

Odontoglossum Alliance Newsletter

Volume 5

May 2009

In This Issue

Miltonia - Miltoniopsis
Miltonioides = Oncidium

Species Issue

- | | |
|---------------------------|---------|
| 1. Miltoniopsis Culture | Page 7 |
| 2. Odontoglossum helgae | Page 9 |
| 3. Odont Alliance Meeting | Page 11 |
| 4. Dues Are Due | Page 12 |
| 5. Color pages | Page 13 |



Miltonia and Miltoniopsis

We are continuing publishing our newsletter series of the species of the Odontoglossum Alliance. This issue is devoted to Miltonia and Miltoniopsis. When I started I was confused by the names of Miltonia, Miltoniodes and Miltoniopsis. Steve Beckendorf helped me out. So I quote his reply to my request for help.

“As far as the genera named for John Milton, I can see why there would be some confusion. There used to be one such genus, Miltonia. It still exists but only includes several Brazilian species, for example Miltonia spectabilis, regnellii, candida, and a few others.

Miltoniopsis was created for the cooler-growing, pansy like orchids from Costa Rico, Panama, Venezuela, Colombia, Ecuador and Peru. There are only five species, vexillaria, roezlii, phaleanopsis, bismarkii and santanaei (santanaei is sometimes considered a synonym of roezlii)

Miltoniodes is currently in limbo. It has not yet been removed from the Kew Monocot List, but the DNA analysis shows that the species that were placed in Miltoniodes are not each other's closest relatives. They fall in at least three separate groups of the true Oncidium. Thus Miltoniodes will not continue to exist.

So in summary Miltonia and Miltoniopsis are important and stable genera and many hybrids have been made using plants from these genera. Miltoniodes was an unstable proposal that is disappearing. All its members should be known as Oncidium.

We have put together the Kew Monocot list of the two genera. Andy Easton has provided us a guide on growing Miltoniopsis. Juan Felipe Posada and Dr. Guido Deburghgraeve have provided pictures of the species. Steve Beckendorf has also provided photographs including the species, now in Oncidium that we thought to be in Miltoniodes. These are Oncidium reichenheimii, reichenheimii yellow, leave, karwinskii and cariniferum. Juan Felipe Posada's photos show the variability of Miltoniodes vexillaria.

Kew Monocot List of *Miltonia* and *Miltoniopsis* Species

The *Miltonia* and *Miltoniopsis* Species lists that follows are available from the Kew Gardens. It can be obtained from the following website: <http://apps.kew.org/wcsp/home>

One extensive list is at the Kew Monocot Checklist site

<http://apps.kew.org/wcsp/home.do>

Type in *odontoglossum* and it will return the list of accepted

names (bold) and synonyms (regular) that follows. Notice that the natural hybrids are included with an x preceding the name.

Miltonia

83 records retrieved

Click on any name to see a detailed overview.

Names in **bold** indicate accepted names, plain list indicates non accepted names.

Miltonia Lindl., Edwards's Bot. Reg. 23: t. 1976 (1837).

Miltonia anceps (Klotzsch) Lindl., Fol. Orchid. 5: 3 (1854).

Miltonia bicolor Lodd. ex Buyss., Orchid.: 385 (1878).

Miltonia □ ***binotii*** Cogn., Gard. Chron., III, 22: 393 (1897).

Miltonia □ *binotii* var. *flavescens* Cogn., Chron. Orchid. 1: 310 (1900).

Miltonia bismarckii (Dodson & D.E.Benn.) P.F.Hunt, Orchid Rev. 108(1233) noh: 15 (2000).

Miltonia □ *bleuana* L.Linden & Rodigas, Lindenia 4: 67 (1888).

Miltonia □ *bleui* God.-Leb., Orchidophile (Argenteuil) 8: 45 (1888).

Miltonia □ *bluntii* Rchb.f., Gard. Chron., n.s., 12: 489 (1879).

Miltonia candida Lindl., Edwards's Bot. Reg. 24(Misc.): 25 (1838). *Miltonia candida* var. *flavescens*

Hook., Bot. Mag. 66: t. 3793 (1840).

Miltonia candida var. *purpureoviolacea* Cogn., Chron. Orchid. 1: 135 (1898).

Miltonia cereola Lem., Ill. Hort. 12: t. 446 (1865).

Miltonia clowesii (Lindl.) Lindl., Sert. Orchid.: t. 34 (1840).

Miltonia clowesii var. *lamarcheana* E.Morren, Ann. Bot. Hort. 26: 174 (1876).

Miltonia □ *cogniauxiae* Peeters ex Cogn. & Gooss., Dict. Ic. Orch.: t. 5 (1900).

Miltonia □ *cogniauxiae* var. *bicolor* Rolfe, Orchid Rev. 9: 294 (1901).

Miltonia □ *cogniauxiae* var. *massaiana* Cogn., Chron. Orchid. 1: 311 (1900).

Miltonia □ *cogniauxiae* var. *pallida* Cogn., Chron. Orchid. 1: 311 (1900).

Miltonia cuneata Lindl., Edwards's Bot. Reg. 30(Misc.): 26 (1844).

Miltonia □ *cyrtochiloides* Barb.Rodr., Gen. Spec. Orchid. 1: 98 (1877).

Miltonia endresii G.Nicholson, Ill. Dict. Gard. 2: 368 (1886).

Miltonia □ *festiva* G.Nicholson, Ill. Dict. Gard. 2: 368 (1886).

Miltonia flava Lindl., Gard. Chron. 1848: 475 (1848).

Miltonia flavescens (Lindl.) Lindl., Sert. Orchid.: t. 48 (1841).

Miltonia flavescens var. *grandiflora* Regel, Trudy Imp. S.-Peterburgsk. Bot. Sada 10: 369 (1887).

Miltonia flavescens var. *stellata* (Lindl.) Regel, Trudy Imp. S.-Peterburgsk. Bot. Sada 10: 369 (1887).

Miltonia flavescens var. *typica* Regel, Trudy Imp. S.-Peterburgsk. Bot. Sada 10: 369 (1887), nom. inval.

Miltonia □ *joiceyana* O'Brien, Gard. Chron., Ill, 14: 206 (1893).

Miltonia karwinskii (Lindl.) Lindl., J. Hort. Soc. London 4: 83 (1849).

Miltonia kayasimae Pabst, Bradea 2: 88 (1976).

Miltonia laevis (Lindl.) Rolfe, Orchid Rev. 12: 300 (1904).

Miltonia □ lamarckiana Rchb.f., Gard. Chron., n.s., 23: 530 (1885).

Miltonia □ leucoglossa auct., Gard. Mag. (London) 41: 736 (1898).

Miltonia leucomelas (Rchb.f.) Rolfe, Orchid Rev. 12: 300 (1904).

Miltonia loddigesii Regel, Trudy Imp. S.-Peterburgsk. Bot. Sada 11: 306 (1890 publ. 1891).

Miltonia moreliana A.Rich., Portef. Hortic. 2: 38 (1848).

Miltonia odorata Rchb.f., Xenia Orchid. 1: 85 (1855).

Miltonia parva C.Schweinf., Amer. Orchid Soc. Bull. 14: 294 (1945).

Miltonia □ peetersiana Rchb.f., Gard. Chron., n.s., 26: 326 (1886).

Miltonia phalaenopsis (Linden & Rchb.f.) G.Nicholson, Ill. Dict. Gard. 2: 367 (1886).

Miltonia phymatochila (Lindl.) N.H.Williams & M.W.Chase, Lindleyana 16: 284 (2001).

Miltonia pinelii Rchb.f., Xenia Orchid. 1: 56 (1854).

Miltonia pulchella Linden, Pescatorea 1: t. 44 (1860).

Miltonia quadrijuga Dus□n & Kraenzl., Ark. Bot. 16(8): 23 (1921).

Miltonia regnellii Rchb.f., Linnaea 22: 851 (1850).

Miltonia regnellii f. alba (Tessmer) Roeth, Orchidee (Hamburg) 56: 337 (2005).

Miltonia regnellii var. alba Tessmer, Orchid Rev. 111: 309 (2003).

Miltonia regnellii var. citrina Cogn., Dict. Icon. Orchid.: Miltonia pl. 7a (1900).

Miltonia regnellii f. *citrina* (Cogn.) Roeth, Orchidee (Hamburg) 56: 336 (2005).

Miltonia regnellii f. *purpurea* (Dombrain) M.Wolff & O.Gruss, Orchid. Atlas: 232 (2007).

Miltonia regnellii *purpurea* Dombrain, Fl. Mag. (London) 9: t. 490 (1870).

Miltonia regnellii var. *travassosiana* Cogn., Chron. Orchid. 1: 310 (1900).

Miltonia regnellii f. *travassosiana* (Cogn.) Roeth, Orchidee (Hamburg) 56: 336 (2005).

Miltonia regnellii var. *veitchiana* Cogn., Dict. Icon. Orchid.: *Miltonia* pl. 7b (1900).

Miltonia regnellii f. *veitchiana* (Cogn.) Roeth, Orchidee (Hamburg) 56: 336 (2005).

Miltonia reichenheimii (Linden & Rchb.f.) Rolfe, Orchid Rev. 12: 300 (1904).

Miltonia roezlii (Rchb.f.) G.Nicholson, Ill. Dict. Gard. 2: 369 (1886).

Miltonia rosea Verschaff. ex Lem., Ill. Hort. 14: t. 524 (1867).

***Miltonia* □ *rosina* Barb.Rodr., Gen. Spec. Orchid. 1: 99 (1877).**

***Miltonia russelliana* (Lindl.) Lindl., Sert. Orchid.: t. 48 (1841).**

Miltonia schroederiana O'Brien, Gard. Chron. 1889(2): 210 (1889).

Miltonia speciosa Klotzsch, Allg. Gartenzeitung 23: 129 (1855).

***Miltonia spectabilis* Lindl., Edwards's Bot. Reg. 23: t. 1976 (1837).**

Miltonia spectabilis var. *aspersa* Rchb.f., Gard. Chron., n.s., 24: 70 (1885).

Miltonia spectabilis var. *atrorubens* Rolfe, Orchid Rev. 2: 350 (1894).

Miltonia spectabilis var. *bicolor* G.Nicholson, Ill. Dict. Gard. 2: 369 (1886).

Miltonia spectabilis var. *lineata* L.Linden & Rodigas, Lindenia 2: 31 (1886).

Miltonia spectabilis var. *moreliana* (A.Rich.) Henfr., Gard. Mag. (London) 3: 41 (1851).

Miltonia spectabilis var. *porphyroglossa* Rchb.f., Xenia Orchid. 1: 130 (1856).

Miltonia spectabilis var. *radians* Rchb.f., Xenia Orchid. 1: 130 (1856).

Miltonia spectabilis var. *rosea* auct., Gard. Chron. 1867: 1239 (1867).

Miltonia spectabilis var. *virginalis* Lem., Ill. Hort. 15: t. 573 (1868).

Miltonia stellata (Lindl.) Lindl., Sert. Orchid.: t. 48 (1841).

Miltonia stenoglossa Schltr., Repert. Spec. Nov. Regni Veg. Beih. 19: 66 (1923).

Miltonia superba Schltr., Repert. Spec. Nov. Regni Veg. 3: 249 (1907), nom. illeg.

Miltonia velloziana Ruschi & la Gasa, Bol. Mus. Biol. Prof. Mello-Leitão. Sôr. Bot. 82: 1 (1975).

Miltonia vexillaria (Rchb.f.) G.Nicholson, Ill. Dict. Gard. 2: 369 (1886).

Miltonia vexillaria var. *leopoldii* H.J.Veitch, Man. Orchid. Pl. 8: 111 (1892).

Miltonia vexillaria var. *rubella* H.J.Veitch, Man. Orchid. Pl. 8: 111 (1892).

Miltonia vexillaria var. *stupenda* H.J.Veitch, Man. Orchid. Pl. 8: 111 (1892).

Miltonia warneri G.Nicholson, Ill. Dict. Gard. 2: 369 (1886).

Miltonia warszewiczii Rchb.f., Xenia Orchid. 1: 132 (1856).

Miltoniopsis

9 records retrieved

Miltoniopsis God.-Leb., Orchidophile (Argenteuil) 9: 63 (1889).

Miltoniopsis bismarckii Dodson & D.E.Benn., Icon. Pl. Trop., II, 2: t. 110 (1989).

Miltoniopsis *bleui* God.-Leb., Orchidophile (Argenteuil) 9: 145 (1889).

Miltoniopsis phalaenopsis (Linden & Rchb.f.) Garay & Dunst., Venez. Orchids III. 6: 278 (1976).

Miltoniopsis roezlii (Rchb.f.) God.-Leb., Orchidophile (Argenteuil) 9: 148 (1889).

Miltoniopsis roezlii var. alba (W.Bull ex W.G.Sm.) Lückel, Orchidee (Hamburg) 46: A119 (1995).

Miltoniopsis santanae Garay & Dunst., Venez. Orchids III. 6: 276 (1976).

Miltoniopsis vexillaria (Rchb.f.) God.-Leb., Orchidophile (Argenteuil) 9: 63 (1889).

Miltoniopsis warszewiczii (Rchb.f.) Garay & Dunst., Venez. Orchids III. 6: 278 (1976).

Miltoniopsis

By Andy Easton

I am always loathe to write about the culture of any orchid genus partly because I seem to always be cognizant of many better growers and also because I am aware that growers cultivate Miltoniopsis in a wide range of environments.

What I am going to say is what I do and what I have found out about the culture of this interesting group over many years.

We are told that *M. vexillaria* is happiest at the cool end of temperate and *M. roezlii* has more warmth-tolerance but in fact most advanced hybrids seem to grow pretty much the same. The availability of a xanthic form of *roezlii* recently will undoubtedly have a profound influence on yellow Miltoniopsis breeding if used judiciously.

Media and Potting:

Across the board, Mtps. dislike being over-potted. Perhaps more than any other orchid I grow they seem to enjoy something very close to annual repotting. If you have a high quality growing medium and excellent water, you may well get a second year without attention but I think this is the limit.

Deflasked plants seem to do very well in sphagnum in plug trays. But sphagnum has a very short life under greenhouse conditions and what encourages rapid root growth initially can have exactly the opposite effect as the moss starts to break down and accumulate salts. When potting on from plug trays I always remove all the old moss from around the roots.

The medium I use is a mixture of Californian and composted New Zealand fine bark (40% each) with 10% perlite (Sponge-Rock) and 10% shredded sphagnum. I correct this with dolomite lime to bring the pH to around 6.0. I go from plugs to 3"pots to shallow 4"pots to 5"pots and then divide. Specimens can be grown in broader

pots like azalea pots so long as they are not deep.

Potting up can be done at any time but divisions seem to thrive when made around the Equinoxes. Of course the Spring Equinox is usually just prior to the main flowering time so I try to limit my dividing then to plants that are in urgent need of attention. I grow in a greenhouse heated to a minimum of 56F at night and find that September divisions do very well for me. When potting up I make sure the plants are quite dry and try to shake off any mix possible before gently working moist fresh mix around the roots which I try to disturb as little as possible. I baby the divisions for about a month, misting daily on sunny days in the am and again in the pm with watering on a longer cycle than normal to encourage root action. I do not alter my feeding however.

One of the worst practices is to pot up plants with a solid root ball and I find it extremely difficult to get roots to break out from the ball into the surrounding medium.

Temperatures and Light:

For me it seems that Mtps. do best when I grow them warmer in Winter and as cool as possible in Summer. When you see where vexillaria comes from in Colombia you see an environment where evenness is a constant.

I can always see a difference in the foliage of plants grown in say Seattle compared with plants grown in Salinas. Yet plants grown in Holland look much closer to those from Salinas compared with ones from Seattle. How can this be? I think the answer lies in moveable shading and I doubt many of you are ever going to be lucky enough to have a system like this in your greenhouses. So you can either whitewash your houses down to a maximum light level around 2500 ft. candles at 1.00 pm in Summer or put up some shading which you can take down in Fall or some sort of a multi-level shade compromise with one light permanent cloth and another heavier seasonal one. Again you are going to have to make adjustments for your local environment.

A great axiom for growing many orchids is "light without heat" and this probably applies more to Mtps. than most. Just a faint pink tinge in broad leaves tells me that I have happy plants that will flower to their potential. The famous concertina effect will stand as a testimony to as little as a day or two's inattention to watering and humidity and it is a good policy to never really dry your plants out except maybe in the depth of Winter. Certainly in hot spells they should be wet at all times.

Personally, I think a minimum temperature of 54F is best for this genus but if you very occasionally drop to 50F in Winter that should not do much harm providing it is not sustained, night after night. Conversely, in Summer day temps above 85F put a major hurt on these plants and can be ameliorated only by increased shading. If at all possible try to get night temperatures into the 60's in Summer by adding water on the floor close to dusk or running an evaporative cooler if you live where humidity is low enough to let it operate efficiently.

Water and Fertilizer:

Good water is a real blessing in the culture of Mtps. If you have water with 3-500 ppm salts then you are going to really struggle to succeed. I use RO water which has some add back so the final readings are in the 140 ppm range. If you can save rainwater you should.

I have seen excellent Mtps. grown with 9 month Nutricote and equally good plants grown with liquid formulations. Because ancestrally the genus is Equatorial they seem to have growth spurts when the days and nights are close to equal so I feed a little more from mid-February to the end of April and from September 1 through mid-October. Also at that time I feed with slightly higher nitrogen than potassium and then I raise the potassium slightly relative to the nitrogen after mid-October through to mid-February. I always keep the phosphorus low. I never feed at higher than 150 ppm nitrogen (290 ppm total) and when the weather is hottest in Summer I alternate every feeding with just plain water as the growth really slows at this time.

Pests and Diseases:

Mtps. get mealy bug and scale but these should never be a problem in a well-managed greenhouse. Insecticides like Orthene should be used as a prophylactic spray and I find a good wetting spray with a paraffinic oil like Ultra-Fine works wonders once a year in the late Fall. Thrips like the flowers so be on your guard in Spring.

Erwinia bacterial rot can take out growths and if not treated the whole plant may succumb. Usually this peaks in the cooler days of Fall or the changeable weather of early Spring. At this season the addition of a little wetting agent to your fertilizer concentrate will ensure that the developing growths dry out more quickly and minimize the problem. A medium speed circulating fan at night can also help.

As an added precaution against dark weather root problems I apply Subdue as a drench coming into the Winter and in the Spring an application of Cleary's will help keep the leaves and developing flower buds pristine.

Andy Easton

Salinas

October 30, 2008

ODONTOGLOSSUM HELGAE FINALLY REDISCOVERED

By Stig Dalstrom

The first time I laid eyes on this interesting species was in 1984 while visiting my friend Mario Portilla at his work, maintaining the orchid collection at Hostería Uzhupud near Gualaceo in Ecuador. I immediately recognized the orchid as something new to science. The flowers were similar to *Odontoglossum harryanum* Rchb.f., but yet different in some significant ways, primarily in the column structure. I asked Mario if I could buy the plant, but he told me that it did not belong to him but was part of the collection there. He did allow me to take some pictures and also to preserve a few flowers in alcohol, however, so at least I had a specimen to study. Theoretically, I could have described it based on that material but I felt uncomfortable at the time, knowing virtually nothing about its natural habitat etc. Mario apparently found the plant during a trip to the *Cordillera de Cutucú*, a lower mountain range that runs parallel on the eastern side of the main Andean cordillera. This area is controlled and protected by some pretty hostile Shuar tribes, which makes it rather iffy to venture around without the proper permits. Nevertheless, the plant had been collected somewhere near the summit, which would be around 1800 meters elevation.

For quite some time, I thought about this *Odontoglossum* species while working with the genus, gathering material and information for a future scientific treatment. It felt dissatisfying somehow, not having seen this species in the wild, and not knowing much about it other than what Mario had told me. Finally, I decided to make a second attempt to buy Mario's plant, no matter what. I had an opportunity to visit Hosteria Uzhpud again a couple of years later. Mario was still working there so I asked him about the *Odontoglossum* plant he had showed me a while ago. He told me that the plant had disappeared and that he knew nothing about its present whereabouts. What a disappointment!

In 1997, Königer described *Odontoglossum helgae*, based on a plant supposedly collected in the Pichincha region, on the western slopes of the Ecuadorean Andes, and named after his wife, Helga, who had found the plant. I immediately recognized the species as being the same as Mario's lost plant. Whether it was the same plant or not is impossible to say but it certainly was the same species, and the probability that two plants of this previously unseen orchid would appear on either side of the Andes in Ecuador is not very likely. I simply assume that we are dealing with the same plant here, and that the labels were lost or switched in cultivation somehow, which is not unheard of. In any case, we now had a name for this pretty species. Unfortunately, it seemed that only one plant existed in cultivation and knowing that odontoglossums are notoriously self-sterile, it did not look promising that plants eventually would become available in cultivation. This was the last scrap of information about this species for years to come.

In October of 2009, I had the opportunity to visit an orchid rich area in northern Peru together with some *Odontoglossum* loving friends. One day we passed through the town of El Progreso, famous for being the place of the sale of what later became the type specimen of *Phragmipedium kovachii*. This area is incredibly rich in orchids and also amazingly undisturbed. When you stand on the road and view the impossibly rugged mountains and rivers, it's easy to understand why. You simply cannot make it out there without a seriously well-planned effort, accompanied by good and reliable guides. Fortunately, people in the area have developed small businesses of selling locally collected plants to both tourists and domestic plant nurseries. Plants then often end up in other nurseries, sometimes in different countries, and sold as coming from that country. This makes the collecting information that accompanies these plants notoriously unreliable. If you happen to find interesting plants at the local "nurseries" along the road here in northern Peru, however, you can most likely trust that they come from that area. That is how I encountered a flowering plant of *Odontoglossum helgae* for the second time in my life. Once again, I immediately recognized it because of its erect and straight column that points at you like an accusing finger. It cannot be confused with anything else. For some time, Ecuagenera in Ecuador has sold orchids under this name, but these plants represent a different and undescribed species (that I am in the process of describing). The main difference can be found in the shape of the column, which is straight and evenly clavate (club-shaped) in *Odm. helgae* versus having a definite hump, or angle, beneath the stigmatic surface for the other species.

While discussing the plant with the Peruvian seller, he told us where he had found it and that he might have a few more plants at a different nursery. At first he was reluctant to leave his house to go and check, but he eventually sent his wife. The following day we returned and were excited to see a second plant with shriveling flowers. The two plants were secured and turned over to others for cultivation. Within a year or two, the first seedlings should be available for *Odontoglossum* lovers all over the world.

Considering the habitat of this species, at least as far as we can trust the Peruvian collector, it is quite possible that the original plant was purchased from this area and introduced to cultivation in Ecuador. It is also quite possible that the first plant really was collected in the Cutucú mountains since the distance to the Peruvian site is not that great, and the habitat as well as the altitude seem very similar.

The Odontoglossum Alliance Meets at the Houston Show

On April 24th 2009 the Odontoglossum Alliance met at the Hilton Houston North Hotel in conjunction with the Spring AOS Members Meeting. Hosted by the Houston Orchid Society, an impressive showing of orchids was displayed in the hotel's atrium area. The show's theme was "Orchids, Texas Style."

A small but congenial group of Odontoglossum fanciers met at noon for a Texas-style lunch (both in size and spice). Odont Alliance members and guests were represented from California, Oklahoma, Texas, North Carolina, Indiana, Hawaii and Canada.

Following the meal, Bob Burkey presented a talk entitled "Odontoglossum Culture in Hawaii." Based upon his twenty years of experience in growing Odontoglossums and their intergenerics on the Big Island, Bob presented some observations supporting his contention that the cool-growing species might have greater warmth tolerance (opposed to being warm growing) than is generally acknowledged. Bob's thesis was that too often Odontoglossums are "grown by the book," thus widely perceived, and treated, as intolerant of conditions outside 40 to 75 degree F. Low-light assumptions are also typed to their culture. However, Bob cited evidence to the contrary gleaned from experience at his nurseries on the Big Island, where both temperature and light levels often exceed the prescribed upper limits. Given that the cultural requirements as cited in the literature are largely extrapolated from conditions in Bogotá, Colombia, the mean data are averages that fail to capture spikes in temperatures and light levels. Intensity and duration of light exposure are also factors not figured in most calculations for optimum growth in the Northern Hemisphere. Since Odont species grow naturally near the equator, it is clear that day/night light levels found there will be at tremendous variance with those found in northerly latitudes traditionally considered ideal for Odontoglossum culture in North America and Europe. Species variation, adaptation, and acclimatization were other factors accounting for greater than expected warmth and light tolerance in Hawaiian-grown odonts.

A short slide presentation was given at the conclusion of the talk showing examples of cool-growing Odontoglossums flowering in relative warm conditions in Hawaii.

General discussion occurred during and following the talk, with focus on what is meant by "ambient temperature" and "ambient light." Russ Vernon and Bob formed a panel to field cultural questions.

The meeting culminated with an auction of plants donated by Odontoglossum Alliance members. Although great deals were had, \$400 was generated for the Alliance and two people joined as new members.

Bob Burkey and Russ Vernon combined efforts to display cut and potted odonts under the name of New Vision Orchids. Oda. Drummer Joe 'Elena' received an AM award, and Oda. Nancy Diamond 'Diamond Vision' received an HCC. The Drummer Joe originally came from Bob Hamilton. Lycaste Shonan Harmony 'Shonan Vision', also in the display, received an HCC.

The Fall AOS Members Meeting will be held in October of this year at the Huntington Gardens in San Marino, California. We hope to see all those members who avoided the heat and humidity of Houston at this upcoming event!

Membership Dues

If your Dues for the Odontoglossum Alliance are due – This is the time. For those of you who have dues for your membership due I have enclosed a separate sheet showing your membership information and the date through which your dues have been paid. For those of you who received this sheet I urge you to promptly send in your renewal payment. I recommend sending in a check which must be in a US bank. If this is not available to you then some kind of money order or as a last resort US dollars.

If you have not received a separate sheet with your newsletter with your name on it – Your dues have been paid beyond the year May 2009. No need to do anything.

I have saved this

Credits

Thanks to the following who have provided photographic material

Patricia Harding supplied the *Miltonia* species pictures and several of the *Miltonioides* now named *Oncidiums*, species pictures.

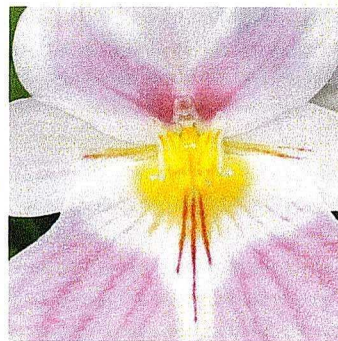
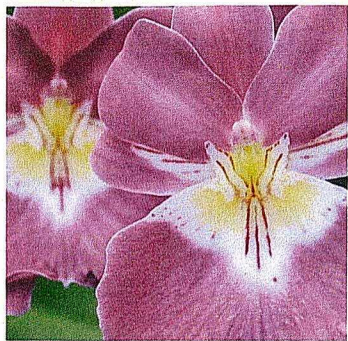
Juan Felipe Posada provided pictures of the *Miltoniopsis*

Steve Beckendorf in addition to his technical advice provided pictures of *Miltoniopsis* and *Oncidiums*

Dr. Guido Deburghgraeve provided pictures of his *Oncidiums*.

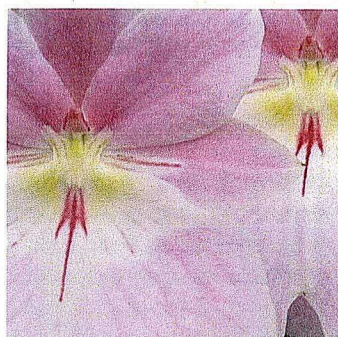
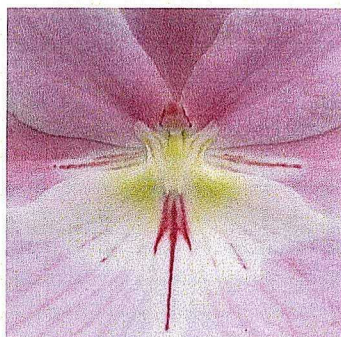
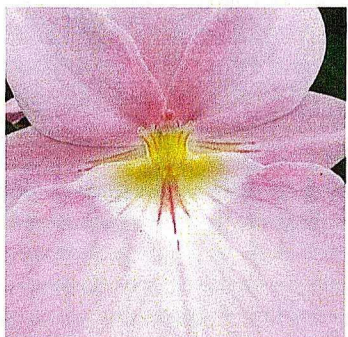
Please note that *Miltonioides* are now named *Oncidiums* even though *Miltonioides* are still carried in the Kew Monocot List.

Note: For space reasons *Miltoniopsis* are labeled **M.**



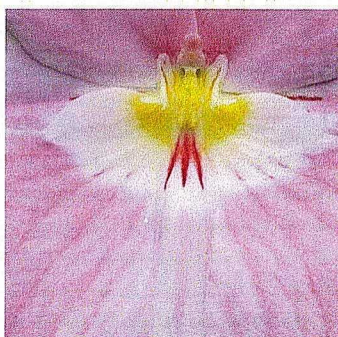
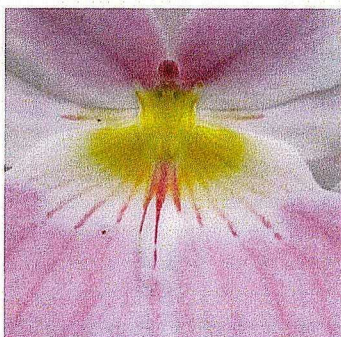
M. bismarkii *M. phaleanopsis*

M. vexillaria



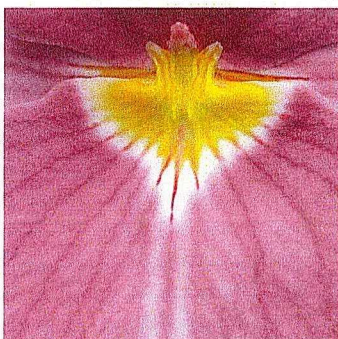
M. vexillaria

M. vexillaria



M. vexillaria

M. vexillaria



M. vexillaria

M. vexillaria



M. phalaenopsis



M. roezlii



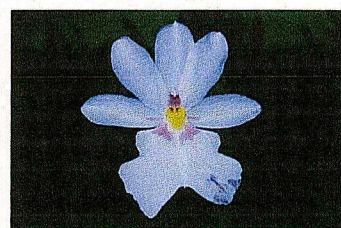
M. roezlii 'alba'



'yellow'



M. roezlii



M. warszewiczii



Milt. clowesii



Milt. cuneata



Milt. flavescens



Milt. regnellii

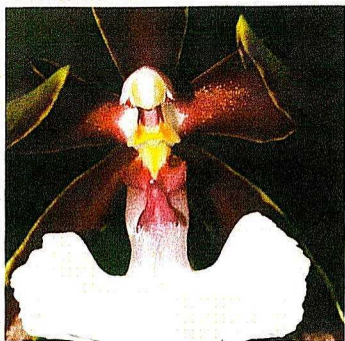


Milt. russelliana

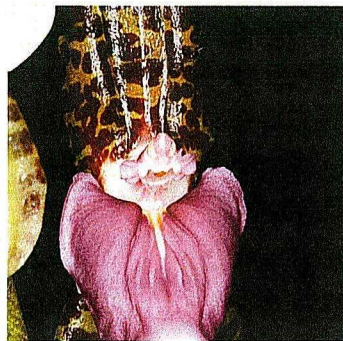


Onc. schroederiana





Onc. carnifera



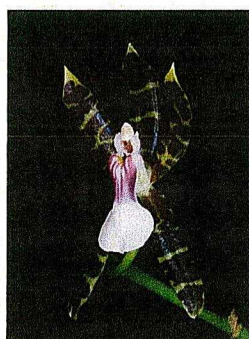
Onc. karwinskii



Onc. karwinskii



Onc. laevis



Onc. laevis



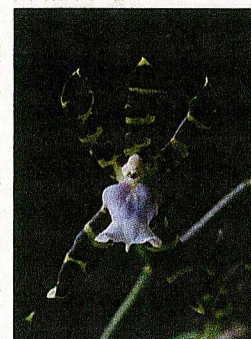
Onc. reicheheimii



Onc. reicheheimii



Onc. reicheheimii



Onc. reicheheimii



Onc. reicheheimii





Odontoglossum helgae



Miltonioides

14 records retrieved

Names in **bold** indicate accepted names, plain list indicates non accepted names.

Miltonioides Brieger & Lückel, Orchidee (Hamburg) 34: 130 (1983).

Miltonioides carinifera (Rchb.f.) Senghas & Lückel, J. Orchideenfr. 4: 75 (1997).

Miltonioides confusa (Garay) Brieger & Lückel, Orchidee (Hamburg) 34: 131 (1983).

Miltonioides karwinskii (Lindl.) Brieger & Lückel, Orchidee (Hamburg) 34: 131 (1983).

Miltonioides laevis (Lindl.) Brieger & Lückel, Orchidee (Hamburg) 34: 131 (1983).

Miltonioides leucomelas (Rchb.f.) Bockemuhl & Senghas, Orchidee (Hamburg) 39(1) cppo: 522 (1988).

Miltonioides leucomelas subsp. **acutum** Bockemuhl & Senghas, Orchidee (Hamburg) 39(1) cppo: 522 (1988).

Miltonioides leucomelas subsp. **leucomelas**.

Miltonioides oviedomotae (Högsater) Senghas, Schlechter Orchideen I/C(33-36): 2283 (1997).

Miltonioides pauciflora (L.O.Williams) Hamer & Garay, Icon. Pl. Trop. 13: t. 1048a (1985).

Miltonioides reichenheimii (Linden & Rchb.f.) Brieger & Lückel, Orchidee (Hamburg) 34: 131 (1983).

Miltonioides schroederiana (O'Brien) Lückel, Orchidee (Hamburg) 37: 55 (1986).

Miltonioides stenoglossa (Schltr.) Brieger & Lückel, Orchidee (Hamburg) 34: 131 (1983).

Miltonioides warszewiczii (Rchb.f.) Brieger & Lückel, Orchidee (Hamburg) 34: 132 (1983).