

# My *Catasetums* and their Relatives Revisited!

by Jeff Glover

In 2004, I wrote an article on *Catasetums* for *Orchids Australia* titled 'My *Catasetums and their Relatives*'. Over the ensuing decade, I have maintained my fondness for this genus and its relatives, and thought it timely to review the great strides made in breeding and the current trends 11 years hence.

Arthur W. Holst's book *The World of Catasetums*. 1999, Timber Press Inc. USA. remains the major work devoted to this genera and was the primary source of reference used in the earlier article and will be referred to again in this article. While published in 1999, his work with reference to the species and hybrids both inter-generic and intra-generic within *Catasetinae* remains valid to date. However, it is within the inter-generic level of *Catasetinae* hybrid breeding that over the past 15 years great strides have been made. In 1999 JEM Orchids of Florida, was arguably the leader in this field based on the breeding by nursery owner and proprietor Gene Monnier. Chapter 9, *Hybrids and Breeding Trends*, in Holst's book is written by Monnier, and discusses his work and visions of future hybrid creations. Retrospectively, he gives us some prophetic insights to what is now available to collectors. Without doubt contemporaries, Jumbo Orchids of Taiwan and Sunset Valley Orchids of California USA are now the main contributors to this field of hybrid breeding. These developments attributable to them will be the focus of this article.

While not wishing to become too technical and before these new trends are addressed, it is probably timely to re associate just where *Catasetinae* fit within the Orchid Family. *Catasetinae* is a sub-tribe within the tribe *Cymbidieae*. *Catasetum*, *Cycnoches*, *Clowesia* and *Mormodes* are genera within *Catasetinae*. (*Taxonomy of Orchidaceae*, Wikipedia, accessed 3-6-2015). *Clowesia* has been a subject of argument with taxonomists, with the species of this genera being classified by some, as belonging to the *Catasetum* genus. However, for this article they will be referred to as a separate genus. Put simply, *Catasetinae* are related to *Cymbidiums* and while *Cymbidiums* are found in the Eastern Hemisphere, mainly in Asia, *Catasetums* and their relatives are found in the Western Hemisphere in Central America and the northern section of the South American continent.



*Ctsm. pileatum* 'Oro Verde'

features to its progeny. However, its downside like all *Catasetums*, is its short-

Interestingly, other comparisons within the Orchid family along geographic distribution can be made; for example, *Paphiopedilums* are mostly Asiatic in location, while *Cypripediums* (their cousins if you like) are in the main North American and European.

*Catasetum pileatum* can be considered as the mainstay species within both inter-generic and intra-generic breeding and a search through the RHS register or *Orchidwiz* database will confirm this. 59 primary hybrids with *pileatum* are listed in *Orchidwiz* Version 11.3 and it has received 22 awards. Its large flowers and colour variations impart these desirous

lived flowering, and this has been a factor that has kept many people from growing this genus. Some species flowers last only a few days. The second most popular species for hybridizing *Catasetum expansum* has the same issue. Yet, on the other hand *Catasetums* are multifloral and several inflorescences can initiate from the same bulb over subsequent months. These redeeming features I discussed in length in my previous article and the fundamental point that is still true; is, that on balance when compared to other popular genera, for example in the *Cattleya* family, where there is only one flowering per pseudobulb, you get more flowers per plant with a *Catasetum*. Unfortunately, potential growers often overlook this and the shortness or lack of longevity of flowers remains their focus. It is this potential downside in the main that I believe has been addressed with recent inter-generic breeding.

A footnote at the start of Monnier's chapter in Holst's book gives us a predictor of the direction intra-generic breeding would take. The context of the note recognizes Monnier as a pioneer and leader in the field of *Catasetinae* hybridizing and qualifies that his most acclaimed cross to date was *Catamodes* Black Magic AM-AD/AOS, awarded an Award of Distinction for the blackest orchid flower produced so far, in 1999. Perhaps one of the quirks of humankind is the desire to defy or manipulate nature. It is not that long ago that interbreeding of plants and animals by scientific means was seen as unholy and against the laws of nature. Much like the debate about genetically modified food is considered today. The absence of a truly black orchid flower has been seen as one of these preserves of nature.

As predicted the pursuit of a blacker orchid flower than Monnier's creation continued over the next decade with the defining work by hybridiser and proprietor of Sunset Valley Orchids of California, Fred Clarke, coming to the fore. This culminated in the registration of the now famous 'black flower' *Fredclarkeara* After Dark, in 2002. (Orchidwiz, 11.3) Perhaps in a fitting tribute, the registrant has chosen his name as the tri-generic term to denote this orchid, which is allowable under the rules of orchid nomenclature and registration. (Handbook on Orchid Nomenclature and Registration Royal Horticultural Society, 1985)

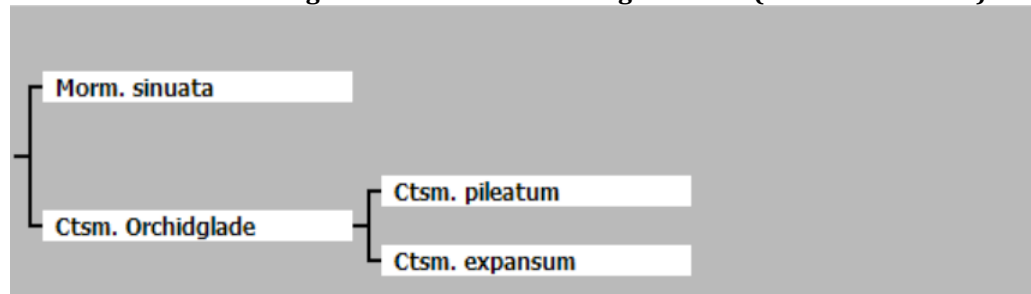


*Cyc. Golden Showers 'Krisett' HCC/AOC*

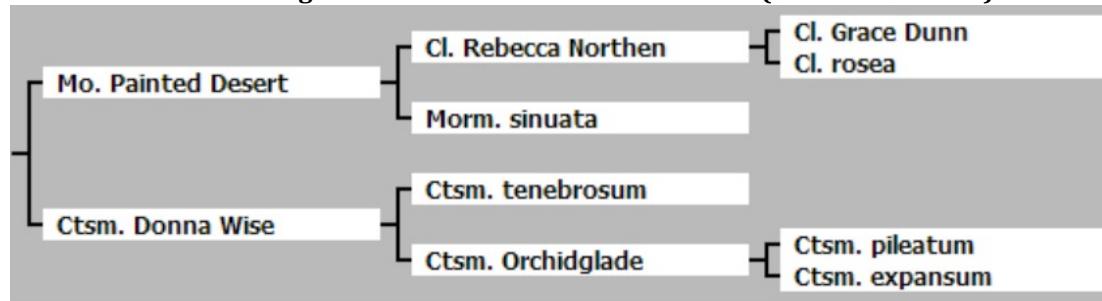
When its forerunner *Catamodes* Black Magic's profile is compared, the relational foundation of common underlying species is evident and the line of enhancement of the desired 'black colour' is apparent with the introduction of *Ctism*.

*tenebrosum*; a species renowned for its very dark variants. Not surprisingly, as suggested previously the great mainstay species for *Catasetinae*, *Ctsm. pileatum*, is also evident in both orchid's lineage as is *Mormodes sinuata*, as can be seen when both are compared in Table 1 and Table 2.

**Table 1.** The Parentage of *Catamodes Black Magic* ( *Orchidwiz* V. 11.3)



**Table 2.** The Parentage of *Fredclarkeara After Dark* ( *Orchidwiz* V. 11.3)



**Fdk. After Dark**

Fred Clarke has continued his hybridising program and a visit to his website [sunsetvalleyorchids.com](http://sunsetvalleyorchids.com) will give collectors an insight to his ground breaking work within *Catasetinae*. His nursery's mantra is that it is dedicated to the hobbyists /collector and the further development of the Fredclarkeara tri-generic can be surely confirmed with a search of *Orchidwiz* which reveals the latest registration for Clarke being for Fredclarkeara Enter Light in 2014 . Others to follow the 'darkness' are Fdk. After Midnight 2009, Dark Matter, Dark After Hours 2012 and Dark Daze 2013. Likewise, his hybridizing continues with the other genera in the sub -tribe, particularly *Cycnoches* and *Clowesia*.

As a *Catasetinae* enthusiast one can only wait in delighted expectation as to what he produces next.

Meanwhile on the other side of the Pacific the Chen family of *Jumbo Orchids* of Taiwan a name synonymous with *Catasetinae* has continued their breeding programs and contributed some outstanding hybrids by mostly focusing on combining species from the *Cycnoches*, *Mormodes* and *Clowesia* genera and similarly with some *Catasetum* species. Perhaps their most famous creation on a par with *Fdk* After Dark would be *Cycnodes Jumbo Puff*. Registered in 2001 it has received 28 awards (Orchidwiz v.11.3), one of these being a plant of mine *Cyd*. *Jumbo Puff* 'Krisett' AM/AOS, awarded in 2011, which had 28 flowers on two spikes. It is a bi-generic combination of *Cycnoches warscewiczii* x *Mormodes badia*. Most famous was its disputed and controversial, 'pseudo-win' as Grand Champion at the World Orchid Conference in 2011 at Singapore. While the winning plant was named *Cycnodes* Taiwan Gold, extensive DNA testing has since been undertaken that strongly suggest this hybrid to be in fact *Cyd*. *Jumbo Puff*. However, both plants are still sold as different entities and the controversy still exists. (www.jumboorchids, accessed 5/6/2015) *Cyd*. *Jumbo Puff*'s large heavily textured yellow/green flowers featured on up to three inflorescences from the one bulb makes it stand out in any orchid show. Given the right conditions, heat, water and fertilizer these plants can grow canes/bulbs up to 100mm in diameter and 600mm high. Like most *Catasetinae* they are heavy feeders in summer and require a rest in winter. Although in northern parts of Australia they have been known to continue growing through winter making for spectacular displays in the following autumn flowering period.



***Cyd*. Jumbo Puff 'Krisett' AM/AOS**

This orchid's other endearing feature as opposed to *Catasetum* species and primary hybrids is its longer flowering period with flowers remaining viable for up to three weeks from opening. An outcome previously discussed that makes them more attractive to potential growers.

The *Cycnoches* genus (Swan Orchids) has some truly beautiful species with pleasing colour combinations and high flower counts, with correspondingly large flowers. These features and their longer flowering life than *Catasetum* species, make them highly desirable for hybridizing. Most commonly hybridized include *bathiorum*, *cooperii*, *warscewiczii*, *cholorochilon* and *herrenhasanum*. Of particular note is the primary hybrid between *Cyc. cholorochilon* and *herrenhasanum* which makes *Cyc. Golden Showers*. Many of these species can be seen in *Jumbo Orchid*'s creations and a search shows the 'Jumbo' epithet appears numerous times in the Royal Horticultural Society's International Orchid Register.



*Cyc. bathiorum* 'Krisett' HCC/AOS

As previously mentioned it has been debated as to whether the genus *Clowesia* is a separate genus from the *Catasetum* genus; however, the smaller fuller shaped more numerous flowers of its species such as *Cl. rosea* and *Cl. warscewiczii* do differ in appearance from the larger *Catasetum* species. Many *Clowesia* species also have 'frilly lips' which they impart to their progeny. These features made them very early candidates for hybridizing. In fact it was a *Clowesia* that was the first *Catasetinae* hybrid to be registered in 1959, by the pioneer orchid breeder Goodale Moir. He named it *Catasetum* Grace Dunn (*Cl. roseum* x *Cl. warscewiczii*) as these species were at the time still regarded as *Catasetums*, (Monnier, 1999). To date most *Clowesia* species are seen in the bi-generic cross between *Catasetum* and

*Clowesia*, resulting in *Clowesetum*. Some grexes of note are *Clo. Raymond Lerner*, (*Cl. russelliana* x *Ctsm. pileatum*) registered in 1983 and *Clo. White Magic* both earlier examples of this line of breeding. *Clo. White Magic* is a cross between *Cl. warscewiczii* and *Ctsm. Orchidglade*, which is a cross of *Ctsm. pileatum* and *expansum*. Hence, yet again the two foundational species of *Catasetinae* breeding are featured. *Clo. White Magic* was made and registered in 1986 by JEM Orchids.

Thirteen years later, Jumbo Orchids bred and registered one of many of their *Clowesetum* hybrids, *Clo. Jumbo Glory* 'Jumbo Orchids', which is a cross of *Cl. Rebecca Northern* which contains two *Clowesia* species (*Cl. rosea* x *Cl. warscewiczii*) and *Ctsm. Bound for Glory*. This *catasetum*'s parentage shows yet again the use of the ubiquitous *Catasetum* *pileatum* which is a parent of *Ctsm. Bound for Glory*.



*Clo. White Magic* 'Krisett' HCC- AD/AOC

Of the other genera in the group *Mormodes*, (Goblin Orchids) is the most reluctant exhibitor but a most precious behind the scene suitor and appears in many inter-generic crosses. There are 70 or so species and have a reputation of being difficult to grow in cultivation. In Australia they are seldom seen and my experience with them is very limited. They are a very true adherent to the

principles of epiphytic growth and it is the most likely genera in the *Catsetinae* family, which all have a propensity to rot if not kept dry during winter; to do so more than any other in the group. (*Catsetinae*canada.weebly.com). *Mormodes* species seen frequently in inter-generic crosses include, *Mor. badia*, *sinuata* and *aurantiaca*. Both *badia* and *sinuata* have achieved notoriety as breeders, with *badia* as a parent in *Cyd. Jumbo Puff* and *sinata*, featuring in the profile of Fdk. After Dark.

In summary, the purpose of this article has been to briefly highlight some of the trends and resultant hybrids achieved over the past two decades and reflect on my association with these orchids. It has been to not discuss cultivation as such, I have addressed that in my previous article and this can be found at the Australian Orchid Council Archive and also at the Rockhampton Orchid Society website for those interested in growing advice. However, if there is one imperative in cultivation worth mentioning again before embarking on your own journey with these much maligned but fabulously diverse orchids; it is to understand that, they must have a 'dry period' throughout winter otherwise, as a grower you are courting disaster as all genera have that strong genetic trait to rot if their natural conditions are not replicated. In recent times the inter-generic hybrids have become more widely available due to the breeding in this field by Jumbo Orchids of Taiwan and Fred Clarke of Sunset Valley Orchids of California.



***Clo. Jumbo Glory 'Jumbo Orchids' BM/JOGA*** Mackay.

In a bonus for those attending the forthcoming Australian Orchid Conference in Mackay Qld, in September 2015, Fred Clarke will be giving lectures and selling flasks of his latest creations, a list of which is available at his site. Likewise, Jumbo Orchids flask list is available at their site. But for those not wanting the challenge of de-flasking, two nurseries have really taken on an interest in supplying these wonderful orchids to Australian growers and have many of both breeders' crosses. They are M&S Orchids of Sarina Qld and Alice's Orchids of Townsville also of the sunshine state. I am sure both proprietors would welcome any enquires and both will have these plants for sale at the conference in Mackay.

I hope you have enjoyed reading about my *Catsetinae* 're-visit' and hope it inspires you to try growing these very rewarding orchids or maybe purchase some of the newer varieties now available to add to your collection.

**Note:** All plants pictured are owned by the owner, and those not photographed by him have been approved for publication by the original photographer.

## **References**

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