

*The New Zealand*  
Internet  
*Orchid Review*

Issue 2

14 December 2007



## TABLE OF CONTENTS

<b>Publication Details and Charges .....</b>	<b>2</b>
<b>Editorial .....</b>	<b>4</b>
<b>This month's cover .....</b>	<b>4</b>
<b>News Item: The Darwin Exhibition .....</b>	<b>5</b>
<b><i>Dendrobium anosmum</i> var. <i>huttonii</i> .....</b>	<b>5</b>
<b>Visit to NZ by Roy Tokunaga .....</b>	<b>7</b>
<b>The Orchid Fair .....</b>	<b>8</b>
<b>The Auckland Orchid Club – Triumph at Ellerslie.....</b>	<b>10</b>
<b>Angraecoid corner .....</b>	<b>12</b>
<b>Orchid Roots .....</b>	<b>13</b>
<b>Can orchid potting mixes be simplified? .....</b>	<b>13</b>
<b>Introducing our writers.....</b>	<b>16</b>
<b>Questions and Answers .....</b>	<b>17</b>
<b><i>Sarcochilus hillii</i>.....</b>	<b>18</b>
<b>Wider worlds – <i>Asplenium caudatum</i> .....</b>	<b>20</b>
<b>Sobralias – a New Passion!.....</b>	<b>21</b>
<b>Society Notices .....</b>	<b>24</b>
<b>Classified Advertisements .....</b>	<b>24</b>
<b>Advertising Section .....</b>	<b>25</b>

### Publication Details and Charges

It is intended to publish the *New Zealand Internet Orchid Review* on a quarterly basis, with publication in March, June, September and December.

The email subscription rate is **zero**. The print subscription rate (including postage) has yet to be determined, as the decision as to whether to provide printed copies depends upon demand. We would like to eventually publish a printed version, but there would need to be sufficient demand to make it practical.

### Deadlines for copy

All written copy for articles must be emailed to the Editors no later than one week before publication date. A reminder will be emailed to all regular contributors two weeks before each deadline. Society notices and classified advertising must be emailed to the Editors no later than one week before publication date. If you are running late, please email the editors ([ncmiller@orcon.net.nz](mailto:ncmiller@orcon.net.nz)). We expect the next issue to go out on 14 March 2008.

Classified advertising (non-commercial growers only) and Society notices will be published free of charge. A reminder notice will go to all subscribers and Society contacts shortly before each publication deadline.

### **Advertising**

If you are interested in advertising in this publication, please email the editors for an information sheet. Our advertising rates are extremely reasonable, being set at \$10 for a page, part pages on a pro-rata basis. Graphics and photos incur no extra charge, provided that you supply them.

### **Classified advertisements, Society notices**

These are published free of charge, maximum of 30 words for a classified ad please.

### **Letters**

Feel free to write letters to the editor. As long as they are not anonymous, obscene, time-wasting or libellous we will publish them!

### **Questions and answer section**

If you have any questions relating to any aspect of the growing of orchids or companion plants, we will solicit replies from our panel of experts. Any responses received will be emailed to the questioner, and the question and answers will be published in the next issue. This way you can receive a prompt response to your question but other readers can subsequently benefit as well.

### **Spread the word**

If you have any friends who grow orchids or 'companion plants', let them know of this publication. All they have to do to subscribe is to send an email. If they haven't joined the computer age and/or would be interested in subscribing to a print version, ask them to contact the editors by mail or telephone or else send an email on their behalf. So far only a handful of requests for a printed version have been received.

### **Please write for us**

All submissions are welcome – long or short. If you're not too fluent with the written word, we are happy to edit your copy. Without writers there will be no magazine.

### **We welcome feedback**

We would like to hear your reactions to this new magazine. Comments and suggestions on content, appearance, format etc. will all be taken aboard. At this stage we have held the format to that of a simple word processing document, and have eschewed columns and other elaborate devices. Is the file size too large for those on dial-up internet access? What do you think? All feedback will receive a reply!

### **That address again**

ncmiller@orcon.net.nz

## Editorial

Welcome to the second issue of our email orchid magazine, *The New Zealand Internet Orchid Review*. Since the demise of *Orchids in New Zealand*, it has been apparent that the lack of a regular, nationwide periodical has been harming the hobby and frustrating keen orchid hobbyists. This publication aims to fill the void by coming out every three months. We hope that it will assist in reviving a delightful and rewarding hobby, together with the small-scale enterprises that cater to its enthusiasts' needs. We have some commercial advertisers – please help to ensure their future existence and the welfare of the hobby by purchasing plants or supplies from them.

We have had an enthusiastic response to our first issue. Our distribution list now includes about 180 email addresses – small beginnings but a promising start. We have more authors coming aboard as well. If you, our readers, would like to contribute copy, we will be happy to receive it. Most enthusiasts in any field of endeavour have something interesting, and useful, to say! Please note that due to the distribution method of this publication, and the fact that it is distributed for no charge, the editors are less severe in their editing that might be the case with a more 'formal' printed publication. We endeavour to retain the original style and phrasing of our writers, mostly restraining ourselves to matters of spelling and formatting.

Just two hours before this issue went out, a copy of the Masdevallia and Disa Group Newsletter arrived in our mailbox. It is very pleasing to see the re-emergence of this publication after a long silence. Thanks to Ray Albiston of Hamilton for taking up the challenge. Contact details for this group are shown in the Society Notices section of this issue.

We wish all of our readers a happy Christmas and a peaceful and prosperous New Year.

Nick and Elizabeth Miller.

.

### This month's cover

The cover photograph is of *Dendrobium anosmum* var. *huttonii*. An article on this plant is in this issue. *Grown and photographed by Mike Davison.*

## Grower credits

The growers of *Dendrobium aurantiroseum*, shown on the front cover of Issue 1, were Paddy and Girli Fox of New Plymouth.

The grower and breeder of *Ascocenda* Mem. Kay Killington 'Sandra' was Burnie Killington, of Napier.

## News Item: The Darwin Exhibition

The Darwin Exhibition at the Auckland War Memorial Museum has a large section on orchids. When Darwin studied orchids they helped him with his theory on evolution. The display has orchids as well as information about their history and evolution. The museum website has more information about this interesting exhibition. <http://www.aucklandmuseum.com/>

My husband Jack, who is a palaeontologist said that there was quite a big display of orchids, some of them 2 metres high. He also said that there was considerable information about the geological history of orchids that goes far back into early geological history of the earth and would be very interesting to orchid people. He said a must-see for growers with a wide interest in orchids.

Diana Grant-Mackie ([grant-mackie@xtra.co.nz](mailto:grant-mackie@xtra.co.nz))

(*This exhibition is well worth viewing.* Ed.)

## *Dendrobium anosmum* var. *huttonii*

Mike Davison ([davison@paradise.net.nz](mailto:davison@paradise.net.nz))

*Dendrobium anosmum* is indigenous throughout most of S.E. Asia. It flowers at the end of winter following a period of relatively drier and brighter weather. The normal variety has clusters of mauve/purple scented flowers, but there are other varieties including an alba form. There is also a variety named after a Mr. Hutton, who first collected the variety in the Malayan Archipelago in 1869.



The flowers of this variety are pure white in colour. The lip is basically white but has a large deep purple patch on the inside of both side lobes of the lip. The staminode is dark purple.

I acquired a plant some 10 years ago; at that time it was a single cane about 120 mm long. I mounted it on a piece of punga, and for several years it grew a

new cane each year, slowly getting longer but showing no sign of flowering.

After having moved to Peka Peka 6 years ago, and generally ignoring orchids for 3 or 4 years, this plant continued to exist, i.e. it didn't die. However with more time, and renewed interest, conditions on the orchid front improved. With more frequent watering, and more heat, the plant has started to grow strongly and to flower. This year there are 4 nodes, on the latest cane, that have shed their leaves and produced 2 flowers on each node. The flowers are partially cupped and are about 70 mm across the lateral sepals.

In the attached photograph (*below left*) there are 8 canes visible; the smallest one is about 50 mm long and latest cane with flowers on it is 500 mm long. For each of the past 2 years I have cut a cane off the plant and sought to propagate it by laying it in a bed of moss. Each cane produced one kiekie, see photograph (*below right*). Hopefully one day the plant will produce 2 or more new canes in a year, and eventually be capable of division. (*Photos by Mike Davison*)



PS. As from some time in March my address will be 243, Troopers Road, RD1, Te Kuiti.



## **Visit to NZ by Roy Tokunaga**

Glenn Poffley (gpoffley@clear.net.nz)

Roy Tokunaga, the proprietor of H&R Nurseries in Hawaii recently visited NZ at the invitation of the NZ Orchid Society. Roy was invited to give 2 lectures to registered orchid members for the princely sum of \$15. This included a lovely lunch at the hall in Mt Albert where we met on Saturday 21<sup>st</sup> Sept.

NZOS members who attended the regular monthly meeting were also treated to an extra talk from Roy on the Wednesday before the lectures. This took the form of an introduction to orchid growing in Hawaii and with the help of slides he showed his growing houses and specifically the weed problems encountered in the humid warm climate.

On the Friday there was a meet and greet evening with drinks and nibbles where we were able to pick up pre-ordered flasks and also buy from the extensive range still available. A good selection including photos of the flowers was on display. With Roy and wife Nora able to give cultural hints and further descriptions of the flowers as well as size and number, eager orchid growers quickly snapped up the flasks. Having personally had a little trouble with cattleyas in the past I decided to try my hand with some of the dendrobiums he specializes in. Sharing flasks with friends was one way of getting a good range of crosses without outlaying too much although I must say the flasks were very reasonably priced with an estimated 25 to 30 plants of good size from \$40 to \$60. One flask that was opened recently at Auckland Orchid Club contained 52 plants!

With many orchid growers from all parts of NZ including a group from Christchurch in attendance, hopefully there will be a good spread of new stock throughout the country.

The first lecture began at 10am and was about his breeding programme of the Latourea section Dendrobiums. This was highlighted with many slides showing the parents and results of the crosses, which in many cases were so good that there was another rush at lunchtime to buy more flasks. Despite my earlier resolution of not wanting to have the trouble of seedlings I now have to very quickly come up to speed in growing on a lot of new baby plants. Lunch was provided at the hall and a very substantial one it was with soup, huge filled rolls, fruit, tea and coffee.

The afternoon lecture concentrated on the splash petal cattleyas with more slides showing some stunning flowers. Roy went more deeply into the genetics of breeding but was so relaxed and easy to understand the audience was held spellbound as he went through the history of how the results were achieved. With such high standards set for the growth rates, flowering ability, quality and vigour we were assured that the plants would all be good. I even saw some of the species flasks with flowers already! Consequently expectations among the growers are high.

At question time we were left in no doubt as to how to grow, fertilise, and water these seedlings and what to expect from the new crosses especially when many of the parents have already won cultural awards with very long lasting flowers.

One problem Roy encountered was that he was unable to bring in his full range of stock because of the inadequacies of the published list of permitted species by MAF. Despite this a very good selection of seedlings and mericlones was available.

This was Roy and Nora's first trip to NZ and the balmy spring weather would have made their stay very pleasant, except for the few days they spent in Christchurch where the temperature plummeted. Many NZOS members spent time showing the couple the local sights in between his busy schedule including helping with the judging at the NZOS Spring Show. With record entries (for recent years) I'm sure they must have been impressed with what we are able to achieve with limited resources.

The NZOS should certainly be proud of this well planned visit by a top hybridiser and we look forward to a visit by another USA grower (Fred Clarke) and an Australian dendrobium specialist next year to celebrate the diamond jubilee of the NZ Orchid Society. I will certainly be among the first to register my interest.

## **The Orchid Fair (From the Auckland Orchid Club)**

Burt Ong

Gorgeous start for a lovely Labour weekend, sunny morning, smiling faces and everybody raring to go! All 43 of us on a fun bus trip to the Orchid Fair in Tuakau. Hosted by K & R Orchids and seven other of NZ's top orchid growers plus Easy Orchids from across the ditch.

There was much excitement and anticipation in the air as our ringmaster Roy Neal kept the actual details of the trip to himself. First surprise 'stop' was at Gellert's Nursery in Papakura. The owner, Steve Gellert was on hand to take us on a one-hour conducted tour of his very impressive Hi-tech growing areas modelled after those in Holland. They supply grafted seedlings like tomatoes to commercial growers on demand and also produce a diverse range of bromeliads, phalaenopsis orchids, etc., for the NZ market. Fantastic eye-opener for most of us and an opportunity not to be missed.

When we reached Ramarama next, Roy directed the bus driver to suddenly turn into a side road with a very visible signage for Plumbing Service! Gosh, most of us in the back seats were worried...'emergency repairs' and 'waterworks' keep cropping up in our mind! Poor Roy. But to our immense relief, the bus finally came to a stop....our 2nd surprise stop, outside a huge warehouse belonging to Joshua Commercial Cut-Flowers. A smiling Gus Joshua was waiting for us when we alighted from the bus to take us on another conducted tour. Here again, we witnessed Dutch ingenuity at its best in all respects of the cymbidium cut-flower business. We were most impressed by all the hugh cymbidiums grown to perfection with countless spikes on them! Grand champion quality, each and everyone? What a sight!

At 12.35 pm we finally arrived at the Orchid Fair in Tuakau. Most of us were famished by then but luckily there was an impressive array of yummy sandwiches and box lunches available to satisfy our rumbling tummies for just \$5 a piece! But yours



A convivial scene at the orchid fair.

*Photo: Betty Vance*

truly just headed straight to the trading tables to see what is left...grabbed two flasks of a highly exotic species from Easy Orchids that hopefully no one else would have throughout the length and breadth of NZ! Then I saw Keith Goodwin from the corner of my eye and quickly darted over and rounded up a few of my favourite parvisepalum-type slipper orchids before fellow enthusiast, William Lo could see them! Soon, plastic bags and boxes were filling up fast

everywhere....only then did we sit down for a cuppa and tuck in something. It was also a wonderful opportunity to catch up with fellow orchid people and have a 'yarn' about the latest orchid 'going-ons'.

Credit should be given to Russell Hutton for his initiative and foresight in promoting such an interesting and long-awaited event. I was told Orchid Fairs are a norm in Aussie and have become an established sales idea of preference for vendors and buyers to get together under one roof. Every indication tells us that it was a great success.... enjoyed by all. I can see this easily becoming a popular yearly event. Already heard in the grapevine is that other orchid clubs also intend organising similar bus trips for their members too. Let's keep our fingers crossed.

After loading all our precious and newly acquired 'treasures' into the bus we headed off to our final destination at Sunrae Orchids in Drury...arriving at 4.10 pm. The main display shade-house was stocked to the brim full of colourful dendrobiums and reasonably priced too. Almost everyone, including those who said they have enough, snapped up something in a mad buying spree! Poor Jason was manning the shop for the day.... he was literally mobbed with cash-strapped customers and the money bag around his waist was almost bursting at the seams! That was how good business was. Most of us were also very lucky to have our ever reliable Ken Morse on hand, giving us his much sought-after professional advice on which plant to choose from. Good on you, Ken! And yours truly also found out how useful Dennis Chuah could be when he helped me to retrieve a bunch of Spanish moss hanging high up in the ceiling, putting his 12 inches advantage over me to good use! I needed those Spanish moss badly to replace the ones that are consistently stolen from our garden by those jolly black birds with the yellow beak for their short-cut in nest-building! Just wonder how long this lot of moss will last! Then it was off to wine tasting with compliments of Drury Hills Winery....fruitily exquisite taste of plum, strawberry, feijoa, blackberry and macadamia wines, tamarillo port and much more! The spread for the BBQ buffet dinner was simply impressive and the taste divine. Many of us went back for a delicious second helping before diving into the fruit salad and ice-cream desert. Then there was coffee and of course back once again to more wine tasting. There were heaps of happy faces around....maybe the nectar was beginning to work its magic!

At 6.30 pm, we bade farewell to our very generous and gracious host at Sunraes and boarded our bus to prepare for our journey home. Almost immediately, before any one of us could quietly fade away into a comfortable wine-induced nap Jim Shaw

sprang into action and out came the Raffle tickets. We were told everyone should buy some to help out in the club fund and there was no escape since we were all trapped in the moving bus. The first draw for a bottle of red-wine donated by Sunrae Orchids went to Gangli Zhou, our local Chinese cymbidium expert. He was invited to draw the next number and miraculously to everyone's amazement, he drew another of his own ticket to win the 2nd. prize for a pot of *Den. kingianum*. Panic sets in, and Roy immediately swung the Raffle box at Olympic speed across to Peter Elfleet's direction instead, for the 3rd prize draw to prevent another repeat! It was a sigh of relief when it went deservedly to our ever hard working Show Marshall, Bev Meredith...a lovely bottle of white. Congratulations to all the winners and on behalf of all the members at AOC, a round of applause should go to the entire organizing committee for giving us such a fun and yummy 'Orchid' weekend!

## **The Auckland Orchid Club – Triumph at Ellerslie**

Dennis Chuah (dennis@inetgardens.com)

I got the idea of the Auckland Orchid Club putting on a display at the Ellerslie Flower Show after a doing a display at the Kumeu Garden Show in 2006. It was the second time we had displayed at Kumeu. Though both the displays were only small, they attracted the attention of the public. Ellerslie is a much bigger show, and if we could create a display that had the same "wow" factor, we would create some interest in orchids.

The inspiration for the display came from Russell Hutton's "Wild Orchids" display at our show earlier in the year. It was a clever little display of various orchids tied on to a tree stump and a few other in amongst leaf litter on the ground. I thought for Ellerslie, we could create a similar jungle scene but, given the time of the year, with emphasis on Masdevallias. We would use a South American backdrop, and I had the idea of using Macchu Picchu, to tie in with the massies. In January 2007, at the Taranaki Summer Show, I met with Kath Coils, who was very interested in supporting the display. I then added Disas and a water feature to the plans.

We then formed a small committee (Roy & Lee Neale, Bery Calder and I) to do the display. Initially, my main concern was to get flowers in November. Roy's main concern was the props. In both respects, we were fortunate to have the support of the orchid growing community, for which we are very thankful.



*Disa*, Glasgow Orchid Conference

The backdrop was a beautiful mural of Mt. Pirongia, borrowed from the Waikato Orchid Society. It had been created for the 1990 World Orchid Conference and previously used in the 2005 National Show in Hamilton. Although it wasn't Macchu Picchu, as I had originally planned, the mural was an excellent fit for the display. The length was right for the 6 x 3 m display, and the tree ferns and cabbage trees on either side fitted nicely into the side walls, with the mountain in the middle. The rest of the display then flowed on from the backdrop.

The focal point was a water feature, on loan from Kumeu Garden Centre. It provided context for the Disas and also housed a few of them. Kath had brought the Disas from Taranaki, and although they were early ones, most had good quality flowers. There was a mixture of uniflora types in red (*above left*), orange and yellow, and a number of beautiful pink and white Watsonii's (*below*). Most people were surprised to see an orchid that grew in water.



To the left was a Masdevallia hollow. A number of the massies came from Ron Maunder and the rest from club members. The colourful massies and disas were the attraction point for the display. We had a number of comments on the colour range of the massies and there were certainly a lot of interested people wanting to know where they could purchase massies.

To the back of the massies was an "orchid tree"; actually a multi-branched tree stump with sarcochilus and reed stem epidendrum plants tied on. Roy has had his eye to use the dead tree in his property for some time and had carefully prepared it for the display. Around the base of the tree were a few odontoglossums and a few late cymbidiums.

A path winds its way between the massies and disas to a river on the backdrop. Specimen sarcochilus plants supplied by Sunrae Orchids lined the path. The other plants in the display came from members in the club. There was a miniature cymbidium with 22 trailing spikes, a few phallies, cattleyas and a couple of paphs. One of the paphs had a dark-coloured flower and it attracted a lot of attention.

We gave out around 2000 brochures, newly produced by the Orchid Council. Hopefully, this will translate to increased memberships and patronage of orchid shows. We set out to create an orchid display that wowed the public, and I think to a large degree, we succeeded. What blew us away was the gold medal and the supreme award for horticulture.



The Auckland Orchid Club's award-winning display at the 2007 Ellerslie Flower Show. (Photo courtesy of the Auckland Orchid Club)

## **Angraecoid corner: *Angraecum didieri***

Margaret Dunseath (marg.dunseath@orcon.net.nz)

This small sized angraecum is native to the eastern and central forests of Madagascar. The summer climate is warm and moist, with a drier, cooler winter, which still enables the plants to maintain condition given the frequent mists and dews which occur overnight. Foliage on this plant is quite stiff and has a leathery succulent feel to



it. With age, the plant grows 'pups' around the base which may be removed and mounted once they have an independent root system able to support the plant.

The roots are quite warty and have very good capacity for holding water, turning green very rapidly once moistened. New roots are very whitish and have bright green growing tips when active, and they seem to branch quite freely rather than just growing from the tips. With age they seem to flatten slightly, losing the roundness of the growing tips, and adhere very strongly to their mount, seeking out every crack and crevice capable of supplying a little moisture reservoir. As with all angraecoids, water quality is very important. I use rainwater and very

small amounts of fertiliser with different brands being used on a rotational basis so that the plants get all the trace elements they need.

Preferred temperatures for growth seem to be in the intermediate range, with the plant

having a short rest in the winter. Flower buds tend to form in the autumn, but sit dormant over the winter in preparation for spring/early summer flowering. The plants seem to like quite bright light with no direct sun during the year.

## **Orchid Roots**

Jim James (jamesj-r@ihug.co.nz)

Orchid roots comprise of a (usually) thick velamen. The function of the velamen is to absorb and hold water long enough for it to be carried into a plant by a narrow vascular passage tissue at the centre of the root.

The velamen envelopes all but the green tip of the root which is where it elongates. All the velamen except the small area near the tip is dead, but not decomposed, tissue. If the tip is broken off the root ceases to grow. In the terrestrial(ground dwelling orchid) the velamen may be very thin and not immediately noticeable.

Epiphytic(tree dwelling) orchids wrap their roots around or along the **outside** of the tree branch. When we put these plants in a pot the roots grow outwards and end up growing around the **inside** of the pot subjecting them to just the reverse of what they have to do in nature. Tree dwelling orchids and those that grow lithophytically on bare rocks dry out quickly between rain showers. Thus, when grown in pots the growing medium must allow the roots to dry out quickly or they will die.

Orchid roots do not like having to adapt to a new growing medium. For example if a healthy orchid is removed from a pot to establish it on a slab of cork or tree fern fibre, the existing roots will not easily attach themselves to the slab. New roots emerging from the plant can do so. An extreme example of how new roots can adapt themselves to the environment they find is that existing roots immersed permanently in water will die but any new roots then emerging will function under water and the plant may live. Eion Scarrow, the well known garden personality, succeeded in growing many orchids, including the cattleya alliance, hydroponically.

It is often difficult to remove a plant from a pot without leaving some broken roots remaining attached to the pot. It seems these roots can continue to function, after a fashion, if remaining healthy. Experiments have shown that even quite old roots will still be functioning if still healthy.

## **Can orchid potting mixes be simplified?**

Elizabeth Miller, under supervision from George Fuller

In the winter of 2005 George Fuller of New Plymouth, a long-time orchid grower and hybridiser, was given an opportunity to experiment with ways to simplify potting mixes and hopefully reduce repotting frequency for growers of disa and other fine-rooted species with similar requirements. Growers that use chopped sphagnum or mixes of bark and sphagnum for disas and masdevallias are usually obliged to repot annually.

Coincidentally, not one but two totally distinctive experimental products of pine bark became available for trial at the same time. One was in the form of freshly crushed bark containing many of the proverbial 'nasties' which we have been indoctrinated

into rejecting and the other was from the opposite end of the production line where controlled composting is involved.

The 'fresh' form has now been called '3FB' which is a descriptive abbreviation for 'fresh, fine, fibrous blend' but it is important to note that dust has been screened out as have particles above 8 mm. It has excellent draining properties despite its appearance.

The other, designated as 'aged', is a by-product of the composting process. Dust particles have been screened out and particle grading sizes are 'No. 2' and a slightly coarser 'No.3', as with freshly crushed bark generally available in New Zealand.

George's trials have been with 3FB and the No. 2 aged bark, both of which are very user-friendly and free of weeds. The bark was supplied by Bark Products Taranaki Ltd.

The first trials involved repotting a small number of disas, previously in pelletised sphagnum moss, into the following media in 12 x 12 cm pots:

- New pelletised sphagnum moss as a control;
- Pure 3FB bark;
- 75% of 3FB bark with 25% drainage gravel;
- 75% of No.2 aged bark with 25% drainage gravel.

The plants flowered in the summer 2005-06 and again in 2006-07. In the winter of 2007, George and some disa-growing friends examined the disas by observing top growth, tipping out each plant to see the roots, tubers and runners, putting the plant and mix back in the same pot and recording their observations.

The results were favourable, with growth good but in some cases not special. In late October 2007 there were several strong young growths in each of the trial pots. The mix looked as though it would be good for at least another year, two years after the beginning of the trial. He included masdevallias and pleiones in his trial in the winter of 2006 and they also grew and flowered satisfactorily.

George was most interested that none of his plants seemed to have suffered from being in 3FB bark. There was absolutely no evidence of root damage. For the small number of plants trialled, there was no obvious difference in growth between those with drainage gravel in the mix and those with 100% bark, so George thinks that for his conditions of overhead watering and liquid feeding, mixing other components with either bark type may be of no practical advantage. This has been consistent in recent more diverse trials.

Including sphagnum moss with 3FB in later trials simply ensured that undesirable mosses, liverworts etc. would ultimately appear, which was not the case in the absence of moss.

Several growers now plan to set up trials in their own conditions, and to carry out feeding trials to look for optimum dose and frequency.

George doesn't use a capillary growing system for his disas, and growers who do use such a system, with water flowing through trays in which the pots stand, need to trial different bark grades and water levels. George has found that although water would rise by capillary action in No. 2 aged bark, surprisingly it did not rise nearly as much in the 3FB.

Some growers are currently trialling other genera in both types of bark, with results encouraging so far.



**1:** Disas in 3FB bark since 2005. Left: *D. uniflora* 'Skytower'; Right: *D. Sunset* 'Flamingo'



**2:** Disa grown in bark/sphagnum mix in 2006 and repotted to 3FB bark September 2006.

**3:** *Disa* 'Sunset Flamingo' repotted in winter 2005 from pure sphagnum to three different mixes.

*Left:* In pure moss in 2005, repotted into bark in September 2006;

*Middle:* In 75% 3FB bark / 25% drainage gravel since winter 2005; *Right:* In 3FB bark since winter 2005.



## **Bark terms**

Bark is available as

- 'FRESH', which is newly crushed and chestnut brown in colour; and
- 'AGED', which has gone through a controlled composting process and is charcoal grey, darkening when saturated.

## **Bark Grades**

3FB is available only in fine grade with dust removed.

The two grades of aged bark, with numbers relating to screen size, are

- No. 2 – finer particle size
- No. 3 – coarser particle size.

## **Wetting fresh bark**

George pots plants into dryish (not soaked) bark, then to settle the plants in and wet the bark thoroughly he waters heavily or stands awhile in water, using water with one drop of household detergent to a bucket of water. The detergent acts as a wetting agent allowing the bark to absorb water by breaking what is known as 'surface tension'.

Fresh (or raw) bark from any source and/or any grade inherits this repellent characteristic, especially if allowed to dry thoroughly in the pot through inadequate or infrequent watering. George is convinced that this is the key to many failures. As the result of his latest trials he is sure that of themselves barks are not phytotoxic to orchid roots any more than a vehicle in itself is a danger to road users.

George continues to be somewhat mystified by the consistently good responses evident in the diverse range of genera trialled more recently in the originally suspect 3FB.

He emphasises that for decades he was an officer in a legion dedicated to eradicating the forces of evil thought to be generated by the finer components of freshly crushed bark but now has to concede that there is sound evidence suggesting that maybe he had been misled. Has he now joined 'the rubbish corps' as a private? Watch this space for the outcome of the court martial.

## **Introducing our writers**

Nick Miller

*An occasional series introducing the people that write for us, presented particularly for the benefit of newcomers to the orchid world. Today's 'candidate' is George Fuller, of New Plymouth. (Biographical details from 'A History of Orchid Growers in New Zealand', Nancie and Dennis Bonham, publ.. OCNZ 1990).*

George Fuller, MBE, grew up in Auckland and received nursery training at the respected nursery of Duncan and Davies in New Plymouth. He subsequently worked at the famous orchid firm of Sanders (St. Albans) ltd., in the UK, followed by a 4-year stint at Kew Gardens (London). An eventual return to NZ saw him being married in Auckland, and eventually joining the staff at Pukekura Park, New Plymouth.



George Fuller in his shadehouse. He is holding *Disa*  
Floise Harner Photo: Nick Miller

George remained at the Park for many years, rapidly rising to the post of Curator. One of his early duties was to organise the reception and care of a large collection of orchids donated to the park by Mr Fred Parker. George has carried out much research into the growing and breeding of orchids, and is well known to many enthusiasts throughout NZ, both for his wide knowledge of orchids and horticulture in general, and also his puckish sense of humour. He received the honour of

being elected a Fellow of the Royal New Zealand Institute of Horticulture in 1989. Since his retirement George has developed his own orchid collection and continues to experiment with various aspects of orchid growing, together with other horticultural pursuits. His lawn of the native grass *Microlaena* is much admired and envied by the editors!

## Questions and Answers

How long before orchids flower? I have bought plants of various sizes at orchid shows and some have not flowered yet - some are 2-3 years old.

My best orchid is one from The Warehouse. It is a phalaenopsis and flowers almost continuously. All I do is put it under the tap every week - less often in the winter, drain it and put it back in my warm north-facing lounge - no fertiliser - no repotting. Do I have orchid thumbs??

Diana (grant-mackie@xtra.co.nz)

An initial response from the Editor

*Here is an initial answer from me - not a definite one alas - there is little that is definite in plant growing:*

*It depends on the size of the plant, what sort it is, how healthy it was when you got it and how well you grow it. Some orchids, if well grown under good conditions, will flower in a couple of years from flask (phalaenopsis are an example). others take longer. In my case, a flask of *Dendrobium speciosum* took 15 years to start flowering, but that species is notoriously slow, and the conditions I gave them weren't the best.*

*The conditions in your lounge are obviously suitable for The Warehouse phalaenopsis. Eventually it will need some fertiliser to continue such good flower production and eventually the potting mix will start to break down, at which point the plant may start to go downhill quite quickly.*

## *Sarcochilus hillii*

David Hutchins dphutchins@xtra.co.nz

### **Description**

Named after Walter Hill, colonial botanist, Director and founder of the Brisbane Botanic Gardens, who originally collected this species from tree branches near the shore at Moreton Bay, Queensland. The root system is very extensive and ours certainly weave their way through the chopped up cork. The leaves are long, narrow and touching dark green. After 5 years from the flask one of our plants has flowered 3 times and at the moment has 5 racemes, the longest is 150mm carrying 32 odd flowers while the shortest is 50mm and has around 10 flowers. Our plants have greeny brown flowers which have a perfume. The flowers are about 7mm across and open sequentially lasting for about 1 month on an average. As the plant gets older I expect the flowers to get larger. There is another *S. hillii* which has white flowers which we have yet to flower.



*S. hillii* (Photo D. Hutchins)

### **Flowering Period**

Usually flowers from October until December although some will flower for a longer period.

### **Distribution**

It occurs from the south coast of New South Wales and up into central eastern Queensland.

### **Habitat**

In the wild it grows from exposed positions to shady gully areas. Sometimes the gullies are in the rain forest which are wind swept. I have seen them in a tree-covered gully outside Campbelltown, in Australia, hanging off the ends of twigs with their roots dangling in the breeze. At the time the gully was dry and the plants were doing well.

### **Culture**

These plants do not like a lot of excess water so it is important to have the plants hanging in an area where they can dry out quickly.

### **Our experience**

This pendulous epiphyte rarely grows on rocks or in pots. We grow ours several ways. We have them tied on hardwood, tied onto natural cork, on tree branches about 40-50mm in diam. and about 25mm long, in tubes made of gutter guard and filled with corks, gutter guard envelopes with wind-break cloth inside to hold bark or cork and another host is the gutter guard tube, filled with corks, with a piece of PVC pipe up the inside to create a draught. There is only the one with the tube up the centre, the other tubes are just filled with the chopped up cork.



At the moment we are trialling another method using 80mm perforated squat pots, filled with bark, leaf mould plus a wee bit of sphagnum moss. The plant is then placed on the top and is held in place with a piece of gutter guard. The pot is then hung up. (Photo to left, D.Hutchins)

The plastic gutter guard is formed into a tube about 150mm long by 90mm in dia with gutter guard top and bottom. These

are hung. We fill ours with old wine corks cut up into pieces ( one cork into about three pieces ) ( use wine corks to give the plant some flavour, ha ha! ). Fill the tube about half way with the cut up cork pieces, add some sphagnum moss and leaf mould,

insert the plant through the gutter guard, place a wee bit of sphagnum moss and leaf mould on top of the roots, fill with the cut cork pieces and then secure the top. Do not forget the label. The dried leaf mould is ground into small pieces. (Photo to left, D.Hutchins)



In the summer we water at least 3 times at week and in winter usually once a week although it depends upon the weather; if we have had a lot of rain we may water

once every 2 or 3 weeks.

Our *S. hillii* plants are suspended about 6 foot from the ground, get plenty of light and AIR movement. I believe that the plants in the cork tubes are doing better than those on cork bark or hardwood. Our temperature in Gisborne does not appear to have any adverse effect on our plants.

What suits us may not suit others, you may have to shift plants around to get optimum growing.

### **Fertilising**

We fertilise our plants usually once a week and once a month flush out the salts with plain water. The conductivity of the fertiliser is 6 CF (about 60 mS/m Ed.).

Hybrids have been made using *S. hillii*. This plant is also a good plant when in bloom.

### **References**

Sarcochilus Orchids of Australia by Walter Upton.

(David will have an article on growing *Sarcochilus* in the next issue – Ed.)

## Wider worlds – *Asplenium caudatum*

Barbara Parris (bsparris@igrin.co.nz).

*This is an occasional series introducing plants that make good companion plants for orchids. Here Barbara Parris, who is a botanist and has been involved in the scientific study of ferns for many years, discusses a little known maidenhair fern.*

*Adiantum caudatum* is a very attractive and little-known member of the maidenhair ferns. The taxonomy of the group is still somewhat confused and this is the nearest approximation to a name for the plant in cultivation in New Zealand.

Most maidenhairs have fronds that are several times divided, triangular, deltate or ovate in outline and are without vegetative buds. In contrast, *A. caudatum* and related species have narrow simply pinnate fronds, with the frond apex ending in a vegetative bud. The pinnae are oblong in outline and lobed along the upper margin, rather papery in texture, slightly flushed reddish brown when young and grown in good light, and light to mid green when mature. The largest fronds on my plants are about 30 x 2 cm. A well-grown plant will have about 20 living fronds, each of which is capable of producing another plant at its apex, and the 2<sup>nd</sup> or 3<sup>rd</sup> fronds of these young plants are also capable of producing their own young plants in the same season. It is such a prolific species that it is a wonder that it isn't more widely grown. Although the fronds are produced in a rosette, the frond apex is curved away from the light, when grown under high light conditions, presumably so that the young plants can establish in shade.



A small plant of *A. caudatum*, rather tatty after a cold winter, growing in the Editor's shadehouse.

*Adiantum caudatum* and its relatives come from the seasonally dry tropics of the Old World, where they grow on earth banks and amongst rocks, so cultivation requirements include free drainage and reduced watering in winter. From my experience an ordinary potting mix, attention to watering in the summer and slow release fertiliser allow an attractive plant to be grown easily. Hanging baskets are good, as is planting in pots, amongst rocks and in pockets on tree fern trunks, but under cover, at

least for winter, is likely to be the best way of keeping it alive. My attempt to overwinter it outside in the Bay of Islands has failed, probably due to winter cold and wet. Goudey (*Maidenhair Ferns in Cultivation*) recommends the protection of a heated glasshouse with a minimum temperature of 12°C if cultivated in cool temperate regions. Here in the warm temperate zone it has survived 5°C overnight in an unheated north-facing sunroom that reaches at least 20°C on sunny winter days, so it is obviously rather tougher than generally believed. (*It survives in a shadehouse, protected from the rain but dropping to 1°C on winter nights, here at Lake Rotoiti.* Ed.)

This little fern deserves to be more widely grown because of its attractive appearance and ease of cultivation. Even when all of the fronds are shrivelled through lack of water, the plant will survive and push up new fronds when watering recommences, surviving the kind of abuse that would kill other maidenhairs outright. It is definitely on my highly recommended list of ferns.

## Sobralias – a New Passion!

Ron Maunder (ronmaunder@paradise.net.nz).

There seems to be a growing interest in this hitherto almost ignored orchid genus which hails from Central and South America. Along with *Arundina bambusifolia* from Asia, sobralias have been commonly called “bamboo orchids” in old orchid literature. The genus was named after an 18<sup>th</sup> century Spanish botanist – Dr Francisco Sobral. Their nearest relatives are the *Elleanthus* also from the Americas..

By one authority there are near a hundred sobralia species and their habitat ranges from sea level up to 2000 metres. The flowers can be quite small – 4cm, to large – 15cm or more across. Plants have long, thin, reed-like stems and short, alternating leaves up the stem, not unlike bamboo. There are no tubers or pseudobulbs. They are terrestrial or epiphytic and some have another similarity to bamboo in that they grow canes several metres high. One species, *Sobralia altissimum*, grows canes up to 12 meters or 40 ft high! Because all species grow in tropical to equatorial parts, most need warmth in our winters. *S. macrantha*, the one species most commonly seen here in NZ is native to the area between Mexico and Costa Rica and is described as warm to intermediate. It seems to grow in sheltered frost protected areas outdoors around the Bay of Plenty northwards producing canes 500-900ml high.



*S. lowii*. Photo: R.Hutton

Sobralias never seem to have been a favourite around the world from what I have read. They have a number of “bad habits” which don’t endear themselves to a lot of growers. They grow very vigorously in a warm greenhouse situation and their canes grow taller and more rampant than outdoors so that they take up too much room for hobby growers with small greenhouses. The other even bigger disadvantage is

their flower life. Even though they can have 3-4 large brightly coloured flowers, the flowers only last up to four days – usually less. They mostly flower sequentially or one after the other and the cane does not usually flower another year. There are always exceptions to any rule of course with *S. dichotoma* having several branched spikes near the top of the cane with a number of flowers out simultaneously. *S. lowii*, another “odd ball”, forms keikis on the canes. I can find no mention of long-lasting flowers in the genus!



*Sobralia Yellow Kiss 'PON'* Photo: R. Maunder

Another problem with Sobralias is that they do not like division. I imported a number of species from Colombia many years ago and lost all but one. The plants were divided just before shipping, had their canes shortened to 3 ft to fit the carton, the roots wrapped in damp paper and sent. All the canes and new shoots turned black en route and the plants were virtually dead on arrival. A small seedling which accompanied them which was just bare-rooted came through and survived. My well used copy of the "Encyclopaedia of Cultivated Orchids" by Alex Hawkes says they are particularly vulnerable to toxic gases from border quarantine treatment but I also believe if my divisions had been established for a few months in Colombia first, the

plants may have survived. If I am ever pressured to cut a few outer canes from my plants I pot them immediately and send them complete with potting mix some time later when new shoots start elongating. On occasion they will die back and there is no stopping the problem!

The roots of sobralias I have seen here and overseas are very vigorous once the plant is established. They are quite similar to the wiry-cored cymbidium roots but thicker and differ in that they are very furry and more brittle. The roots adhere to each other incredibly and break if you are trying to carefully pull them apart. I find it best to cut the plant into chunks down between canes and pot up the entire chunk without damaging more roots trying to get the cut pieces out. *S. macrantha* and its interspecific hybrids seem to produce new shoots from their underground branching rhizomes. These regularly bury themselves deep in the mix and are wasted or come out through drainage holes or gaps in the big tubs I have made from garden edging tanalised timber. They're not unlike the bad habit of *Paphiopedilum armeniacum* with its rhizomes!



*S. Yellow Kiss.* Photo: Jenny Mair  
Another clone of this fine cross

Flasking is a problem too. It certainly doesn't pay to put more than about 5 plants to a bottle. Normal replating of 20-25 per bottle will result in the mass of roots growing together and it is impossible to separate plants without massive root damage even after having been potted up in mix for a few months.

During early spring there is a big increase in new canes coming away and this is obviously the time to step up the watering and manuring. All literature says they are gross feeders and if you water an established plant at least once a day (even better four times a day!) the plants will reward you with more flowering canes. From my experience they can be watered and fed all the year round.

Other than frost and a few sunburnt leaves if not acclimatised to full sun, they have few insurmountable problems. Slugs and snails like their succulent flowers, paper wasps love building their nests on their canes and ants of course will cart mealy bug and scale up to their leaves and tip flower/pod bracts.



S. Songbird 'Gifted Beauty'  
Photo: R Maunder

Unfortunately sobralias are still fairly hard to come by, especially hybrids and species other than *S. macrantha*, partly because dividing big plants really is a mission! Also they flower in summer when most orchid shows and meetings are over so their flowers are usually not on sale plants when they are offered.

There are at least two of us sobraliaphiles trying to produce more hybrids and raise up young plants in NZ. Recently Peter Elfleet Jnr registered a first hybrid for NZ in 2004 with his lovely Songbird – *macrantha* x *Mirabilis*.

So keep your eyes out for these strange non-orchid looking bamboo-like plants with fabulous yellow, cerise, or white *Cattleya*-like flowers. Grab them and grow them into big

plants and you will soon be hooked by their masses of flowers when not much else is out!

## Society Notices

### Auckland Orchid Club Show dates for next year.

Ribbon show and BBQ:

30 March 2008

Hobsonville Hall

Hobsonville Road

Auckland

Silver Jubilee Spring Show and dinner:

22-24 August 2008

Kelston Community Centre, cnr. Awaroa and Gt. North Road, Auckland

Guest speaker: Murray Shergold

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For more information, please contact the Show Marshall, Bev Meredith,

Phone: 09-4122991

### Howick Orchid Society

Here are the HOS Club days for 2008 so please note them in your diary:

10<sup>th</sup> Feb, 9<sup>th</sup> March, 13<sup>th</sup> Apr, 11<sup>th</sup> May, 8<sup>th</sup> June, 13<sup>th</sup> July, 10<sup>th</sup> Aug, 14<sup>th</sup> Sept, **Show** 26/27<sup>th</sup> Sept, 12<sup>th</sup> Oct, 9<sup>th</sup> Nov, 14<sup>th</sup> Dec. (Xmas social)

We meet at the Fencible Lounge, Uxbridge Rd., Howick. Time is 1.30pm start. Usually it is the 2nd Sun of month except for show and the prize giving meeting. Contact numbers are Len 09) 576 6303 or Glenn 09) 534 8689.

Website (mainly photos of display plants and newsletter) is

<http://hos.inetgardens.com>

**The Masdevallia and Disa Group** are now issuing a newsletter again.. To join them, contact the Secretary/Treasurer, Ruth Coles (candrcoles@hotmail.com)

## Classified Advertisements

A message passed on by Chris Hubbert, of North Shore Orchid Society:

"I read with interest the story in [NSOS Insigne, September 2007] of *Bletilla*.

I have *B. striata* and have been trying to get other types. Is there anyone in your society who would sell me *B. formosana* and *B. ochracea*, or give me an address to contact? We have a good group of members in Oamaru and we like to get new plants, as we don't get up your way. Hoping you can help. Best wishes, Joan Butler."

Joan's address is 34 Leith Street, Oamaru, North Otago 9400.

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