temperatures rise.

Water: Requirements vary with the type of plant. Generally, plants with large fleshy roots or leaves need less frequent watering than thin-leaved or -rooted plants. Watering should be thorough and the medium should dry at least halfway through the pot before watering again. This may be every two to ten days depending on weather, pot size and material, type of orchid and type of potting medium. Plants not actively growing should be watered less; many species have winter rest periods.

Humidity: Oncidiums prefer humidity levels of between 30 and 60%; many require less humidity than other orchids. Most greenhouses have adequate humidity. In the home, placing the plants above moist pebbles in trays is ideal.

Fertilizer: Plants should be fed regularly while actively growing. Applications of 30-10-10 formulations twice a month are ideal for plants in a bark-based potting medium. A 20-20-20 formulation should be used for plants in other media or on slabs. If skies are cloudy, applications once a month are sufficient.

Potting: Re-potting should be done when new growth is about half mature, which is usually in the spring. Fine-grade potting media are usually used with fine-rooted plants and coarser mixes with large-rooted plants; the standard size is medium grade. The plant should be positioned in the pot so that the newest growth is farthest away from the edge of the pot, allowing the maximum number of new growths before crowding the pot. Spread the roots over a cone of potting medium and fill in around the roots. Firm the medium around the roots. Keep humidity high and the potting medium dry until new roots form. Equitant and mule-ear Oncidiums, as well as other fleshy-leaved or large-rooted plants, can be grown on slabs of cork bark or tree fern or in pots filled with a coarse, well-draining medium such as charcoal. This allows the drying between watering that these types need.