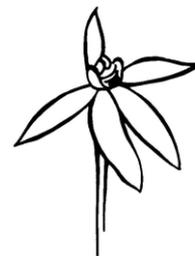


Bulletin of the Orchid Society of Canberra, Inc.

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ABN 34 762 780 850

Petalochilus fuscatus



Volume 26, Number 3

May-Jun 2011

Regular monthly meetings:

Monthly meetings of the Society are held on the first **Wednesday** of each month (except January) at the **Seventh Day Adventist Church, corner Gould and Macleay St. Turner**. Meetings commence at 8:00pm with the library and trading table open from 7:30pm.

Speakers:

May 2011: Kevin Dawes - Dendrochilums

June 2011: Frank Fogliati - Stanhopeas & Gongoras

Orchid Society of Canberra Events

Spring Show: 17 - 18 September, Sat 11:00am - 5:00pm & Sun noon - 4:30pm, St John's Hall, 43 Constitution Avenue, Reid.

Upcoming Orchid Events

Orchids Out West: 20 - 22 May, Hawkesbury Race Course.

Mingara Orchid Fair: 25 - 26 June, Mingara Recreation Club, Mingara Drive, Tumbi Umbi, NSW.

Eurobodalla Orchid Club: 15 - 16 July, Fri 9am-5pm, Sat 9am-1pm, CWA Hall, Queen St, Moruya.

Batemans Bay Orchid and Foliage Society: 22 - 23 July, Sat 10am-8pm, Sun 10am-3pm, Soldiers Club, 2 Beach Rd, Batemans Bay.

20th World Orchid Conference: 13-20 November 2011, Marina Bay, Singapore.

President's Comments

As we reach the end of another year I would just like to thank everyone for their continuing support to myself as President and to the Committee over the year. We have had an interesting year with many good speakers and a very successful Show. If you are interested please consider that you could nominate to be part of the committee - attached to this bulletin is a nomination form for the committee and these can be completed and handed to a member of the committee at the May meeting. This is a very rewarding way to participate in the running of the Society by making suggestions as to how we can improve things for the members, or helping with organising speakers, social events and our Show. Also on the same form is a reminder that membership fees are now due for the 2011-12 year. The speaker in May will be Kevin Dawes on Dendrochilums and in June Frank Fogliati will talk on Gongoras and Stanhopeas, both of which should be very interesting talks.



April Judges Choice species & Orchid of the Night: *Dracula ubangina*, grown by Ross Anderson.

Committee Members

President:	Robyn Noel	6258 5734
Vice President:	Laurie Woods	6258 6187
Treasurer:	Bill Ferris	6297 5635
Secretary:	Ben Walcott	6161 2742
Committee:	Peter Coyne	
	Bob Forrester	
	John Ryan	
	Karen Groeneveld	6299 7080
	Zoe Groeneveld	6299 7080

Committee meetings:

May 9: Ben Walcott

June 6: Robyn Noel

Disclaimer

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Results from the Autumn Horticultural and Orchid Show March 2011:

ANNUAL GENERAL MEETING

2 June 2010

Champion Orchid	<i>Sarconopsis</i> Noelene Russell 'Tinonee'	Mark Fraser and Sandra Corbett
Reserve Champion Orchid	<i>Phalaenopsis equestris</i>	Mark Fraser and Sandra Corbett
Champion Specimen	<i>Brassavolla nodosa</i>	Mark Fraser and Sandra Corbett

Bubble-wrap for greenhouse insulation

Sancell is an Australian plastics company operating in Victoria. Sancell manufactures a UV-resistant, clear bubble-wrap designed to provide a long-lasting, insulative cover for greenhouses. The triple laminate, UV400 bubble-wrap is flexible, yet very strong and resistant to hail. It can be easily formed around igloos or hung inside glasshouses to provide insulation (UV400 has a thermal conductance of 3.9, compared with 8.1 for 3mm glass). Tests conducted by Sancell indicate a light transmission of 80%. Sancell will happily make-up custom-made covers for any greenhouse, from small domestic to large greenhouses. Price is \$590-91 +GST for a 100m x 1.5m roll; or \$11-02 +GST per square metre. For further information see www.sancell.com.au (and click on the link to covers/blankets) or ring 1800 624 900 toll free.



March Orchid of the Night: *Dendrobium coerulescens*, grown by Mark Clements.

1. Minutes of the previous AGM were read. Moved Laurie Woods and seconded Jim Harper - approved.

2. The following Committee was nominated:

President: Robyn Noel

Vice President: Laurie Woods

Treasurer: Bill Ferris

Secretary: Ben Walcott

Committee: Zoe Groeneveld, Karen Groeneveld, Peter Coyne, Bob Forrester & John Ryan

Moved Rob Rough and seconded Mark Clements - approved.

3. The Committee nominated Bob Bush for life membership.

Bill Ferris stated that the Committee believed that life membership would be an appropriate reward to Bob for his contribution to the Orchid Society and in promoting the cultivation of orchids. Bob joined the society in 2001 and was elected to the committee in June 2003 on which he served until this year. Family and other circumstances have meant Bob could not seek re-election. Bob served as President 2004/2005. There are few activities of the Society in which Bob has not played a role:

- He is always a willing helper at the Show
- He has assisted at most of our workshops
- He plays an active role on the sales table
- He is an inaugural volunteer at CSIRO/ANBG
- He has assisted in the preparation of our display and presentations at each Floriade in which the Society has participated.

In his own quiet way, Bob is a good sounding board for anything to do with orchids. He is very insightful, not afraid to ask curly questions at the meeting and stimulate discussions. He has provided wise counsel at committee meetings.

Moved Laurie Woods and seconded Ros Walcott - approved unanimously.

4. Robyn Noel thanked the previous Committee for all their hard work. She specifically thanked the retiring members, Bob Bush, Tina and Ross Anderson, Jim Harper and Kevin Dawes.

General Meeting

2nd March 2011

Apologies: Lynne and Brian Phelan, Theo and Jenny Schutz, Jane Wright, Roger Williams, Tony and Julie Smith.

Visitors: Joe Portelli, Mamun Rashid, Soniya Rubaiyet, Sarah Morris, Gary Backhouse

Members present: 40

Speaker: Mark Clements introduced Gary Backhouse who has written extensively on Victorian orchids.

Gary's topic was the cultivation of *Draculas*, although his main interest is orchids in the wild.

Draculas come from the southern part of Central America and the northwest regions of South America. They are found high in the mountains where it is very wet with constant mists and very cool temperatures. These orchids lack pseudobulbs, have stiff, brittle leaves with a central rib and pendant flowers which are pollinated by fungus gnats.

Draculas are related to the *Pleurothallids* and *Masdevallias*. They need very high humidity to grow and a temperature range of 5-25 degrees C. Gary grows them in a mixture of sphagnum moss and perlite which he changes every two years or so. *Draculas* are difficult to grow well. To grow them successfully, you need a misting system that produces a very fine mist to mimic the fogs of the mountains. Gary uses an evaporative cooler to keep the temperature below 30 degrees C. They like moderate light levels where you can just see the shadow of your hand - you can hang them below the bench to achieve this effect. Gary grows them in mesh pots because the flowers grow out through the mesh and hang down in many cases. He is careful to fertilize with a dilute mixture sprayed onto the leaves. He later washes it through well with water, so that the sphagnum doesn't become covered in algae.

Gary then showed pictures of most of the species of *Dracula* and discussed their merits. Among his recommended plants is *Dracula mopus* which has pendent flowers and is quite easy to grow. Another is *Dracula bella* which is the easiest to grow as it's probably the toughest of the *Dracula* species. Many of the large flowered species are difficult or impossible to exhibit at shows because the flowers wilt and collapse as soon as you remove the plant from the humid glasshouse. Consequently, they are better admired in their environment. In most cases this would be a controlled glasshouse, although Gary commented that he had seen people in northern Tasmania growing them beautifully in their gardens.



March Judge's Choice species: *Cirrhopetalum sikkimense*, grown by Karen Groeneveld.

Announcements:

This weekend is the Horticultural Show and Robyn encouraged people to register their plants by 8pm on Thursday and bring them for judging.

The Workshop with Dennis Diehm and Wayne Turville is 12-13 March and members are encouraged to sign up as there is still room. Members can go to Wayne's website and select plants that he will then bring to the workshop. The cost of the Workshop is \$60 which includes lunch for both days as well as morning and afternoon tea/coffee. Members were asked to prepare cakes and slices to go with tea and coffee.

Secretary's report:

Campbelltown and Districts Orchid Society - Jan 2011
Eurobodalla Orchid Club - Feb 2011
Email from NSW asking for show dates
Batemans Bay Orchid and Foliage Soc - Feb 2011
The Orchid Spike Albury-Wodonga - Feb 2011
Invoice from Comstat
Catalogue from Dendi Orchids
Book: From the Ground Up by Ross - gift from Neutrog
Letter from Neutrog offering speakers
Sapphire Coast Orchid Club - Feb 2011
Tinonee Catalogues Spring/summer 2010
Flyers for Sydney International Orchid Fair - 8-10 April
Gardners Gazette from Royal Hort. Soc. Victoria - Autumn
Orchids Australia - Feb 2011
Orchid Digest Vol 75-1 - Jan-Feb-Mar 2011
Australian Orchid Review - Feb-Mar 2011
Report on Floriade - 2010
Miriam Ann Orchids Newsletter - Mar 2011
Batemans Bay Orchid and Foliage Soc - Mar 2011
Eurobodalla Orchid Club - Mar 2011
The Orchid Spike Albury-Wodonga - Mar 2011

Moved Sandra Corbett and seconded Mark Fraser – approved.

Treasurer's report:

Bill reported a balance of \$19,048.06 which included some registrations for the Workshop.

Moved Laurie Woods and seconded Bob Bush – approved.

Raffle: Nita Wheeler, Joe Portelli, Karen Groeneveld, Kelly Gowland, Vi Mach, Mark Clements, Jim Wheeler.



March Judge's Choice hybrid: *Laeliocattleya* Morning Glory x *Lc.* Love Knot, grown by Rob Rough.

General Meeting

6th April 2011

Apologies: Robin Bedding, Robyn Noel, Theo and Jenny Schutz, Brian and Lynne Phelan

Guests: Joe Portelli, Venetia Major, Irene Bodell

Members Present: 38

Speaker: Vice President Laurie Woods introduced Ben Wallace who talked on CAM plants.

CAM, or Crassulacean Acid Metabolism, is a biochemical process that takes place in the leaves of some plants, including many orchids. It enables plants to survive in hotter and dryer conditions by allowing photosynthesis to take place during daylight without the leaves losing water. It was named after the *Crassula* family where the process was first found.

Ben explained that the surfaces of plant leaves are covered by an epidermis (or skin) and a cuticle which keep the interior of the leaf at 100% humidity. The mesophyll cells within the leaf have chloroplasts (containing the green pigment chlorophyll) that are ordered in the top layer as a 'palisade' and below as a more disordered layer - the spongy mesophyll. Running through leaves are veins that take water and nutrient minerals in and sugars out. The surface of the leaf has stomata ('breathing' pores) that each have two guard cells. When the guard cells fill with water and

become turgid (in high humidity) the stomata are forced open, and when the guard cells lose water and slacken (in lower humidity), the stomata close. This process regulates the movement of gasses and water vapour in and out of the leaf, and prevents the loss of water from the leaves when the humidity is low (normally during daylight hours).

In order to photosynthesise and produce sugars to survive, plants need:

Sunlight, water and carbon dioxide (where $6\text{CO}_2 + 6\text{H}_2\text{O} = 6 \text{ carbon carbohydrate} + 6 \text{O}_2$).

Carbon Dioxide enters the leaf when the stomata are open; water mainly enters via the roots and is lost to the atmosphere from the leaves when the stomata are open.

Orchids often grow in sunny but drying conditions – often high in the trees where the breezes are stronger and humidity is lower. How do they meet the need for both carbon dioxide and sunlight in order to photosynthesise, without drying out by opening their stomata in the daylight?

Crassulacean Acid Metabolism provides the solution. During the hot, dry day, the plants keep their stomata closed so they don't lose water, but this means they can't take up CO₂ from the air. Instead, they open their stomata during the night to take in CO₂ without losing much water because the air is cooler and more humid. The CO₂ taken in at night is stored in the leaf by binding it to Malic acid (hence, 'Acid Metabolism'). This stored CO₂ is then recovered by the plant during the day and used with water in the presence of sunlight to make carbohydrates, without the plant needing to open its stomata.

Thelychiton tarberi was the species Ben used in his PhD studies of this process. These plants grow at about 800 metres altitude on exposed rocks on west facing slopes. They get baked by the sun during the day and some of the leaves show burn marks. Ben found that leaf acidity went up at night (when CO₂ came into the leaf and was fixed as Malic Acid) and down during the day (when the CO₂ was released for photosynthesis). The stomata opened quite quickly after dark and closed quickly at sun rise.

For CAM plants, the implications of this are:

High humidity at night will cause stomata to open and gas exchange can take place. Low humidity at night and the stomata won't open and the plant can't grow because it can't make carbohydrates.

Low humidity during the daytime is not really an issue for CAM plants since they close their stomata to reduce water loss. High light intensity is usually needed during the day to drive photosynthesis. Moderate temperatures at night needed for CO₂ exchange – need the diurnal flux.

Ben explained that the ratio of carbon isotopes in the leaves is used scientifically to determine whether a species is a CAM plant. However, there are a number of features that many CAM plants share (although there are always exceptions!), including thicker, more succulent leaves; deciduous plants are more likely to not be CAM plants. A cross section of the leaf can give a good indication - if the whole cross section of a leaf contains green chloroplasts, the plant is likely to be CAM plant. However, if the chloroplasts are restricted to a layer under the epidermis, then the plant is not likely to be a CAM plant.

Not all orchids are CAM plants. For example:

- *Thelychiton jonesii* is not a CAM plant
- *Thelychiton gracilicaulis* is a CAM plant
- *Dockrillia* sp. are all CAM plants
- *Durabaculum mirbelianum* is a CAM plant
- *Elentheroglossum fellowsii* is a CAM plant
- *Dendrobium stuartii* : even though it can be deciduous and has thin leaves it is probably CAM

Many Bulbophyllums have thick leathery leaves and are CAM plants. *Cymbidium suave* and *C. maddidum*, even though their leaves are quite thick are not CAM plants. These plants grow in quite high humidity environments. *Cymbidium canaliculatum*, on the other hand, lives in very dry conditions with occasional wet periods and is a CAM plant. Most *Sarcochilus* species are CAM plants, as are *Phalaenopsis*, *Vanda*, *Acampe* and *Ascocentrum* species.

For the grower, those plants which use the CAM metabolism don't need humidity during the day but do need it at night. In general, it is cooler at night and so humidity is higher.



April Judge's Choice specimen: *Diplodium truncatum*, grown by Nita Wheeler.

After the talk Jane Wright introduced our special guest, Irene Bodell:

Irene is the President of the Orchid Society of NSW. She pointed out that administratively Canberra is now part of the NSW chapter. She encouraged in particular novice growers to submit plants. NSW are currently running a judging course which has its next meeting 18-19 of June in Canberra and there is no one from Canberra attending. She encouraged members to think about it. The meetings are a weekend every three months with talks from specialists on each major group of orchids. You don't have to want to become a judge to attend and you will learn a lot. The cost is only \$50 for the entire course.

Secretary's Report:

Campbelltown and Districts Orchid Soc - Feb
Sapphire Coast Orchid Club - Mar
Shoalhaven Holidays brochure
Australian Orchid Foundation letter
Miriam Ann Orchid Newsletter - Mar-Apr
The Orchid Review - Mar
Announcement of Orchids Out West
The Orchid Spike Albury-Wodonga - Apr
Eurobodalla Orchid Club - Apr
Batemans Bay Orchid and Foliage - Apr
The Orchadian Vol 16 No 10 - Mar

Moved Jane Wright and Seconded Nita Wheeler – approved.

Treasurer's Report:

Bill reported a balance of \$18,643.92. The Workshop had 38 registrants and about broke even. The fiscal year ends soon and so membership fees will be due. Moved Terry Turner and seconded Ross Anderson – approved.

Misc:

Popular vote: Irene Bodell suggested that at some clubs, *Dracula* flowers are presented floating in water so that they don't dry out. It was suggested that the Committee should rule on this.

Laurie announced that Kevin Dawes will talk next month on *Dendrochilums*.

Raffle: Joe Portelli, Vi Mach, Joe Portelli, Ros Walcott, Bill Ferris, Vi Mach, Nita Wheeler, Ross Anderson and Bob Evans

Door Prize: Lorraine Wilson



<u>Sales Table</u>		
Pots/Fertilizer/wire products	Bill Ferris	6297 5635
Shirts	Robyn Noel	6258 5734
25th Anniversary glasses	Ben Walcott	6161 2742
Bark	David Judge	
Orchid Mate	Laurie Woods	

April Judge's Choice hybrid: *Beallara Peggy Ruth* Carpenter, grown by Ben Walcott.

Out about Canberra

Orchids recently in flower close to Canberra (February – April):



Coronastylis cornuta



Eriochilus cucullatus



Speculantha rubescens



Diplodium reflexum



Coronastylis clivicola



Adelopetalum exiguum

Photos by Zoe Groeneveld.

Popular Vote March 2011

Category	Plant	Owner
Laeliinae hybrid	<i>Cattleya</i> Lulu Pink Blush x <i>C. landante</i> hybrida	Rob Rough
Laeliinae species	<i>Cattleya glutata</i> x <i>C. leopoldii</i>	John Ryan
Other species	<i>Cirrhopetalum sikkimense</i>	Karen Groeneveld
	<i>Kefersteinia tolimensis</i>	Geoff Dyne
Vandaceous alliance	<i>Holcoglossum kimballianum</i>	Mark Fraser
Dendrobium alliance	<i>Dendrobium coeruleescens</i>	Mark Clements
Paphiopedilum alliance	<i>Paphiopedilum callosum slinale</i> x <i>callosum</i> (Dark)	David Judge
Australian Terrestrials	<i>Diplodium coccinum</i>	Ben Walcott
Orchid of the Night	<i>Dendrobium coeruleescens</i>	Mark Clements
Judges Choice - Hybrid	<i>Laeliocattleya</i> Morning Glory x <i>Lc. Love Knot</i>	Rob Rough
Judges Choice - Species	<i>Cirrhopetalum sikkimense</i>	Karen Groeneveld

Popular Vote April 2011

Category	Plant	Owner
Laeliinae hybrid	<i>Laeliocattleya</i> Wrigley 'Orchid Library'	Ben Walcott
Laeliinae species	<i>Cattleya maxima</i>	Ben Wallace
Paphiopedilum species	<i>Paphiopedilum helenae</i>	David Judge
Paphiopedilum hybrid	<i>Paphiopedilum</i> Billy Cardalino	Karen Groeneveld
Bulbophyllinae	<i>Bulbophyllum fascinator</i>	Mark Clements
Oncidiinae hybrid	<i>Beallara</i> Peggy Ruth Carpenter	Ben Walcott
Oncidiinae species	<i>Miltonia spectabilis</i> var. <i>morelliana</i>	Karen Groeneveld
Pleurothallidinae	<i>Dracula ubangina</i>	Ross Anderson
Coelogyninae	<i>Dendrochilum magnum</i>	Don Chesher
Dendrobium alliance	<i>Vappodes (Dendrobium) bigibbum</i>	David Judge
	<i>Dendrobium moniliforme</i>	Mark Clements
Terrestrials - Pterostylis	<i>Diplodium truncatum</i>	Nita Wheeler
Terrestrials - other	<i>Corysanthes hispidus</i>	Mark Clements
Any other orchid	<i>Dendrolirium ornatum</i>	Ben Wallace
Orchid of the Night	<i>Dracula ubangina</i>	Ross Anderson
Judges Choice - Hybrid	<i>Beallara</i> Peggy Ruth Carpenter	Ben Walcott
Judges Choice - Species	<i>Dracula ubangina</i>	Ross Anderson
Judges Choice - Specimen	<i>Diplodium truncatum</i>	Nita Wheeler

Contributions to the Bulletin

You can get material to the editor by the following means:

In person: At meetings, or if I am not there to either Robyn Noel or Bill Ferris.

By mail: 112 Tharwa Road, Karabar NSW, 2620. **not** the Orchid Soc PO Box

By phone: (02) 6299 7080 (h)

By email: zoe.groeneveld@internode.on.net

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