

Cattleya

KAT-lee-ah

Cattleyas are among the most popular orchids. Their culture is often used as the basis for comparison with other types of orchids. Cattleyas and their related hybrids come in many colors, shapes, forms and sizes. Culture varies only slightly among most of these. This sheet is a general guide to basic cattleya culture. Interestingly, there are three major forms of flowering in Cattleya – ones which bloom the moment the pseudobulb matures, ones which bloom after the pseudobulb matures and rests with a green sheath, and ones which bloom after the pseudobulb matures and rests with a dead sheath. You should ask your grower which one you are purchasing.

LIGHT is the most important factor in growing and flowering Cattleyas, whether in a greenhouse or in the home. They can receive direct sun indoors in a South, East, or West window, or direct sun in a greenhouse.

In a home, Cattleya should be placed in any window (ideally South-facing) that gets more than 4 hours of direct sunlight to bloom. In a greenhouse, they should get 50 to 70 percent full sun (3,000 to 5,000 foot-candles). If grown under lights, Cattleya should receive more than 3000 lumens of light to bloom and grow. Leaves should be a chartreuse-green color; pseudobulbs erect and requiring no staking.

- If using artificial lights, they should be on for 10 to 14 hours a day.
- In a greenhouse, 50-100% full sun or about 32,200-53,800 lumens/3,000-5,000 foot-candles is ideal. Southern climates below the 37th parallel will need to use shade cloth. Northern growers can expose some species to full sun with no consequence.
- In the home, South, East, or West windows where they will get about 4+ hours of direct sun are ideal. You cannot sunburn a Cattleya indoors.

TEMPERATURES Depends on the hybrid/species, but in general, Cattleya are happy with 55F-72F (12.7C-22.2C) nights and 70F-85F (21.1C-29.4C) days. If growing indoors, no need to worry about temperature; room temperature all the time is fine. Seedlings should have night temperatures 5 to 10 degrees higher.

Higher day temperatures can be tolerated (up to 95 F if humidity, water, air circulation, and shading are increased).

WATER When thinking about water for epiphytes like Cattleya, you must keep in mind that they like have quick wet/dry cycles. Cattleya like to go dry in between waterings, but like to be immediately watered when their media hits dryness. If growing in a greenhouse, you can/should water daily regardless of whether or not it's potted or mounted. Indoors, Cattleya should be grown potted, and after watering from the top, be allowed to sit in about ½" of their own flow-through for a day or two. Otherwise, indoor Cattleya can be taken to the shower or sink and be watered, drip dry, then be placed back. The frequency will depend on how fast it takes for the media to dry in your conditions. Indoors, you can get away with watering less frequently by letting them sit in their own flow-through. Use lukewarm water! Water temperature below 50 F may injure plants, as will hard water or water softened by the addition of salts.

HUMIDITY for Cattleya is a bonus, but is not necessary for growing these well. Indoors, as long as the Cattleya are well-watered and frequently watered, you do not need to worry about humidity. Remember that humidity is an anti-dryness factor; orchids do not absorb water through their leaves. If you raise the humidity, the plant will be slightly more robust, but not incredibly so. In a greenhouse, air should always be moving around the plants to prevent fungal or bacterial disease,

especially if high humidity or cool temperatures exist.

FERTILIZE on a regular schedule. Use ½ to ¼ strength of a normal dose regularly when plants are actively growing. A higher nitrogen formulation (such as 30-10-10) is recommended during active growth. In autumn, or after growth slows, fertilizer should be reduced or eliminated for the winter. Some growers use a high-phosphorus formula in the spring to promote flowering.

POTTING is necessary when you first get the plant, or the rhizome of the plant protrudes over the edge of the pot, or the potting medium starts to break down and drain poorly (usually after two to three years). If you see new roots just starting to grow or a new shoot starting to grow, that's the best time to repot. Otherwise, you will have to wait until after flowering. Mature Cattleya are usually potted in coarser potting material than are seedlings. Until a plant has at least six mature pseudobulbs, it generally should be put into a larger pot and not divided. If dividing a plant, three to five pseudobulbs per division are required. Select a pot that will allow for approximately two years of growth (usually a 2-3" larger diameter pot) before crowding the pot.

If growing indoors, you will want to mix about ¼-1/3 of sphagnum to either fine or medium grade orchid bark mix (which is bark+perlite+charcoal). Alternatively, planting into 100% treefern fiber works well with plastic pots indoors.

If growing in a greenhouse, use medium to coarse orchid bark mix. No sphagnum is necessary, except for perhaps the smallest of seedlings.

OTHER Cattleya usually bloom once a year, though through hybridization, some hybrids can bloom multiple times a year. Most are fragrant, unless there's certain *Laelia* or *Sophranitis* in the background. Cattleya are the most succulent of the orchids (besides Eulophia), and you will also see other closely related genera lumped in with them for their ability to be hybridized or their similarity in care.

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At Fairchild Tropical Botanic Garden
10901 Old Cutler Road, Coral Gables, FL 33156
www.aos.org