



## Cultural Requirements of Oncidium

By H. Phillips Jesup

A genus that includes a great many species attractive and intriguing to the hobbyist is *Oncidium* (on-SID-ee-um). The lip dominates the flowers of many oncidiums and, in a number of species, fancifully resembles a full, swirling skirt, with the other, smaller segments being the "dancer's" arms and head. This accounts for this group's popular name, dancing-lady orchids.



Oncidiums are found exclusively in the New World Tropics, ranging from Florida and Mexico through Central and much of South America. The genus contains approximately 600 species and, as with most sizable aggregations, is divided into a number of taxonomic sections of closely related species. The most common flower colors are combinations of yellow and brown, although lavender and white are occasionally seen in the genus. A veritable rainbow of colors is found in the popular variegata oncidiums (now placed in the genus *Tolumnia*). These species and their numerous hybrids are also commonly termed equitant oncidiums.

The individual flowers of many species are not large, but this is more than compensated for in most species by the great numbers of flowers produced on long, often branched inflorescences, producing a shower-of-gold effect. The flowers of some species are used in corsages or as boutonnieres, and the airy sprays of others

make handsome floral arrangements.

The flower forms tend to be stylized, the sepals and petals in some crisped and ruffled and with a lacquer-like texture. A diagnostic feature of the flowers is an often-ornate, complicated callus or crest at the base of the lip. This can range from a toothed protuberance to a shiny, warty one. In fact, the genus takes its name from this feature, *Oncidium* being derived from the Greek work *oykos* which means warty and refers to the wartlike growths on the lip. Naturally, this feature (as well as most aspects of flower form) serves a function related to pollination.

Plant forms in the genus vary widely. The majority of species have rather prominent pseudobulbs and strap-shaped, somewhat-thin leaves. One group has terete (pencil-shaped) leaves, whereas another has dwarf fans of hard, three-edged leaves. Plants of another popular group, commonly called the mule-ear orchids, produce folded, leathery leaves. Inflorescences are produced from the base of the plant in the axils of the sheathing leaves, not at the apices (tops) of the growths as in cattleyas. The inflorescences range from a few inches in length to an extreme of 12 to 15 feet in a few species in section *Cyrtochila*. Roots of most oncidiums are fine and numerous. Most species are epiphytic, growing in trees, although a few grow on rocks and some are content to grow on the ground among the leaf litter.

**Temperature and Humidity** Oncidiums grow in many different habitats. They are found from hot, humid tropical lowlands to the cool and misty mountains to some places with almost desert-like climates for much of the year. While oncidiums are more accommodating in their temperature requirements than many orchids, the various species will do best if grown for most of the year in temperatures approximating those in their native habitats. The majority of species grow well in the intermediate temperatures (70 to 85 F days, 60 F nights) suitable for cattleyas. Position those from lowland habitats in the warmer microclimates of the growing area. Those from somewhat higher elevations should be in the cooler areas. The genus has not evolved primarily in high, cool montane areas, as has the closely related genus *Odontoglossum*, and only a few sections notably *Cyrtochila* and *Cucullata*, are decidedly cool growers. Many species that do reasonably well intermediate temperatures will grow and flower as well or somewhat better in 50 to 55 F night temperatures. Most oncidiums do not need a seasonal change in temperature to initiate inflorescences.

While there is some variation in humidity needs, for most species the optimum is 50- to 60-percent relative humidity.

**Light** The majority of oncidiums thrive in the same light conditions as cattleyas, roughly 1,500 to 2,000 foot-

candles. Some, such as the terete-leaved species and the mule-ear group, can tolerate even higher illumination with positive results, while the cool-growing species are best grown with somewhat less light in order to keep the plants cooler. The leaves should be a medium green to slightly yellow- or red-tinged, never dark, glossy green. The leaves of mule-ear species and the dwarf equitant or variegata oncidiums will show evenly distributed tiny dark dots often on a reddish background, when grown in suitable light. Finally, strong light (short of damaging the foliage), coupled with adequate fertilizer and good roots, will result in robust inflorescences. This can be obtained in a bright greenhouse, a window with a good deal of sun (particularly in winter), or close to the lights in an artificial light setup.

**Air Movement** As for all orchids, movement of air is requisite. The air should be moist to prevent desiccation, and the flow should be gentle. While sizable fans are normally used in greenhouses, small muffin-type fans obtainable at electronics stores are useful for growing areas in the home. They are small, quiet and use little electricity. Good air circulation tends to result in rapid drying of potting media, something that is essential for healthy roots.

**Watering** The watering schedule for oncidiums is similar to that for cattleyas, although some species require slightly more frequent watering in order to keep at least the most recent pseudobulb from shriveling. The sections of the genus *Oncidium* differ somewhat in their need for water. Some enter a substantial rest period of up to several months during which the plant is neither growing nor flowering. Others have a short rest period. A few have none at all because they initiate inflorescences immediately after completing vegetative growth and begin growth anew right after flowering. Those that rest should have somewhat less water during quiescence – but not so little that the pseudobulbs shrivel severely. Hobbyists learn through trial and error how often to water under their particular conditions so that only the older pseudobulbs are slightly shriveled.

**Fertilizing** The fertilizer requirements of oncidiums are similar to those for most other epiphytic orchids, such as odontoglossums.

**Potting** Oncidiums initiate new roots, often in large numbers, during active vegetative growth. This dictates that the proper time to repot is just after new growth begins but before tender developing root tips can be broken.

Do not disturb a resting or flowering plant because it often will fail to re-establish itself. Most (but not all) oncidiums start new growths between March and May. However, treat each plant in accordance with its cycle. Oncidiums grow well in most standard epiphytic orchid potting media. However, it is essential that drainage be perfect. The roots are quite fine and die if the medium becomes soggy. It also must be fresh. Oncidiums grown in pots normally should be repotted every second year.

A solution used by many to avoid the chore of frequent repotting and the attendant trauma to the plants is to mount rather than pot oncidiums. Tree-fern or cork plaques are the most commonly used, but sections of small limbs from rough-barked trees are particularly useful, and they are aesthetic as well. Each of these mounting media affords excellent drainage except for some tree fern that may be too dense. The only disadvantage is that mounted plants require more frequent watering than those in pots. Oncidiums root strongly on plaques or logs, and with the roots being exposed to air, the plants often do not require remounting for five years or more.

Reprinted from *Growing Orchids*, a culture handbook published by the American Orchid Society. To receive a free colorful brochure about this wonderful hobby and to learn more about growing orchids, contact the

American Orchid Society at *Fairchild Tropical Botanic Garden*  
10901 Old Cutler Road, Coral Gables, FL 33156 Phone: (305) 740-2010 Fax: (305) 740-2011  
Email: The [AOS@aos.org](mailto:AOS@aos.org) Website: [www.aos.org](http://www.aos.org)

**Akatsuka Orchid Gardens** \* P.O. Box 220 \* Volcano, Hawai'i 96785  
Phone: (808)967-8234 Toll Free: 1-888-967-6669 Fax: (808) 967-7140  
Email: [info@akatsukaorchid.com](mailto:info@akatsukaorchid.com) Website: [www.akatsukaorchid.com](http://www.akatsukaorchid.com)