# **New York Botanical Gardens: Oncidium Intergeneric Hybrid Orchids**

The orchid family*, Orchidaceae,*is one of the largest of all flowering plant families, with plants growing in many different habitats*.*Successful orchid culture is the result of imitating an orchid's natural habitat as closely as possible.  All orchids need appropriate light, temperature, humidity, moisture, nutrients, ventilation, potting medium, and maintenance.

*Oncidium* (dancing lady orchid) is a very diverse genus of orchids that originate in dramatically different habitats of the Americas. Over 450 species include terrestrial, epiphytic and lithophytic orchids. These plants are grouped with intergeneric hybrids created with closely related genera like*Brassia, Miltonia* and*Odontoglossum*. You can sometimes identify the genetic makeup of the plant from the intergeneric name (for instance,*Brassidium* is an intergeneric hybrid composed of *Brassia* and *Oncidium* orchids) though the name can also reflect the originator's name when more genera are involved.

The most beneficial routine of care varies, and one set of instructions does not suit all *Oncidium*. Save the name tag on your *Oncidium* orchid when you make your purchase so that you can confirm the best conditions for your specific plant. The *Oncidium* intergeneric hybrids can be lightly to strongly fragrant, are relatively easy to grow and widely available. Their care routine is summarized below.

**Light:**

*Oncidium*intergeneric hybrids require bright but filtered light. Gentle eastern morning light can be ideal, or indirect, southern light with protection from the strongest midday sun. In the New York City area, they can fare well in any but a northern window as long as it receives extended light and they are given some protection from hot afternoon sun.

LED artificial light can be used to supplement light for most orchids. Be careful not to place the light too close and burn the plant. Look for a full-spectrum light option made for plants.

Orchids which have too little light will look lanky and not bloom properly, while those plants receiving too much direct sun will have sunburned foliage. Too much red in the typically bright green foliage indicates too much light.

**Water and Humidity:**

Orchids are killed more often by the common mistake of over-watering than anything else. When watering, remember that these orchids have  pseudobulbs that act as water storage systems.*Oncidiums* like to approach dryness before they receive more water. Orchids with large, fleshy roots and thick leaves need less water than thin-rooted, thin-leaved types*. Oncidium* intergenericsgenerallyneeds to be watered when the potting medium has dried out slightly, never allowed to dry out completely. Day length, humidity and individual heat systems will affect the rate at which water evaporates from the growing medium, but the*Oncidium* intergeneric hybrids do not have a rest period requiring a significant reduction in watering. Use your finger to test an inch or so down for dryness before you water.

When it is time to water, place the plant in a sink and allow the water to soak through and drain out completely. Always water in the morning. It is best to use tepid water, as it will help to dissolve fertilizer salts and not shock the plants. If the water is too cold and it gets on the foliage, some *Oncidium* intergeneric hybrids will produce tiny black spots on their leaves which look like freckles. It is simply cosmetic damage.

Humidity in the air is just as necessary as moisture in the soil and decreases the likelihood of drying out. A minimum of 40% relative humidity is required to grow *Oncidium*intergenericswhereas an average home in the northeast will have humidity as low as 25%. In the home, both heating in winter and air conditioning in summer remove a lot of moisture from the air. Supply extra humidity with humidifiers, or group plants on a gravel-lined tray that is filled with water to increase air moisture through evaporation. You can use a simple hygrometer to assess the humidity and keep it in the 40 to 60% range that *Oncidium* intergenerics prefer.

The high humidity in tropical areas is often accompanied by gentle and constant air movement. Stagnant, humid air is as detrimental to orchids as cold drafts. Air movement is essential, as it evaporates moisture on leaves and stems and helps protect plants from the spread of disease.

**Temperature:**

Most orchids need a distinct fluctuation between day and night temperatures to successfully produce flowers. Intermediate to warm-growing orchids such as *Oncidium* Intergenerics prefer day temperatures between 70 and 85°F, with night temperatures between 60 and 65°F.

**Nutrition:**

Since orchid potting mediums are not composed of nutritious garden soil, the rule of thumb for orchid feeding is "feed weakly, weekly." For *Oncidium* intergenerics, a balanced fertilizer (20-20-20) is best, diluted to ¼ strength and used once or twice a month. You can use an orchid fertilizer or a regular houseplant fertilizer. It's important to flush the plant out with water once a month to get rid of any residue salts left over from the fertilizer. It's better to give an orchid too little fertilizer than too much but fertilizing year-round will enhance flower formation.

**Encouraging Flowering:**

An orchid needs to have all its requirements met to generate the energy necessary to flower. Adequate light, careful watering, fertilizing and proper temperature and humidity levels all contribute to a flowering *Oncidium*intergeneric plant. In nature, orchids experience a 10ºF. temperature difference between day and night. This differential is especially important when trying to initiate flowering and best way to coax your orchid into bloom is to signal a season change. Drop the nighttime temperatures down to 60°F for several weeks and you have a good chance of encouraging a flower spike.

**Care After Flowering:**

Cut the spike all the way down to the base when it has turned brown after flowering to allow the plant to rejuvenate and grow for the next flowering display.

**Re-potting:**

When an *Oncidium*intergeneric's potting medium has deteriorated, it should be repotted. This is best accomplished about every two years. It is important to gently remove as much of the old potting medium from the roots as possible. Any rotting roots need to be removed immediately with sterile tools.

*Oncidium* intergeneric hybrids require good drainage and good root aeration to grow. Fine-grade, fir bark, potting medium is preferable.  Be sure to use only quality orchid potting mixes and never substitute landscape mulches for orchid potting mediums.

**Hygiene:**

Cleanliness is important for orchids. Wash orchid leaves occasionally with soapy water to reduce the harmful effects of excess debris and minor insect infestation. Since orchids are susceptible to viral diseases, use gloves when handling them and/or wash hands often between handling. When cutting stems always use tools sterilized in a 10% bleach solution (1 part bleach to 9 parts water) and/or alcohol, or use a clean, single-edged razor blade.

**What to look out for:**

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