# Cattleya Culture (Kat-lee-a)



Commonly known as the Queen of Orchids, Cattleyas are epiphytes (tree-dwelling plants) native to Central and South America. They are among the most colorful and fragrant of all the orchid families, with the blooming period lasting anywhere from 4-6 weeks or more.

The following are the cultural requirements for the many related intergeneric varieties and relatives of the Cattleya as grown in the upper Midwest.

### **LIGHT**

To ensure good growth and profuse flowering, Cattleya requires bright light. They prefer some direct sun and do best with the light source above rather than from the side. A south or west exposure is the recommended house environment. Some Cattleyas are photoperiodic (day-length sensitive), so they must receive no additional light between sunset to sunrise.



Pot. Lakeland 'Britt'

Cattleyas do best when grown outdoors during June through October. The ideal location would be to hang them from a tree or the overhang of your house, or place them in a screened porch where they can receive some dappled sunlight. Cattleyas can benefit from higher light intensities as the day length decreases towards fall and into winter, and vice-versa for the spring and summer. Provide as much light as possible for your plant throughout the year without causing sunburn on the leaves. Once your Cattleya is in the flowering stage, it is best to shade it from any direct sun to prolong the life of the blooms.

#### **TEMPERATURE**

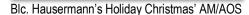
One crucial cultural element for Cattleya is that they do best when exposed to a 10-to-15-degree differential between day and night temperatures. For that reason, Cattleyas can be grown outdoors from June until early October. While growing outdoors, these plants do not mind periodic temperature dips into the 40s at night, as long as the temperature rises at least 10 degrees or more during the day. It would be time to bring your Cattleya indoors once the temperature differential between day and night becomes narrow. For example, when the October daytime temperature is consistently 45 degrees and the nights are 40 degrees. Do not ever allow your Cattleya to experience freezing temperatures.



Cattlianthe Acker's Romance

Once you have brought your Cattleya indoors for the growing season of October through May, it is best to place them in a sunny area that experiences a nighttime temperature of 55 to 60 degrees. This temperature reduction can be best achieved in the home by using a basement area or a spare room that the nighttime heat source can be reduced. It is still essential that the plant experiences a rise in at least 10 degrees or more for the daytime. On cloudy winter days, an artificial heat source might be needed to achieve the proper daytime temperature differential. In contrast, sunny days should generate enough warmth for an adequate temperature differential.

# warmth for an adequate temperature differential. WATER



Proper indoor watering for Cattleyas requires allowing the bark mix to become dry beneath the surface between watering cycles. Factors such as how root-bound your pot is, how much light the plant is receiving, and what size pot will all play a role

in how fast it dries out. Typically, while growing indoors, a good thorough watering once a week should be sufficient. In root-bound plants grown in warm, high light areas, watering every 5 days is needed. When watering, drench the bark thoroughly until water runs freely from the bottom of the pot. Remove pot from any decorative container to allow for proper drainage. Never leave your Cattleya to stand in water, as this will cause root rot. Never use softened water on any of your orchids.

For outdoor growing, it is best to maintain slightly more moisture than for indoors. During the highest temperature periods (mid-summer), keep the Cattleya moist but not soggy. Watering twice a week is usually needed during that period. As the temperature begins to drop towards the end of the outdoor season, start letting the bark become dry beneath the surface, much like the indoor watering schedule. While outdoors, natural rain on the plant is beneficial.

#### **FERTILIZER**

Cattleyas and their relatives are active growers. Fertilizer is essential for good growth and flowering. Use a 30-10-10 formula applied every second to third time you water for three applications, then for the fourth application, use a high phosphorus Blossom Booster 10-30-20. This combination ensures your plant's good growth with maximum bloom potential. Dilute 1 tsp. to a gallon of water.

Note: Mix your fertilizer ahead and store it in a plastic container that can be labeled and capped (such as a used gallon milk jug). This ensures the solution is thoroughly diluted, at room temperature, and convenient to use.

### **HUMIDITY**

Like most orchids, the Cattleya enjoys a moderately humid climate of 50% or greater. While growing outdoors, this is not an issue since we generally have adequate humidity in our Mid-Western summer climate. While growing indoors, increase humidity around the plant by placing your plants on a humidity tray, misting them adequately in the morning, or grouping your plants all together in one area.



# **BLOOMS**

The Cattleyas blooms for 4-6 weeks or more. When the flowers are finished blooming, simply cut the stem off at the point where it <u>emerged from the</u> plant.

## **REPOTTING**

Cattleyas need to be repotted every two years. If you are not experienced or comfortable doing this yourself, call upon someone you know who can help you through the process. A recently purchased Cattleya may be ready for repotting as soon as it has finished flowering. Inquire with the seller as to when your specific plant was last repotted.

#### Good indicators for a Cattleya to be repotted are:

- 1. When the rhizomes and roots of the plant have protruded over the edge of the pot.
- 2. When the potting medium starts to break down and drain poorly; or
- 3. When the plant is completely root-bound in the pot. It is best to repot just as new roots sprout from the rhizome, typically after flowering has completed or in the springtime, as the plant becomes actively growing again.

Photo by Terri Jozwiak



An example of a Cattleya in need of repotting.

Cattleya may be divided if the plant has enough pseudobulbs to do so safely. A division should consist of a minimum of four

pseudobulbs to allow enough strength for future growth. Larger divisions of 6-10 pseudobulbs are preferred, which will make for a specimen plant the next blooming season. If your plant is not dividable at this time, simply repot it into a slightly larger pot.

#### To make a proper division in your Cattleya:

1. Start by locating the pseudobulb that had most recently produced flowers.

- 2. From there, follow the rhizome, which connects each pseudobulb and count back from there four to six pseudobulbs.
- 3. At that point, cut the rhizome and root mass using a sterilized pruning sheer or large stiff knife to make your division.
- 4. Repeat this process with the remaining portion of the plant.

After doing that, you may have a clump of leftover pseudobulbs called back-bulbs. These will not have a recently flowered pseudobulb attached and are not viable or worthy of potting, and should be discarded.



Cattlianthe Golden Wax

A note about orchid viruses: most commonly, the transmission of orchid viruses is caused by using the same cutting tool on multiple plants. The most effective method to reduce virus transmission from plant to plant is to briefly flame-sterilize your cutting tools between each plant. A simple Butane torch or a gas stove are handy items for this purpose. This practice should be implemented when repotting as well as when cutting off perished flowering stems.

Once your division is made, select a new pot in the appropriate size to allow for another two years of growth. Unfortunately, there is no set rule for choosing the proper pot size, but generally, increase the pot size by 1 to 1½ inches around the root ball. Do not use too large of a pot because these plants like to be somewhat crowded, even after repotting. Cattleya prefers to grow in clay pots for the benefit of the clay's porosity. Place the cut-side of the division against the inside perimeter of the container and fill it with moistened fir bark orchid potting mix. Try to keep the rhizome about ½ inch below the potting mix and pack it firmly with a blunt tool to ensure the plant is secure in the pot. Wait about one week and then water thoroughly.

Chuck Acker
Good luck and Happy Growing!