



Vol 22 No 9 March 2011



CULTURAL AWARD,  
February 2011  
*Bulbophyllum  
echinolabium*  
Maxine

# NEWSLETTER

**NEXT MEETING - TUESDAY 8 MARCH**

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**Contents**

- |   |                           |    |                                |
|---|---------------------------|----|--------------------------------|
| 2 | General Meeting Minutes   | 6  | Plants displayed February 2011 |
| 3 | Notes from your Committee | 8  | <i>Rhizanthella gardneri</i>   |
| 4 | Noticeboard               | 10 | About us                       |
| 5 | Monthly plant             |    |                                |

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# MINUTES OF THE GENERAL MEETING

8 February 2011, 7.50 pm

**Present:** 36

**Apologies:** Lee, Jack, Neville, Jeanine

**Visitors:** Nil

**New members:** Brian, Jeanine

**Minutes:** Minutes as circulated accepted (Mavis, Trevor)

**Business Arising:** Nil

**Financial Report:** The Financial Report was tabled by Sandra, and the current balance is \$3,126.15 #2 A/c \$1,811.09. (Anne, Graham)

**Correspondence:**

**Inwards:**

- New members (Brian & Jeanine)
- Mandurah Orchid Club - advising of Office Bearers for 2011
- Garden Clubs of Australia - Autumn Magazine
- Various Club Newsletters

**Outwards:**

- Nil

**Business Arising:** Nil

**General Business:**

- Orchids Australia featured Tony Watkinson's *Elythranthera emarginata* "Choice" on the front cover. Tony received an HCC/AOC for this plant in September 2010.
- Ken advised the members that AQIS was becoming much stricter with flasks now and any flasks containing plants with dead or marked leaves would not be accepted. They are also imposing charges for shipments of flasks that have to be unpacked, inspected and

repacked before they can be released.

- Courtney donated a flowering *Phalaenopsis* which was unnamed for auctioning. This subsequently raised \$14 for the club, the successful bidder being Bruce. Thank you Courtney.
- Thanks also to Tony for the donation to the library of a book on *Pleione*, purchased from the sale of Northern Districts Orchid Society's library. He also offered a book of *Paphiopedilum* Genus, Albino Forms which he purchased overseas. The Society agreed to refund him the purchase price and accept the book for the library. Thanks also to Chris & Ken for the donation of past copies of orchid magazines (*Orchid Digest* & others)
- It was proposed to members that we have voluntary "plant sitters" who would be willing to look after plants for anyone away, ill or incapacitated, or otherwise unable to look after their plants. The general comment was that we all seem to do this anyway, but there may be members who are unaware of this, so it was not a bad idea to make the membership aware of this from time to time.
- Kevin was thanked for hosting the last home visit.

**Cultural Award:** A striking *Bulbophyllum echinolabium* exhibited by Maxine

**Raffle:** Bruce (twice), Anne, Vic & Judith  
**Name Badge:** Courtney

## NOTES FROM YOUR COMMITTEE

- Thanks to Kevin, Rosa, Sandy and Tony for hosting and feeding us at the January home visit. I noticed several members doing their best to fill the cardboard boxes that Sharon thoughtfully bought with her!
- Your committee reviewed a draft budget for 2010/11 compiled by our Treasurer. With the very significant increase in hall rental and consumables for our colour printer, we will have a substantial shortfall, even allowing for the increase in membership fees. We spent time discussing a range of strategies including more plant auctions by our captive auctioneer Tom, special raffles etc. We will discuss these matters at the next general meeting, so come along with your ideas about how to generate additional income (or save expense) without compromising the values of our Society which are focused on fellowship, learning and giving something of value to members.
- If you haven't ordered your new badge yet, please see Mich. The cost for badges with a magnetic clip is \$13.50, and with pin is \$11.50.
- Don't forget the parking - please ensure that you park your car in the bitumen parking area whenever possible as it will avoid a fine!

**President:** Adrian

**Vice President:** Graham

**Secretary:** Maxine Godbeer  
2195 Hidden Valley Rd, Parkerville  
6081

**Treasurer:** Sandra

**Editor:** Ken Jones

204 Park Street, Henley Brook  
6055. Phone: 9296 1765  
e-mail: [kcjones@tpg.com.au](mailto:kcjones@tpg.com.au)

**Committee:**

Chris

Michele

Lee

Sharon

Tony

Mavis

Trevor

**Life Members**

Barry Gardner

Gordon Doherty

Joan & Ted (decd),

Neville

Noel & Eva

# NOTICEBOARD

## FORTH- COMING EVENTS

### Home visits:

At 10am on the Sunday after the fourth Thursday of each month. Please bring chairs and a plate of food to share.

March - Adrian & Deanne , Safety Bay

April - Margaret , Erskine

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## FOR SALE/WANTED



### Imported plant news

I apologise that it has taken so long to send each of you details on the plants in quarantine, however being prudent, I have waited to ascertain which are likely to survive. It is disappointing to have to report that at least 40% of those released to us by AQIS have not survived - this is much higher than the usual loss rate of 10-15% and I think is due in part to some poor quality plants and the fumigation regime required once a live snail was discovered. I will complete this task before the March meeting and e-mail each member purchasing plants a record of their order.

*Ken & Chris Jones*

## MONTHLY PLANT

### *Mystacidium braybonae*

**Country of origin:** northern South Africa

**Description:** Miniature twig epiphyte

**Difficulty:** Not easy to grow without high summer humidity and winter heat.

**Cost:** \$12



*Mystacidium braybonae* is one of 10 species in the genus, found in Southern and Eastern Africa. These plants come from flask and were donated by Michael Zink some years back. They were deflasked by Neville who grew them on for a time. Then Maxine and Adrian have grown them on further, but both report that they can be difficult to grow, and for no reason at all suddenly seem to become less vigorous and can quickly die.

However, this desirable species is not generally available, and the majority of these plants are flowering size, several having already flowered. As the in situ photo shows, it really is a miniature species and when in flower, it is difficult to see the plant that is covered in small white flowers.

In the wild, this species is epiphytic on *Ficus* species in shaded forests. La Croix

recommends cultivation in intermediate conditions, moderate shade and high humidity while in active growth with less water while in resting. It flowers in summer which is when you will need to be able to maintain humidity. These plants are mounted on paperbark, but will need transplanting as the mounts have deteriorated.. Cork is recommended as mounts should be long lasting (it resents disturbance). The robust roots spread along the mounts securely anchoring this species.

Being a diminutive species, *Mystacidium braybonae* is very susceptible to scale, mealy bug and other sap-sucking pests and will quickly succumb if not treated. Therefore, it is recommended that they are grown in an environment of good air movement, moderate shade, and high humidity in summer.

16 plants are available for purchase.

**Bill & Sandra**

*Taeniophyllum obtusum*

**Maxine**

*Aerangis citrata*

*Bulbophyllum dearei*

*Bulbophyllum echinolabium*

*Cleisostoma crochetii*

*Dendrochilum cobbianum*

*Dendrobium montanum*

*Laelia fidelensis*

*Promeneia stapelioides*

*Vanda tessellata* 'Blue'

**Ken and Chris**

*Epidendrum elongatum*

*Epidendrum xanthina*

*Lycaste tricolor*

**Adrian and Deanne**

*Angraecum X longiscott*

*Cleisostoma rostratum*

*Sobenikoffia robusta*

**Peter & Shirley**

*Cattleya harrisoniana*

*Phalaenopsis cornu-cervi* var. *flava*

*Phalaenopsis fasciata*

*Phalaenopsis leuddemanniana*

*Phalaenopsis leuddemanniana* v. *delicata*

*Phalaenopsis pulchra*

*Renanthera matutina*

**Vic**

*Aeranthes grandiflorus*

**Noel & Eva**

*Encyclia alata*

# PLANTS DISPLAYE

*Vanda tessellata* Blue

Maxine



*Phalaenopsis bellina*

Peter & Shirley



*Prosthechea radiata*

**Tony & Mavis**

*Encyclia alata*

*Epidendrum peperomia*

*Kingidium delicosum*

*Paphiopedilum concolor*

*Phalaenopsis bellina*

*Taeniophyllum obtusum*

*Vanda tessellata*

# ED FEBRUARY 2011

*Phalaenopsis fasciata*

Peter & Shirley



*Aeranthes grandiflora*

Vic

Photography by Tony

## *Rhizanthella gardneri*

Last week, Tony sent me an interesting short article on *Rhizanthella gardneri*, WA's rare and endangered underground orchid. The following article was written by a former member, the late Ron Heberle and is published on our website with several photos. Take the time to visit this at the address on the front page of this newsletter.

In 1928, Farmer John Trott of Corrigin, unearthed the first specimens of *Rhizanthella gardneri* when ploughing new land that had been previously rolled and burnt. He took the specimen to Charles Gardner, the Government Botanist, who, in turn, forwarded them onto Dr. Sanders Rodgers who named the species in Gardner's honour.

As the common name implies, the species spends most of its life cycle underground, growing in association with, and close to *Melaleuca uncinata*, that sheds its leaves to produce thick layers of leaf mould.

The developing capitulum of tiny, crowded orchids, are exposed when the floral bracts expand and, occasionally push through the leaf mould, allowing light, and presumably pollinators to enter. Since the first finds, just six confirmed sightings were made in Corrigin - Babakin areas.

A breakthrough occurred in 1979 when farmer John McGuinness of Munglinup,

East of Ravensthorpe, turned over a mallee root and found an orchid under it. Research then and again in 1980 produced a total of 26 specimens.

Further collections were made at the Oldfield locations, with another 9 plants sighted. Finance was made available from the World Wildlife Fund, for research from the resulting in a well organised research program led by Kings Park research scientists and assisted by the members of the Western Australian Native Orchid Study Group. Around 150 sightings were made and as a result of this and ongoing research, the knowledge of the biology of *Rhizanthella gardneri* has been greatly advanced.

*Rhizanthella gardneri* are unusual in other ways amongst the orchid family. The flowers are produced in a capitulum, which appears to be one large flower but on closer examination, proves to be a whole group of small flowers grouped together within a series of bracts which gives the appearance of being a single flower.

*Ron Heberle*

Following is the article, published by the University of WA that Tony found and sent to me that reveals some more amazing facts about this unusual orchid

## Buried flower has rare genes

Wednesday, 09 February 2011

The University of Western Australia



*Rhizanthella gardneri* is a cute, quirky and critically endangered orchid that lives all its life underground. It even blooms underground, making it virtually unique amongst plants.

Last year, using radioactive tracers, scientists at The University of Western Australia showed that the orchid gets all its nutrients by parasitising fungi associated with the roots of broom bush, a woody shrub of the WA outback.

Now, with less than 50 individuals left in the wild, scientists have made a timely and remarkable discovery about its genome.

Despite the fact that this fully subterranean orchid cannot photosynthesise and has no green parts at all, it still retains chloroplasts - the site of photosynthesis in plants.

"We found that compared with normal

plants, 70 per cent of the genes in the chloroplast have been lost," said Dr Etienne Delannoy, of the ARC Centre for Excellence in Plant Energy Biology, the lead researcher of a study published in *Molecular Biology and Evolution*. "With only 37 genes, this makes it the smallest of all known plant chloroplast genomes."

"The chloroplast genome was known to code for functions other than photosynthesis, but in normal plants, these functions are hard to study," said ARC Centre Director Professor Ian Small.

"In *Rhizanthella*, everything that isn't essential for its parasitic lifestyle has gone. We discovered that it has retained a chloroplast genome to make only four crucial proteins.

Our results are relevant to understanding gene loss in other parasites, for example, the *Plasmodium* parasite that causes malaria."

Associate Professor Mark Brundrett from the Wheatbelt Orchid Rescue Project describes *Rhizanthella* as one of the most beautiful, strange and iconic orchids in the world.

"Combining on-the-ground conservation efforts with cutting edge laboratory technologies has led to a great discovery with impacts for both science and conservation. The genome sequence is a very valuable resource, as it makes it possible to estimate the genetic diversity of this Declared Rare plant".

Professor Brundrett has been working with the Department of Environment and Conservation and volunteers from the West Australian Native Orchid Study and Conservation Group to locate these unique orchids.

"We needed all the help we could get since it often took hours of searching under shrubs on hands and knees to find just one underground orchid!"

But *Rhizanthella gardneri* thought for many years to be monotypic is not the only underground orchid. *Rhizanthella slateri*, the Eastern Underground orchid is found in New South Wales at Bulahdelah, the Watagan Mountains, the Blue Mountains, Wiseman's Ferry area, Agnes Banks and near Nowra. It is also listed as a critically endangered species due to habitat loss and destruction.

As this reclusive species lives underground, it is seldom seen and thus rescue programs that are often effective in translocating orchids (and other plants) and animals impacted by development are ineffective. Fortunately, state governments are now listing this species as critically endangered and providing protection for some known habitats. This includes buying land and setting it aside in reserves, in situ and captive breeding programs with or without associated mycorrhizal fungi, long term germplasm storage and at Kings Park, research to map the genetic diversity of the northern and southern populations. Translocation is another important strategy under

investigation along with habitat improvement through removal of weeds and rehabilitation by reintroduction of native species. It is this work that has resulted in the finding that only 37 genes make up the chloroplast genome, the smallest of all known plants.

A third species, not yet formally identified has been found in the Lamington area of Southern Queensland. This species was initially thought to be *Rhizanthella slateri*, however Jones DL regards it as a new species.

Since sending me the first article, Tony has found the following URLs that provide more information about these unique, rare and endangered Australian orchids.

If you're interested, look at

<http://earthsky.org/biodiversity/the-odd-life-of-an-underground-orchid>

and

<http://www.cosmosmagazine.com/news/4036/rare-underground-orchid-genome-unlocked>

for further articles about the outcomes of the WA research.

# ABOUT US

## Monthly Meetings

Monthly meetings held on the 2nd Tuesday of each month (exc January at Forster Park Hall, cnr of Abernethy Road and Keane Street, Cloverdale commencing 7.45 pm. Usually, the short formal meeting is followed by plant descriptions given by members. Supper follows to allow members time to socialise and discuss orchids.

All visitors are very welcome

## Membership Fees

**Family** (1st year @ 2 badges) \$31.00  
renewal \$15.00 (Badges with magnet fastening additional \$4.00)

**Single** (1st year @ 1 badge) \$21.50  
Renewal \$10.00. (Badge with magnet fastening additional \$2.00)

New members who don't live in Perth will not require name badges, therefore their membership will be at the renewal fee

## Monthly Home Visit

On the weekend following the fourth Thursday of each month (generally on the Sunday morning), a home visit is held at a member's home. This gives members an opportunity to enjoy the fellowship that our mutual interest provides, and to see how others go about growing their orchids.

## Monthly Plant Display

Given that the prime objective of the Society is to promote the cultivation of species orchids, only species or natural hybrids are acceptable for display. Since we all may be uncertain about the identification of a plant from time to time, we encourage members to bring plants along about which they are unsure since someone may be able to identify them. There is no competition nor restriction on flower count, quality or length of

ownership. We want members to be able to see species plants in flower. So even if your flowers are a bit past their best, bring them in as others may not have seen that species in flower.

## Plant Sales

The Society provides an opportunity table for members to sell surplus plants and equipment, and for the Society to sell product from time to time. A commission of 10% is charged on all sales.

## Plant Purchases

The Society endeavours to obtain a different species seedling for sale at each meeting, usually costing between \$6.00 and \$12.00. The Society makes a small profit on these sales which is invested in benefits to members. As it is always difficult to get new or different species, should members have 20 or more plants of one species which they feel might be suitable as a monthly plant, please contact a Committee member.

## Raffle

The Society conducts a raffle each meeting and at home visits as a means of raising funds.

## Plant Imports

The Society is able to use quarantine facilities provided by Ken & Chris to co-operatively import species orchids.

## Management

In accordance with the Constitution, the Annual General meeting is held in May each year at which time the office-bearers and committee are elected. The majority of Committee members serve two year terms.

If unclaimed, return to  
The Editor  
204 Park Street, Henley Brook WA 6055



Peter & Shirley Masters  
110 Crawford St  
East Cannington 6107 WA  
Phone: 08 93506087  
Mob 0419831177  
Shirley 0414948469  
E-mail: [peterskorner@iinet.net.au](mailto:peterskorner@iinet.net.au)

Peterskorner is now distributing a range of orchid products from Easy Orchids (Murray and Jean Shergold) and we are happy to take orders, and bring them to the Species Society monthly meeting.

Check out our catalogue at [www.peterskorner.com](http://www.peterskorner.com), phone Peter or Shirley on the numbers shown, or e-mail [peterskorner@iinet.net.au](mailto:peterskorner@iinet.net.au).