**GENUS SUMMARY**

Cycnoches [sik-NO-keys]

**General Description**

Cycnoches is an epiphytic genus of sympodial orchids that are usually found in warm, moist, open canopy tropical trees. The altitude can range up to 1500 meters depending on the latitude of the location. Pseudobulbs are spindle-shaped with multiple nodes and three to seven pairs of thin, veined leaves. The pendulous inflorescences arise from the upper nodes of the pseudobulb.

Cycnoches, like orchids of its sister genus *Catasetum*, are unique among orchids in that they bear separate male and female flowers with the occasional appearance of intermediate, hermaphroditic forms. The column structure is the surest method of determining the sex of flowers. The male column is long, curved, and thin. It bears the pollinia prominently at the tip. The female column is relatively short and bearing curved hook-like structures on each side of the tip. The stigma of the female column is found inside the tip of the column. There are two different forms of male flowers among the Cycnoches.

One group, the section Cycnoches, bears male and female flowers that closely resemble each other except for the column structure. The section Heteranthae bears male flowers that are radically different from the female flowers. The female flowers of section Heteranthae resemble the female flowers of section Cycnoches except that they are normally smaller. The male flowers of section Heteranthae are small with a disk-shaped lip that has from 5 to 14 projections or “fingers” on it.  Cycnoches are very fragrant with a generally complex chemical structure that distinguishes the species to their pollinators among the Euglossine bees. Like the other members of the Catasetinae, cycnoches can produce new growths from almost any of the nodes of the pseudobulb. Cycnoches are seasonal growers. The new growths are produced and rapidly develop to maturity in about six months when they produce their flowers. After flowering, the leaves are frequently dropped, and a dry rest period follows before new growth starts again.

The genus name comes from two Greek words that mean swan and neck. The type species is C. *loddigesii*described in 1832 by John Lindley. In addition to this species, other popular species are Cycnoches *chlorochilon,* Cycnoches *haagii*, Cycnoches *pentadactylon*, Cycnoches *barthiorum.*

**Number of species:** Currently 8 in section Cycnoches, 25-28 in section Heteranthae with one subspecies. The World Monocot Checklist currently contains 39 accepted names (July 2009).

**Distribution:** Tropical America from southern Mexico to southern Brazil and Bolivia.



Distribution of Cycnoches, image from Royal Botanical Gardens Kew

**--- C U L T U R E ---**

|  |  |
| --- | --- |
| **Temperature:** | Warm |
| **Light:** | Bright open shade with very good air movement. |
| **Water-Humidity:** | During the period the plants are in growth, maintain even moisture and high humidity. Once the plants have flowered, water should be reduced or stopped until new growth develops enough to produce new roots. Spider mites are the main enemy of *Cycnoches* and are brought on by hot, dry conditions which is why it is vital to maintain good moisture and good air movement while the plants are in growth. |
| **Fertilizer:** | Balanced or high nitrogen fertilizer while the plants are in growth. I believe it is not possible to overfertilize *Cycnoches* while they are in growth. I mix a teaspoon of Nutricote in my media when potting, top dress with black cow or well-rotted animal mature plus applying a half-strength liquid fertilizer at least every-other watering. As the plants mature, I change to something like 5-50-17 or other bloom-booster. No fertilizer is given when the plants are dormant. |
| **Potting:** | Sphagnum moss in clay pots; medium-fine fir bark in clay or plastic pots; mounted with sphagnum at the roots. Hanging the pots or mounts is best because this presents the best air movement around the plants. Remember that mounted plants will require more frequent watering – two or more times per day in the hottest season. |
| **References:** | **1.**  Carr 1995 *Cycnoches, 165 years of Confusion.* Privately published to be found on the Florida North Central Judging Center website[www.orchidjudges.org](http://www.orchidjudges.org/)  **2.**  Carr 2000 *The Cycnoches ventricosum Complex, Orchid Digest*, vol. 64 (1) pp. 29-38 |
| **Author:** | George Carr |

**How to Grow Cycnoches**

Cycnoches are popular among intermediate and advanced hobbyists who want to experiment with something different, says Gene Monnier of JEM Orchids in Delray Beach, Florida. The keys to success: Provide excellent drainage and do not overwater.

“Once you understand the problems associated with dormancy, the plants are easy to grow. When the new growths are developing, do not give the plants too much water until the new roots are growing,” says Monnier.

Cycnoches normally have a dormant period during the winter, although those plants grown under lights or in a greenhouse where temperatures above 60 F are maintained are unlikely to lose their leaves. Under most conditions, however, the plants shed their foliage. The plants are most vulnerable to overwatering when they are dormant, during which time Monnier recommends watering the plants once a week. Ideal temperatures at that time are 55 to 65 F during the day with a slight drop at night. When the plants are growing, provide day temperatures of 75 to 85 F with a 10 degree drop at night.

At JEM Orchids, dormant cycnoches are removed from their containers, the roots are cut away with a sterile tool and then each cluster of pseudobulbs is set into a clay or plastic container and watered with the other orchids (lack of potting mix around the roots prevents rot). When growth begins in the spring, the plants are potted in clay or plastic containers large enough to hold the cluster of pseudobulbs plus the new growth. Monnier uses a mix of equal parts charcoal and Aliflor to which 20 percent coconut peat is added. He says that repotting the cycnoches annually gives them a boost.

Some growers, both in the tropics and those who grow in greenhouses in the temperate zone, attach the plants to mounts, such as hardwood or cork. Avoid using tree fern as a mount because it may hold too much water. According to Monnier, this method of cultivation is excellent for those who tend to water plants frequently. When grown this way there is less chance of the plants succumbing to basal rot.

Cycnoches respond differently to varying light conditions. “The plants can be grown under phalaenopsis to vanda light conditions, but the intensity determines the sex of the flowers,” says Monnier. A cycnoches can bear male or female flowers, depending on the environment. Although the flowers of some species are similar, female flowers tend to be of heavier substance and longer lasting, while male flowers are smaller but more numerous on an inflorescence.

Indoors, place the plants on a windowsill with an east or south exposure (light in a west-facing window may be too intense). In the greenhouse, provide some shading, and if you live in South Florida, consider growing cycnoches in a pool cage; the screening provides light that induces development of female flowers. Those who raise orchids under lights should experiment to determine the most satisfactory tubes-to-plants distance. For example, it may be appropriate to set plants 12 inches away from fluores­cent tubes, but several feet away from high-intensity-discharge lamps. Monnier, who has seen cycnoches growing on the trunks of palms in nature, and even on fence posts, says that providing the correct level of humidity is important, too.

When the plants are in active growth — which begins in the spring — fertilize regularly. At JEM Orchids, a one-half-strength solution is applied twice a month. Withhold fertilizer when plants are dormant.

To avoid pests and diseases, maintain a clean growing environment. Even under the best conditions, spider mites may be a problem, especially where there are high temperatures and low humidity. To control them indoors, apply a soapy solution to the plants. The life cycle of these mites is three days, says Monnier, which makes it necessary to repeat applications of soapy solution every three days. For those who grow their plants in greenhouses, there are several chemical miticides available. Before working with toxic chemicals, remember to put on gloves and protective clothing. Apply the toxin to the plants in a well-ventilated area. When finished, tightly close the pesticide container and store out of the reach of children and pets. — James Watson.

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**Cycnoches Species, Progeny, Awards**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Species | F1 | Progeny | Awards | | | | Total Awards |
|  |  |  | HCC | AM | FCC | Others |  |
| albidum = dianae | 1 | 1 | - | 1 | - | 1 | 2 |
| amesianum = pentadactylon | 29 | 83 | 1 | 3 | - | 17 | 20 |
| amparoanum = egertonianum | 7 | 21 | 1 | 2 | - | 4 | 7 |
| aureum | 1 | 1 | - | 1 | - | 2 | 3 |
| barbatum = Pcn. muscifera | 1 | 1 | - | 4 | - | 4 | 8 |
| barthiorum | 17 | 38 | 11 | 12 | - | 6 | 29 |
| bennetii | 0 | 0 | - | - | - | 1 | 1 |
| brachydactylon | 0 | 0 | - | - | - | - | 0 |
| buchtienii = Pcn. muscifera | 1 | 1 | - | 4 | - | 4 | 8 |
| carrii | 1 | 1 | - | - | - | 2 | 2 |
| chlorochilon | 29 | 101 | 7 | 9 | - | 14 | 30 |
| christensonii | 0 | 0 | - | - | - | 1 | 1 |
| clorochilon | 29 | 101 | 7 | 9 | - | 14 | 30 |
| cooperi | 13 | 33 | 5 | 23 | 2 | 13 | 39 |
| cucullatum  = loddigessi | 10 | 63 | 1 | 3 | - | 15 | 19 |
| densiflorum | 7 | 21 | 1 | 2 | - | 4 | 7 |
| dianae | 1 | 1 | - | 1 | - | 1 | 2 |
| egertonianum | 7 | 21 | 1 | 2 | - | 5 | 7 |
| egertonianum var. aureum | 1 | 1 | - | 1 | - | 2 | 3 |
| espiritosantense = pentadactylon | 29 | 83 | 1 | 3 | - | 17 | 20 |
| farnsworthianum | 3 | 3 | - | - | - | - | 0 |
| glanduliferum | 0 | 0 | - | - | - | - | 0 |
| guttulatum | 1 | 1 | - | - | - | - | 0 |
| haagii | 19 | 22 | 1 | - | - | 10 | 11 |
| herrenhusanum | 14 | 29 | 2 | 3 | - | 4 | 9 |
| jarae | 0 | 0 | - | - | - | - | 0 |
| lehmannii | 11 | 24 | - | - | - | 4 | 4 |
| lindleyi = Lue. pescatorei | 0 | 0 | 2 | 4 | - | 5 | 11 |
| loddigesi | 10 | 63 | 3 | 1 | - | 15 | 19 |
| lusiae | 0 | 0 | - | - | - | - | 0 |
| maculatum | 1 | 1 | - | - | - | 1 | 1 |
| manoelea | 2 | 2 | - | - | - | - | 0 |
| musciferum | 1 | 1 | - | 4 | - | 4 | 8 |
| pachydactylon | 0 | 0 | - | - | - | - | 0 |
| pauciflorum  = ergertonianum | 7 | 21 | 1 | 2 | - | 4 | 7 |
| pentadactylon | 29 | 83 | 1 | 3 | - | 17 | 20 |
| pentadactylon var. cooperi =cooperi | 12 | 33 | 5 | 23 | 2 | 13 | 39 |
| peruviana = peruvianum | 3 | 3 | - | - | - | 4 | 4 |
| pescatorei | 0 | 0 | 2 | 4 | - | 5 | 11 |
| Species | F1 | Progeny | Awards | | | | Total Awards |
|  | | | HCC | AM | FCC | Other |  |
| powellii | 0 | 0 | - | - | - | - | 0 |
| squatourcristis | 0 | 0 | - | - | - | - | 0 |
| rossianum | 0 | 0 | - | - | - | - | 0 |
| sanderiana = Lac. bicolor | 0 | 0 | - | - | - | 1 | 1 |
| schnidtianum | 0 | 0 | - | - | - | 1 | 1 |
| Stelliferum =  ergertonianum | 7 | 21 | 1 | 2 | - | 4 | 7 |
| stenodactylon | 3 | 6 | - | - | - | - | 0 |
| suarezii | 1 | 1 | - | - | - | - | 0 |
| thurstoniorum | 0 | 0 | - | - | - | 1 | 1 |
| thurstonorum | 0 | 0 | - | - | - | 1 | 1 |
| tonduzii | 57 | 82 | 2 | 10 | 2 | 2 | 16 |
| triloba = pescatorei | 0 | 0 | 2 | 4 | - | 5 | 11 |
| ventricosum | 2 | 2 | - | - | - | 1 | 1 |
| versicolor = haagii | 19 | 22 | 1 | - | - | 10 | 11 |
| viride = russelliana | 27 | 42 | 4 | - | - | 13 | 17 |
| warscewiczii | 57 | 82 | 2 | 10 | 2 | 2 | 16 |

Species highlighted in blue have been moved to another genus

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