

Cymbidium Orchids

**Resource: Cymbidium Society of
America**

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In their natural habitats, cymbidiums grow at the higher altitudes in the temperate zone of mid-Asia (China, Japan) down through Southeast Asia and extending south of the equator with a number of species in Australia. The climatic conditions found there are also found at sea level in the coastal regions of California (USA), along the coast in the Mediterranean and in part of New Zealand and Australia as well as South Africa. They are also grown under greenhouse conditions in many other parts of the world. The cycle of cool nights and warm days during the spring months in these regions is necessary for flower spike bud formation. Warmer weather in the summer enhances the growth and development of the flower spikes for the following season (winter into spring). Although they grow out-of-doors very successfully in these areas alluded to above, most commercial nurseries producing cut flowers grow in cool greenhouses to protect flowers from inclement weather.

Temperature

Cymbidiums can tolerate considerable summer heat and winter chill. Lows of 29 degrees F and highs up to 100 degrees can be handled for short periods. Plant foliage usually will not freeze at 27 degrees if the weather includes some moisture and air movement. Flower spikes which are soft and tender will suffer damage if exposed. With extreme heat (90-100 degrees) attempts should be made to cool plants with misting or syringing mid-day. Although flower spike buds are visible often as early as summer through fall, the initiation of these buds is believed by many to be several months earlier when there are a series of 55 degree F nights and warm days along with or in addition to a 25 degree temperature between day and night temperatures.

Light

During the spring, summer and fall growing season, plants should have as many hours of filtered sunlight as possible (approximately 50% or, if measured, 3000-4000 foot candles). The color of the foliage should be golden-green (plants with rich, dark green leaves are very likely not receiving sufficient light). As flower spikes break sheath showing the buds, many of the pastels, whites and greens will profit from shading to avoid "staining" of the sepals from dark pigments created by exposure to sunlight. This will improve the clarity of flower color. Polypropylene shade cloth of 55% density has proven to be ideal as a shade cover for cymbidium growing areas.

Soil

Cymbidiums are most frequently seen growing as pot plants (from small to large containers) although they can be grown in raised beds in the ground. In either case, the growing medium must be free-draining and acidic in reaction. Many combinations of both organic and mineral materials have been used through the years. Currently, potting composts contain one or more of the following in varying proportions: small bark pieces (Fir or Pinus radiata "down under"), perlite (Spongerok), redwood compost, coarse peat moss, sand, crushed volcanic rock, oak leaf mold, dolomite as a buffer for acidity and some nutrient material. Any potting mix should always be moistened ahead of use. Plastic pots of various sizes are now the containers of choice for most commercial growers and hobbyists.

Water

During the warmer months when actively growing, cymbidiums can handle copious amounts of water - the purer the better. One of the reasons for heavy watering in most areas is the need to leach out salts which accumulate from use of tap water. With clean, purer water, much less leaching is required. Plants can and should be kept drier during the colder months but never "bone dry". The fact remains that they are very sensitive to more than traces of the natural salts found in tap water. They will exhibit "leaf tip dieback" with continued use of "salty" tap water (defined as containing in excess of 500ppm of dissolved salts) if not leached out. In the summer, watering 2-3 times per week is typical; once per week or less in the winter.

Fertilizer

With a free-draining growing medium, nutrients are easily washed out of the mix. The goal of any feeding program is to maintain an even level of soluble nutrients in the soil water all of the time. Commercial growers have injection systems which enable them to achieve this by introducing nutrients as they water. Hobbyists have a more difficult time. A nutrient mix should be water soluble and balanced with nitrogen, phosphorus and potash in varying amounts and contain small amounts of the trace elements that plants require (copper, zinc, manganese, boron, etc.). An application once or twice per month with watering at less than full strength is usually adequate. Some hobbyists use commercial pelleted slow-release fertilizer with good results. Others use a top dressing once or twice per year (warm months) with organic not using excessive amounts of nitrogen any time of the year as it can encourage too much growth at the expense of flower spike production.

Repotting

It is generally true that larger plants produce more flowers proportionately than smaller ones but at some point it is necessary to divide the plant into pieces and repot usually for one or more of the following reasons: (1) the pot and plant are too big to be handled or housed properly; (2) there are too many "back bulbs" taking up too much space; and/or (3) the potting mix has been exhausted and the plant may be living on its old, decaying roots (three years is often considered an average limit). When dividing, an attempt should be made to create divisions of 2-3 green bulbs with one "back bulb" left for water and food storage. Removing the plant from its present pot requires a knock or tap or two to dislodge the root mass. Most hobbyists and commercial growers remove the lower 1/3 to 1/2 of the root ball using a sterile cutting tool. The plant mass usually can be broken apart at natural splitting points. Healthy roots should be shortened to 3-4 inches; all roots should be removed from back bulbs kept with a division. It is common practice to wash off the division with a brisk stream of water thus allowing a better view of the overall health of the root system. Dead or withered roots should be removed. Again, potting mix should be moist at the time of use. Also, since there are always many cut exposed root tips, it is a good practice to allow the divisions to air dry for a period of time to allow the root tissue to heal over (not in the sun). Choose a container that best fits each division being careful not to overpot. Press the mix firmly around the root mass up to and around the first 1/3 or the green bulbs. Some growers do not water the potted divisions immediately allowing healing to take place at the root level; others water immediately until drainage water comes out clear from the container. In either case, fresh potted divisions are placed in a cool, shady protected area for about two weeks with occasional misting. They are then returned to a regular growing area and normal light and watering