

The South African Bulb Group

Newsletter No. 20 -- November, 2011



From the Editor

David Victor

The IBSA 3rd International Symposium took place at the Slanghoek Conference Centre, Goudini Spa at the end of August this year. The first two days were given over to presentations and the following three days to field trips. Nearly sixty people attended the event, including half a dozen from the UK and others from New Zealand, USA and Singapore. A report on the Symposium follows later in this newsletter.

Overall the Symposium was one of the best experiences that I have had in my plant-growing life and I cannot encourage you all enough to take the opportunity to attend the next time around. Having the chance to discuss and see in their natural habitats the plants that you grow, in the company of such knowledgeable experts and enthusiasts is a wonderful experience and should not be missed.

Significant changes are in the wind concerning the publication of new species and I am including a note that has recently been circulated by Professor John McNeill following the recent International Botanical Congress in Melbourne. Doubtless similar changes will follow, in due course, regarding the naming of cultivated plants.

I know that a number of you grow *Oxalis* and are as frustrated as I am over their nomenclature: Salter's monograph on the subject is difficult to get hold of and quite "dense" and many of the standard reference books refuse to publish anything of value on the subject. Thus, the note in the recent IBSA Newsletter about a talk given by Dr Kenneth Oberlander will, I am sure, have interested you. Sadly, few details were given, although knowing that there is at least one taxonomist working in the area is a great step forward.

Dr Oberlander belongs to a group at Stellenbosch which is supervised Professor Léanne Dreyer and I have included in the newsletter the comments she has made on her web site on the subject. As you will see, one of the objectives of current work is to produce an interactive electronic identification key for South African *Oxalis*, which would be a great boon to us enthusiasts.

As an indication of just how small the world we plant enthusiasts occupy is, some 20 years ago Prof. Dreyer was brought to my home in Bedfordshire to see my Oxalis collection by Prof. Charlie Stirton. At that time she was working on the pollen studies she refers to for her PhD dissertation. I'm sure that we are all pleased to see that she has not lost her interest.

After our last meeting I was talking to Jon Evans and Jack Gingell and the subject of deep pots came up. In particular, we were wondering if anyone knows of a source for square long-toms, with a capacity of 2, 3 or 4 litres. If you do, please let me or one of the other Committee Members know and we'll pass it on. We also wondered if these pots were of much interest to anyone else. If so, one possibility would be to make a bulk purchase. Again, please let me or the others know.

In case you are interested but not on the list, Gordon Summerfield's latest seed list has recently been published. You can contact him for a copy at:

summerfields@telkomsa.net

As you will know, the Post Office has recently increased mail charges very significantly and, to be fair to other Members, we need to minimise that effect this has on our costs. So, if you currently receive this newsletter by mail, but could receive it by email please let us know your email address. Alternatively, if you do not have email, please regularly send a suitable SAE to Audrey Cain at:

101 Archery Grove, Southampton, SO19 9ET

Jeremy Spon, from Canterbury, recently contacted me enquiring if there were any Members in his area that might be interested in exchanging visits to look at plants or to share journeys to Winchester for meetings. If so, please contact him on:

01227 780038 or jeremyspon@waitrose.com.

If you would like to raise a similar issue through the newsletter, please let me know:

01984 667250 or davidxvictor@btinternet.com

Spring Meeting, 2012

Our next meeting will be held on Sunday, 11th March 2012 at our normal venue, the Badger Farm Community Centre near Winchester. As in previous meetings, the doors will open at 10.00, with our speakers taking the stage at 11.00. The meeting will close at 16.00.

The morning session will be a talk by one of our Members, Bob Charman, on Fritillaria. As many of you will know, Bob is a keen member of the Frit Group and has a wealth of experience in growing those plants and I am sure that we will all find it an interesting and rewarding subject. In the afternoon, our Chairman, Bill Squire, will give a talk on the plants seen during our trip through Namaqualand this autumn. This was delayed from this autumn's meeting due to problems with his slides.

As in all meetings, there will be a display table for any plants that you care to bring along to show Members. We hope to organise one of our informal discussions periods during the afternoon, so that Members can show their plants and answer any questions other might have. If any of you have slides or jpeg's of plants that you would like to show, please bring them along.

There will also be a sales table where you can offer material for sale on an 80:20 Member to Group basis. Please include double labels on pots, showing the price so that we can settle up easily at the end of the day.

There will be a lunch break from 12.30 until 14.00. For those of you that have not come before, it's worth adding that many Members bring their own food so that they can have the opportunity to chat to others. Alternatively, the Sainsbury's supermarket is based on the same site.

As usual, the charge for the meeting will be £3.00 each, payable at the door.

Directions to the meeting hall

Meetings are held at the Badger Hall Community Centre, near Winchester and, for those of you using satnav's or Google Earth, the post code is SO22 4QB.

By road, leave the M3 at junction 11 and proceed towards Winchester. At the first roundabout follow the sign to Winchester. At the second roundabout take the second exit up the hill towards Badger Farm. At the third roundabout take the third exit to the superstore (not the second exit marked Badger Farm). Follow the road right round the edge of the car park until you see the doctor's surgery. Next to it is the Community Centre.

There is plenty of room in the car park and it is free: However, this privilege depends on Members filling in the form at the entrance giving the car's registration details.

Autumn meeting, 2012

We will be having two speakers at this meeting, both Members of the Group. In the morning, Jon Evans will be giving a talk on photographing plants, together with a practical demonstration. Many of you will know of Jon's great skill in this area and, in particular, of his work at AGS shows. In the afternoon, Jack Gingell will give a talk on flowers of the Eastern Cape, based around a trip he made with Cameron McMaster last spring. The date of the meeting will be distributed nearer to the time.

Nomenclature changes following the Botanical Congress, Melbourne, 2011

From: John McNeill, Rapporteur-général, Nomenclature Section, XVIII IBC, Melbourne 24-29 July 2011

1) *Electronic publication*

The Nomenclature Section accepted a proposal to add the words in bold to Art. 29.1 and also accepted a number of corollary proposals, the effect of the more important of which is described below:

"29.1. Publication is effected, under this Code, by distribution of printed matter (through sale, exchange or gift) to the general public or at least to botanical institutions with libraries accessible to botanists generally. **Publication is also effected by electronic distribution of material in Portable Document Format (PDF; see also Rec. 29A.0) in an online serial publication with an International Standard Serial Number (ISSN) or an International Standard Book Number (ISBN)**

Publication is not effected by communication of new names at a public meeting, by the placing of names in collections or gardens open to the public, by the issue of microfilm made from manuscripts, typescripts or other unpublished material, **or by distribution electronically other than as described above.**"(

"29.2. For the purpose of this Article, 'online' is defined as accessible electronically via the World Wide Web."

In order for any nomenclatural action, e.g. the description of a new species, the transfer of a species to a different genus, or actions (typifications) to fix the application of a name, to be effective, it must be "effectively published" Article 29 specifies what this means. Hitherto the distribution of printed matter has been necessary- now this may also be distribution of electronic material in pdf.

The effective date of the new provisions is 1 January 2012, a year earlier than would be normal for implementation of a decision to change the Code's requirements.

There are also provisions establishing that the content of a particular electronic publication must not be altered after it is first issued and that a version indicated as preliminary is not effectively published.

For published comment see:

<http://www.nature.com/news/2011/110720/full/news.2011.428.html>

2) Modification of the Latin requirement

Currently, in order to publish the name of a new taxon, e.g. a species, of non-fossil plants a description and/or a diagnosis in Latin must be provided. The Nomenclature Section modified this so that effective from 1 January 2012, the description and/or diagnosis may be in either English or Latin for valid publication of the name of all new taxa. [This is the current requirement for names of plant fossils, published on or after 1 January 1996 - previously for fossil plants it was any language.]

Since 1935 a Latin description or diagnosis has been required for new taxa of all non-fossil plants, except algae, for which the requirement has existed since 1958.

3) *Title of the Code*

In order to make clearer that the Code covers fungi as well as green plants the Section agreed that the title should be:

“International Code of Nomenclature for algae, fungi, and plants”,
instead of the existing *“International Code of Botanical Nomenclature”*.

The genus *Oxalis*

Taken from the web site of Prof Leanne Dreyer, Stellenbosch University

Oxalis is the seventh largest plant genus in the CFR, and constitutes an important member of the flora in that it has diversified both within the Fynbos and the Succulent Karoo biomes.

SA *Oxalis* displays an amazing range of biological attributes. They are geophytic, with well-developed subterranean bulbs arising from slender rhizomes. This growth form enables them to flower and fruit profusely during the wet winters in the CFR, and to escape the arid summers below ground.

The genus also displays tristylly, a rare and restrictive breeding system that promotes out-crossing. Plants with heterostylous breeding systems often share a suite of fixed flower morphological traits, and this is well-expressed within *Oxalis*. The flowers are very uniform in structure, with tube length and width and flower colour constituting the only variable floral traits. Despite these floral architectural restrictions, the genus has diversified to well over 200 species within southern Africa. Species are thus mostly demarcated based on very labile vegetative-morphological characters, which seriously impedes the accuracy of the current taxonomy.

This was reinforced by my palynological survey of all southern African members, which revealed considerable pollen diversity within the genus, but which made very limited taxonomic sense. We have recently completed construction of a multiple-marker DNA sequence-based phylogenetic of the southern African members of *Oxalis*. The phylogenetic classification corresponds well with the palynological data, but contradicts the current morphological classification. We are thus in the process of producing a new, updated classification system of SA *Oxalis*, based on diverse morphological, cytological and molecular data. Aims of the current phase of our research include:

- To provide a new phylogenetic classification of southern African members of *Oxalis*
- to produce an interactive electronic key for the identification of SA *Oxalis* species
- to resolve the phylogenetic affinities and population genetic diversity displayed in the numerous “group species” among SA members of *Oxalis*
- to identify the main factors that has driven species radiation among SA members of *Oxalis*

to assess the patterns of evolution and adaptive significance of bulbs, and thus the geophytic growth form, displayed by southern African members of *Oxalis*
to evaluate the evolution and adaptive significance of seedling development and bulb formation among SA members of *Oxalis*
to evaluate the role of chromosomal evolution and polyploidy in the radiation of SA members of *Oxalis*
to assess the role of pollinators as drivers of radiation among SA members of *Oxalis*
to study the extent of expression and evolution of the tristylous (and other) breeding systems among SA members of *Oxalis*
to understand the ecological and evolutionary implications of the tristylous breeding system
to understand the extent, ecology and implications of anther smut infection among southern African members of *Oxalis*

Germination of *Lapeirousia jacquinii* N.E.Br. (*Iridaceae*) and associated species

Ben Turner



Lapeirousia is a notoriously difficult genus to grow from seed, but don't be put off by this common misconception as success is possible under the right conditions. Fresh seed of *Lapeirousia jacquinii* and other species was obtained from the Ramskop Wildflower Garden at Clanwilliam in the heart of the Cederberg at the end of September 2006. Circumstances dictated and sowing took place the following autumn at the end of

August 2007. The abundant seed was sown on to the surface of a mixture of 40% fine silver sand to 60% sieved John Innes No.1 in plastic 15cm shallow pans. The seeds were covered with a thin layer of silver sand and watered in with a fine rose.

Having been allowed to drain the seed pans were then placed into a shaded propagator with gentle bottom heat. The propagation case is located inside a shaded glasshouse that is heated to a minimum of five degrees Celsius during the winter. Bottom heat was maintained throughout the ensuing period, with germination taking place some 6-7 weeks later. The pans were removed from the heat once germination had occurred and placed onto the shaded propagation bench. The following spring a couple of *Pelargonium* sp. seedlings emerged from the pans, evidently the seed had been contaminated during the cleaning process. The seedlings were extracted, potted and proved to be something along the lines of *Pelargonium capitatum* or similar.

Leaf development of the *Lapeirousia jacquinii* seedlings has been slow, but as a recent summer inspection showed, the corms have developed very well! Flower production has yet to take place but the author is hopeful that this may only be a couple more seasons away?

In conclusion it would seem that the combination of a late summer sowing, light sandy, free-draining growing medium, light shade, a protective atmosphere and gentle bottom heat allowed for success. Other factors such as the age of the seed may have contributed as well. Perhaps *Lapeirousia* seed is best left for a year or two before sowing? Maybe certain inhibitors prevent fresh seed, or equally older seed from germinating? Maybe those certain inhibitors just felt that conditions were right? At the time of sowing southern England was enjoying a balmy Indian summer and whilst external temperatures were not too oppressive, conditions were similar to that of a typical Cederberg spring!

Photograph courtesy of:

<http://imágenes.infojardin.com/subir/images/opt1190668155c.jpg>

IBSA 3rd International Symposium on South African Bulbs and Corms, 2011

The first morning was given over to a series of presentations on the Iridaceae, given by experts on the family and supported by outstanding pictures of the plants in habitat. Rod Saunders provided an overview of the family, Rachel covered *Gladiolus* with pictures of virtually every species, Alan Horstmann reviewed *Romulea* and the tricky problems of identification and John Manning discussed revisions to the botany of *Freesia*. These sessions were much more than slide-shows, giving many insights into the various aspects of the individual genera and species. Then, Anthony Hamilton, a Brit, discussed the origins of *Gladiolus byzantinus* and *G. illyricus*.

The afternoon was a more diverse affair, with Vicki Thomas, a botanical artist discussing the development of that art. She was followed by that great raconteur and plantsman Ernst van Jaarsveld talking about his discoveries in Angola and Allan Tait reviewing the various forms of *Zantedeschia* found in the summer rainfall. After tea, James Hitchmough, a Professor from Sheffield University, gave an exciting presentation of how they are using South African geophytes in public spaces in the UK, such as the Olympic Park and Wisley: an amazing idea to some of we growers!

The second day started with a provocative analysis of the current view of *Clivia*, based on much field work by Roger Dixon. This was followed by me talking about tuberous forms of the genus *Pelargonium* and Bill Squire talking about how he grows South African bulbs in the UK. After a break, Dee Snijman showed that she is by no means only interested in Amaryllids, by giving a detailed review of new insights into the *Hypoxidaceae*. Bearing in mind the close relationship between that family and the *Orchidaceae* it was appropriate to follow that talk by one on *Disa*. This was billed as dispelling a few myths about those plants and it certainly did, as Hildegard Crous showed that these are a more growable group than normally thought. The morning was completed by Gordon Summerfield discussing the genus *Gethyllis*, based on the wonderful insights he has formed from growing his wonderful collection of them.

The afternoon was dominated by Alan Horstmann's review of the plants on the display table. There were dozens of pots of beautifully grown plants that had been brought by the Members and Alan used his encyclopaedic knowledge to discuss them, calling out other experts as appropriate. An awe-inspiring session. The afternoon

was completed by Cameron McMaster talking about the interesting bulbous flora of the Eastern Cape.

Supporting the formal programme, there were evening picture shows given by Cameron McMaster, Alan Horstmann and John van der Linde.

The field trips were spread over three days. The Wednesday was given over to the Tulbagh area, Thursday to a longer distance trip to Darling and the Friday morning to a trip to the Worcester Botanic Garden. Burn sites had been chosen, where possible, and a wealth of geophytes were seen in their natural habitats.

Of course, much of the value of a conference comes from the informal discussions carried out between the more formal parts of the event and, even with a very full programme, there was plenty of time for friendships to be made and re-made. A great Symposium much enjoyed by each and every one of us.

Annual Group Accounts for year to 30th September, 2011

	2011	2011	(2010)	(2010)
	£	£	£	£
<u>Income</u>				
Treasurer's Account Loan	0.00		£50.00	
Membership Fees	5.00		£116.35	
Catering	25.56		£50.33	
Bulb Sales	166.77		£45.28	
Book Commission	0.00		£0.00	
Plant Sales	100.34		£257.60	
Donations	68.00		£0.00	
Admission Donations	177.00		£335.00	
Account Interest	<u>0.10</u>		<u>£0.09</u>	
Total Income		542.77		(£854.65)
<u>Expenditure</u>				
Account Loan Repayment	0.00		£50.00	
Hall Rental	120.19		£136.68	
Speaker	80.00		£252.00	
Catering Costs	10.59		£38.00	
Postage	86.23		£71.80	
Stationery	36.85		£30.97	
Printing	0.00		£72.10	
Seed Purchase	0.00		£0.00	
Affiliation Insurance	<u>134.00</u>		<u>£183.00</u>	
Total Expenditure		<u>467.86</u>		<u>(£834.55)</u>
Profit/Loss		<u>74.91</u>		<u>(£20.10)</u>

Financial Position at 30 September 2011

	2011	2010
Balance Brought Forward	894.03	(£873.93)

Add Profit/Subtract Loss	74.91	(£20.10)
Creditor- expenses due	33.05	
Balance Carried Forward	1001.99	(£894.03)

Represented By

Bank Account	0	(£0.00)
Treasurer's Savings Account	<u>1001.99</u>	<u>894.03</u>
	1001.99	(£894.03)

David Wilson MBA

Date 14/10/2011