Odontoglossum Alliance

Odontoglossums Growing Under Lights

Peter Homes

There are three types of 'High Intensity Lights' available: Mercury Vapour, High Pressure Sodium and Metal Halide. The Mercury Vapour produces light mostly at the blue end of the light spectrum. As plants need both red and blue light to grow correctly and bloom, Mercury Vapour lamps are not very suitable. Plants need 'far red' light to initiate the flowering cycle. I once used some so-called plant growth fluorescent tubes over my early collection of orchids and had no flowering until I found out the tubes contained none of the far-red light that was required. High-Pressure Sodium lights have little blue light but do have orange, red and some far-red. Metal Halide lights, however, do have some ultra-violet light, blue, orange, red and far-red in sufficient quantities to make them very suitable for plant growth. They produce a colour somewhat similar to that of sunlight. However, there is some variation between different makes.

There are two types of bulb: clear and coated. The coating reduces the overall light emission and changes the spectrum of light to a warmer colour. It has been suggested that coated bulbs produce better flowering but I have not experienced this. In the past, I have run 1 coated and 1 clear bulb in the same room. There was a greater effect from the coated bulb at one end of the room than the other, but the flowers were no better. It seems to me that flower count and quality will only come from plants that have been grown vigorously for at least a year, and the clear light with its greater output and good

quantity of the far-red light required by the plants does the job. I have been able to bloom awarded plants with flowers at least as good as when awarded and sometimes larger and -alas -sometimes smaller..!

Metal Halides come in 400 watt and 1000 watt sizes. A 400W will cover a 4ft x 4ft area and a 1000W will cover 10ft x 10ft or a little bit more, emitting sufficient light to bloom most orchids. The light from these bulbs is emitted sideways, less light is radiated downwards from the end of the bulb. This is OK as plants can be as close as 18 inches from the bottom of the bulb. It is possible to mount the bulb horizontally and to fit a reflector above it to direct most of the light straight down if this is desired. However, if you are growing in an enclosed area, say a room in the basement of about 10ft square and coat the walls and ceiling with white paint, the bulb should be mounted vertically. The walls will act as a reflector and a large amount of light will bounce back onto the plants from the walls. I use a material called FOYLON which is silver-coated cotton material used. I believe, in survival blankets. This is stapled all over the walls above bench height and on the ceiling.

In a 10ft x 10ft room the bulb should be mounted in the centre of the ceiling, preferably above head height, for safety reasons. My present room is about 16ft x 15ft and I use two 1000W clear Metal Halide lights mounted 2 feet on either side of the centre of the room. A better shape for the room would be 20ft x 10ft but that would mean rebuilding the house..!

Metal Halide lights give off heat and so do ballasts that increase the voltage (in Canada) from 110v to 400v to power the lights. I have the ballasts mounted outside the room to cut down on heat as mostly I grow cool orchids. No heating of any other kind is required in the room. I adjust ventilation to suit depending on the time of year.

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Even in cold weather I can admit fresh air into the room. In the summer I change the air completely at least 6 times and hour.

Because the lights can be mounted up and out of the way, there is room for the long spikes of odontoglossums and especially some of the intergenerics to extend. I do still have trouble with the likes of Onc. macranthum and leucochilum which invariably fry the end of their spikes near the bulbs if I don't train them out of danger. Apart from the odontoglossums, I have brassias, zygopetalums, masdevallias and one or two plants of dubious ancestry that have not identified themselves as yet, about 1200 plants in all including seedlings.

The plants are all potted in a Rockwool mix. Rockwool comes in two forms: absorbent and non-absorbent. I use 2 parts absorbent and 1 part non-absorbent and 2 parts large perlite. This mix is inert so I use a liquid fertilizer made by Dynagrow, their 7-7-7 formula which supplies all the usual trace elements plus sulphur, magnesium and calcium. Any good hydroponic fertilizer would contain these three elements. I feed at an E.C. reading of 600 microSeimens and adjust the PH to 6.5. This is fed to the plants once a week and the pots are flushed out once a month. I feel that with the high light level it is necessary to feed consistently to achieve optimum growth. I am thinking of increasing the feeding level to 800 micoSeimens next year. I use a day length of 16 hours in the summer dropping to 14 hours in the winter so the plants are growing throughout the year with no short winter days. I have had excellent results with 12 hours in the winter. Once, I did try a batch of seedlings on 18 hour days under fluorescent lights but they did not seem to do very well, 16 hours appears to be better for them.

The only real problem in the summer is heat, so I use 7 fans: 1 blowing air in from the outside at floor level, 2 drawing air out at ceiling height, 2 on the floor pointing upwards and blowing cool air over the plants and 2 small fans circulating the air. Even at an air temperature of 85F degrees, the leaves feel cool as there is no radiant heat from the sun as would be the case in a greenhouse. There are 2 ultrasonic humidifiers which are running in the summer to maintain a

humidity of 70% during the day and 90% or more at night. This is contrary to what is written in many books where it is often suggested to lower the humidity at night. This is not what happens in nature and I have not had any problems with 90% or more as the humidity is in the air and not on the plants and the constant air flow keeps the leaves dry.

The benches in my room are of various heights but average 40 inches above floor level. Slightly lower would be better as this would allow for another level of plants at the back of each bench where I tier the plants on shelves of inverted pots for increasing the height at the back. This allows for better light coverage. I find inverted pots excellent for the job as the height and position of the plants can be adjusted by standing them on pots of different sizes.

The bottoms of the 2 lights are 76 inches above the floor, determined by the ceiling height as the lamp sockets are mounted on the ceiling. The plants directly below the lights have the tops of their leaves 18 inches from the bulbs. These measurement are what I use dictated partly by the shape of the room and the size of my plants. If a plant directly below a bulb is in spike it is promptly moved further from the light otherwise the spike would likely hit the bulb and fry. The plants are standing on wire mesh over plastic flats which have holes in them at strategic intervals to allow excess water to drain into gutter under the benches and then through plastic hoses to the outside. This works well until very cold weather when the pipe freezes up..! Watering is done by a submersible pimp in a garbage can made of unsplittable (I hope!) plastic. The room is divided into 6 parts marked by surveyor's tape. 1 part gets water every day and on the seventh day I rest! This has the effect of keeping some humidity in the room from the freshly watered area without making the whole place too damp which would certainly be the case if all the plants would be watered at once. I water in the pots, never overhead on the plants as I feel this invites rotted growths.

The Rockwool mix must never be allowed to dry out as it is hard to re-wet. However, with the perlite in the mix it does seem to contain a lot of

water yet is much more open than without it. The previous mix I used contained no perlite and compacted after about a year and a half causing some root loss. If any plant blooms with smaller than expected flowers it may well cause smaller but perhaps brighter-coloured blooms. Veitch in his book "Manual of Orchidaceous Plants' states that odontoglossums collected from the wild that had been growing in full sun or very bright light had smaller blooms very frequently. Conversely those from deep shade would not flower well if at all. With any artificial light system it is possible to reduce the amount of light available to the plants by reducing the day length or, of course, by moving the plants further away from the light source.

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There are many advantages to growing in what is essentially a controlled environment. The amount of light, temperature range, humidity, amount and frequency of feeding can all be adjusted to best suit the types of plants you are growing. It is also helpful to grow plants with similar requirements.

There are some problems with my present setup. I would prefer 75 degrees as a maximum in the summer but have to take what I get. The plants don't seem to mind the few weeks of 85 degrees. Also, I could do with more room. I use a trolley holding about 50 plants that fits in the one gap between benches. It pushes out of the way under a bench for access to the plants so I use as much floor area as possible. The plants are touching each other and I must be careful about pests. But overall, the plants are safe and I don't need to worry about power cuts in the middle of the night during a winter storm!

I have been fortunate to gain 6 AOS flower quality awards (**) so far, numerous trophies for best odontoglossum alliance at shows and several awards for display quality all on plants which never see any daylight. Most of them were raised by me either flask or small seedling size. Metal Halide lights do cost more than fluorescent lights initially but they are much more efficient overall. They do not alter the colour of the flowers and can be mounted out of the way. I believe that they offer a good alternative to growing orchids without the expense of a

greenhouse.

(**)

Odcdm. Tiger Hambuhren 'Barbara Luise' AM 82 points

Vulys. Hambuhren 'Copper Cliff' AM 80 points Oda. Shelley 'Spring Dress' HCC 79 points Bakerara Whidbey Island 'Barbara Luise' HCC 78 points

Odtna. Yellow Parade 'Copper Cliff' 83 points Odm. pescatorei x Odm. Tontor 'Copper Cliff' 77 points

Peter Holmes 6679 Madrona Crescent West Vancouver B.C. V7W 2J9 Canada

A Partial History of Odontoglossums in Great Britain (Part 1)

Brian Ritterhausen

Odontoglossums belong to the enormous sub tribe Oncidinnae whose main genera also include Oncidium, Miltonia and Cochlioda. The genus Odontoglossum consists of about one hundred known species. These are distributed throughout South America at altitudes of between 1,500 and 2,750 meters, in cloud forest areas close to the equator in Columbia, Ecuador and Peru. In these tropical regions there is little difference between summer and winter months as we know them. The climate can be considered idyllic, with almost permanent spring all year round. Some species also occur further north, crossing the Panama isthmus into Guatemala and as far as northern Mexico, always growing at high altitudes, very seldom to be found in the tropical lowlands.

The first odontoglossum was discovered by

Humboldt and Bonpland. Friedrich Heinrich Alexander Baron von Humboldt was born in Germany in 1769, and before his death in 1859 he had successfully explored enormous areas of South America. In his lifetime he was to discover so much of the unknown world that he had over 2,000 rivers, mountains, plants, animals, ocean currents, and even a crater on the moon named after him. In 1799 Humboldt teamed up with the Frenchman, Aime Bonpland, together they travelled to Venezuela on a trip of exploration and discovery. Although they spent only five years on the South American mainland they covered a very large area. Upon their return to Europe they brought with them over 60,000 specimens of which no less than 3,000 were new plants unknown to science. Humboldt and Bonpland were original gentlemen collectors who, according to records, wherever they went with their team of Indian guides were always immaculately dressed. Working through the jungles of South America, they made their way up through the valleys to the foothills of the Andes in Northern Peru. Here amongst the many plants they discovered was the type odontoglossum. A specimen of O. epidendroides was brought back to Europe and described in 1815 in their work Nova Genera et Specie Plantarum. The name Odontoglossum referred to the shape of the lip with the two tooth like protuberances at the centre and epidendroides simply means "upon a tree", so they aptly named this new orchid "The plant with the toothed tongue that grew upon a tree".

From that time onwards many orchids were arriving in England, sent by various collectors for the botanists and taxonomists of the time to classify and name. They were at first in the form of dried herbarium specimens and it was not until 1835 that the first odontoglossum successfully bloomed in England in the collection of Lord Rolle at Bieton in South Devon. The great Palm House at Bieton was built in 1820. It still stands today and is the oldest palm house in existence in the world. This species, named after the estate, was odontoglossum bictoniense. It is still of importance today and is worth having in any collection, being cool growing and easy to

cultivate. O. bictoniense was discovered by Mr. George Ure-Skinner in Guatemala who sent the first plants to Mr. James Bateman in England who in turn passed some on to Lord Rolle. The following extract is taken from Bateman's Monograph of Odontoglossums.

"...Odontoglossum bictoniense so called after Lady Rolle of Bieton in Devonshire was the earliest species of this popular genus that ever reached England alive. It also formed a portion of the first box of orchids that I ever received from Guatemala, whence they were sent to me in 1835 by my invaluable friend George Ure-Skinner, now 1867 alas! most suddenly and unexpectedly - numbered with the dead! This is not the place for a memoir of that generous and enthusiastic spirit - let it suffice to state the Mr. Skinner was on his way to Guatemala for a final visit when he was attacked by yellow fever early in February last on the Isthmus of Panama and carried off after three days illness! He was collecting plants on the Saturday before his death, and on the Wednesday he was a corpse! He was in his 63rd year and had he been permitted to return to England, would have crossed the Atlantic exactly forty times!" A further quote from Bateman's "The Orchidaceae of Mexico and Guatemala States"...Mr. Skinner poured into our stoves (greenhouses) the richest of treasures of the Barrancas of Guatemala..." Another closely related species discovered at the same time in Guatemala and first flowered in this country in 1858 was Odontoglossum uro-skinneri named after Mr. Ure-Skinner.

Odontoglossum pulchellum, the names means "pretty" was first introduced from Guatemala in 1841. It is a strange species from which little hybridization has been done but today still readily available, and cultivated by most amateurs. In recent years the botanists have considered it more likely to belong to a new genus Osmoglossum. One of the most northerly of the Mexican species is Odontoglossum rossi. It was plentiful in earlier years with many named varieties showing strong color variations. Probably the best known variety is O. rossi var. majus which is unavailable today in its true form. This species was originally discovered in 1837 by an early explorer, John

Ross who was on a collecting trip for Mr. Baker of Birmingham.

Probably the largest and most spectacular of all the odontoglossums is the strange O. grande from Guatemala, first found in the valleys quite close to Guatemala City. There are several closely related species with which it will hybridize but it has always failed completely to cross breed with other plants of the genus. It is not surprising to learn therefore that in 1976 it was reclassified with other plants with which it closely related into a new genus, Rossioglossum. The plant was discovered by Ure-Skinner in 1839 and was first flowered by the Duke of Bedford at Woburn Abbey in 1841. Odontoglossum cirrhosum, "a lock of curled hair" was first collected in Ecuador in 1833. although flowering plants were not established in Great Britain until 1875, after which it was available in large quantities. Today it is a highly sought after and rare species, anyone who can obtain a good variety of this Odontoglossum is very lucky!

Also from Ecuador comes Odontoglossum hallii first collected by Col. Hall, who sent home herbarium specimens in 1837. The firms of Stuart Low and Veitchs successfully bloomed plants from 1864 onwards. Today it is fairly rare.

Odontoglossum harryanum, described is 1886 by Professor Reichenbach and named after Harry Veitch was a species that was to prove very important to orchid hybridizers. It is extremely variable and can be raised fairly easily from seed, making it occasionally obtainable today. Odontoglossum luteo-purpureum is widely distributed throughout the Andes and was first discovered in 1842 in New Grenada by a botanist called Linden. It is interesting to note that luteo-purpureum means "yellow with purple". The first flowers to arrive in England were pressed herbarium specimens as stated earlier, these flowers will often develop a purple pigmentation giving a false impression of the original colour. When we see blooms of a living flower it is dark chestnut brown with yellow markings. Due to its wide geographical distribution and its habit of interbreeding with

others of the same species with which it may be growing it is highly variable. It can be found today and could be an important parent for the future.

Without question the most famous of all the Odontoglossum species is O. crispum. This was first discovered in 1841 by Carl Hartwig. He found plants growing near Bogata and successfully shipped home a number of live specimens. Unfortunately owing to the belief that persisted in those days that all plants from South America required tremendous heat, these first specimens quickly died. It was not until 1863 when the cultural requirements of these orchids were more fully understood that the Royal Horticultural Society and Low and Co. were successfully importing large quantities. Owing to the extreme variability of the species anything from pure white flowers to heavily spotted varieties led to it being classified under several names. One of the most famous occasions being when Lindley described it as a new species under the name of Odontoglossum alexandrae after the Princess of Wales, only to discover later that it was a variety of O. crispum. cultivation of odontoglossums in the British Isles is naturally linked with all other greenhouse plants as well as orchids. The early gardeners insisted that all tropical plants from the hot steamy jungles where the light was poor and the humidity extremely high should be grown in what they called a Stove House. The green houses were constructed against a brick wall which consisted of a hollow flue and the furnaces beneath were kept stoked day and night producing tremendous heat. This combined with constant damping down and heavy shading meant that hardly any of the cool growing orchids could survive. The few that flowered under such conditions were accredited to the great skill of the grower.

One of the first men to realize that these orchids were high altitude, cool growing plants was Joseph Paxton, head gardener to the Duke of Devonshire, who turned off the heat and threw open the windows of his Odontoglossum house, with the result that the plants started to grow, make roots and flourish. Now, for the first time a

proper understanding of orchids and their requirements were beginning to develop. In 1833 Paxton built a huge conservatory 90 x 20 meters, over an acre under glass. He sent John Gibson, the first true orchid collector, to Assam and elsewhere. Gibson returned with full information regarding the altitude, the locality, the rainfall, and much more data that was useful to ensure successful cultivation of the orchids he collected. Within a short time orchid fever had gripped Europe and nowhere more so than on the big private estates of England. No garden was complete without its orchid collection as growers and collectors vied with each other to pay the highest prices for the best and latest species available. Collectors were dispatched all over the world to bring home what treasures they could find and the cool growing odontoglossums, particularly those from the Andes, received the greatest amount of attention. The plants were gathered in their thousands, dried out, packed into boxes and started on their long arduous journey on the backs of mules across the mountain ridges. They were taken down into the hot tropical valleys to the nearest river point to be loaded on to barges, from where they had to endure the equally long and sweltering journey to the sea ports. At this stage, they were loaded on to the ships, either packed in the holds to become food for rats and cockroaches, or placed on the open deck to endure regular doses of salt spray. It is no great wonder that few of these plants reached our shores alive. Nevertheless, the demand for more and more plants accentuated until fierce competition between collectors caused them to move into areas of forest and systematically chop down every tree striping every orchid from its branches. To ensure success over their rival, they arranged for the natives to bring all plants that could be found to collecting points. Here they were sorted and any unwanted orchids considered not up to standard, or plants other than those the collector was interested in, were piled up and burnt to prevent the opposition, who may follow, from obtaining any scraps of what was left. Very few odontoglossums grew near the ground, most were to be found on the trunks or higher

branches of the evergreen oak and walnut trees which grew profusely in the valleys of the higher Andes.

Throughout thousands of years different varieties of each Odontoglossum species had evolved in each Andean valley. The steep terrain and sheer sided valleys meant that cross pollination was unlikely between different colonies. The early explorers first described how spotted varieties of Odontoglossum crispum grew in one valley while the white varieties were to be found in another. Sanders Orchid Guide listed sixty seven named varieties of O. crispum, yet today not one is to be found in any nursery catalogue. By the end of the century there were hardly any left, the forests had been felled and the plants stripped from the fallen trees. It was the end of an extraordinary era, where orchids were auctioned daily by among others, Prothero and Morris at Cheapside, London. The choicest varieties fetched many hundreds of guineas while the vast majority were sold for a few shillings. The majority of these would struggle to grow for a few years, while many were to perish through lack of proper understanding.

Today, the situation is different, but now it is not the collecting by enthusiastic growers which is threatening these plants but the total destruction of their habitat caused, it would appear, by over populated communities striving to increase their meager agricultural production. Those wild plants which still remain are strictly controlled by new international laws on endangered species, which endeavors to protect both the flora and fauna. We can only hope this act will be successful to enable all endangered species to survive yet another catastrophic encroachment by man upon their wild habitats.

Brian Ritterhausen Burnham Nurseries Ltd. Kingsteignton Newton, Abbot, Devon

Note: This article, 1 of 3 parts has appeared in the Orchid Review and is re-printed here with the permission of the author. Parts 2 and 3 will be in future newsletters. Editor

"A Monograph of Odontoglossums"

by James Bateman

Maunder, New Zealand. The planning for the meeting is underway and details of the program will be announced in the November newsletter.

Sold

"A Monograph of Odontoglossums" by James Bateman, London was offered at a Christies auction in New York on 9 June 1992. This is the large folio printed in the period of 1864-1874. The description in the catalog was as follows: "Large folio, 513 x 363 mm. (20 3/16 x 14 3/8 in), modern half green morocco, gilt-lettered morocco title label on upper cover, spline gilt, upper cover bowed, plates 4 and 5, very minor marginal dampstaining just touching image of plate 5, very slight trace of dampstaining to upper margins of four other plates, the rest very fine, 1/2-inch tear to half title, two marginal repairs to text leaf for plate 30. 30 hand-colored lithographed plates by Walter Hood Fitch, wood-engraved text illustrations. Estimated at \$7000-\$10,000.

This sold for \$4455 after the sale. There were two other Bateman orchid books offered for sale. In addition to this material there were other orchid works by Sir William Hooker, Messrs. Linden, Lindley, Miner, Paxton, Sander, Warner, and Williams, King and Pantling, and Fitsgerald.

14th WOC

Odontoglossum Alliance meeting at the 14th World Orchid Congress

The 1993 meeting of the Odontoglossum Alliance will be held at the 14th World Congress 2:00-5:30pm Thursday 29 April 1993. The organizing committee is John Hainesworth, Cheshire, England, John Miller, Westport Point, MA US, Dr. Cedric Maunder, England, and Ron.

Odontoglossum Hybrids seen in the San Francisco Bay Area this spring. Bruce Cobbledick

There were not many odontoglossum plants awarded this year in the San Francisco area. Several hybrids that have been bred locally are becoming flowering size, and seen in the shows and at meetings as first flowering seedlings. As the best of these hybrids mature I'm sure we will have several awards.

A beautiful brightly colored and well formed flower sample of (Oda. Buckman 'Premier' x Oda. Joe Marshall 'Syon') was shown by Tim Brydon. The sibling Oda. Florence Stirling hybrids are flowering, and several seem to be an improvement over either parent. Several first flowering seedlings of a new hybrid of (Oda. Saint Clement x Oda. Aviemore) were flowering on small plants and show great promise. This cross was made by Tim Brydon.

Albino (xanthotic) Odont's were seen in greater quantities than previously. Golden Gate Orchids had a large group of Oda. George McMahon (Odm. Parade x Oda, Golden Rialto) in the Pacific Orchid Exposition. Their bright colors always standout. Strawberry Hill Orchids had a fine Odm. Lemonade (Parade x Talkeetna) in their display. Two plants of Oda. La Hogue Bie (Odm. Panise x Oda. Eric Young) were seen in collections. They have large size, good form and excellent color.

The popularity of the species plants seems to be increasing. Bob Hamilton had a beautiful Odm. edwardii with a huge branched spike and 100+ flowers. Several plants of Odm. cirrhosum were seen, the flowers and spikes seem to get larger in

cultivation. Some plants of Odm. speciossum, formerly called Odm. triumphans, of the Mansell & Hatcher sibling cross, were seen. Several fine Odont intergenerics that were seen include the following: Odcdm. Tiger Barb (Odm. maculatum x Odcdm. Tiger Hambuhren) with the distinctive spotting from Odm. maculatum showing. A fine yellow plant of (Odm Herb Thoreson x Odcdm. Tiger Hambuhren). An interesting cross of Odcdm. Norm Berwick (Odcdm. Tiger Butter x Onc. leucochilum) a dark cordovan flower with a pale yellow lip, on a tall branched spray. Golden Gate Orchids is starting to flower an exciting hybrid of (Vuyl. Memoria Mary Kavanaugh x Oda. Saint Clement). The Vuyls. Memoria Mary Kavanaugh is (Miltonia spectabilis 'Royalty' (4n) x Oda. Elpheon). The new hybrid has richly colored, well formed flowers well spaced on tall sprays. This is an overview, and I apologize for other fine and exciting plants that I have not mentioned.

Unicorn Orchids 144 Station Avenue Daly City, CA 94014

Hybridizer's Notes

Howard Leibman

I am providing a short commentary on some of the newer odontoglossum alliance hybrids that I have seen in bloom in Southern California this year. I addition, I would like to use this opportunity to comment on some of my own hybrids which have bloomed this year. Andy Easton, of New Zealand, continues to surprise me with his hybridizing in the odontoglossum alliance. Several years ago I received from him several plants of Vuylstekeara Lutetia hybrids made with Odontiodas. Vuyl. Lutetia x Oda Janis Andrews produced large,

very round, mahogany marked flowers on an upright spray. Vuyl. Lutetia x Oda. Anne Bolyne was a 10 cm. red flower on a rose background, quite spectacular. In fact, I recently purchased two more plants of the latter cross. However, last week I was visiting Cal Orchids in Santa Barbara and saw another Easton creation which was both unusual and desirable. It was a cross of Bllra. Diana Dunn x (Onc. Macranthum x Chrysodipterum). The result was a Beallara-star shaped, 7 cm flower with a purple flush and heavy purple spots on the center of the sepals and petals. The flower lip and inflorescence were dominated by the cyrtochilum pollen parent. It was fascinating to see the exceptional quality of this oncidium cyrtochilum section hybrid. I, of course, immediately purchased several seedlings of the cross. I have for the last 22 years been attempting to create a new generation of Odontonia and Vuylstekearas with contemporary miltonopsis. I have had only occasional success, but they have been wonderful crosses such as Odtna. Susan Bogdanow and Odtna. Maxine Jochelson. However, during the last five years I have succeeded in producing over 35 new miltonopsis intergenerics. The best have been spectacular. Vuyl. Scott Binder is a cross of Oda. Harrod's Forever by Milt. Leo Holguin 'Midnight Giant'. This cross has produced 10 cm miltonia-dominated flowers with flower colors that vary from royal purple markings on a lavender background to solid royal purple. The shape is very much in the style of Odtna. Susan Bogdanow, but the color and pattern are strikingly different. We have already begun to mericlone two cultivars. Vuyl. David Leibman (Milt. vexillara 'D.J. Torrence' AM x Oda. Stromar 'Maxine') is quite different. In this cross the tetraploid Oda dominated the diploid miltonias producing an odontoglossum shaped flower similar to Vuyl. Yokara 'Perfection'. The flowers are heavily patterned light red over a lavender or pink background. The first to bloom have already produced seed pods when crossed back to miltonias. It is worth noting the Miltonia vexillara 'D.J. Torrence' readily produces seed

with odont pollen and for this reason the plant has become desirable as a parent.

A final comment is reserved for an interesting cross made with the lovely Odtna. Bragelonne 'Plush'. This miltonopsis hybrid has Odm. edwardii as the only odont in its background and produces tall branched sprays of violet purple flowers. Keith Andrew tried for many years to hybridize with this plant unsuccessfully. I have discovered that Braeglonne will readily accept Miltonia pollen. The first to bloom is Odtna. Amethyste Gem (Odtna. Bragelonne x Milt. Mem Ida Seigel). The flowers were small (5 cm), flat and star shaped with an intense violet color and a large white lip with a dark purple mask. The Odm edwardii inflorescence remains dominant. I now look forward to see the Odtna. Bragelonne hybrids that have been made with the larger tetraploid and triploid miltonias. These should be something unique.

Howard Leibman, MD 165 Gretna Green Way Los Angles, CA 90049

Odontoglossum Alliance Specie Description

Leonore Bockemuhl

Ada Lindl, 1853

This genus was described by LINDLEY in 1853 in Fol. Orch. and for a long time was thought to be monotypic. The type-plant, collected by SCHLIM 1851 near Pamplona (Columbia) at an elevation of 2,600 meters, was forwarded to Mr. LINDLEY, who described it and named it *Ada aurantiaca*, Fol.Orch. 1854. The first alive flower was grown in England by Mr. Bateman and was painted for the Botanical Magazine Pl. 5435. In 1891 *Ada lehmannii* Rolfe was added, very similar but somewhat more rigid. In 1972

seven more species were added to the genus by N.H. WILLIAMS, who transferred them from the glumaceous Brassia.

Ada aurantiaca bears brilliant orange-coloured, bellshaped flowers. The inflorescence almost 25 cm long, arching, with about 10 flowers, furnished with sheathing bracts. Sepals narrow-lanceolate, about 35 mm long; petals somewhat shorter; the lip oblong-acuminate 15 mm long with two short, membranaceous keels at base. Column very short, concave below the stigmatic surface. The plant is medium sized, the unfoliate bulbs more or less developed, surrounded by several sheaths, two or three of them foliaceous.

Habitat: Around 2000-2600 meters, Epiphytic and lithophytic at the cloud forest edges. Distribution: Venezuela, Columbia, and Ecuador in the Andean-region.

Two artificially produced hybrid genera: Adaglossum (Ada x Odontoglossum) Adioda (Ada x Cochlioda)



Leonore Bockemuhl Nikolaus-Cusanus-Haus Appt.350 Torlesackerstr. 9 7000 Stuttgart-Birkach

Editors Note: This is the first of a series in the description of the principal species of the Odontoglossum Alliance.

Editors Comments:

This is the second of the re-invigorated newsletter of the Odontoglossum Alliance. Support of the Alliance is growing and membership is increasing. An announcement of the change in secretary from Fred Shull to John Miller will appear in the September AOS Bulletin as well as a quarter page ad announcing the same. Dues for the year June92-May93 have been coming in. This is the last letter you will receive unless you have paid your dues. Enclosed with this newsletter is a form for membership if you have NOT paid your dues. If no form is enclosed then I have received your dues. For those of you who sent your dues in after the 1 May mailing of the first newsletter, I have enclosed a copy. Remember if you have not paid your dues prior to the 1 November newsletter mailing you will not be on the mailing list. The next meeting of the Odontoglossum Alliance will be held at the Eastern Orchid Congress in Boston on Friday 23 October 1992. Details of the program were announced in the May 92 Newsletter.

Known to the editor the following organizations will have a display of Odontoglossum Alliance material and will have sales tables:

The Beall Orchid Company, Dan Harvey Chieri Orchids, Pat Petit Strawberry Creek Orchids, Pat Hill Stonehurst Nurseries, Michael Tibbs

I again remind those of the Alliance that part of our program will be an auction of donated alliance material. Please bring your contribution with you to the meeting or send it to me, John E. Miller, 5 Windward Way, P.O. Box 38, Westport Point, MA 02791. We have already received a copy of 'A Manual of Orchidaceous Plants The Oncidiinae' James Veitch & Sons, 1887, reproduced by the New Zealand Odontoglossum Alliance Group.

I have been investigating the possibility of adding color to our newsletter. This is all now feasible and commencing with the November issue I plan to have at least one page of color, starting with a contributed series of best quality recently displayed alliance material. The newsletter needs contributed articles from members and each reader should consider writing a contribution. Please send with your article a color transparency of the flowers and/or plants described. The color transparencies will be returned. While I will be pleased to receive these contributions, I shall in addition more forcefully solicit such material. Included with this newsletter is a list of known sources for alliance plant material. In the last newsletter I requested those who wish to be listed to get in touch with me. Since I have heard from no one, this is my own list. If you are not included and wish to be in the next listing, get in touch with the editor. Many members have requested this list.

John E. Miller P.O. Box 38 Westport Point, MA 02791

Odontoglossum Alliance Sources of Supply

Stonehurst Nurseries Ardingly, West Sussex RH17 6TN, England

Cal-Orchids 1251 Orchid Drive Ext. Santa Barbara, CA 93111

Chieri Orchids 2913 N. 9th Street Tacoma, WA 98406

Everglade Orchids 1101 Tabit Road Belle Glade, FL 33430 Dugger's Hybrids 762 North Granados Solana Beach, CA 92075 Golden Gate Orchids 225 Velasco Avenue San Francisco, CA 94134

Keith Andrews Orchids Ltd. Plush, Dorchester Dorset, DT2 7RH, England

A&P Orchids Peters Road Swansea, MA 02777

Burnham Nurseries Ltd. Forches Cross Newton Abbot Devon, TQ12 6PZ, England

Strawberry Creek Orchids 4373 Central Avenue McKinleyville, CA 95521

Unicorn Orchids 144 Station Avenue Daly City, CA 94014

Orchids Royale 2360 Foothill Road Santa Barbara, CA 93115

The Beall Orchid Company, Inc. 3400 Academy Drive SE Auburn, WA 98002

Mansell & Hatcher Ltd. Cragg Wood Nurseries Rawdon Leeds, LS19 6LQ England

McBeans Orchids Ltd. Cooksbridge, Lewes Sussex, BN8 4PR, England

Charles Island Gardens P.O. Box 91471 West Vancouver, B.C. Canada V7V 3P2

