

The Southern African Bulb Group

Newsletter No. 9

Winter 2007, published Dec. 2007



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SOUTHERN AFRICAN BULB GROUP

This association of largely UK growers was inaugurated at a meeting in the garden of Terry and Jennifer Smale on 4th April, 2004. At this meeting, the twenty-two people present decided to set up an informal organisation under the above name for the study of southern African bulbs from a northern European perspective. Membership has almost quadrupled since then and the current management of the Group is in the hands of the following:

CHAIR – *Bill Squire*

TREASURER – *Margaret Corina*

MEMBERSHIP SECRETARY – *Audrey Cain*

MEETINGS CO-ORDINATOR – *David Victor*

NEWSLETTER EDITOR – *Mick Reed*

SEED DISTRIBUTOR – *Mick Reed*

WEB MANAGER – *Richard White*

NEXT MEETING

Our next Meeting will be held on Sunday 18th May 2008 at Badger Farm Community Centre, Winchester SO22 4QB.

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. (Second exit goes to Badger Farm) Follow the road right round the edge of the car park until you see the doctors surgery and next to it the Badger Farm Community Centre. We have access from 10.00am to 5.00pm.

Guest speakers will be Rod and Rachel Saunders of Silverhill Seeds, South Africa.

More information to follow in the Spring Newsletter.

Spring 2007 meeting at Crawley

SABG members met again at the Crawley Horticultural Society's Hall, Ifield Avenue, Crawley, on Sunday 25th March 2007 from 10:30 am to 4:00 pm. You could tell you'd come to the right place when you entered the hall and saw the benches down the side laden with plants for display and plants for sale. The view was dominated by *Veltheimias* in flower in various colours from lemon-yellow to a dark shade of their usual pinkish-red. There were also lots of *Lachenalias* and a nice white *Bulbinella*, among other things.

The hall was open at 10:30, but plenty of time was available for us to admire the display and purchase plants from the sales end of the table before the main presentations got under way. As usual, tea and coffee and later soup and other refreshments were available to sustain us through the day.

The morning session began at about 11:25, with Terry Smale outlining the timetable for the day, which would contain two main presentations, plus some pictures from CDs. To begin the first of the two presentations, he then introduced David Victor, who had hosted one of the early SABG meetings at his large garden in Hockliffe, Bedfordshire, where he has various plant collections including bulbs and an arboretum. He had attended the IBSA convention in South Africa last year, and described it for the benefit of the majority of us who had not been there. It covered a wide range of topics in two days of sessions, some of which are reported in the IBSA Annual Bulletin, including hybridising *Haemanthus*, the commercial bulb trade in Germany, pollination of Iridaceae by John Manning, the basics of DNA studies, and the cultivation of South African bulbs in northern Europe by David himself and also by a Dutch speaker. There was also a flower show associated with the IBSA convention, and some talks by people such as Alan Horstmann about some of the plants which had been staged. You can read more about the symposium in this account written by Mary Sue Ittner:

<http://lists.ibiblio.org/pipermail/pbs/2006-September/026059.html>

David's talk at our March meeting was based on photographs he'd taken on a field trip organised as part of the convention. The field trips were excellent, since recent rains had brought on an exceptional year for flowering, alleged to have been the best for 20 years. He said his talk would concentrate on "irids", members of the iris family Iridaceae, which he had recently given up growing (I think perhaps to concentrate on the family Amaryllidaceae), but it also included a lot of information about the little-known genus of about 30 species called *Gethyllis* in the amaryllid family. David's talk is described in more detail in another article in this newsletter, and includes some information he gave us on the cultivation of *Gethyllis* in reply to a question about this.

After Davis's talk we had a session where some images which members had brought along on CDs were projected for our enjoyment. Mick Reed talked about some images of *Clivias* from Mike Jeans of Heathfield in East Sussex, who is keen on this genus (see his web-site at <http://www.tomorrowsplants.com/>). He explained that Mike grows them in a different way to Terry's tougher approach. The pictures included *Clivia nobilis* and *C. miniata* var. *citrina*, which was actually almost a peach colour, a white form and one with variegated leaves. Several clones can be found in garden centres, and Mike is busy hybridising *Clivias*.

Other images included a *Crinum* from Madagascar, *Hippeastrum vittatum*, with red and white striped petals, which is one of the parents of the Dutch "Amaryllis" hybrids, and the orchid *Pleione forrestii* var. *alba*.

Next came a collection of images of fourteen different coloured forms of *Oxalis obtusa*, garnered from the web. The colours we saw included tangerine, clear pink, white with a pink tinge at the throat, a yellow variety (imaginatively named 'Buttercup'!), yellow with red petal bases, pink with red bases, and white with a purple ring around the throat. They are not large plants, so it would be easy to grow a collection of them. Unfortunately only the salmon-pink form seems to be available from UK nurseries (although a wide range is grown by Telos Rare Bulbs of California as can be seen at <http://www.telosrarebulbs.com/Oxobtusa.html>).

Finally some South American bulbs crept in, including one with red and green flowers whose name I didn't catch, and a couple of genera: *Stenomesson*, which can be hard to flower as it requires warmer winter conditions than South African bulbs, and *Phaedranassa*, which (according to sources on the Web) is much easier.

At this point the meeting adjourned for lunch. The first thing we did on sitting down after lunch was to thank the people who had brought plants for the display, Mary for the refreshments, and Mick Reed for organising the meeting. This was a good opportunity to discuss the organisation of the SABG as a whole. Margaret Corina pointed out that there was a limit to the increasing amount of work she could do in helping to run the Group, and suggested that it was time to form an official Committee to delegate tasks to individuals. Terry made some suggestions as to the roles which members of the committee should undertake, including a chairman to run the meetings, a treasurer (Margaret is happy to continue to do this), a membership secretary (Audrey), newsletter editor (Mick), someone to run a web-site (I have volunteered to do this), a secretary (who is needed to keep it all together and who would need to be online to send and receive email), and a couple of additional committee members to take on other tasks as they arise. Please contact Margaret or Terry if you would like to volunteer; it was hoped that we could set up a committee at the next meeting at Corfe Mullen Village Hall on Sunday 23rd September 2007.

The rest of the meeting was taken up with an extensive discussion on seed production, germinating seeds and growing seedlings, led by Terry, with much advice by him and various useful additional suggestions and opinions from the audience. I hope to write this up as a separate article for the next newsletter and for the web site.

Richard White

SABG website

I have created a web site for the Group, which can be found at <http://www.sabg.tk>. In case you're wondering, .tk web addresses belong to the Tokelau Islands in the South Pacific, whose small population don't need a large number of web sites, so they make them available to others – they are easy and cheap to register, so I have registered this address on behalf of the Group for the next ten years, when it will need to be renewed. In the same spirit of economy, I am using spare space to store the actual pages and pictures on a server computer at Cardiff University where I work. This has a large amount of space available, and will also allow us to install special software if we want to do anything fancy with the web site in future. Sometimes when looking at the web site you may see the address of the pages on this server, which is biodiversity.cs.cf.ac.uk/sabg/, although this is not supposed to happen. I will be trying to cure this problem, but meanwhile please do not save this longer address or link to it – tell other people the address is www.sabg.tk – this will ensure that if we have to move the pages somewhere else in future (for example, when I retire!), the short address will remain valid and links will not get broken. At the moment, the web site is very simple and rudimentary, but it already helps people who search for information about southern African bulbs to find out about our group.

Websites, like newsletters, do not write themselves. Just as you are, I hope, constantly bombarding Mick Reed with material for the newsletter, please also send me any information, pictures, or links to other interesting web sites that you think may be of interest to other bulb enthusiasts, members and non-members alike. I will then add your suggestions to the web site. I can be reached by email at richard@rjwhite.tk
Richard White

Seed and Bulb Exchange Report

Our first venture into seed and bulb exchange between members was a great success. We had 13 donors and 21 members requesting seeds and bulbs. There were 250 packets of bulbs and seeds sent to me and the variety absolutely amazed me. Many donations were of seeds and bulbs that would be difficult and expensive to obtain from nurseries and many donors supplied large quantities of seeds and bulbs.

After sending to seeds and bulbs to members who requested them I still had a considerable amount left over. The choice items obviously were snapped up with donors naturally getting first choice. The packaged the seeds and bulbs that I had left and took them to Corfe Mullen in late September to sell at 20 pence per packet. I did not think many would be sold as all had already been on offer free of charge in the exchange but we finished the day selling over 150 packets.

I have learnt a lot from this initial exchange and propose that the following changes for next year's exchange.

a. The list of seeds and bulbs available will be sent to all donors. Non-donors on email will need to request that a copy is sent via email to them. Members only on normal postage will need to send for a list including a stamped addressed C5 envelope.

This is to cut down on expenses for ink, paper and postage.

b. It has been requested that we add a column to the seed and bulb available list stating who the donor was. This will help where wrongly named items are sent by donors. Often plants are sold or given to members that turn out to be wrongly named. With the donor listed we will hopefully be able to contact the donor to correct the name of the bulb.

Ed. I have received 3 *Veltheimia bracteata* that I have bought as *Veltheimia capensis*. I also have from the exchange a bulb listed as *Polyxena paucifolia* which is listed as a narrow 3-10mm wide leaved polyxena. Mine has not flowered yet but the leaves are 13cm x 20cm.!

I look forward to receiving even more seeds and bulbs for the exchange next year.

If any member can think of other improvements that could enhance the Seed and Bulb exchange contact me at email:mick.reed@blueyonder.co.uk or Tel.No. 01293 420975

South African Orchids Jonathan Hutchinson

Of all the South African geophytes it seems that the terrestrial orchids are the least grown of them all.

The primary reason for this must be the fact that even if one is able to purchase seed the whole sowing process is out of most peoples reach because of the sterile environment, growth medias, skills and expense needed to enable germination.

Even when a grower has produced a plant in this sterile environment things can rapidly go down hill when attempting to bring the plant out into the big wild world. That thick agar jell which is such a life line to the plant in its protected environment will quickly go mouldy when left on the plants roots and soon see the demise of your prized plant.

Beyond this some orchid species are very difficult to grow , the usual scenario being that they hang around in a pot for a couple of years, maybe even flowering initially then just gradually fade away. Probably the main reason for this is the lack of a fungus which has a symbiotic relationship (one of mutual benefit) which in the wild state would allow germination and then enable the orchid to further develop. This whole process could include more than one fungus.

It has been said that all plants have these symbiotic relationships, but it seems that they are most necessary with orchids.

Happily not all orchids seem to be to dependant on this relationship I think a good collection could be built up by concentrating on these.

I really am in no position to write about these plants as I have certainly killed more plants than I have growing

at the moment but I am intent on growing some of the easier species. A particular favourite genus of mine is *Satyrium*. In the limited experience I have had with this genus the lack of presence of a particular fungus has not seemed to be a problem.

The most often pictured species are those such as *S. erectum*, *carneum*, *princeps* and *corrifolium* which usually have lovely collumular flower heads of pinks and whites though the latter is orange. I have killed three different plants of this genus but still have the green flowered, sweetly scented *S. odorum* which has a less striking but quiet attraction.

As to how I killed the other plants, it was all down to watering. As with the other South African geophytes specific dry and wet regimes have to be adhered to but as where a bulb can often be stimulated to grow with a bit of early water, trying this with an orchid tuber, in my experience meant a rather rapid turn to a soggy mess. Never again will I try and stimulate an orchid into growth, it will start when it wants to start and is best left in its compost until it makes an appearance. Another successful way of killing tubers is to take them out of their compost for their dormant season where they rapidly go soft, then seem unable to rehydrate them selves.

Again leave them in their pots during the summer and store under the greenhouse bench, particularly if in small pots.

I had a particular *Satyrium* which flowered for a couple of years and was getting quite impressive. Every thing was fine until I decided to water it as its leaves started to yellow. It had said quite clearly to me 'I am dying down' but I had not heeded it. Very soon I was left with a soggy husk where instead there should have been a substantial tuber. A particularly remarkable thing about the flower was the scent. It was very sweet but even lasted strongly as a dead flower spike and continued to do so for about three weeks after the flowers had died. For a suitable compost I have found that a sandy /gritty mix with a small amount of compost added seems fine. It is the same mix really as I use for the other geophytes

Bonatea speciosa is a terrestrial orchid well worth seeking out which produces strong stems and lovely scented white flowers. In my compost for this species, I try and emulate it's habitat conditions by producing a freely drained sandy compost with a portion of organic matter in the top third of the pot It is often found in coastal dune thicket. Plants can grow to a meter in height which must look wonderful! My plant is no where near that tall so it should possibly be given more water and feeding. The roots of this plant are a collection of large tubers held together by the growth point. They require a deep pot and seem to be happy in clay or plastic but I prefer clay.

Disas must be amongst the most flamboyant of South Africa's orchids but will leave these for another occasion!

Jonathan Hutchinson

The Genus *Gethyllis* Plum ex L.

This is a little known genus, endemic to South Africa, the name being derived from the diminutive of the Greek *gethuon*, literally “a little leek”.

Some 33 species are currently recognised, with some 19 coming from the winter rainfall area, many from Namaqualand and the Karoo. As might be expected from this, most species grow in semi-arid habitats, although two, *G. afra* and *G. kaapensis*, grow in seasonally moist sites.

The genus is closely related to an even lesser known genus, *Apodolirion*, the two being distinguished from each other by the arrangement of their stamen and a number of other small differences. It is thought by some that it would be better to merge the two, but accepted that there is insufficient knowledge for this to be properly done today.

Why grow Gethyllis?

There are three major reasons for growing these interesting bulbs, each linked to their three-stage annual cycle. Firstly, their foliage, which emerges early in the winter and grows on for some months before dying back in late spring. Secondly, their flowers which emerge when they are without foliage in mid-summer. Finally, their autumn fruits, which are attractive, pleasantly scented and tasty!

Whilst the leaves of most species are linear and narrow, the overall effect of the foliage of nearly every species is attractive and unusual in some way or other. In many of the species, leaves are attractively coloured silvery-grey or deep green. In many, the leaves are twisted, curled or set in closely twisted spirals. In five of the species, the attractiveness is enhanced by the presence of stellate hairs or flat trichomes attached to a raised spot of the leaf surface, which give a glistening effect to the surface – see note below.

The attractiveness of the foliage is also often enhanced by the presence of a basal sheath, referred to as a cataphyll. This has a turned over top and is often attractively marked with splashes and dots of various colours. It may be used as a mean of identification (see later).

The flowers are beautiful, though somewhat fleeting. Each bulb produces one salver-shaped, flower which lasts for 1 to 5 days. They are either pure white or pale pink and can be up to three inches in diameter. They are often scented and writers say that the perfume of the flowers is often jasmine like.

There are some doubts as to how they are pollinated. One school suggests night-time pollination by moths, although John Manning has suggested that it is more likely that they are pollinated by bees.

Bulbs of a particular species show a notable degree of synchronicity in flowering, whether in the wild or cultivation. Marloth related how six bulbs of *G. ciliaris* had been apparently dormant for four months until, one day in December, there was a shower of rain. The next day five buds appeared, opening a few hours after sunrise.

Fruits are fragrant and sweet tasting and are widely enjoyed as a sweet-meat by children, where they go by the name of “Kukumakranka”. Writers say that the taste of the fruit somewhere between banana and pineapple. They emerge through the ground as an elongated, club-shaped berry with a semi-transparent skin and are often coloured yellow or red. The outer covering of the fruit quickly breaks down allowing the seed to spill out. This then germinates quickly, to allow the young plants to establish before the end of the season.

Historical development of the genus

Linnaeus published the first species (*G. afra*) in 1753, though little was known about the genus until Thunberg’s visit in 1772 – 5. He collected three more species (*G. ciliaris*, *G. spiralis* and *G. villosa*), describing them under the generic name *Papiria*. In his book “*Amaryllidaceae*”, Dean Herbert included two more species (*G. verticillata* and *G. undulata*) and two more questionable species. It was only late in the nineteenth century that the first and only monograph on the genus was prepared, by J. G. Baker at Kew. This recognised ten species, of which three were only known from drawings based on collections made by Masson in the Cape in the 1790’s.

There was then a lull in new reports concerning the genus until the late 1920’s. Then, over a period of four years (1929-33), nine new species were added to the list. Louisa Bolus, at Kirstenbosch, described a further six species and Rudolf Marloth described three.

Very little then happened with the genus until 1986, when Professor Dr. D. Müller-Doblies of the Institut für Biologie, Berlin published a first paper covering a new revision of the genus. In this he published the names and diagnoses of 14 new species, 3 new sub-species and 2 changes to sub-specific rank. However, although promised in that paper, he has not yet published the full revision, pending “the completion of the completion of critical studies on some doubtful taxa”. So, there is something of a continuing hiatus.

Identifying the plants

One thing that is missing from the Müller-Doblies revision is an identification key for the species and whilst Baker included some information of this type it covers less than half the species known today. However, in 1999, Alan Horstmann published some identification notes in the IBSA Bulletin.

Horstmann divided the genus into four groups, for identification purposes only, as follows (NB this is a highly condensed version of his note):

- **group 1** – Those with a cataphyll above ground level: *G. britteniana*, *cavidens*, *ciliaris*, *grandiflora*, *gregoriana*, *latifolia*, *namaquensis*, *verticillata* and *undulata*. If it is not group 1 then:
- **group 2** – Those with narrow, prostrate leaves arranged in a rosette: *G. barkerae*, *lata*, *pectinata*, *roggeveldensis* and *uteana*. If it is not group 2 then, if it has hairy leaves group 3 or alternatively group 4.
- **group 3** – with hairy leaves - *G. fimbriatula*, *lanuginosa*, *longistyla*, *multifolia*, *oligophylla*, *setosa*, *unilateralis*, *verrucosa* and *villosa*.
- **Group 4** – with non-hairy leaves – *G. afra*, *campanulata*, *hallii*, *kaapensis*, *linearis*, *oliverorum*, *pusilla*, *spiralis* and *transkarooica*

Deliberately omitted from the above list are the little known *G. heinzeana*, *G. kaapensis*, *G. longituba* and *G. marginata*.

Cultivation

As mentioned earlier, most *Gethyllis* originate from the western part of South Africa and, as such, are essentially winter-growing, with a requirement for a dry summer rest. Bulbs of the genus lie deeply in the ground, with the flower being erected on a long perianth-tube and the ovary resting at the top of the bulb. I have heard that they mainly come from limestone areas, though I am by no means certain of this.

With the above in mind, I grow the bulbs (which are small by nature) in deep pots. I use a proprietary mix, similar to a John Innes 3, split 50:50 with a sharp Cornish grit. Pots are topped with a good layer of granite chippings. I grow them in a cold greenhouse during the winter months, giving them an extra cover of horticultural fleece on particularly cold nights.

I water only very occasionally, if at all, during the coldest part of the winter, but in the warmer periods of growth I water every few days. Watering is probably best done from below, to avoid damage to the foliage and the bulb. However, practicality leads me to mainly water from above, even though it takes a steady hand! During the summer months they are given a rest from watering, although I occasionally give them a short spray to ensure they are not totally desiccated.

Conclusion

The genus *Gethyllis* contains many attractive species which, although being a little tricky, are quite growable in the United Kingdom. Whilst not commonly available, most South African bulb and seed suppliers have one of two species available each season. With their attractive foliage, beautiful flowers and interesting fruit they would make a positive contribution to most collections of South African bulbs and I strongly recommend you try some if you do not already grow them.

If you are interested in learning more about the taxonomy, a check-list with full synonymy can be found on the Kew web-site at <http://www.kew.org/wcsp/home.do>.

Note: Whilst in many plants hairs on the leaves protects against sunlight or transpiration that is not the case here. In 1931, Dr Marloth, the creator of "Flora of South Africa", described experiments which showed their purpose was to collect dew at night in the very dry habitats that they occupy: Each plant could absorb as much water in a single night as they would lose in transpiration in a week.

Bibliography

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NOTICES

Would all Members of The Indigenous Bulb Association of South Africa (IBSA) contact me so that

I do not duplicate Bulb Chat and their Newsletter to you. Mick Reed

Audrey Cain has some surplus Nerine bowdenii bulbs. Contact her on Email: Audrey@cain.net or
Tel. no. 02380 446571

Updates for your Suppliers of Southern African Bulbs:

Delete Rupert Bowlby's Nursery. (No longer trading as a nursery)

Add R.V. Roger Ltd. Malton Road (A 169) Pickering, North Yorkshire YO18 7JW

Email: sales@rvroger.co.uk

Website www.rvroger.co.uk