

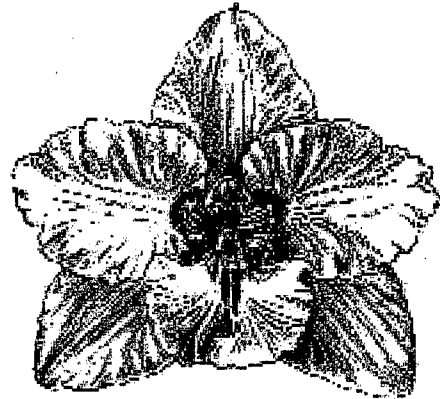
Odontoglossum Alliance Newsletter

Volume 5

August 2010

In This Issue

Medellin Orchid Show	Page 4
Cut Flowers	Page 6
Election of Officers	Page 8
Onc. vs. Odm	Page 8



ODONTOGLOSSUM DEBURGHGRAEVEANUM; A SHOWY LATE-COMER FROM ECUADOR.

Stig Dalström

2304 Ringling Boulevard, apt. 119, Sarasota, FL 34237, USA

email: stigidalstrom@juno.com

Research Associate: Lankester Botanical Garden, University of Costa Rica, Cartago, Costa Rica.

Centro de Investigación en Orquideas de los Andes "Angel Andreetta

Gualaceo, Ecuador.

Gilberto Merino

Researcher, Centro de Investigación en Orquideas de los Andes "Angel Andreetta

Gualaceo, Ecuador.

For many years commercial orchid business in Ecuador was limited to a few individuals' private enterprises, despite the richness of the orchid flora in the country. Not until Father Angel Andreetta, a Salesian missionary stationed in Ecuador and long time orchid enthusiast, established Ecuagenera together with the Portilla family did a more serious effort begin to create an efficient business model. The rest is history. Not only did Ecuagenera turn into a profitable commercial company, but it is also a most successful scientific contributor that has sponsored local education, conservation programs and research efforts by numerous visiting scientists and hobbyists with a passion for orchids. Untold new species have been discovered in this process and one of them is the recently described *Odontoglossum deburghgraeveanum* Dalström & G.Merino (Fig. 1).

Odontoglossum deburghgraeveanum differs from the rather similar *Odontoglossum harryanum* Rchb.f. (Fig. 2) by the smaller flower with a more open appearance, and the narrower base of the lip, in addition to the distinct ventral angles on the column of the former. The flower of *Odontoglossum wyattianum* Gurney Wilson (Fig.3) differs in having a column that is distinctly curved towards the lip and with well-developed, broadly falcate apical wings.

The flower of *Odontoglossum helgae* Königer (Fig. 4) has a more erect and terete column without any ventral angles. The flowers of the much smaller *Odontoglossum velleum* Rchb.f. (Fig. 5), are altogether different with a short and straight column that is parallel with the base of the lip.

The first examined evidences of *Odontoglossum deburghgraeveanum* are two color slides in the collections of the currently inactive Orchid Identification Center at the Marie Selby Botanical Gardens, Sarasota, Florida, labeled “*Odm. wyattianum?*”. One slide is from the Lee Kuhn collection (Fig 6), and is probably from a plant that flowered at J & L Orchids in Connecticut at some time, but the second slide is of unknown origin, possibly from Gilberto Escobar’s extensive slide collection, and was processed in August 1973 (Fig. 7). Father Andretta collected some additional plants of this species in 1992, apparently near the little town of Guarumales in central Ecuador. In August of 2000, plants of this species were in bloom at Ecuagenera’s nursery in Gualaceo, where they were offered for sale, marketed as *Odm. helgae* Königer. A comparison with the type of that species, however, and with most recently discovered additional plant material in northern Peru, reveal that they represent separate taxa due to distinct morphological differences.

Odontoglossum deburghgraeveanum has apparently been collected on few occasions in an area where the closely related *Odm. harryanum* and *Odm. velleum* Rchb.f., also occur sympatrically and the possibility of *Odm. deburghgraeveanum* being a natural hybrid between the other two has been considered. Although similar in coloration, the morphological differences between the three species suggest that a hybrid origin is not likely. The column structure and the base of the lip in particular are quite defined and consistently different for the three species. *Odm. deburghgraeveanum* is rather variable in coloration, as most species in the genus, which is a factor that often deceives collectors and scientists alike to believe they see different species (or natural hybrids). This color variability presumably deceives pollinators as well, to see different types of flowers where some awards eventually can be obtained. This topic has been discussed in a separate article (Dalström, 2003). *Odm. deburghgraeveanum* is currently reported from one locality in east-central Ecuador. It is likely to be found elsewhere, however, because many species of *Odontoglossum* occur in very “spotty” populations, often over a very large area and are often considered rare until another population suddenly is discovered quite some distance away. To make matters worse, sometimes plants are purchased from private collectors where the original locality may be lost or falsified.

Odontoglossum deburghgraeveanum is named in honor of Guido Deburghgraeve MD., of Liedekerke, Belgium, a passionate grower of odontoglossums and plants of related genera, who has contributed substantially to the knowledge and understanding of how to view and classify these very complex and troublesome orchids.

Literature cited

Dalström, S. 2003. Orchids smarter than scientists: an approach to Oncidiinae (Orchidaceae) taxonomy. *Lankesteriana* 7: 33–36.

FIGURE CAPTIONS (See page 10-11)

Fig. 1. *Odontoglossum deburghgraeveanum* (photo: Dalström)

Fig. 2. *Odontoglossum harryanum* (photo: Sönnemark)

Fig. 3. *Odontoglossum wyattianum* (photo: Dalström)

Fig. 4. *Odontoglossum helgae* (photo: Manolo Arias)

Fig. 5. *Odontoglossum velleum* (photo: Sönnemark)

Fig. 6. *Odontoglossum deburghgraeveanum* (photo: J&L)

Fig. 7. *Odontoglossum deburghgraeveanum* (photo: Gilberto Escobar?)

Oncidium trilobum

by Andy Easton

I was very pleased to read Stig Dalstrom's article in the May Newsletter about *Odm. astranthum*'s affinities. Bob Hamilton has already made the delightful primary of it with *Odm. pescatoreii* (*Odm. Pesky Trance*) and converted it to 4n. But we will discuss this line in the future and our topic this time is *Oncidium trilobum*, long classified as an *Odontoglossum*. Although it is clearly an *Oncidium* and confirmed as such by Garay, the RHS still registers hybrids with it as if it was an *Odontoglossum*. We have the stupid situation where the most recent registration in the line is called *Odontioda John Miller* even though the pod parent is listed as *Odontocidium Tribbles* (*Onc. trilobum* X *Odm. pescatoreii*) and pollen parent as *Oda Burning Bed*! Is it any wonder hobbyists are confused.

Going back to the beginning, it was Burnham Nurseries in England who made the first hybrid from *Onc. trilobum* and registered it as *Oda. Honiton Lace* in 1980. The other parent was the classic *Oda. Carisette*. I had plants of the cross in New Zealand and did not think too highly of them because, of course, I was in a climate where *Odont.* culture was easy. Gradually I realized that *Onc. trilobum* imparted considerable warmth-tolerance to its offspring and began to see *Honiton Lace* in a new light. Bob Hamilton confirmed to me that it was the Burnham hybrid that first stimulated his interest in dabbling with *trilobum*.

Then followed two decades of apparently forgettable results, some registered and none remembered. I must add here that I can never understand why folk register hybrids that are disappointing? There should be a register published elsewhere where we might post our mistakes so that enthusiasts in the future might be warned where not to tread! However in 2002, Bob Hamilton registered his breakthrough cross of *Odcdm. Tribbles* (= *Odm. Tribbles*) which was the primary hybrid between *Onc. trilobum* and *Odm. pescatoreii*. Being Bob, he also treated the seedlings with oryzalin and diploid and tetraploid selections have appeared.

One of the loveliest diploid forms is *Odcdm. Tribbles 'Pacific Pearl'*, cloned by Golden Gate Orchids. It carries a classic Christmas tree inflorescence with lovely off-white flowers with a count of up to 50+ usually. Tom back-crossed this to a good diploid *Odm. pescatoreii* and some of these are vigorous whites about 3.5 cm in diameter. The warmth-tolerance seems to carry through and these plants can take a spell of warm weather without any apparent setback.

Bob used the 4n selections at first blooming and it was from this crop that *Wils. (Oda.) John Miller* arose. They are easy growers and bloom consistently on their second bulbs. I cannot say what the inflorescence will attain on maturity but it should be impressive. Bob also made a hybrid with *Odcdm. Tribbles 2n* and *Odm. harryanum* and treated them too. From this cross several extremely floriferous tetraploid lemon yellows have appeared. I am not sure how to proceed in the line so have made speculative crosses to even complex Brazilian *Miltonia* tetraploids to see which combinations click best.

We saw several seedlings from *Onc. trilobum 4n* X *Oda Nicherei Sunrise* blooming on their first bulbs last Winter and it would seem that bright orangey-colored partners are going to do well with *Onc. trilobum*. Several seedlings of Bob's hybrid with *Oda Taw* have bloomed with appealing contrasting pale lips

against red flowers. Apparently Howard Liebman has made the same hybrid with different forms of the parents so obviously great minds think alike!

Possibly my favorite novelty hybrid to date with *Onc. trilobum* is *Oncidioda Tricolore* (X *Cda. noezliana*), again from the toothpick of Bob. The cross has been blooming in diploid and tetraploid iterations and they are easy to grow and quite cute.

The best ones have a rose pink flower with darker rose highlights on the segments with a lovely contrasting cream lip. Flower life is exceptional, something that seems to trace directly to *Onc. trilobum*. I know that the selection *Onc. trilobum* 'Hawk Hill' 4n is special but any species that carries over 120 flowers per stem and lasts 6-8 weeks is worthy of considerable attention from hybridizers.

What do we have to look forward to from *Odcdm. Tribbles*? I hope others are using the species liberally as well as its offspring. New Horizon has *Odcdm Tribbles* 4n X *Colm. Catatante*, *Oda. Jaffa* 4n X *Odchm. Tribbles* 4n, *Odcdm Tribbles* 4n X *Oda. Helen Perlite* and *Odcdm Tribbles* 4n X *Oda (Jim Mintiservis X Nicherei Beaugo)* out of flask and a good number of pods at varying stages of propagation with both *Onc. trilobum* and its offspring. I have a gut feeling the *trilobum* line may well be quite influential in the future. Thanks Brian and Bob for your vision!

Andy Easton

July 13, 2010

XVII Annual *Orchids, Birds and Flowers Show* Medellin, Colombia - August, 2010

The Medellin, Colombia Orchid Show this year coincided with the Bicentennial of Colombia's independence from Spain, the inauguration of Colombia's newly elected President and the annual "Feria de los Flowers" (Festival of Flowers) Parade. As you might imagine all of this in combination made for a hell of a party. The streets of Medellin were full and there was a celebratory atmosphere everywhere.

Odontoglossum Alliance members Steve Beckendorf, Howard Liebman and I, along with about five other AOS judges from the south Florida area, as well as a number of non-judge enthusiasts from the United States participated in the show and enjoyed it immensely. The show was actually larger than last year which was amazing to me considering the state of the world economy and what appears, at least in the U.S., to be a declining interest in orchids and things botanical in general. According to officers from the Colombian Orchid Society, *Sociedad Colombiana de Orchideologia*, there were approximately 5000 individual orchids and 10 – 15,000 non-orchid flowering plants on display including water lilies, roses, Delphiniums, sunflowers, Hydrangeas, Calla lilies in many colors including black and very large displays of Heliconias. Also on display were many non-endemic cage birds. While Colombia has many exotic and colorful birds of its own it prohibits keeping them in captivity as does the United States.

Orchids in the show ran the gamut from the now ubiquitous Taiwanese *Phalaenopsis* hybrids to gaudy and flamboyant *Cattleya* species and hybrids as well as *Vanda* hybrids. A large percentage of plants on display were of course endemic Colombian species ranging from the very large to the minute. Judging began at about 8 am and continued until we were thrown out at about 4 pm in order to prepare the show ground for the evening's banquet. My team of judges including Beckendorf and

Liebman found it necessary to return the following morning (somewhat the worse for wear) to complete descriptions and measurements on plants we had awarded. I'd like to point out that I had argued that we complete our judging duties at the local Society office the first day, but Beckendorf and Liebman whined that they wanted to return to the hotel and change immediately in order to get back to start the party early.

AOS awards granted at the show totaled thirty including a 93 point FCC to *Cymbidium Koshu Dreams "Amazonas"* exhibited by Francisco Villegas, owner of the firm *Orquifolaijas Ltda.* Villegas also received a well deserved AQ and four Awards of Merit for his f2 cross of *Onc. Mullata's Dancing*. Each of the plants displayed a very dark black face with a striking bright yellow picotee. Villegas' outstanding display also received the AOS Show Trophy.

Another noteworthy plant in the show was a stunning and as yet unidentified *Elleanthus* believed at this time, but not yet confirmed, as *Elleanthus discolor*. This received a provisional CHM and a CCE of 93 points from the AOS judges. The Colombian judges named this plant, exhibited by Valeria de Estrada of Cali, as Best in Show.

Of particular interest to members of the Odm. Alliance were nine plants awarded in the display of Colomborquideas. Odcdm. Bob Hoffman "Jaime" received an HCC of 77 points as did a fine example of Oda. Susan Preston Richards. An Oda. Avranches "Maria" was awarded a 78 point HCC. The Colomborquideas display was also graced with two *Miltoniopsis vexillarias* that received Awards of Merit and another of *Miltoniopsis* variety *leucoglossa* that also received an Award of Merit. All were very fine forms and, in hindsight, I think we underscored them. Juan Felipe Posada and his staff at Colomborquideas do a very fine job of growing *Miltoniopsis* and have many outstanding clones. Also exhibited by Colomborquideas were *Cyrtochilum ionodon* "Vincente" which received an AM of 80 points and an excellent example of *Cyrtochilum annulare* "Nancy" AM 82 points.

And finally, in another display, a CHM of 82 points went to a clone of *Odm. aspidorhinum* "Maria del Monte" exhibited by Maria del Carmen Arango of Popoyan.

This year's Medellin show is perhaps the fifth or sixth I've been fortunate to attend and I must say that each has been better and bigger than the last. The enthusiasm of Colombian orchidists is remarkably contagious and if it could be bottled and distributed it would create an orchid pandemic. While active orchid growers constitute a very minor percentage of the Colombians attending the show and the population in general there is an incredible passion for their country's natural history and their orchids in particular. Attendance at Colombian orchid exhibitions is astonishing by our comparatively feeble standards. The paid attendance at this show for its first five days was about 67,000. The expected attendance on Sunday, its last day, was expected to be between 20 and 30,000 only because of conflicts with the parade, which is viewed by locals as somewhat like Pasadena, California's Rose Parade, and the Presidential inauguration. The Show's opening banquet has become a major social event in Medellin and this year 1800 tickets were sold out two months in advance. Show organizers said that had there been more room they could have sold another 1000 tickets.

Orchidists here in North America inevitably ask if there aren't security concerns in going to Colombia. I have to respond that there are, but then again that's true in many of our large cities. When I first began to travel in Colombia security was very tight and while caution remains the need for armed guards at the orchid show is essentially gone. Persons traveling to orchid shows there need only take the reasonable precautions one would normally take in New York, Miami or Washington DC. Let's face it there are crooks and dangerous people everywhere, but if you treat people respectfully, and don't act foolishly you'll be fine.

ODONTOGLOSSUMS AS CUT FLOWERS

by Dr. Wally Thomas

Odonts are wonderful as cut flowers for table displays, as individual flowers in a suitably small bowl, or large bowl full or as corsages in a tube pinned on a black velvet cloth. They like to float in shallow water with their petals and sepals on the surface. Individual blooms make a wonderful thank 'you' or as an enhancement to a dinner party. By that time that the blooms are open all the way down the stem the first to open are ready to be picked. Put them in a ziplock sandwich bag blow into it and zip. In this status they will keep in the fridge for 7-10 days and travel without damage. When presented, a pin may be fastened into the firm top of the bag above the zip. The pin is excellent for holding a small card on which I had printed "The exquisite '**Odont**' **Orchids** came originally from high in the Andes Mountains. They are believed to be the flowers worn by the Temple Maidens of the Incas. After wearing, refresh the flower by immersing it face down in cool water over night. Gently shake off excess water to wear again or display it in shallow water in a bowl or goblet". The Library is an excellent place to promote orchids as they are able to use the cut flowers or plants to draw attention to a special display. Although not a way to promote growing plants but a way of bringing delight to the invalided is to have the library attach a bloom with the books or discs and tapes that they send out to the invalided.

This message from Russ Vernon, the owner of New Vision Orchids. His email address is: russ@pawsinc.com and is printed as a courtesy to him by the Odontoglossum Alliance.

Hi Odont Fans!

This is Russ Vernon at New Vision Orchids located in Indiana. Odonts and relatives are a big interest of mine. I have been growing them to one degree or another for forty years. In the last ten years I have been doing hybridizing and have everything from flasks to divisions of mature plants available.

New vision Orchids has been operating since 2005 and has a web site at
www.newvisionorchids.com.

Because NVO is a "one man" operation, it has proven difficult to stay on top of everything that needs to be done in a timely basis. I thought that this group might be a way to let Odont fans know what is going on in my "Odont world".

I promise that I won't inundate you with drive and endless e-mails. Just the occasional update on what is available from the business Odont wise, an occasional cultural observation and an occasional picture. At present, we are using a land line so extensive pictures aren't practical.....

If you have questions regarding culture or other Odont related matters, do not hesitate to ask and let me know if I can pass the question and my answer on to the group. Business matters will remain between the two of us.

Please let me know if you do not want to be a part of this group and I will take your e-mail address off of the list. If you know of others that would be interested, let me know that and I will add their name after checking with them. (They should also be members of the Odontoglossum Alliance).

Thank you for your patience in reading this and your consideration.
I have attached an Odont picture of Odm. Mont Fallu on page 18
Russ Vernon

Unpaid Dues

There are 13 members of the Odontoglossum Alliance who have not paid their dues for the coming year. In May I sent out a self addressed envelope of the dues status to all members. I have tried to make it easy for members to continue their membership. Most of you responded quickly. For those of you who have not paid their dues, I have included a second self addressed envelope for your use. Without a response from you I will eliminate you from the Newsletter mailing in November and do so without further notice. I am not being cruel. It is only that I have only me handling this and I will not be able to spend further time on more reminders.

Election Results

The results of the election of Officers and Directors are as follows:

Elected As;

President	Steve Beckendorf	
Vice-President	Bob Burkey	
Secretary/Treasurer	John Miller	
Chairman of the Board	Robert Hamilton	
Board Members	Mario Ferrusi	Russ Vernon
	Juan Felipe Posada	Tom Etheridge
	Guido Deburghraeve	Larry Sanford

The Battle over Nomenclature Changes Oncidium vs. Odontoglossum

The earlier decision by Mark Chase, et al of Kew to lump all the Odontoglossums and their derivatives into Oncidiums based upon DNA studies are not over. The decision was made without soliciting any comments from the interested grower community. It also was made without disclosing any rational for the decision. Well it is not final that Odontoglossums will be lumped into Oncidiums. Over 150 years of history are being dumped. Nomenclature changes based upon DNA studies for other genera have shown that there are several choices available. Other factors than DNA studies have importance in the choices possible with good scientific rational. It now appears that before this decision becomes final there is an opportunity for the Odontoglossum Alliance to make our case for a different rational and scientifically backed decision that will retain Odontoglossums as Odontoglossums. Our new President, Steve Beckendorf, wrote an email to Joyce Stewart and the RHS Advisory Board on Orchid Hybridization that resulted in a pause until December before the Board will make a decision. Both Steve's email and a statement from the Board are reproduced below. If anyone has additional information or comments that might sway the Board's decision, please send it to Steve (beckendo@berkeley.edu) or directly to Johan Hermans, President of the Board, (orchids1@btinternet.com).

Changes to the Orchid Hybrid Register following the publication of *Genera Orchidacearum* volume 5.

The RHS Advisory sub-Committee on Orchid Hybrid Registration (ASCOHR) met on the 26th of May to discuss the implication for the Orchid Hybrid Register of name changes made in *Genera Orchidacearum* (GO) Volume 5; the main adjustments concern generic boundaries in the *Oncidiinae*.

ASCOHR consists of an international group of scientists, hybridisers and nurserymen; their purpose is to advise the Royal Horticultural Society (the RHS is the international registration authority for *Orchidaceae*) in matters relating to orchid nomenclature and taxonomy. Further information about ASCOHR can be found in The Orchid Review Supplement of June 2010.

After consideration of written and verbal contributions it was agreed unanimously that **all changes in GO5 should be implemented in the Register except for those concerning *Odontoglossum* and *Gomesa***. It was agreed that more opinion would be invited regarding the boundaries of those two genera and that these would be discussed at the next ASCOHR meeting in December.

This means that Julian Shaw, the International Orchid Registrar, will start the complex task of implementing changes in the circumscription of *Ada*, *Cyrtorchilum*, *Erycina*, *Miltoniopsis*, *Rossioglossum*, *Tolumnia*, *Zelenkoa* etc. Synonyms will be recorded and it is very much hoped that this information will soon become available on the public interface of the Register (rhs.org.uk/horticulturaldatabase/orchidregister).

The reasoning behind these changes has been widely reported and were clearly summarised in the April 2009 issue of AOS *Orchids* (p.229-238). ASCOHR members accepted that the science and interpretation behind the changes is sound and consistent for a number of reasons:

- it is coherent with the interpretation of other groups in the *Orchidaceae* and other plant families,
- it is based on solid evidence and a large sample base,
- the different species in the *Oncidiinae* were found to be genetically close,
- recognition of broad genera shows plant relationships and is horticulturally more useable than the recognition of numerous smaller genera,
- the large international team behind GO research are well recognised and contains scientists who have considerable experience with the *Oncidiinae*.

Although the science and interpretation of the boundaries of *Oncidium*/*Odontoglossum* and *Gomesa* were endorsed by ASCOHR it was felt important to defer a recommendation so that other interested parties could provide more input into a final decision. I therefore encourage everyone who has an interest in this issue to submit their thoughts and evidence as soon as possible.

In addition ASCOHR delayed a decision on issues concerning *Ida* / *Sudamerlycaste*; this will give individuals a short time to put their case to the relevant authorities.

At the World Orchid Conference in Singapore we anticipate holding a forum where the broader issues of generic boundaries and Hybrid Registration can be discussed.

I am most grateful to Julian Shaw for his meticulous work on integrating all the new information in the Register, to Dr Janet Cubey (Chief Horticultural Data Development Manager of the RHS) and all the ASCOHR members for their valuable contribution.

Johan Hermans
Chairman ASCOHR
21 July 2010
orchids1@btinternet.com

From: "Steven Beckendorf" <beckendo@berkeley.edu>
Subject: Odontoglossum/Oncidium - now with the attachment.
Date: Wed, May 12, 2010 6:42 pm
To: Joyce@joycestewart.plus.com

Dear Joyce,

It was good to get a chance to talk with you at Oklahoma City and share some of my concerns about the changes in the Oncidium/Odontoglossum clade that have been proposed by Chase, Williams and Whitten. If you think it will aid your discussions, please forward these comments to Johan Hermans and Julian Shaw.

I'm writing to suggest that you consider alternative views before making major changes to the species designations in the Oncidiinae as suggested in volume 5 of *Genera Orchidacearum*. I'm aware that DNA sequencing studies have changed the way we think about relationships in this large Subtribe, and I agree with many of these changes. For example, several species that had previously been included in *Oncidium* were shown to be only distantly related, and they were placed in distinct genera such as *Tolumnia*, *Caucaea*, *Cyrtochiloides*, etc.

In contrast, I am concerned by some of the decisions to combine several genera, especially when these combinations create heterogeneous groupings. In the Chase et al work there has been an explicit and acknowledged bias toward larger genera, a preference for lumping. Although they have advanced several arguments to justify this bias, I believe that it has led to unfortunate results in several parts of the Oncidiinae. Here I want to focus on the *Oncidium*-*Odontoglossum* clade, the group with which I am most familiar.

In GO5 Chase suggests that all the *Sigmatostalix*, *Odontoglossum*, and *Cochlioda* species, in addition to several smaller genera, be transferred to *Oncidium*. These changes create a large and quite heterogeneous genus and eliminate several distinctive, monophyletic genera. I don't believe that these changes were compelled by the science. There are many other ways to group the species in this clade, all of them consistent with the DNA results. The attached figure shows one example. A scheme like this has several advantages over lumping all these species into one group.

It retains *Sigmatostalix*, the most distinct clade both morphologically and genetically. Between *Oncidium* and *Sigmatostalix* there is a pollination shift from large oil-collecting bees of the genus *Centris* to much smaller oil-collecting bees probably of the genus *Paratetrapedia*.

This scheme also retains *Odontoglossum* and *Cochlioda*, again genera that are distinguished from *Oncidium* by their probable pollination syndromes, nectar collecting bees for *Odontoglossum* and bird pollination for *Cochlioda*. *Solenediopsis* is morphologically distinct, though little is known of its biology. Finally, *Collare-stuartense* has distinctive side lobes on the column and an expanded clinandrium behind the anther cap, the feature that gave it its awkward name.

This scheme does propose several new genera, probably four or five, and there is some reluctance to add new names. In arguing for their *Oncidium sensu lato*, Chase et al say that if one wanted to retain *Odontoglossum*, it would be necessary to erect at least 20 new genera. I think that's a straw man. There are several alternatives, like the one shown here, that add five or fewer new genera. I don't think that is an unreasonable number, especially since similar additions have been made to other groups, notably *Maxillaria* and its relatives and the *Huntleya* clade.

Although it's not the primary consideration, I believe that the horticultural history of these groups should also be considered in drawing generic boundaries. As you know, *Odontoglossums* in particular and *Cochliodas* and *Oncidiums* to a

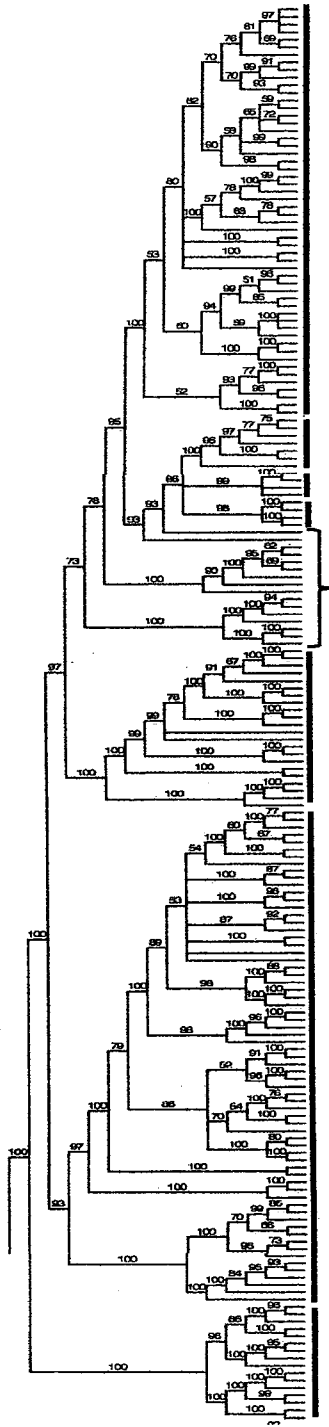
lesser degree have a long and storied history in generating some of the most spectacular and iconic orchid hybrids. Since the new molecular data allows the retention of these horticulturally important genera, this should be an important factor in deciding between alternative schemes. This consideration might be particularly important for the RHS.

A final reason for delaying any decision about adopting the *Oncidium sensu lato* proposed in GO5 is the way the evidence and arguments for that change have been presented. I was initially surprised that the first article about these changes (Lindleyana 21: 20-31, 2008, appearing in the December 2008 issue of Orchids) made all the name changes but provided almost no justification and no data. I was surprised that such a paper cleared peer review. In my field, molecular biology, and most other scientific fields, you cannot publish opinions and conclusions without the data. When I sent an email to Mark Chase, he told me to wait for GO5; all would be explained there. However, when GO5 was published, almost a year later, the treatment there was very disappointing. First, there were lots of careless errors, especially in the figures. For example, plate 119, labeled *Oncidium* [*Odontoglossum*] *cirrhosum*, actually shows *O. tenue*, and Figure 529.3 labeled *Oncidium* [*Odontoglossum*] *naevium* shows *O. crocidipterum*. More seriously, the phylogram that forms the basis for the entire reorganization of the *Oncidiinae* contains many errors, some of them spelling errors, most of them from mistaken identifications of the specimens that were sequenced (Fig. A.8, pp 214-218). For example in clade H, *Cyrtorchilum densiflorum* is listed twice, in two widely separated locations. From my experience helping Norris Williams sort out other ID problems, one of these is very likely misidentified. Near the middle of clade G, *Oncidium gloriosum* is shown between *cultratum* and *pyramidale* even though *O. gloriosum* is not a legitimate name. Similarly, *Cyrtorchilum sphinx* and *sphynx* are listed twice in Clade H but neither is a legitimate name. Most distressingly all of the tree information is listed as Williams et al, unpublished. Thus none of it has been subjected to peer review. Hopefully, appropriate reviewers would have questioned many of these errors and maybe even some deeper issues.

Thank you for your time. I expect to be writing a more detailed and publishable description of these ideas soon and would be glad to send you a copy.

Sincerely,
Steve Beckendorf

Steven Beckendorf
Department of Molecular and Cell Biology
University of California Berkeley, CA 94720



Odontoglossum

Cochlioda

Collare-stuartense

Solenediopsis

≤ 4 new genera

Sigmatostalix

Oncidium

New genus

This is the *Oncidium*/*Odontoglossum* clade (GO5 clade G, p. 216) taken from a majority rule tree sent to me by Norris Williams. It's a bit more recent than the tree published in GO5, but the branching structure is essentially the same, except for some of the species in the region that may require up to 4 new genera. Settling on a structure for this region will probably require further sequencing.

The clade at the bottom includes many of the species that were included in the heteranthum group of *oncidiums*. It may be possible to redefine the genus *Heteranthodium* Szlach., Mytnik & Romowicz for this clade.

Odontoglossum deburghgraenum Figures



Figure 1 *Odontoglossum deburghgraenum*



Figure 2 *Odontoglossum harryanum*



Figure 3 *Odontoglossum wyattianum*



Figure 4 *Odontoglossum helgae*

Odontoglossum deburghgraenum Figures



Figure 5 *Odontoglossum velleum*

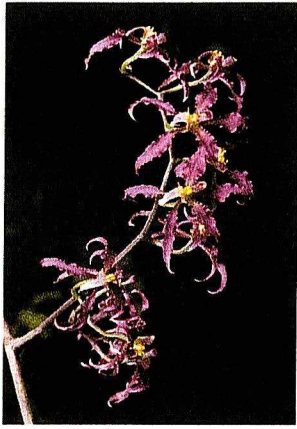


Figure 6 *Odontoglossum deburghgraeveanum*



Figure 7 *Odontoglossum deburghgraeveanum*

Award Photographs
Medellin Orchid Show
August 2010



Cyrt. ioplocon 'Maribel'
HCC/AOS



Mtnps roezlii var Albescent
'Monica' AM/AOS



Mtnps roezlii var xanthina
'Maria Cristina' CHM/AOS



Mtnps Sierra Snows
Colomborquideas AM/AOS



Odm luteo-purpureum 'Paula'
AM/AOS



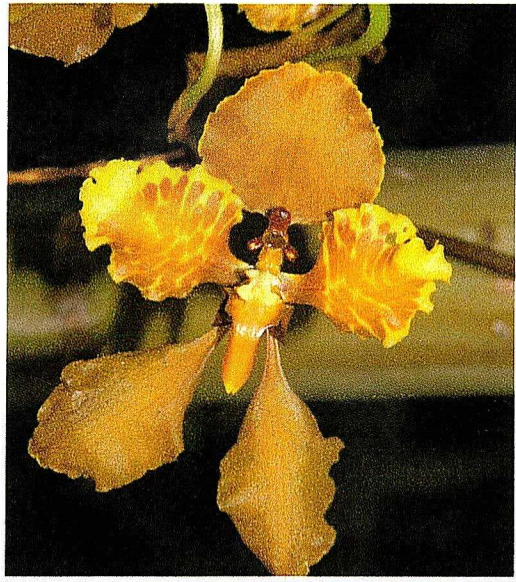
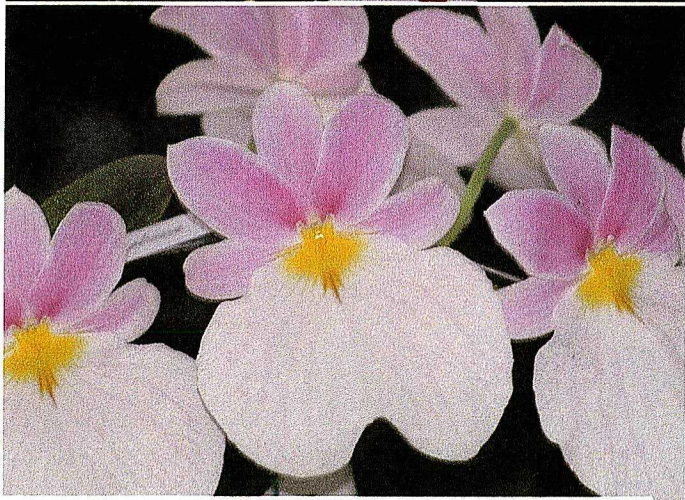
Odm luteo-purpureum
'Benjamin Ramirez'
AM/AOS



Onc. Mulatta's Dancing 'Ana Pita'
AM/AOS



Wils. Matoaka Road
Orquifollajes HCC/AOS



Photographs
Medellin Orchid Show
August 2010

Floating Cut Odontoglossums Cut Flowers





Odm Mont Fallu 'MontVision'