

# Growing Orchids in Colorado

*A guide to growing and nurturing orchids indoors*



## At a Glance

**Light:** South or east windows are best; avoid more than 4 hours direct sun daily.

**Temperature:** Between 50–80° F; increase air circulation in higher temps; night temps should be 50–70° F.

**Water:** Thorough wetting of roots is crucial, but do not allow plant to sit in water for extended periods.

**Humidity:** 40–60%, try a pebble tray with a small amount of water, but do not allow plant to sit in water.

**Fertilizer:** Feed only occasionally when new growth is evident. Be sure roots are moistened before feeding; avoid splashing on leaves and blooms.

Most orchids are epiphytes, or plants that attach themselves to other plants like trees nonparasitically, which means their care differs from terrestrial plants.

## Light

A south or east window is best for most types of orchids, but more than 4 hours of direct sunlight on foliage should be avoided.

Fluorescent lights (full spectrum) can be used at a distance of 12–18" from the plant, creating 12 to 14 hour days. In a greenhouse, light levels should be reduced by about 50%.

The leaves of most orchids should be a medium green color. Leaves that are yellow/red may indicate excessive light. Leaves that are a very dark green, thin and brittle are in too low of light.

Light is even more important prior to flowering than it is while in bloom. Place the plant in bright indirect light. Excessive sunlight can shorten the flowering period. A little direct light is fine as long as the plant stays cool and humid.

Many orchids will only produce fragrance if light levels are fairly high. Place the plant in the brightest light possible to get the most fragrance from your flowers. This will, however, shorten the bloom period.

## Temperature

Orchids often do well in a home, because temperatures are usually similar their native environment. They prefer temperatures between 50–80°F. If temperatures are high, promote air circulation to help cool the leaves. There are a few types (dendrobium and oncidium) that will not initiate flower buds unless nighttime temperatures are allowed to fall to 50 degrees or below.

The most important factor in determining how long blooms will last is night temperature. Keep temperatures between 50 and 70°F. Try to avoid any rapid temperature changes, as this can cause flower buds to abort. Don't keep the plant too close to an outside door or where drafts might occur. Make sure the plant is not kept near a heat source such as a heater vent. Hot, dry air will cause flowers to fade.

Some Phalaenopsis flowers will last only a month—give or take—if the plant is left in the warmth of a hot greenhouse. If the same plant is taken to a cool location, many Phalaenopsis flowers can last as long as six to nine months. To lengthen flowering period keep cool (about 50 to 60° night temperature).

# Watering

Orchids are planted in very porous soil media, usually bark or volcanic rock. Water plants generously, taking care that the roots are given a thorough soak, but never allow the plants to stand in water for extended periods. Most orchids should become almost dry before watering again. This can take several days to a week depending upon conditions. An easy way to determine when a plant requires water is by its weight. If the plant feels light, it may be time to water. Put your finger into the potting medium about 1/3rd of the way; if it feels cold or damp, don't water.

Blooming orchids need extra water, but don't keep the plant constantly wet. Water a day earlier than you would ordinarily. Never let the plant dry out completely when it is in bud or flower formation, as it can cause 'bud blast'. Blasting is when buds drop off the plant before they've opened. Try to also avoid getting water directly on the flowers, as this can cause the appearance of black spots.

# Humidity

A humidity level of 40 to 60% (or higher) is best. Grouping plants together is one way to increase humidity levels around your plants, and pebble or rock trays (tray at least 4" wider than the base of plant filled with small gravel and water) can also help, but don't allow plants to sit in the water. Humidifiers can be very helpful, especially in the winter. Extra watering will not help.

If humidity levels are low during bud formation, buds may either blast or not open properly. Conversely, if the humidity is too high, flowers may develop black spots. Promoting air circulation in higher humidity is essential.

# Fertilizer

Orchids are not heavy feeders, and their roots burn easily. Be cautious about fertilizing plants in flower. If fertilizer is splashed on flowers it can leave burn marks or stains. It can also cause premature bud drop or blast.

If the soil/medium has become very dry, water the plant first with plain water, following with a solution of half-strength or less using a bloom fertilizer (15-30-15). This can be done occasionally during flowering and only if you see new growth (leaves).

If the plant isn't in bloom or bud and is actively growing (showing new leaves), feed up to once a month. Try a 30-10-10 or a 20-20-20 at half strength (or weaker) as a foliar feed (spray leaves) or soil drench.