Kurt Weiss Greenhouses, Inc.

ORCHID CARE GUIDE





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LIGHT:

GOOD LIGHT vs. BAD LIGHT

Light is a key factor in growing healthy orchids. Direct sunlight may cause plants to burn, and too little light will prevent plants from flowering. An ideal location is behind curtains or window blinds.

Leaf color is a good indicator of the amount of light a plant is receiving. Orchids should have bright green, healthy leaves. Dark green leaves indicate that a plant is getting insufficient light, and yellowish-green or red leaves indicate that a plant is getting too much light. If you suspect a plant is exposed to too much light, feel the leaves. If they feel noticeably warmer than the surrounding air, move the plant to a location with less intense brightness.

Low light, Warm growing orchids enjoy a north, east, protected west or shaded south window of the home. Standard household temperatures are adequate. Orchids that are classified as low light, warm growing are: <u>Paphiopedilum or Lady Slipper</u>, <u>Phalaenopsis</u> and <u>Oncidium</u>.

Moderate to high light, Warm growing orchids. These orchids like a lot of light and warm household temperatures. They thrive in a west or south window. From early May to late September, you should watch light levels in south windows to avoid burning; you may have to move your orchid away from the window or place them behind a sheer curtain to decrease light intensity. These orchids like to dry between watering. Orchids that are classified as moderate to high light are: <u>Cattleya</u>, <u>Dendrobium</u>, and <u>Vanda</u>.

A. Phalaenopsis hybrids enjoy the light behind curtains and window blinds in this master bedroom.
B. Too much light can permanently sunburn the orchid leaves.
C. A good way to tell if a plant is receiving too much light is by feeling the leaves' temperature.
D. Masdevallia veitchiana is by nature cool-loving and suited to cultivation only in cool places.









TEMPERATURE:

THE IDEAL TEMPERATURE

To produce beautiful, long-lasting blooms, orchids must produce energy in the form of carbohydrates during the day when the temperature is high, then store that energy at night when the temperature drops. This temperature fluctuation is necessary for orchids to bloom. Without a day-night fluctuation of 10-15 degrees Fahrenheit, the plants will grow plenty of healthy foliage but may stubbornly refuse to flower. A night temperature of 60-62 degrees F is ideal for optimum growth, but temperatures as low as 55 degrees F will not harm your plant. Daytime temperatures should range between 70 and 80 degrees F. Temperatures as high as 90-95 degrees F for short periods will cause no harm, as long as proper humidity and air circulation are maintained.

THINGS TO CONSIDER: In the world of the orchid, <u>temperature</u>, <u>light</u> and <u>humidity</u> work in conjunction with one another. Unless a harmonious relationship is achieved between them, optimum growth is not possible. In instances of low humidity, high temperatures can be dangerous; in the case of too much atmospheric moisture, the effects of low temperatures can be over-emphasized. A widely held misconception is that all tropical orchids need extremely high temperatures to survive. This is not altogether true, and to subject them to such treatment can be disastrous. In the very early days of orchid cultivation, many failures were due to growing orchids in the excessive temperatures of a "stove" house

A. This Vanda Sansia Blue, exposed to the proper daily temperature ranges, produced a spike and will bloom 4-6 beautiful blue-purple flowers that will last for weeks.
 B. Vanda Sansia Blue (Crimson Glory x Vanda Coerulea).

C. A temperature and humidity thermometer, a must for all orchid growers.







WATERING:

WATERING YOUR ORCHID

Always water early in the day so that your orchids dry out by nighttime. The proper frequency of watering will depend on the climatic conditions where you live. In general, water once a week during the winter and twice a week when the weather turns warm and dry. The size of your orchid container also helps determine how often you need to water, regardless of climate conditions. Typically, a 6-inch pot needs water every 7 days and a 4-inch pot needs water every 5 to 6 days.

The type of potting medium being used can also affect your plant's water requirements. Bark has a tendency to dry out more rapidly than sphagnum moss, for instance. It is important to remember, however, that even when the surface of your pot is dry, the root area may remain moist. Poke your finger or a regular wooden pencil an inch into the pot; if it feels moist to the touch or if the pencil looks moist, do not add additional water. The potting medium should always be damp, but not soggy—neither should it be allowed to get extremely dry.

The quality of water used, whether for spraying or watering, is of great importance. Since tap water has often been chemically treated, generally with chlorine, it should be used with caution. The best water for orchids is undoubtedly rainwater. Rainwater, as it passes through the air, dissolves and absorbs many substances such as dust, pollen and other organic matter. This enriched rainwater contributes to the nourishment of the plant.

THINGS TO CONSIDER: The temperature of the water is also important. If the water temperature and the surrounding air temperature are equal, no harm will result, and slight differences either way can be tolerated by healthy plants. Fatal or long-term damage, not easily discernible at first, can result from using water that is too cold

A. When watering your orchids, take care to avoid wetting the leaves.
B. If water gets trapped in between the leaves, dry them quickly by using a piece of tissue or a cotton ball.
C. After watering, do not allow residual or standing water to come in contact with the base of the orchid pot.
D. Overwatering will result in yellow, damaged leaves. If your orchid's leaves turn yellow and show signs of rot, hold off on watering for a few weeks.









FERTILIZER & FEEDING:

ORCHID FOOD

In their native habitat, orchids scavenge nutrients from whatever happens to be nearby: decomposing leaves, bird or animal droppings, or minerals borne in rainwater. You can help your orchid to grow faster and bloom sooner by feeding it the right fertilizers. Look for products that contain nitrogen (N), phosphorus (P), and potassium (K), along with trace elements such as iron.

Potassium (K) is mainly responsible for the control of flower, and fruit development. Phosphorous (P) for flower production, and Nitrogen (N) for healthy vegetative growth. The amount of feeding depends on the plant concerned, the time of year and general health of the plant. Investigations have shown that feeding should begin with more Nitrogen just when the new shoots are showing, more Phosphorous and Potassium being necessary towards the end of the season.

THINGS TO CONSIDER: Orchids growing in bark need more nitrogen than either phosphorus or potassium (in proportions of 30:1:1. This is because the bark is decayed by bacteria that use a large amount of nitrogen, leaving very little for the plant. Therefore, the most important step to remember when feeding your orchid is to correctly identify the type of fertilizer you should be using.

A. Read instructions carefully to make sure you are using the correct orchid food.

B. It is best to water your plant thoroughly prior to feeding.

C. A granulated or dry <u>orchid food</u> must first be dissolved in water before being used. Do not apply dry orchid food directly to the plant. Most dry orchid food is highly concentrated and will kill the plant if used in correctly.
D. Pour dissolved granulated orchid food directly on to the pre-watered plant. To prevent standing water in the bottom of your decorative container, ensure all water has drained from the plant prior to placing it back in its decorative container.



REPOTTING:

REPOTTING YOUR ORCHIDS

Each orchid genus has different requirements for potting media. It is very important to have the correct medium for each type of orchid, depending on whether it is terrestrial or epiphytic—tree dwelling. Growing media commonly include <u>fir bark</u>, <u>coconut husk</u>, <u>sphagnum moss</u>, tree fern fibers and perlite, and frequently a <u>mixture of two or three</u> of these materials. All orchids potted in a typical bark medium need to be repotted every 18 to 24 months, depending on the needs of the individual plant.

The primary purpose of repotting is to provide fresh media, not necessarily a larger pot, but pot size should be selected according to the size of the root mass. Orchids like to be a little tight in their pots. Orchids transferred to overly large pots tend to concentrate their energy on root growth and may not show new growth or foliage for several months.

Orchids may be potted in plastic, clay or decorator pots, and the type of pot selected may influence watering frequency; plants in <u>clay pots</u> will need more frequent watering, as they will dry out a little faster. Always select <u>pots with drainage holes</u>; orchid roots <u>in contact with standing water</u> will rot and die, killing the plant. Media in the center of larger pots may remain wet for long periods and become an unhealthy environment for roots. This can be avoided by placing pieces of broken <u>terra cotta</u> in the bottom of the pot. A smaller pot inverted into a larger one can also help with drainage and aeration, with the roots of the plant draped over and around the smaller pot. Some orchids, such as Phalaenopsis, have roots capable of photosynthesis. For these plants, clear pots have become popular, as they allow light to get to the roots.

THINGS TO CONSIDER: Orchids should not be reported without a compelling reason. If, for example, aeration of the potting materials is poor because of decomposition, it must be replaced. Care must be taken to ensure that new growths and shoots are not overlapping the rim of the pot—large, neglected plants that have been potted for a long time are notoriously difficult to handle, and it is easy to break off new shoots and roots. But, when in doubt, put it off for another year!

ANNUAL REPOTTING: Dendrobium, Miltonia, Paphiopedilum and Phalaenopsis and their hybrids. EVERY OTHER YEAR: Cattleya, Dendrobium, Oncidium, Odontoglossum and their hybrids. EVERY THIRD YEAR: Vanda and its allies, Cymbidium

A. In this example, the orchid is burdened by a mass of root matter and excessive top growth. Remove any dead roots or roots affected by rot with a sharp, sterilized blade.

B. Divide the remaining root matter into several sections. Each division should consist of a small number of younger, healthy shoots.

C. The new pot should be sizable enough to accommodate at least two years' growth. Choose a potting medium (fine, medium or coarse) suitable to the particular requirements of the orchid (do not reuse old bark).
D. Place the newly separated plant in its pot. The most mature growth should be positioned against the side of the pot. Fill with the appropriate potting medium.

E. Place the orchid label back in to the pot after repotting is done for a proper identification of your orchid.



REBLOOMING:

REBLOOMING YOUR ORCHIDS

Each genus of orchid has different requirements for reblooming. Most commercial varieties are very simple to rebloom. Phalaenopsis, Zygopetalum and Odontoglossum require only slight changes in temperature to initiate blooming. Others, such as Oncidium and Dendrobium, bloom on mature new growth and require a change of fertilizer to a phosphorus-rich, blossom-booster formula, such as <u>20-20-20</u>.

- A. When the last flower drops, cut your flower spike halfway down the stem.
- B. After cutting the stem with a clean, sharp blade, seal the cut with melted candle wax or cinnamon powder to prevent bacterial infection.
- C. A rebloom will probably occur if you continue to care properly for your orchid. Simply follow orchid care guidelines. D. This rebloom should flourish for up to 3 to 4 months in perfection.



This Guide was compiled from information on the web site: <u>http://www.beautifulorchids.com/orchids.html</u>

Also recommended are several books:

<u>Ultimate Orchid</u> by Thomas J. Sheehan <u>Growing Classic Orchids</u> by Mike Tibbs and Ray Bilton

<u>Orchid as House Plant</u> by Rebecca Tyson Northern <u>Growing Orchids Indoors</u> by Jack Kramer