

Odontoglossum Alliance Newsletter

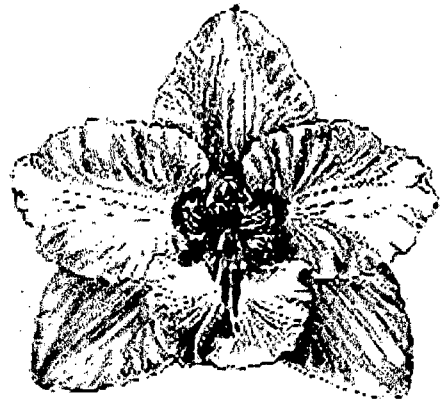
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THE ODONTOGLOSSUM STORY COMES TO LIFE

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In early 1979 I encountered my first true *Odontoglossum*. I had been window-sill growing a number of plants that were named "*Odontoglossum*" for some time but which no longer remain in the genus today. The plants were imported during pre-CITES days from Mexico and Guatemala via Floricultura in Holland and turned out to be rather easy to grow and flower, even in gloomy Sweden (or perhaps because of that?). Since the plants responded favorably to me, I responded favorably to them. That is how my interest in this group of orchids began and I started to look around for more species to try out. This was a bit discouraging because there were not many available through Floricultura's catalogue, and they all came from Central America. I knew that the most interesting ones (for me) all grew in South America, but I could not find any sources for them. This was too frustrating so I decided to go see for myself where they were hiding out. Together with a couple of friends I set out for Ecuador in late December of 1978, and that turned out to be the right spot for the mission.

What complicated the situation right from the start was the fact that I did not have any experience with these species and therefore could not identify some of them. In those days many *Cyrtorchilum* species resided in *Odontoglossum* and they certainly caused a lot of identification problems, and still do. Another source of confusion was that similar looking plants had differently looking flowers and therefore were placed in different genera. The vegetative features of "*Odontoglossum*" *ramosissimum* were basically identical to the features of "*Oncidium*" *macranthum*, but very different from let's say *Odontoglossum hallii*. That seemed strange to me. Overall there were many question marks to straighten out regarding this group of plants so I decided to try and

do something about it. In 1984 I gave a presentation during the World Orchid Conference in Miami entitled "What is an *Odontoglossum*?" (Dalström, 1984). Here I explained my approach to the genus by dividing it into large groups based on overall morphological features. I also explained that species such as "*Odm.*" *ramosissimum* etc. really did not belong in the genus but ought to be placed together with species such as "*Onc.*" *macranthum* in a broadly defined *Cyrtochilum*. The groups I established back then are similar to the groups I follow today.

Group 1 consisted of species with a flexible lip lamina, such as *Odm. crispum*, *Odm. cristatum*, *Odm. hallii* and also the type of the genus; *Odm. epidendroides*. These are the true "Alpha-glossums".

Group 2 consisted of species with lips rigidly attached to the base of the column, which therefore have an immobile lip lamina, such as *Odm. blandum*, *Odm. cirrhosum* and *Odm. gloriosum*. These are still true odontoglossums but have a separate evolutionary path. Perhaps we can call them "Beta-glossums"

Group 3 consisted of two subgroups with the lip rigidly attached to the ventral side of the column by a longitudinal central ridge. The first sub-group consisted of species with erect lateral lobes of the lip and a rather evenly club-shaped column and included *Odm. lindleyanum* and *Odm. mirandum*. The second sub-group consisted of species without erect lateral side-lobes of the lip and with well developed ventral lobes on the column, such as *Odm. astranthum*, *Odm. multistellare* etc. These two sub-groups are still considered by me as true odontoglossums and we can nickname them "Gamma-glossums" and "Epsilon-glossums" respectively.

At the time of the 1984 WOC I recognized *Cochlioda* and *Solenidiopsis* as separate genera, but today I have merged them into a broader concept of *Odontoglossum* together with *Symphyglossum sanguineum*, based on molecular and morphologic features.

From here on we leave "*Odontoglossum verum*" entirely and plunge into the murky world of cyrtochilums.

Group 4 consisted of large-flowered atypical "odontoglossums" such as "*Odm.*" *angustatum*, "*Odm.*" *paradinum* and "*Odm.*" *ramosissimum* etc., which I reasoned should be placed together with "*Oncidium*" *macranthum* and its allies in *Cyrtochilum*.

Group 5 consisted of the small-flowered species, such as "*Odm.*" *longifolium*, "*Odm.*" *myanthum* and "*Odm.*" *retusum* that I believed were most closely related to the species in Group 4, and therefore also should be treated as cyrtochilums, although I did mention during my 1984 lecture that some species also were similar to some members in genera *Ada* and *Brassia*.

Group 6 consisted of species in the "*Odm.*" *aureum* complex, which I believed were most closely related to "*Onc.*" *loxense* (and still do), and therefore also should be treated as cyrtochilums.

At the time of the 1984 WOC in Miami, I had not yet had the opportunity to examine the types of these orchids, but relied on cryptic Latin descriptions and blurry microfiche photos to a great extent. Needless to say, errors were made. One particular case was how to define the real type of the genus (*Odontoglossum epidendroides*). I had found some plants in southern Ecuador that I suspected could be it, but also mistook those plants for being the same as "*Odm. coradinei*", and therefore a valid species and not a hybrid as was originally thought by Reichenbach who described it. My illustration of the Ecuadorean plant was featured as "*Odm. coradinei*" in *Icones Plantarum Tropicarum* (10), plate 947 (1984). Today I consider the Ecuadorean plant as being the true *Odm. epidendroides* but far from the Colombian alleged natural hybrid *Odm. x coradinei*, which was speculated to be a cross between *Odm. spectatissimum* and *Odm. odoratum* by Reichenbach, or between *Odm. crispum* and *Odm. lindleyanum* by Rolfe. I tend to lean towards the latter version.

A couple of years later I learned that Leonore Bockemühl in Germany also was working on a treatment of *Odontoglossum*. My initial and spontaneous reaction was defensive. There was an intruder in my garden! But I soon had to admit to myself that this was a childish attitude and I contacted her instead to find out what she was up to. This was a very fortunate decision and she generously helped clear up some of my taxo- 2

onomic problems. One was the true identity of *Odm. velleum*. I had not seen the real type yet but Bockemühl had, so she sent me a photo of some live flowers, the first I ever saw. Unfortunately, I had already illustrated what I wrongly interpreted as “*Odm. velleum*”, which was featured in *Icones Plantarum Tropicarum* (10), plate 968 (1984). The voucher for this illustration was a plant I had collected in Ecuador and which later was described as “*Odontoglossum matangense*” by Bockemühl. When I look back at my identifications of some of my first collected and illustrated “odontoglossums”, featured in *Icones Plantarum Tropicarum* (10), I can’t help feeling embarrassed by all the mistakes I made. But that was really why I needed to work with this genus.

So instead of being threatened by Leonore Bockemühl’s work, I realized that since I was far from ready to publish anything (considering the errors I already had made), her efforts would be useful to me, and also give me plenty of time to continue my research. I realized that it would be foolish to try and rush a premature monograph into publication too soon after such Bockemühl’s. I needed her information!

In 1989, Bockemühl’s monographic treatment of *Odontoglossum* was finally published. It was about time that somebody produced a modern revision of the genus and I gratefully received a copy as a gift from Jan Sönnemark. I was working as a freelancer at the time and most of my hard-earned money was spent on trips to the Andes in search for *Odontoglossum* populations. So my budget for literature was slim. Bockemühl’s work impressed me. She had really made an effort to travel to areas you risked your life visiting, particularly in Colombia. But some of her conclusions challenged my own views of the genus. It surprised me that she still included the large-flowered species I considered to be cyrtochilums in *Odontoglossum*, while excluding the majority of the small-flowered ones. And I also realized for the first time that Bockemühl had “snatched” a new species from under my nose with her “*Odontoglossum*” *matangense*.

With the arrival of molecular research, particularly DNA sequencing, a new tool for classifying organisms appeared on the scene. Based on some of the results by Norris Williams, Mark Whitten, Mark Chase and many others, I could conveniently transfer all “odontoglossums” that really were cyrtochilums to their new taxonomic home (Dalström, 2001). There were some original problems with the cladograms though. In one of the preliminary versions the name “*velleum*” appeared in the midst of *Cyrtochilum*. And in the midst of true odontoglossums the name “*matangense*” appeared. I contacted Norris in Gainesville and explained that these two must have been switched somehow. The errors were corrected and the names appeared where they belonged in the published cladograms from there on (Williams et al., 2001). It later dawned on me that my misidentification of the real *Odm. velleum* may have caused this problem. It is possible that somebody received a flower of *Cyrt. matangense* and identified it as “*Odm. velleum*” based on my drawing in *Icones Plantarum Tropicarum*. This is a good example of how an initial misidentification can affect later scientific work. The importance of being able to verify the identifications of samples used in molecular research is therefore crucial.

Unfortunately, this is not always possible because the samples were destroyed in the process, or cannot be located. This leaves us with two options. We either trust the initial identifications, made by somebody who may not be comfortable enough with this challenging task, or experienced enough to make the correct identifications. The other option is to delete the samples from the cladograms that have no surviving vouchers. Having realized that some of the existing vouchers indeed have been misidentified in the past, I chose the second option! This leaves us with a delicate situation how to treat the massive species transfers that have taken place during recent years. Although I personally reject some of these super-lumpings of morphologically different-looking clades in Oncidiinae, we can use the molecular results as guidelines when we approach the difficult task of organizing them in user-friendly, practical, biologically sound taxonomic groups. But we need to be aware that some of the samples may not be what the given names suggest. I therefore prefer to use a combination of all possible sources of information in order to name and classify species. This includes molecular work as well as macro- and micro-morphological, anatomical, chemical, ecological and geographical features and facts.

With this approach in mind we can then move on to the work of distinguishing the various clades/genera that have been transferred into *Oncidium sensu latissimo* and find an alternative way how to treat them taxonomically.

To be continued!

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In 1989, Bockemühl's monographic treatment of *Odontoglossum* was finally published. It was about time that somebody produced a modern revision of the genus and I gratefully received a copy as a gift from Jan



Fig A *Odontoglossum epidendroides*



Fig B *Odontoglossum blandum*



Fig C *Odontoglossum lindeyanum*



Fig D *Odontoglossum astranthum*



Fig E *Cyrtorchilum ramosissimum*



Fig F *Cyrtorchilum longifolium*



Fig G *Cyrtorchilum aureum*



Fig H *Odontoglossum velleum*



Fig I *Cyrtorchilum matangense*

Odontoglossum Alliance Meeting to be Held in San Francisco

26-28 February 2016

The next meeting of the Odontoglossum Alliance will be held in San Francisco at the time of the San Francisco Orchid Show 26-28 February 2016. Economic conditions have shortened this show to 3 days with the Preview Party on Thursday night, 25 February 2016. We are having a joint dinner and meeting with the Pluerothalid Alliance on Saturday 27 February.

The meeting will be held at the Fort Mason Center. I have included some material on the location in this newsletter. Featured wines will be served with dinner following. The menu will include choices of roast beef, turkey and vegetarian lasagna. Members of both Alliances living in the area will contribute by providing a variety of specialty dishes. All in recognition of the economic climate to make it as attractive as possible for members to attend. A talk is planned: Bob Hamilton He will discuss current directions in hybridizing and illustrate it with recent accomplishments. As usual there will be an auction of fine material from both alliances. I expect to see some premium Odont divisions available in the auction.

Our Odontoglossum Alliance needs help. Our treasury is running low and is now below \$500.00 while in the past we have been carrying over \$2000.00. This may sound like a lot, but this is the money that the newsletter takes with all the colored material we have printed in it. What we need is more of our Odontoglossum Alliance members to attend the meeting in San Francisco. WE need much more in donations of material for our auction. What we need is those attending the meeting to look at our auction as a donation to the health of the OA in addition to the acquisition of fine OA material. We need the generosity of bidding for this fine OA material. Without this infusion of money over and above the \$15.00/a year dues we will not be able to continue much of the newsletter material. Without material of interest in the newsletter we need to ask ourselves what is the purpose of the OA. So come to the meeting prepared to bid generously. IF you can't come use a proxy with instructions to do your bidding or be on the phone to do your bidding. Contact either Steve Beckendorf or Bob Hamilton either as your proxy or to select a proxy.

On Saturday and Sunday, Bob Hamilton's greenhouse will be open for viewing some of the things he describes in his talk. For times and directions you can call Bob at 510-644-3329 or 510-325-7557. It is hoped this decision will be attractive to many of our members and that we will have a good turnout.

Tickets to the Preview Party and the show can be obtained over the internet. The address for the web site where these can be ordered is found is:

<http://www.orchidsanfrancisco.org/poe.html>

We expect the cost of the dinner at the meeting to be very reasonable. In the February 2016 newsletter we have firmed up on those costs and it is just come. In addition to make a reservation email Bob Hamilton or John Miller. Those addresses are in this newsletter.

We look forward to a good crowd. In this newsletter are some suggestions as to hotel locations close to the show. The San Francisco Orchid Show is the best show in North America to see Odontoglossum alliance material in the show. The sales area is huge with many opportunities to acquire high quality material.

A good web site to look for hotels is: www.sftravel.com. The specific page is <http://www.sanfranciscovisitor.com/bgt.html>. A selection of hotels picked from the web site follows.

Travelodge by the Bay (415) 673-0691

1450 Lombard St. San Francisco, CA 94123

Lombard Motor Inn (415) 441-6000

1475 Lombard St.

Francisco Bay Motel (415) 474-3030

1501 Lombard St.

Redwood Inn (415) 776-3800

1530 Lombard St.

Town House Motel (415) 885-5163

1650 Lombard St.

Star Motel (415) 346-8250

1727 Lombard St.

Cow Hollow Motor Inn* (415)-921-5800

Lombard Street

S F Motor Inn (415) 921-1842

1750 Lombard St.

Coventry Motor Inn (415) 567-1200

1901 Lombard St.

Ramada Limited (415) 775-8116

1940 Lombard St.

Buena Vista Motor Inn* (415) 923-9600

PO Box 475517 San Francisco, CA 94147

Chelsea Motor Inn (415) 563-5600

2095 Lombard St San Francisco, CA 94123

Motel Capri (415) 346-4667

2015 Greenwich St.

Hotel Del Sol (415) 921-5520

3100 Webster St.

Best Inn (415) 776-3220

2850 Van Ness Ave San Francisco, CA 94109

These hotels are within a couple of blocks of Fort Mason. These appear to be clean and comfortable, but not elegant. The web site offers reviews of the hotels. The ones marked with an * I have stayed at for previous meetings and shows. They are clean, neat, not elegant, reasonably priced and with parking. I often walked to the show from these hotels.

The meeting to be held on Saturday evening starting at 6:00 PM adjacent to the show in the Fort Mason Complex. The address is:

Fort Mason Center
San Francisco, CA 94123

IOA Members,

Andy Easton, on visiting the greenhouse one Winter remarked it was the “boring time” – the Winter Doldrums. This is to say, there’s typically not a lot of oncidinae that bloom in the winter in hobby greenhouses. This is not surprising given the purpose of a flower which is for the propagation of a species. Insects tend to disappear in wet weather and cooler temperatures and the days are shorter in many parts of the world. This observation applies to latitudes other than the equatorial.

I can attest that the greenhouse is not currently overflowing with blooming plants; however, there are some things in bloom and plants given good culture seem more apt to ignore when they bloom. Nevertheless, I’ll take the opportunity to share some photos of what’s in bloom and add some commentary and anecdotes about what’s blooming. Given a paucity of IOA newsletter submissions I’ll endeavor to make a regular contribution, “what’s blooming” in hopes this provokes others to share a photo or two, a story or a rebuttal.

Sincerely,

Bob Hamilton

Odontoglossum Quistrum “Lyoth Angelo”, Charlesworth Ltd. 1938, FCC-RHS, AM-AOS

Quistrum is a stunning orchid which grows “cleanly”, with vigor after more than 78 years in cultivation. For me, it exemplifies the best of Charlesworth’s white breeding. Given its nobile background its white ground cover is solid and not transparent as found in white breeding in which only crispum appears. Quistrum’s dark markings are opaque, near black whereas the spots in crispum breeding are often an unattractive liver-brown.

I received Odm Quistrum “L.A” as a division from my friend Tim Brydon. Tim had gotten it from Bruce Cobbeldick who ran Unicorn Orchids. Bruce, in turn had purchased Quistrum from Paul Gripp, via Gripp’s nursery, The Santa Barbara Orchid Estate. When Bruce bought it a division from SBOE commanded a price of \$500. Paul crossed Quistrum to Odm Stropheon “Pacifica” FCC-AOS, making the cross of Anne Gripp, a beautiful orchid which continued Charlesworth Ltd’s breeding lines. Stropheon won its award when shown in 1960 in San Francisco, CA by Vallemar Gardens in Pacifica, CA who had a fine collection of Charlesworth odontoglossums which were purchased by Norris Powell’s, The Orchid House and Paul Gripp’s, SBOE.

In the 90’s I began chromosome counts of orchids I considered potential breeders. This followed in the footsteps of Alan Moon at the Eric Young Foundation. Alan worked in collaboration with the great plant scientist Don Wimber to characterize plants at the Foundation. Another Allan, Allan Lam, a microscopist-friend worked with me on chromosome counts. He arrived at a number “greater than 112 chromosomes” for Quistrum, i.e. greater than $4n$. To this day Allan shares greenhouse space in my Pacifica greenhouse, at the former site of Vallemar Gardens. Chromosome counting is difficult and his result may be in error. With such high numbers it is difficult to understand Quistrum’s resulting progeny. Quistrum has been the parent of some stunning hybrids which grow well and bloom consistently. I consider Quistrum to be one of the finest white odonts.



Odontoglossum Alliance Quistrom 'Lyoth Angelo'



Odontoglossum Shelley 'Spring Dress'

Share your Flowers though the Newsletter

I have a difficult time finding material that our readers will enjoy and benefit. You can help me. Bob Hamilton has led the way by sending in photos of two lovely flowers he has blooming in his greenhouse. For one of them he has provided a nice write-up. I am sure you, our member, enjoy seeing these two fine examples of the Odontoglossum Alliance, even though they had changed the name to Oncidinae. We can ignore that. All you have to do is send in one or more pictures of what you have blooming or have bloomed. Our readers would like the name, so put that in. IF you want to write something about it, that would be a bonus.

Here is what you do. Take your pictures and send them as jpg format to jemiller49@aol.com. For written material I would like it either in the email as a body of the message or as an attachment in the email. For an attachment I would like it in MS Word formatted as a doc document. This is the 2003 Microsoft word version. I like it in that version as my publisher program will accept it directly. If you can't do that send it along and I will make it work.

Follow Bob Hamilton's example. Send in pictures of those lovely things you have bloomed. All our readers will enjoy them. You will make my job easier as well. It will be a pleasure to have your submission.

John E. Miller

Editor Odontoglossum Alliance Newsletter.