

The Catasetinae

By Mademoiselle Compot

Orchids are the most advanced plants in the world and no group of orchids demonstrates this fact better than the sub-tribe Catasetinae. Catasetinae, consisting of the Genera *Catasetum*, *Cycnoches*, *Mormodes*, and *Clowesia*, are widespread across the lowland tropical areas of Central and South America. They are weed-like epiphytes usually found growing in vast quantity on fences, stumps, and in the middle of tree trunks. These plants require a rest period where they receive no water or fertilizer for several months after losing their beautiful foliage. The highly fragrant flowers are either male or female.

Cycnoches, pronounced sik-no-keez, was named for its dramatic, swan-shaped flowers. They are further divided into two color forms and two flower forms. Eu-cycnoches have similar male and female flowers. They tend to be the same color with the female distinguished by the larger, waxier lip. Heteranthes have male and female flowers that look completely different from each other. The two color forms are brown and ayacuchoensis or green. Usually, the green form is reserved for the female flowers although, *Cyc. herrenhusanum* is a eu-cycnoches that has green flowers for both.



Cycnoches barthiorum is the most spectacular of three new species used in cultivation. The male flowers, like a male peacock, are vibrantly colored in green or pink with dark brown spots. The female form is solid green. This species, like other heteranthes, actually had a different name and awards depending on if the plant displayed the male or the female form. It took taxonomists twenty years to figure this out!



Cycnoches warscewiczii is the flower that got Fred Clarke hooked on these plants all those years ago. These extremely fragrant flowers are only found in a small area of Panama. They are characterized by a long, straight column and rounded flowers 5-6 inches across.

Cycnoches chlorochilon was considered the only cycnoches for a long time. It has upswept petals and a square form. The hybrid between *chlorochilon* and *warscewiczii*, named *Cyc. Mass Confusion*, looks like a superior *chlorochilon* or an inferior *warscewiczii*. There is no doubt that many of these plants have been awarded as *chlorochilon* in the past because they look so much alike.



Mormodes, nicknamed "the goblin orchid", is known for its twisted and contorted petals. These can be challenging to grow well because they enjoy a hot, humid climate. This makes them quite rare in cultivation. However, they make magnificent parents. *Mormodes* crossed to *Cycnoches* becomes the hybrid *Cycnodes*. *Cycnodes* are quite hardy hybrids taking the best genes from both parents. *Cycnoches* imparts its flower size and shape as a parent and *Mormodes* imparts its stunning color. Many of these crosses are quite popular. *Cycd. Wine Delight 'JEM'* FCC/AOS is probably the most well-known hybrid with its bright red flowers. *Cycd. Jumbo Empire* is a bright orange flower with a deep red lip.

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Catasetums are the most unusual and fun of the subtribe. They have male, female, and perfect flowers. A perfect flower has both male and female parts giving rise to the age old question-What came first...the



perfect flower or the dimorphous (both male and female) ones? Fred Clarke is on the side of the dimorphous flowers. Most flowers, even other orchids, have perfect flowers that contain both parts necessary for parentage. Orchids are also some of the oldest flowering plants. Therefore, he believes that Catasetinae are more highly evolved to have separate flower forms for each. It also explains the occasional perfect flower that shows up from time to time.

Catasetum have a highly evolved breeding pattern. The male flowers are brightly colored, loaded with pheromone, and have a pollen-ejecting trigger along the underside of the column. Upon the slightest touch

by its bee pollinator, the trigger will release sending the bee, with polliniae attached, off at a hundred ft/s to as far as six feet away. It does this to teach the bee a lesson and ensure the next flower the bee enters will be the green, helmet-shaped female flower. When the bee enters the base of the helmet, it cannot back out. The flower is pollinated and closes to prevent a second pollination attempt. This opens a slit at the back of the flower to allow the bee to continue its pollination duties. Usually, the plant will bloom with all female flowers or all male flowers. It does all of this to prevent inbreeding and self-pollination.



A new manmade genus has been added to the Catasetinae named *Fredclarkeara* (abbreviated *Fdk*), produced from *mormodes*, *catasetum*, and *clowesia* parents. His hybrid *Fdk* After Dark is the famed black orchid. The plants take the best of each of their parents with long-lasting flowers of heavy substance, large flower counts, and hardy plants.

Catasetinae as a group are quite easy to grow well. Just remember these seven tips:



1. Wait to irrigate until new roots are 3-5" long.
2. Use well-drained potting media.
3. When in active growth, water and fertilize frequently.
4. Scout for insects and treat accordingly. The most common pests for Catasetinae are spider mites. Look for stippling and bronzing on leaves caused by feeding stings. If you see webbing, it's too late. Use a miticide to treat all leaf surfaces. It is theorized that Catasetinae and other plants from those regions lose their leaves to rid themselves of spider mites.
5. Reduce irrigation when leaves begin to yellow. Water only once a week or every ten days and stop fertilizing.
6. Stop watering completely when leaves drop.
7. Repot when new growth starts.