'Cymbidium Chatter'

Edition 7 - June 1 2020

Cymbidium *tracyanum* 'Salinas' 4n AM/AOS
Photograph: Pierre Pujol

Welcome to this edition of Cymbidium Chatter, I hope it finds you well and staying safe!

Cymbidium *tracyanum* - Do We Have a Problem?

As mentioned in the previous edition of CC I said that I was reluctant to do an article about Cym *tracyanum.* As expected, it has drawn comments from well informed Cymbidium growers.

In this edition I have include*d* a discussion that took place, on the Gold Coast Cymbidium Growers, Facebook page. This Gold Coast is in California. Rather than identify the three people, I have just identified the contributors to the discussion with an alphabetic reference, they are all experienced Cymbidium growers, two are judges and the third person is a scientist by education.

As interesting as the discussion is and there are some very valid observations, I have not changed my own personal stance on the matter, until such time as some form of scientific investigation is undertaken, I feel that we must accept the flowers concerned as true species. The growers of hybrid Cymbidiums will be wondering what all the fuss is about but it is extremely important for as contributor 'B' states it "will forever change the species qualities for judging and for hybridizing." This has far reaching ramifications!

Contributor A: In reference to Geoff Bailey in the last "Cymbidium Chatters", I had a *tracyanum* 4n awarded in Jan. 2020 (picture attached Cym. *tracyanum* 'Salinas' 4n - top right) to be then questioned by two of the judges about the purity of its genes as a species. I had bought this plant as a sprouted backbulb, which originated back from Andy Easton. From what I understand about AE breeding, this *tracyanum* is coming from the 3rd generation in this line of breeding. Please note that Barry Zimmerman did a sib-cross of the F1 (first generation) of that breeding line and the progeny came true as *tracyanum*. The cultivar 'Stirling Dark' which was awarded and 'Stirling Sweet' are a good example of the F1 line; these were 2n though with the latter's chromosomes counted by R. Robinson. The 4n 'Salinas' flower picture was examined by the group of experts in cymbidium species from the AOS judging sytem, which confirmed it as Cymbidium *tracyanum*: "this plant is consistent with a polyploid C. *tracyanum*; C. *tracyanum* is the only species in the group with very long hairs on the crests, as well as the side lobe margins and the body of the mid-lobe, as does this flower." When exhibited, the plant had a single strong spike with 19 flowers/buds.

Contributor B: I accept the 2n breeding of Barry's as acceptable tracyanums, but I agree with Randall and seriously question the Easton line of 4n breeding. The flowering season is not

right, the lip configuration and patterning are not like tracyanum even though there is a typical toothbrush type calli. Where are the surface aerial roots to name but a few differences. This plant looks suspiciously like Cym Tracyanum Alexander named by Mukoyama in 2011 but seedlings of this cross have been floating around for awhile. Check out the Cymbidium Tracyanum Alexander on Orchid Wiz. I do not pretend to be a taxonomist but in my opinion, this line of 4n breeding introduced into the tracyanum line by Easton with tracyanum 'Alexander', will forever change the species qualities for judging and for hybridizing.

Contributor C: The problem with a lot of this breeding is the tracyanum alba that was used. Here is a picture from Bert Klein of this plant and I do not believe it is a tracyanum. Furthermore if you look at the picture of the flower you will see there are very few hairs on the lip keel and this is a feature of tracyanums.

Contributor A: Let me state first that I am neutral on the topic, just intrigued/amused by the discussions about it. To be objective, the facts, based on my experience with the plants I have grown from this breeding line, are that 1) they bloom at the same time as my other wild-collected tracyanums and 2) they do show aerial roots. The only potentially differentiation feature could the shape of the bulbs which is slightly rounder than what I would expect for a tracyanum. Yes, Contributor C, I believe that the F1 is a cross with a tracyanum alba ("albanistic"), but I have not personally seen this plant so all beyond the facts is a hypothesis.

Contributor C: The picture above was sent to me by Bert Klein, it was a seedling from a selfing of this plant that Andy said he used. I don't believe this is a tracyanum, so all progeny are also hybrids.

Contibutor A: Here is a picture of my tracyanum alba 'Woodside' wild-collected by Holger Perner in China. Not a lot of differences with Bert Klein's picture except the angle of the picture. Maybe a wider lip and more dispersion of the yellow spots on the lip.

Contributor C: I would also say the petals on Bert's go straight out where yours arch as would be expected of a tracyanum. Nd thoughtful

A good and thoughtful discussion by all but I am not entirely sure that we are any further advanced.

Now if we look at the facts that are presented: two panels of judges , one here in Australia the other in the US, have seen fit to award two tetraploid (4n) flowers an AM (Award of Merit). In the US, two judges questioned whether of not the flower was typical of a true species. The judging body, the American Orchid Society, then asked a group of judges considered experts on Cymbidium species, to examine the flower. They felt that the flower was indeed the species Cym *tracyanum.* Do we ignore the decisions by two judging panels, not something we encourage!!

The flowers in question (click on each photo and then zoom in)

You have read on the previous page the discussion around various flowers. Contributor C queries as to whether or not the alba form of tracyanum used in the original (F1) cross was a Cym tracyanum, if indeed that is the flower, they are right to ask the question. Flower form, lip markings, lack of hairs, are all characteristics that suggest the flower may in fact be a hybrid.

Contributor B drew a comparison between Cym Tracyanum Alexander (below left) and the recently awarded tetraploid Cym *tracyanum (*below right) in the US. Cym Tracyanum Alexander is 75% Cym *tracyanum* and 25% Cym *sanderae*. One has to accept that the flowers are very similar and the lack of hairs on the lips and side lobes are more suggestive of a hybrid than a straight species (make sure you zoom in on each flower) This contributor also adds that, that 25% could forever change the line of Cym tracyanum species and its hybrids.

Cym Tracyanum Alexander Photo: A Easton

Cym *tracyanum* 'Salinas' 4n AM/AOS Photo: P Pujol

Are we getting any closer to a definitive answer, I personally don't think so, and the situation only becomes more unclear when you look at the three flowers below, all supposed tetraploid Cym *tracyanums,* all from the F3 line of breeding. Zoom-in on the first two flowers, 'Daughter of Dark-

Cym *tracyanum* 'Daughter of Darkness' 4n Photo: A Easton

Cym *tracyanum alba* 4n Photo: A Easton

Cym *tracyanum* 'New Start' 4n Photo: G Bromley

ness' and the 'alba' and you will see the characteristic hairs that define the species. The other flower, 'New Start', has hairs on the callus ridges, but is devoid of hairs on other surfaces and the lip markings are not typical of the species.

Now I think you will all have a better understanding of my reluctance to write about Cym *tracyanum,* I have presented the facts to you fairly and to the best of my ability and knowledge. Without seeing the whole plant it is difficult to make an accurate assessment. We must look to science for the answer. Until a thorough investigation is undertaken, the doubts and the doubters will remain!

Cymbidium Ken Siew

Hi Geoff,

When you downsized a couple of years ago, I bought few Cymbids and now have pleasure in showing you this season's flowers (above). It is Ken Siew with 8 spikes, 6 open at the moment. I thought you might like to see how gorgeous it is. I know it needs repotting but I kept it as a show piece. Repot after flowering is my aim. Thanks for such a beautiful Cymbidium.

Best wishes, Terry Hill. Southern Suburbs Orchid Society (SSOS).

Cymbidium Ken Siew (*erythraeum x tracyanum*) was created by Kevin Hipkins, Royale Orchids, NSW. It was registered by Royale Orchids in 2009 and in 2012 Cym Ken Siew 'Royale' received an Award of Cultural Merit - ACM/OSNSW. The plant, pictured below, had 13 spikes, 204 flowers, 10 buds and the spikes were up to 120cm (4 feet) tall. The main spike had 18 flowers.

Here we see two different forms of Cym Ken Siew. It is a good plant to have in a collection as it flowers during May/June, consistent with its *tracyanum* parent. Unlike many of the tracyanum hybrids it has retained its delightful spicy fragrance.

Cym Ken Siew 'Royale' ACM/OSNSW

It is interesting to compare the two different flowers. The brown flower is basically a smaller version of Cym *tracyanum* whereas the greenish flower is very much a combination of both flowers. The forward pointing (porrect) dorsal sepal is typical of Cym *erythraeum.*

Both flowers are fairly typical of many of the Cym *tracyanum* hybrids in that they don't have any of the hairs that we associate with the species.