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In This Issue

A Broader Definition of *Odontoglossum* Avoids Creating
New Names by Stig Dalström Pages 1-6

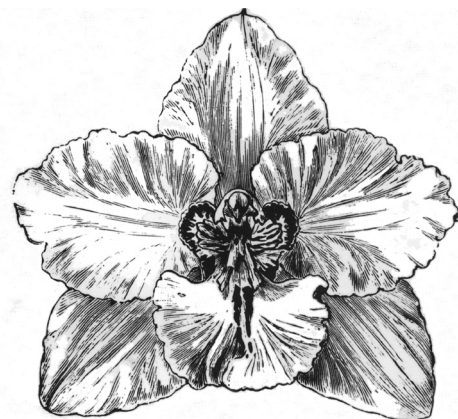
Colombian Flower Show - 2016
by Andy Easton Pages 7-9

Story of Fixing My Greenhouse
by John Miller Pages 10-11

Give Them Some Lip by Andy Easton Page 12-13

Editorial Ramblings - Robert Hamilton Pages 14-16

A Note from the Editor - John Leathers Page 16



A Broader Definition of *Odontoglossum* Avoids Creating New Names

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Many attempts have been made by various authors to solve the complicated taxonomy in Oncidiinae in general, and to classify or delineate the genus *Odontoglossum* Kunth in particular, but without lasting or entirely convincing results; Kunth (1816: 350), Lindley (1852), Beer (1854: 274—295), Pfitzer (1887: 106—107), Bockemühl (1984: 213—218; 1989: 15—29), Chase et al. (2008), Pridgeon et al. (2009: 212—220), Neubig (2012), and Kolanowska and Szlachetko (2016). For a variety of reasons and from a taxonomic point of view, this is not an easy group of plants to deal with. Traditionally, taxonomists have focused on a few morphologic features, generally associated with some flower details, particularly the angle between the column and the lip. Species with similar looking flowers have ended up in the same genus despite displaying many different-looking features otherwise, such as vegetative and micro-morphologic structures. Since molecular research focusing on DNA sequencing arrived on the scene as an additional tool to work with, we realize that vegetative features are very important in revealing close or distant relationships. Also micro-morphology has an important role to play here, while flower color, odor, and general shape can be misleading and appears to be evolutionary plastic adaptations to available pollinators.

Very little is documented about pollination of *Odontoglossum* species. Van der Pijl and Dodson (1966: 80—81; figure 53 on page 80) report the following: “In the case of *Odontoglossum kegeljani* E.Morren [= *Odontoglossum lehmannii* Rchb.f.; author’s note] in Ecuador, male bees of *Bombus robustus* var. *hortulans* Friese come to

the flowers and attempt to reach nectar in the false nectaries. The teeth of the callus act to impede the advance into the flower and in their struggles they detach the viscidium of the pollinarium with their heads. The stipe curves downward, carrying the pollinia to a position in front of the head and in visiting a subsequent flower they leave the pollinia on the sticky surface of the stigma.”

This may be the only photographically supported report of the pollination of an *Odontoglossum* species. But it probably represents what happens to most “typical” odontoglossums since the basic flower morphology is very similar. In the case of the “*Cochlioda* Lindl., group” in *Odontoglossum* (members of the former genus *Cochlioda*, Dalström, 2012), however, the brightly rosy red to magenta or orange-colored flowers suggest a different pollination syndrome, and hummingbird pollination of *Odontoglossum* (as *Cochlioda*) *vulcanicum* (Rchb.f.) Dalström is reported by van der Pijl and Dodson (1966: 89, 95). These authors continue: “A point which has been generally overlooked in taxonomy in the orchids is that the characters which result from adaptations to bird-pollination are often striking. These characters are commonly employed by taxonomists in separating genera, with the result that closely related species may be placed in distinct genera. Examples are the *Cochlioda*-*Odontoglossum*-*Oncidium* and the *Sophranitis*-*Laelia*-*Cattleya* complexes where the enormous numbers of artificial hybrids are mute evidence of the failure of taxonomists to understand the ecological background of speciation in these groups.” (van der Pijl and Dodson, 1966: 94). The conclusion is that we should widen our generic concepts and be ready to accept that groups of species with rather different looking flowers may still be rather closely related. A true close relationship, however, can generally be seen in similar vegetative features.

Another case of a deviating pollination syndrome for a small species complex within a larger complex is represented by the “*Solenidiopsis* Senghas group” in *Odontoglossum* (members of the former genus *Solenidiopsis*, Dalström 2012). These miniature *Odontoglossum* species are vegetative indistinguishable from their larger “cousins”, but have developed very different looking flowers. Actually, the flowers are structurally similar to members of the “*Cochlioda* group”, but are non-resupinate and rather drab in yellow to dark brown colors. While flowers of “*cochliodas*” display

color as an attractant, the members of the “*Solenidiopsis* group” have distinct flower odors, which suggests an entirely different pollination syndrome, probably performed by smaller bees. Hence members of different but still closely related *Odontoglossum* groups or sub-genera can co-exist sympatrically without interspecific cross-pollination. Cross-pollination among similar-looking members within the same group of the more typical species complexes, however, is a different story altogether and rather frequent (Rolfe, 1893; Dalström, 2003).

When Chase and others (2008) transferred orchid genera *Cochlioda*, *Odontoglossum*, *Sigmatostalix* Rchb.f., and *Solenidiopsis* to *Oncidium* Sw., based on molecular evidence, a rather strange situation developed, seen from a taxonomic point of view. Many plants with very different vegetative features as well as floral features ended up in the same genus, together with some members of what clearly belong to the genus *Cyrtochilum* Kunth, such as *Odontoglossum contaypacchaense* D.E.Benn. & Christenson, *Odontoglossum machupicchuense* D.E.Benn. & Christenson, *Odontoglossum pseudomelanthes* D.E.Benn. & Christenson and *Odontoglossum rubrocallosum* D.E.Benn. & Christenson. In fact, even without these mistakenly transferred *Cyrtochilum* species (which probably were transferred without molecular evidence), the members of the generously extended *Oncidium* (sensu Chase et al., 2008) are so different from each other that it becomes virtually impossible to visually define the genus *Oncidium* and to separate it from many other genera in the *Oncidiinae*. Therefore, some of the arguments used by Chase et al. (2008) Pridgeon et al. (2009), and later Neubig et al., (2012) to justify this transfer are worth analyzing.

“If *Odontoglossum* is to be maintained as a distinct genus, then many more genera will need to be created or some long-known species with typical *Oncidium* floral morphology (e.g., *O. chrysomorphum* Lindl., *O. obryzatum* Rchb.f.) will have to be transferred into *Odontoglossum*, which removes any hope of morphological distinctiveness for *Odontoglossum*.” (Chase et al., 2008).

No additional new names are needed to maintain *Odontoglossum* as a distinct genus once the vegetative *Odontoglossum*-looking “*Oncidium chrysomorphum*” and “*O. obryzatum*” complexes are transferred into *Odontoglossum*. This is clearly a more conserva-

tive and stabilizing alternative than lumping everything into *Oncidium*, which will effectively eliminate any possibility to distinguish it as a genus. What DNA research has taught us is that flower morphology is not entirely reliable as a basis for taxonomic decisions, but vegetative features are.

“After these changes [the removal of many *Cyrtorchilum* species from *Odontoglossum* by Dalström (2001a)], there still remains a core group of *Odontoglossum* species that DNA studies have indicated are monophyletic, but these are deeply embedded in *Oncidium*.” (Chase et al., 2008).

By studying the “...single maximum likelihood tree resulting from analysis of the combined five-region data set for 736 individuals” (Figure 8, in Neubig et al. 2012). We can see that an extended *Odontoglossum* is not actually “deeply embedded” in *Oncidium* at all, but a monophyletic sister-group to *Oncidium* (*sensu stricto*), even when the latter includes other distinguishable and monophyletic groups that have been described as separate genera, such as *Heteranthocidium* Szlach., Mytnik & Romowicz, *Chamaeleorchis* Senghas & Lückel, and *Sigmatostalix* Rchb.f.

“In addition, *Cochlioda* Lindl. and *Symphyglossum* [as “*Symphyloglossum*”] Schltr. are hummingbird-pollinated species of *Oncidium* and also deeply imbedded in *Oncidium/Odontoglossum*, so these too are transferred.” (Chase et al., 2008).

Symphyglossum sanguineum (Rchb.f.) Schltr., as the sole species from that genus was transferred to *Odontoglossum* in 2001 based on molecular evidence and vegetative features, and is not deeply embedded in *Oncidium* (*sensu stricto*). It is, however, deeply embedded in the monophyletic and extended *Odontoglossum* (Dalström 2001b). The other former *Symphyglossum* species; *S. distans* (Rchb.f.) Garay & Dunsterv., and *S. umbrosum* (Rchb.f.) Garay & Dunsterv., belong in *Cyrtorchilum*. Whether *Odm. sanguineum* is hummingbird pollinated or not is probably pure speculation. We are not aware of any scientific documentation for this phenomenon.

“*Sigmatostalix* is another such case. These oftentimes tiny plants produce oil on their lip calli and are recorded to be pollinated by oil-collecting bees, as are the great majority of species in *Oncidium*. Size alone is not suitable for generic delimitation, and in all other ways the species of *Sigmatostalix* are simi-

lar to those in *Oncidium*. These also we transfer to *Oncidium*.” (Chase et al., 2008).

Sigmatostalix Rchb.f., is a monophyletic complex of species that are easily distinguished from the bulk of *Oncidium* species (*sensu stricto*), and from most other Oncidiinae members for that matter, by the combination of a miniature growth, strongly flattened pseudobulbs generally with papery thin leaves, and the morphologic unique and rather bizarre-looking flowers. It makes sense to maintain this genus for the same reasons as for maintaining *Odontoglossum*.

“We feel that it is better to use vegetative features in combination with few floral traits to define broader genera... *Oncidium* is perhaps the best example of our contention that floral morphology must be foregone in Oncidiinae as a basis for generic Characters... Floral traits in Oncidiinae are highly plastic and reflect evolutionary shifts in pollinators.” (Neubig et al., 2012).

We agree that vegetative features can and should be used in defining genera, in combination with molecular evidence, and where possible also floral and any other available traits. The species of the former *Oncidium chrysomorphum* Lindl., and *Onc. obryzatum* Rchb.f. complexes (Dalström and Higgins, 2016); *Odontoglossum boothianum* (Rchb.f.) Dalström & W.E.Higgins, *Odm. chrysomorphum* (Lindl.) Dalström & W.E.Higgins, *Odm. obryzatoides* (Kraenzl.) Dalström & W.E.Higgins, *Odm. obryzatum* (Rchb.f. & Warsz.) Dalström & W.E.Higgins, *Odm. pictum* (Kunth) Dalström & W.E.Higgins, *Odm. tipuloides* (Rchb.f.) Dalström & W.E.Higgins, *Odm. trinastutum* (Kraenzl.) Dalström & W.E.Higgins, and *Odm. zelenkoanum* (Dressler & Pupulin) Dalström & W.E.Higgins, share more vegetative and molecular features with other species in that genus than with members of *Oncidium* (*sensu stricto*), but have switched to different pollination syndromes and therefore form a separate group within the genus, just like the “*Cochlioda* group” and the “*Solenidiopsis* group”. The “when” and “why” this switch has taken place are unknown of course, but some indications suggest that ancient hybridization between members of genus *Heteranthocidium* (the “*Oncidium heteranthum* Poepp. & Endl., complex”) and some *Odontoglossum* species may have taken place. Members of both genera are frequently sympatric in the Andean region and flower simultaneously, where few *Oncidium* (*sensu stricto*)

species occur. Members of the *Odm. chrysomorphum* and *Odm. obryzatum* (Rchb.f.) complexes display features from both *Heteranthocidium* and *Odontoglossum*. They sometimes, but apparently not always, produce abortive flowers. The flowers in general and the pollination apparatus in particular of the transferred species are very similar to *Heteranthocidium* flowers, with an elongate, elephant trunk-like rostellum and very narrow stipe on a minute ovoid viscidium. The inflorescence shapes are similar to some *Heteranthocidium* species, but the glossy, strongly flattened and the generally purple-mottled pseudobulbs are common *Odontoglossum* characteristics. Members of the *Odm. chrysomorphum* and *Odm. obryzatum* complexes are also characterized by having strictly unifoliate pseudobulbs, which makes them easily identified as a group even without flowers. In addition, molecular evidence demonstrates that the species in the *Odm. chrysomorphum* and *Odm. obryzatum* complexes belong to the “base” of an extended *Odontoglossum* clade (Neubig et al. 2012) where such a hybrid may well appear. These hybridization speculations may seem far-fetched at first but we need to keep in mind that natural hybridization in *Odontoglossum* (Rolfe, 1893) is quite common and may be a much more active factor in the speciation process than we previously have acknowledged.

In addition to the already DNA sequenced species, which were transferred to *Odontoglossum*, there are a few other taxa that may have to be transferred as well. It is unclear at this time, however, whether they really represent valid species or are just synonyms of the ones treated in this paper. In other words, more work is needed to complete this task.

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Figure 1: *Odontoglossum hirtzii* Dalström, displaying purple mottling on a typical cultivated *Odontoglossum* pseudobulb. Photograph by Stig Dalström.



Figure 2: *Odontoglossum boothianum* (Rehb.f.) Dalström & W.E.Higgins, based on S. Dalström 3716 (USM). Photograph by Stig Dalström.



Figure 3: Flowers of *Odontoglossum chrysomorphum*. Photographer unknown (Dalström archives).



Figure 4: *Oncidium pictum* Kunth. Holotype (P). Photograph: Muséum National d'Histoire Naturelle (P), provided by SEL.



Figure 5: *Odontoglossum tipuloides* (Rchb.f.) Dalström & W.E.Higgins, based on S.Dalström 2358 (SEL). Photograph by Stig Dalström.



Figure 6: Flowers of *Odontoglossum tipuloides*, Baeza, Ecuador, based on SD 3075. Photograph by Stig Dalström.



Figure 7: *Odontoglossum zelenkoanum* (Dressler & Pupulin) Dalström & W.E.Higgins, based on S. Dalström 3791 (USM). Photograph by Stig Dalström.

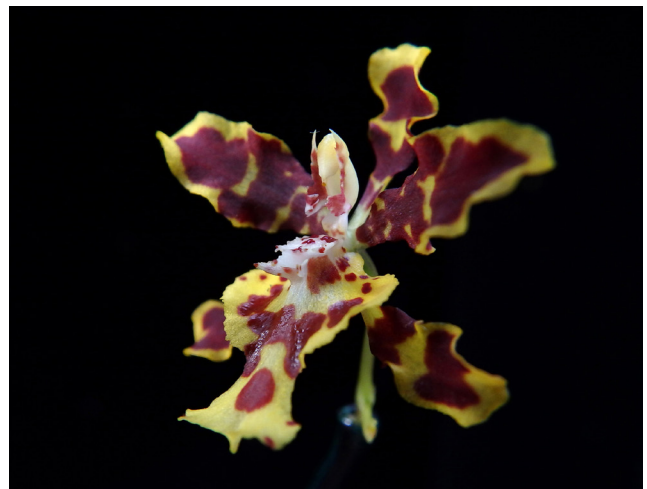


Figure 8: Flower of *Odontoglossum zelenkoanum* (Dressler & Pupulin) Dalström & W.E.Higgins, based on S. Dalström 3791 (USM). Photograph by Stig Dalström.

Colombian Flower Show - 2016

The Colombian Orchid Society's annual show has become an eagerly anticipated event both for Colombians and an ever-increasing international contingent. Held in the expansive Medellin Botanic Gardens, this show has become the premier annual show of the entire Americas and is the first event in a week of floral festivity that concludes with the annual parade through the city of Medellin on the following Sunday.

Orchid societies from all over Colombia travel some notable distances to participate and as the area around Medellin is a floral paradise, the show's appeal is broadened by displays of all the area floral products. The setting is perfect, an established garden with covered roof so that inclement weather never intrudes on the event. Medellin is known as the Colombian city of "Eternal Spring" so weather is always warm-temperate and ambient temperatures are rarely uncomfortable.

This year the International Odontoglossum Alliance generously funded cash prizes for the Best Odontoglossum Alliance species and hybrid. Judging was carried out with a delightful fusion of Odont-experienced AOS judges and Colombian Odont specialists with the Alliance President available as a tiebreaker if needed.



Odontoglossum mirandum

There was a clear majority for Best Odontoglossum Alliance species which went to a very well-marked Odm. mirandum, shown by Colomborquideas. The species is not seen very often (at least correctly-la-



Mps. (Oise X Harold Ripley)

beled!) and while this was a little smaller in size than some examples, it was the judge's unanimous choice.

The Best *Odontoglossum* Alliance hybrid was won by Daniel Piedrahita for a beautifully grown plant of Mps. (Oise X Harold Ripley). The plant also gained an AM/AOS on the day. With its six large salmon-peach flowers, the judges made a very wise and popular choice! Daniel also won a membership in The International *Odontoglossum* Alliance so he will be a great addition to our group.

The AOS judges upgraded the award to Odcdm. Bob Hoffman 'Jaime' HCC/AOS 2010 during the show and elevated it to a well-deserved AM. I am not certain of the provenance of this plant but almost certainly it was bred by the IOA President, Bob Hamilton and not the registrant! We rarely see any *Onc. tigrinum* progeny today and this was one of the best examples of a type apparently out of fashion.

The third AOS award to an *Odont* Intergeneric was an AM/AOS for the unregistered grex (Vuyls Cambria X *Odm. wyattianum*) 'Ligia', also shown by Colomborquideas. What was astonishing about this plant was that it was only a first bloom seedling in a 3"



Odcdm. Bob Hoffman 'Jaime' AM/AOS

pot. It will be something to behold when mature, as the flower was already very large and taking all the energy from a modest-sized bulb.

There were other interesting and well-grown *Odont* Alliance specimens. A particularly fine blooming of *Brassia* Rex 'Waiomao Spotless' FCC/AOS exhibited by the venerable Sr. Londono caught everybody's attention. This albanistic clone apparently appeared as



Vuyls. (Vuyls Cambria X *Odm. wyattianum*) 'Ligia'

a meristem mutation. I am not aware of anyone making successful hybrids from it but it certainly catches the eye. A lovely *Oda* that I failed to find a name for was a close contender for best *Odontoglossum* Alliance hybrid but in the absence of a name, it just missed selection.

In the evening, after judging, we all attended the official show opening and what a spectacle this was. Many of the city's glitterati were in attendance and the entertainment was quite astonishing. One good idea that bears copying, all the major prizewinners were already seated on the stage so the announcement of awards and trophies proceeded in a lively and timely fashion. Master of ceremonies was Juan Felipe Posada, President of the COS and he seemed to be in



Brassia Rex 'Waiomao Spotless' FCC/AOS

almost constant motion. The final act of the evening were the tango dancers and the final pair, elegantly attired in black, literally held the almost 2,000 person audience breathless. I love the tango and I have never seen it danced better.

Many of the overseas guests stayed at the Hotel Polblado Plaza where we enjoyed a very attractive Orchid Festival rate and a central location from which the Botanic Gardens, shopping malls and other tourist attractions could be easily reached. While traffic in the city can be a bear at rush hour, like San Francisco

and Los Angeles, the taxis are very reasonably priced and you only pay for miles travelled and not waiting time in traffic. The word is out on the Medellin Show and expect a large contingent visiting in 2017. It is always held in early August and would be a very viable alternative to the November WOC in Ecuador which will have nowhere near the breadth and quality of orchid displays! Plus you can avoid all those RHS type sycophants who will be in Quito and not in Medellin!

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Story of Fixing My Greenhouse

After 30 years of operation my greenhouse required a complete renovation of the interior.

My greenhouse was constructed in 1986 along with a new residence in Westport, Massachusetts. The greenhouse is a double glass wall 18' by 24'. It is divided into two sections each 18' x 12'. At the time of construction I built my benches of redwood using galvanized screws. Over the years the wood in quite a number of areas rotted. The galvanized screws were rusted through due to the acid in the redwood. I would patch up rotted sections as they appeared, usually by dumping the plants on the floor. Finally at my age (91) I needed sturdy benches to hold onto as I worked or walked in the greenhouse.

The idea behind the sections was to have two different temperature areas, one at 52 degrees F for the odonts and the other at 63 degrees F for everything else. Each section has an evaporative cooler, exhaust fans, louvers and humidifiers. The exhaust fans were corroded and barely running. Each section had two ceiling fans. Of the four fans two had already fall-



A view of the 18' x 24' greenhouse attached to the greenhouse work room. Note the shade cloth on the exterior. Under that is a reflective and shade cloth. Under that is another dark shade cloth. The exterior shade cloth is put on in April and removed in October.

en and needed to be removed. The other two were ready to come down. The watering plumbing was very clumsy. From the description, you can tell the entire interior needed a complete overhaul. Starting in November planning was commenced starting with the bench decision. I visited Griffin greenhouse to examine their products. I contacted a greenhouse bench supplier in New Hampshire. I specified my re-

quirements and sent out Requests for Quotes. Griffin promptly replied after a visit by the salesman with a quote that was FOB at their factory for about \$5500. The New Hampshire supplier finally responded after two months with me sending them numerous emails and telephone calls. Finally they sent me notice that the job was too small for them. In the meantime the builder of my house offered to make the benches. We talked it over and I decided to go with him.

The plan was to use the current bench configuration and make the benches of pressure treated lumber and stainless steel screws. Also we decided to put a nice cedar board around all benches with a lip of two inches to prevent plants from falling off. By now it was March and still cold here in New England. I needed to clean out the greenhouse by moving all plants into



The new plant benches with the cedar walls to prevent plants from falling

my living room.

The entire operation needed to be completed in a reasonably short time. It was imperative that a carefully planning of the entire operation was essential. There were four essential elements to coordinate;

1. Moving the plants out before work could begin in the greenhouse followed by returning the plants to the renovated greenhouse.
2. Removal of the old benches and construction of new benches some of which needed to be built in the greenhouse.
3. Removal of the corroded exhaust fan and the remaining ceiling fans. Re-installation of new ceiling fans and a new exhaust fan
4. Modernizing the plumbing making future watering operations far more convenient.

I ordered all the necessary long lead items and had them on hand. Then I set the date for the operation. We would start on a Monday with the AM moving the plants into my living room on a number of tables. At the same time the bench builders would have my garage as a place to work. On Tuesday the electrician and plumber was committed to that day. With an empty greenhouse their work could be eased. On Wednesday the bench builders would complete their work allowing effort to commence putting all plants back in on the new benches.

Things went along like clockwork. My friend and fellow orchid grower, Bill Wisneski and I moved all the plants starting at about 8:00AM and we finished in two hours. I would guess we moved



New plant benches in the cool section of the the greenhouse. Note the cedar board trim around he benches

On the next day, Wednesday the benches were completed by noon and they were beautiful, solid and made it easy for me to walk about holding on and not worrying I would topple a bench. As they left at noon, Bill and I moved all the plants back in less than 2 hours. We were done. The plan had worked.

I now have great plant benches and a fine operating greenhouse that is a pleasure for work and good for growing.

John E. Miller
19 July 2016



The Old benches are now kindling wood for the fireplace

about 500 to 700 plants. The bench builders had previously put their tools in my garage as well as having the lumber delivered over the preceding weekend. They were able to get in the greenhouse at about 10:00 AM and make kindling wood out of the old benches. They commenced building new benches that afternoon. The electrician and plumber arrived promptly on Tuesday and commenced work. They both finish before 1:00 PM. The bench builders continued to work on the benches.



The new benches in the warm section showing cattleyas and various small orchids.

GIVE THEM SOME LIP.....

This is my favorite pastime when it comes to taxidiot and RHS types! This little story will explore the species *Oncidium trilobum*, so beautifully named because from its lip one can see such a stamp in all its immediate hybrids. One of the beauties of the Odontoglossum Alliance is that all sorts of lip outlines can be acceptable and appealing. By that I mean the classic full lip of a *Vuykstekeara* is no more to be valued than the distinctive cruciform lip of a species like *Onc. trilobum*.

Let us look at the first bloom seedlings of four of our crosses blooming in Medellin in August 2016. I cannot pretend to have had any special insight when making these four hybrids but I was motivated at least partially by a "I wonder what will result" goal. Two of the hybrids are tetraploid and the other two could possibly be triploid. In every case, the parent descended from *Onc. trilobum* was tetraploid.

Odm Pecas X *Odcdm Fido* 'NH' 4n. This hybrid sees the wonderful broad-lipped *Odm. harryanum* completely dominating the typical trilobum lip. Predicted?



Odm California Cherub x *Wils Wilda Bullard* 4n



Odm Pecas x *Odcdm Fido* 'NH' 4n

No, but I do know the power of *Odm. harryanum* (that's how *Vuyls Cambria* got its lovely lip!) and so I was not too surprised. When you consider that *Odm Pecas* is full of *Odm. spectatissimum* influence, the broad lip in this first seedling is maybe even more noteworthy.

Oda California Cherub X *Wils Wilda Bullard* 4n here we see a really reduced lip though still evidence of trilobum at work. Probably because the *Oda California Cherub* is strongly influenced by *Cda. noezliana*

and *Odm. hastatum*, two species not renowned for their impressive lips. It is a triploid dead end but what we were looking for here is a perky little pot plant type that would bloom precociously and freely. Time will tell.

Oda Burning Bed X *Wils Wilda Bullard* 4n. Only two of these have bloomed to date, both on their second bulb so any evaluation of the hybrid must wait a year or two. However the exciting aspect of this cross is that *Onc. trilobum* seems to be quite color neutral and lets strong reds appear consistently. The seedlings so far are as expected yet pleasing.

Oda Burning Bed X *Odcdm Tribbles* Forgive me if I am a little excited about this one. The strongly colored flower has

a truly stunning bicolor lip with the two-toned effect making a very appealing pattern. If we get more like this with a strong yet manageable inflorescence, we may well have a winner. And in every hybrid from the *Onc. trilobum* line, we see a measure of warmth-tolerance, lacking in previous breeding lines from *Oncidium*s like *tigrinum*. For an inveterate hybridizer,

hope is a virtue to be treasured. I hope members of the International Odontoglossum Alliance will hunt out new and interesting seedlings and literally have something to look forward to, month by month throughout the year.

Andy Easton
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Oda Burning Bed x *Wils Wilda Bullard* 4n



Oda Burning Bed X *Odcdm Tribbles*

Editorial - Ramblings

The time has come for another edition of our newsletter. As typical for a volunteer effort we scramble to get the material together. Invariably a photo or text gets lost and authors note they have a revision coming. A few days here, a few days there and the deadlines get blown out of the water. And, the weather's been good enough to simply want to goof off. Don't mistake this explanation as "falling on my sword". I don't own one. It does explain why the August newsletter arrives in September. And, compliments to John Leathers, our editor for pulling it all together in spite of being a pleurothallidinae grower.

A good friend and skilled grower calls this time of the year, "the boring time". This is because in California little is blooming and spikes won't initiate for a couple more months. Note, I write from the Northern hemisphere. Odont growers in countries like Australia, Chile, South Africa, and New Zealand are no doubt now approaching their peak.

Thus, a real pick-me-up was dropping in on the Medellin, Colombia annual show. John Leathers and I met up with friends Marguerite Webb, an owner of J&L



Juan Felipe Posada, with Dr. Howard Liebman reviewing archives of plants imported by Colomborquideas from nurseries like Charlesworth & Company over their decades of operation.

Orchids and Dr. Larry Schweitzer a renowned orchid grower who lives in Connecticut. Flying from opposite

coasts we met in Miami and continued the flight to Medellin. In Medellin we joined Steve Beckendorf, Andy Easton and Dr. Howard Liebman at a terrific hotel. Steve was there as part of a trip to an obscure region of Colombia that he's been researching. Andy was there to attend the show and to host relatives who live in Bogota, Colombia's capital. The rest of us were there to enjoy what is unquestionably one of the greatest orchid shows on Earth and to eat, drink and be happy.



A police band line dance performance for an appreciative audience.

While growing Odonts in San Francisco in August is not the most exciting time this cannot be said for growing orchids in Medellin, Colombia. The latitude of Medellin is ~ 6.25 degrees while San Francisco's is ~37.8 (I know of a grower in Aberdeen, Scotland whose latitude is ~57 degrees). How and when Odonts bloom varies by country and Medellin is close to the equator where the duration of days and nights are virtually equal all year long.

This edition of the newsletter contains a write-up of the Medellin show. While the show is terrific in size, staging and the diversity of plants the hospitality of Colombian's and the vitality of their cultural and their enthusiasm is remarkable. If you've never seen a police band dance or sat down for a dinner hosting 2000 guests under the canopy of a gorgeous botanic garden you're missing something! And, special thanks to Juan Felipe Posada of Colomborquideas and Francisco Villegas of Orquifollajes for seeing to the needs of their foreign visitors and hosting us at their greenhouses sited in the majestic Colombian countryside. The weather was perfect.

For growers who travel put the Medellin, Colombia show on your list!

Bob Hamilton

Additional Photos of the Colombian Flower Show



Although predominantly an orchid show many other types of flowers are on display often used with spectacular creativity:



Two additional spectacular flower displays.



Colombian school children in their school uniforms being introduced to art at the Botero Museum in Medellin. Note the clown hat the guide is wearing and the attentiveness of these children. We saw three groups of kids in similar pose as we toured the museum.

A Note from the Editor

Growers interested in contributing articles for the IOA Newsletter are encouraged to do so! Articles of any length, including as small as a photo with caption, comments or announcements of events are welcome. I can accept most word processing and photo formats.

Please email them to rmhjjl@comcast.net. Note in the subject line such as "IOA submission" or something that helps identify its content for the newsletter is appreciated.

Also, if you would like to receive the newsletter by email, contact the editor at rmhjjl@comcast.net. Note in the subject line "Email Newsletter" to help identify your request to receive the newsletter electronically. The printed newsletter will still be sent out to anyone member wishing to receive it.