

Cattleya Culture Information

Colourful, flamboyant and much sought after, Cattleya (*CAT-lee-uh*) have some of the largest single orchid blooms of all, some measuring over 15cm across. They originate from the jungles of Central and South America, particularly Brazil, Mexico and Guatemala, where they grow as epiphytes producing huge clump-like plants. Unfortunately, their attractiveness has been their downfall and over the past century or so they have been extensively collected. This, together with the destruction of their native habitat, makes species Cattleya quite rare. All the plants sold as pot plants are hybrids of which there are many and varied.



Close relatives of the Cattleya include Laelia, Brassavola and Sophronitis. All of these genera will readily interbreed with Cattleya producing many varied and exciting hybrids.

Cattleyas have strong sausage-shaped pseudo-bulbs from which one or two thick leathery leaves develop. The plant will keep these leaves for many years and they, together with the pseudo-bulbs, will store water and nutrients for the plant. New pseudo-bulbs are produced each year and are carried on a rhizome that grows along the surface of the pot. Roots are strong and silvery growing in and over the pot; they will cling onto anything in their way.

The plants can be divided into two main groups according to their leaves. Single-leaved or uni-foliate species have fewer but larger, softer flowers. Twin-leaved or bi-foliate have smaller flowers with a heavier texture but there are many more on a stem.

The plants flower mainly in spring or autumn, depending on the variety. Buds are produced within a protective sheath enabling them to develop in safety; the sheath then splits and the fully developed bud emerges into a flower, many of which are very fragrant. Individual flowers last for 3 to 4 weeks. The flowers last well as cut bloom and make excellent corsages.

Generally speaking, most Cattleya have an active growth period when they flower, then, normally during the winter, plants may appear to stop growing and may go into a period of rest. It is possible to keep them a little cooler at this time but, since most homes are centrally heated, the temperatures will probably stay warm enough for the plants to continue growing.

Temperature: Most Cattleyas enjoy intermediate green house conditions but may be grown in a sunny room or sun lounge. Minimum night time temp. of 10-14°C and day time temp. of 18-25°C. These temperatures can be a few degrees higher during the summer.

Light: Good light is essential but shade from full midday sun during the summer as this will scorch the leaves. If plants are to be kept in a greenhouse, shade should be given from late spring until autumn. Full light can be given in autumn and winter.

Water: During the spring and summer, when a constant rate of growth is required, plants should not be allowed to dry out and compost should be kept evenly moist. Expect to have to water twice a week making sure the compost is being well soaked but not allowing the plant to sit in water. Always drain plants after watering.

After flowering, some plants appear to stop growing. In these cases, watering can be gradually reduced to watering only when the compost appears to be dried out, but ensure the bulbs or

leaves don't shrivel. This will induce a rest period which, although not essential, can benefit the plant by allowing it to build up energy to produce bigger flowers in the next season. At the end of the rest period, as new growth is showing at the base of the plant, resume normal watering.

Not all plants need a rest period, especially the new smaller hybrids which actively grow throughout the year. Larger plants may be watered by dunking in a bucket of water to allow the compost to soak up sufficient moisture. Clean rainwater is preferred by the plant but you can use filtered tap water.

Note: Over watering can cause leaves and buds to turn yellow and drop off. Never stand the plant in water for more than 10 minutes.

Feed: Cattleya only need feeding from March to September. A balanced orchid fertilizer, such as Ivens Orchids' Orchid Feed, can be given at the time of watering once every two weeks. Do not feed during the rest period.

Air Humidity: High humidity (50-60%) and Good ventilation (not drafts) are essential but care should be taken to prevent any sudden drops in temperature. A light misting may be beneficial during the summer, especially during very hot weather, as this will help to cool the leaves. It is important to note that during the summer the plant is actively growing and developing new pseudo-bulbs and flower sheaths. If these partly ripened growths are made too wet and/or cold they may easily rot off; this could be caused by over misting or dampened sheaths. Also, bad ventilation may cause bud drop or botrytis.

Tip: Plants can be placed on trays of moist pebbles to help create local humidity.

After Flowering: Old flower stems can be cut back taking care not to cut too close to the base of stem where the leaf joins as they have a tendency to weep and this may cause dieback. A little powdered sulphur can be used to dry up the wound, but this is not essential.

Repotting: Cattleyas should only need to be repotted every 2 to 3 years when the leading bulb is over the rim of the pot and the roots are crawling over the sides of the pot. The best time to pot is when you can see new growths are developing but before the new roots have grown; this is normally during spring. When repotting, look to use a pot big enough to accommodate at least 2 years further growth. Cattleyas grow in one direction, so position the plant to the side of the pot with the oldest section of plant closest to the edge of the pot; this will allow the new growths room to grow without the pot becoming unstable. Always use good quality orchid compost, such as Ivens Orchids' Composts, which includes a good medium bark, ideal for growing Cattleya. If plants become too big, they can be divided. Repotting and dividing classes are available from Ivens Orchids.

Basic Potting Technique: Remove plant from its old pot and inspect the condition of the root-ball. Shake off old compost. If roots are firm and in good condition, pot up allowing space for 2 years growth. If using bark based compost, soak it well before potting. Using a clean pot, support the plant in the pot while you feed fresh orchid compost around the root-ball; remember to position the plant to one edge of the pot to allow the new growth room to develop. Do not pack the compost in too firmly as these plants prefer a free draining pot. After potting, leave the plant 2 weeks to dry out; during this time the newly potted plant will quickly make new root growth. After this period, commence watering as normal.

If the plant has only a few good roots or is a division, it is possible that it will not cope with the drying out technique described above, which may cause too much dehydration or damage the plant. In these cases, only use dampened compost for potting but still allow the compost to dry

out before any more water is given, then water sparingly for the first 4 weeks after repotting before recommencing the normal watering procedure, (see above).

Basic Dividing Technique: Mature plants can be divided: They should have at least 8 pseudo-bulbs so that any new divisions have at least 4 good sized bulbs and a new growth. If divisions are smaller than this they may take 2 or 3 years to develop flowers. The time to divide is when you can see new growth but before the new roots have developed.

Remove the plant from its pot and shake off compost. Look at the plant and decide where best to cut the rhizome. The rhizome can be very tough – You will need a sharp knife or secateurs. Make sure each division is a good size as described above. The leading division(s) will show new growths and you will be left with an older part or back division. This back division can also be potted up as the old growths normally carry one or two dormant buds at their base and these will be encouraged to grow now that the leading growths have been removed.

Any healthy, leafless pseudo-bulbs, also known as back bulbs, can be potted up individually in small pots.

An alternative method of propagation is as follows: During the autumn, once the plant has either flowered or finished its season's growth and is still in its old pot, cut the rhizome as required and leave plant undisturbed during the rest period; then, in the spring when the plant starts to show signs of growth, the bulb behind the severed rhizome will also start to grow similar to the newer front part of the plant. This method allows the older part of the plant to get going earlier and should offer a better success rate for flowering in the same season. During the spring, repot both sections of the plant into separate pots using fresh dampened compost as described above.

Note: Cattleya roots are very fragile and, although it is practically impossible to repot or divide a plant without some damage, great care should be taken to keep this to the minimum.

Pests: Prevention is always better than cure so look for good healthy plants to start with and keep them that way with a clean environment for your plants. Throw away old, weak or infested houseplants and maintain good housekeeping in the greenhouse. Most often seen pests are scale insect and aphids which will weaken the plant if left unchecked. The scale and aphids may be cleaned off with soapy water, if found early enough, otherwise treat with a specific systemic insecticide.

Buying Tips: Always buy good quality orchids from a reputable supplier and look for clean healthy plants. If buying plants in flower, check the flowers are not damaged or that the pollen caps are still on the flower. If these get knocked off by poor handling or contaminated by poor storage or transport conditions, the flowers will very quickly discolor or "go over". Check for healthy buds and if there are other sheaths on the plant gently feel to see if they contain developing buds. Look for healthy leaves: Cattleyas keep their leaves for a long time so they quite often have a few scars, which is normal, but they should not show too many signs of scorch or damage. Look for plants whose flower buds look quite plump and ready to open.

Handy Hints: Check plants regularly for pests and treat straight away. Keep your plants clean and healthy by occasionally cleaning the leaves with a mixture of 1 tablespoon of olive oil and a few drops of washing up liquid mixed in warm water. Using a sponge cloth, wipe over the leaves with the mixture.

Note: To help prevent flower and bud drop, keep plants away from drafts, radiators and other heat sources.

Special Notes: Pseudo-bulbs sometimes grow horizontally and may need some support. To do this, secure short canes in the pot and tie the bulbs to them with raffia or twine. This will help to keep the plant looking tidy and allow the flowers to develop in a more upright manner.

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