



Growing Orchids: A Toronto Master Gardeners Guide

There are 15,000 to 35,000 different species of orchids and they are not all easy to grow. The orchids most generally cultivated are *Cattleyas*, *Phalaenopsis* (Moth Orchids), *Paphiopedilums* (Slipper Orchids) and *Cymbidiums*. Even within these general groups cultural requirements are variable and best results can only be obtained by choosing plants that will fit the particular environment available or by adjusting the environment to fit the plant.

This gardening guide provides basic cultural rules for growing orchids in the home and focuses primarily on *Cattleya* orchids. While these rules are basic to many other orchids, different rules for temperature, light and water may apply and it is best to seek expert advice.

Temperature

Ordinary home temperature is good for many orchids. They do well at temperatures from 15 – 20 °C, although the night temperature should be slightly lower than in the daytime.

For *Cattleyas* do not let the temperature go below 12 °C as it may blast any flower buds that have formed. *Phalaenopsis* like temperatures above 20 °C. while *Paphiopedilums* and *Cymbidiums* prefer night temperatures of above 10 °C. Warm rooms without good circulation may keep the buds from opening fully.



The *Phalaenopsis* or moth orchid is one of the more commonly available species.

Photo: Helen Battersby

Light

The orchid plant takes all the sunlight it can get. In Toronto this usually means all the direct sun you can give the plant from about the first of November until the middle of February. In the late spring, summer and early fall months they still require lots of light with shading from the direct sun. (A gauze curtain at the window is sufficient.)

Water

If your plant is potted in fir bark, as most orchids now are, water it heavily every five to seven days according to your particular home conditions. Place the pot in the sink and flood it with water. Allow the pot to drain completely before returning it to its saucer as the roots may rot if it sits in water. Remember the orchid is somewhat of an air plant and likes drenching rains on its roots but does not like 'wet feet'. Do not use chemically softened water due to the high sodium content.

Humidity

During the winter months when your house is heated and consequently dry, place the plant on a dish of wet pebbles which will help to develop an envelope of humidity around the plant. Be careful that the pot sits on the pebbles and not in the water. A light spraying of the leaves with water during bright hot days is beneficial but not on dark, dull days.

Food

Because orchids are generally potted in fir bark which is devoid of nutrients you must feed them regularly to get new growth. Use any balanced water-soluble fertilizer (20-20-20 for example) at a quarter of the rate recommended for other house plants. During the winter use this solution for one of the regular waterings every 3 weeks. Feed every two weeks in the summer.

Air

Orchids like circulating air similar to their natural habitat where they usually grow up in the crotches of trees where there is plenty of air movement. Drafts will not hurt the plant unless the temperatures are extreme. Hanging your plant outdoors from the branch of a tree is an option in the summer. Remember that a plant will dry out more quickly if it is put outdoors, requiring more frequent watering.

Flower Cycles

When your plant is in bud be sure it does not receive the direct rays of the sun. For *Cattleya*, after the flowers have faded and died, cut off the flower stem and pod-like sheath down to the axil of the leaf without cutting the leaf. Your plant will not flower again until the following year at about the same time. In order for it to bloom again it must develop new growths (stem or pseudo bulb and leaf) from which the flowers will appear. Each growth blooms only once and sends out new growths or pseudo-bulbs to bloom the following year. The old growths will remain green and active in producing food for the plant for four to six years. Then they will eventually turn yellow, dry and die.



Beautiful *Paphiopedilum* or slipper orchids get their name from the pouch that looks like the toe of a slipper.

Photo: Helen Battersby

Phalaenopsis will often rebloom from the old flower spike. Therefore it should not be removed unless it withers naturally. The honey-like secretion you may find on your new growths at certain seasons is natural and nothing to alarm you.

Repotting

Never place the plant in a tight decorative container or wrap the pot in foil as the roots must breathe through the clay pot or the holes in the plastic pot. An expandable bamboo sleeve or woven open cover will decorate the pot if you feel it necessary. Orchids should be repotted about every two or three years as they will outgrow the pot in that time and the fir bark will begin to break down by then. It is preferable to repot in the spring after the new growth has reached 2 -3 cm in length.

The basic steps for repotting an orchid are:

- Select a pot large enough to permit about 2 years growth (approximately 3 – 5 cm) between the new growth section and the edge of the pot. Cover the bottom of the pot with broken crock and partially fill with bark or mix.
- Trim roots back to fit the pot and cut off old (brown-brittle) roots completely. Place the rhizome so that it rests just below the pot rim. Press bark firmly into pot and around the roots with fingertips.
- Place a stake into the pot or clip stake to the pot rim and tie all leaves to the stake so the plant is held firmly. Firm potting is a must.



Cattleya (pronounced KAT-lee-ya) orchids.

Photo: Helen Battersby

- Water heavily once, then use water very sparingly until new root tips appear. Misting helps at this time. When roots appear, water in the normal manner.

Should the plant appear to be drying up and not responding to the new potting, place the plant in a clear polyethylene bag. Moisten the bark well and tie the top of the bag loosely and hang in a shady area until root action appears. Then remove from the bag and grow in the normal manner.

References

1. *Manual of Orchids*, The New R.H.S. Dictionary. Editors Joyce Stewart, Mark Griffiths
2. *Home orchid growing*. Rebecca Tyson Northen
3. *Orchids – A Care Manual*. Brian and Sarah Rittershausen
4. Website to chat with other orchid growers:
<http://www.rv-orchidworks.com/orchidtalk/>

Produced by the Toronto Master Gardeners, these Gardening Guides provide introductory information on a variety of gardening topics.

Toronto Master Gardeners are part of a large, international volunteer community, all committed to providing the public with horticultural information, education and inspiration. Our goal is to help Toronto residents use safe, effective, proven and sustainable horticultural practices to create gardens, landscapes and communities that are both vibrant and healthy.

If you have further gardening questions, reach us at our gardening advice line 416 397 1345 or by posting your question online in the Ask a Master Gardener section. To book Toronto Master Gardener volunteers for talks, demonstrations, advice clinics, or other services, please contact us at 416 397 1345 or bookamg@torontomastergardeners.ca

Revised prior to May 2005