

British Cactus & Succulent Society

Southampton & District Branch Newsletter

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Editorial

After a couple of weeks with hardly any rain, we did get some showers over the weekend, along with some rather chilly winds. I still have some daffodils in flower at present. These are a type called "Salome" which were supposed to have pink trumpets, but in the two years that I've grown them, they've open with yellow trumpets which fade to a cream colour. It appears that there are both pink and yellow versions of "Salome" – so despite being misled I shall order some more from another supplier and hope that I receive the right variety.

Just as with the outdoor plants, plants in the conservatory are flowering a few weeks later than normal. Currently I have some Rebutias and a Mammillaria or two in flower, but one would normally expect to see more flower buds by this time of the year.

Homebase had a good selection of Easter Cacti on sale over the past month and the smaller 3-trunk plants were a good buy at £1.99, (even less if you managed to catch one of their 10% off days). The flower colours offered this year were white, deep red, orange-red, light pink, and magenta. These plants belong to the genus Rhipsalidopsis and the original species from which these plants are likely to have been bred are *R. gaertneri* and *R. rosea*.

Announcements

The branch will be putting on a display as part of **Sparsholt College's Countryside Day** on Saturday 15th May. According to their website, there's going to be quite a lot to see and do on that day :

- The 400 acre farm, milking parlour, sheep shearing and the pig unit
- Have-a-go' air rifle shooting, clay shooting and archery
- Big machines, tractors, quad bikes and car workshops
- Game birds and pheasant rearing
- Climbing wall and sports activities
- Plant sales, tropical house, Pitch and Putt and a view of the famous BBC Radio 4 'Gardeners' Question Time' garden and Potting Shed
- Horse riding displays, jumping and Suffolk Punches logging and harness demonstrations
- Band music from the 'The Plonkers'
- A wide range of local crafts and produce in the Craft Fair
- The veterinary nursing centre and exotic animal building, the animal enclosures, grooming centre and kennels. Over 500 animals of 100 species including spiders, reptiles, exotic pheasants, mara, llamas & wallabies, and Kiki our Red Panda
- Falcon, gun dog and dog agility demonstrations
- Village Fete, family activities, displays and refreshments
- Woodland crafts, timber processing, chainsaw work and tree climbing
- Fascinating ornamental and tropical fish, fishing lake and fish hatchery

The event runs from 9:30am - 16:30pm. Entrance is £7 for adults (£6 for OAPs).

Later in the month, on 29/30 May, we will be putting on a display at **Whiteley Village's Garden Market**. Whiteley is signposted from junction 9 of the M27, and if you're in the area or passing by, please do come along – the event is free and parking is plentiful. There should also be a good variety of garden plants on offer from various nurseries.

At the start of his talk to our branch last month, Derek Tribble mentioned that he was in charge of a **BCSS photo competition** timed to coincide with the National Convention. There are 5 classes and images must be submitted in digital form. The closing date is 1st June, and not many entries had been submitted so far, so this might be a good chance to win something.

Our monthly meetings continuing to be well attended and it can sometimes be daunting for new

members to be faced with a roomful of people and trying to remember everyone's names. So, to make life a little friendlier, on the front table, there is a sheet of sticky **name labels** with people's names printed on them – just grab yours and affix to your clothing. If your name isn't featured on the printout – let me know so that I can include it in future months.

Last Month's Meeting

Plants of Interest

David Neville mentioned there wasn't much happening in his greenhouse. Outdoor plants seemed to be growing a month later than normal and same applied to plants inside his greenhouse.

The first plant he discussed was *Turbinicarpus valdezianus* which normally flowers in February. He had owned the plant for over 20 years and this was the latest that it had flowered in all that time. It is one of slowest growing of the cacti.

Next was *Parodia chrysacanthion* which would normally have finished flowering by April but the featured plant was only just forming buds. He had seen some in flower on his recent trip to Holland, probably because they tend to keep their greenhouses warmer.

Glandulicactus uncinatus has dark coloured waxy flowers and this was also late – normally it's one of the first to flower each year. The other plants he had brought along were some examples of his sales plants which were just starting to form flower buds – this was a mixture of various Rebutias, Mammillarias, Gymnocalyciums, Notocactus and Echinocereus.

The final plant he described was an unusual form of *Ferocactus glaucescens* which had no spines. Someone in the audience mentioned that it looked like an *Echinopsis* – David agreed but mentioned that if the flower buds had been more developed, then the genus would have more obvious. This is one of the few Ferocacti which is capable of being flowered in a 5 or 6 inch pot.

Thanks are due to Ben Turner for providing the following write-up of last month's talk by Derek Tribble.

Growable Gasterias

The genus *Gasteria* is well-known to succulent enthusiasts, but an in depth analysis of these South African natives is not often featured in presentations! Derek Tribble certainly didn't disappoint and provided a clear insight into a group of plants we should all probably know more about.

Background

The genus itself has been for many years the subject of great confusion. Taxonomy was messy at best and the plethora of different plants in cultivation were generally regarded as either unknown species with hazy origins or non-descript hybrids.

It wasn't until Ernst van Jaarsveld produced the first definitive literature compiled from in-depth study and exploration of the genus that these plants began to increase in popularity. Nowadays *Gasteria* are very popular amongst collectors, and accurately named species are easily obtainable. Some species and certain varieties in particular are highly sought after and take pride of place in specialist collections. Thanks to Ernst's work the genus is now considerably concise and contains 23 species and 11 sub-species/varieties. Three species in particular grow to considerable size and are not suitable for the average greenhouse collection as they can reach two to three feet across with an even larger inflorescence.

Cultivation was the subject of much discussion and many succulent enthusiasts will be pleased to know that *Gasteria* are easy to grow in pots, often easier than Aloes. *Gasteria* are often associated with *Haworthia*, and of course the Haworthia Society caters for fans of both genera. Amongst other aspects of membership, the society offers seed distribution of various *Gasteria* species, but seed does not remain viable for long. The society invited Ernst to speak at their convention in Leicester last year.

The essential reference on *Gasteria* is Ernst's book 'Gasterias of South Africa', published in 1993 and lavishly illustrated by the late Ellaphie Ward-Hilhorst. These illustrations are in fact some of the best botanical art relating to *Gasteria*. This major revision of the genus is the result of both Ernst's MSc thesis on *Gasteria*, which focused on analysis of individual characteristics, as opposed to DNA investigation. It also follows an article by Ernst

published in 'Aloe' magazine (the Journal of the South African Succulent Society), which essentially formed the preceding taxonomy followed in the book.

Cultivation

Cultivation of *Gasteria* is relatively straightforward, but it helps to know the plants well to begin with. *Gasteria* are leaf succulents (monocots) with stems that are often hidden and sheathed by the leaves. They differ from other succulents due to the fact that they root from the top of the stem. Therefore you will often find a lot of old stem buried beneath the plant itself. *Gasteria* undergoes continuous regeneration with new leaves produced from the centre, just as one finds with any monocot. The leaves grow to full length and eventually wither and dry up with age. They can simply be removed by twisting the whole leaf sideways and gently pulling it away from around the stem, however, this is a delicate operation and should not be rushed!

Try not to let the leaves interfere with the roots, when repotting mature *Gasteria*; you must take away dead root material in the centre right at the bottom of the new roots. In nature this type of plant clean-up is most probably taken care of by worms. However it is important to intervene with regular plant care and attention far more than is generally the case with cacti. On really old plants, cut off the bottom of the stem as the rooting zone moves upwards quite considerably. Always make sure you allow the stem to callous over before potting up.

Gasteria are generally not that fussy about compost, as long as it is free draining. A standard cacti mix is ideal. Always remember to frequently divide up established plants. Repotting into plastic pots is better for watering (in terms of gauging weight), but clay pots are still a viable alternative.

It is best to water *Gasteria* all year round, regular watering during the main growing season is essential, allow them to dry out slightly in the depths of winter. Remember that they are not hot, arid zone succulents; they do need regular watering, as they occupy dry niches in areas of fairly consistent rainfall in South Africa. Their natural habitats are the northern slopes of hills and under the cover of bushes. Therefore they are particularly shade tolerant and the leaves will be able to gather enough light underneath the staging with *Haworthia* that thrives in the same conditions. It is important however to provide them with generous exposure to extended periods of sunshine early on in the growing season.

Plants that become top heavy, such as Derek's example of *G. polita*, growing in a plastic pot can be submerged in a larger clay pot with gravel for extra stabilisation. Stakes may be necessary to support some the massive inflorescences that certain species will produce. Although support may be necessary, it is not always easy to determine the size of pot required in the first place, as the pot size is not always equal to the spread of the plant. It is important to allow enough space for anchorage roots.

The only drawback to using clay pots in general is that they dry out about a third quicker than plastic pots. This of course means more watering will be needed on a regular basis. Pots will require shading, particularly if the plants are growing in black plastic pots; in direct sunlight this will speed up transpiration. Installing benching with a prominent raised lip around the edge is an effective means of combating this problem.

If additional shading is required, this should be installed around Easter time. Apply shading from the bench down if plants are growing underneath the bench, but beware of etiolation! As with many succulents, *Gasteria* has a depressed centre where water can collect, therefore overhead watering is not ideal, neither is spraying over, other than a very light misting early in the morning during high summer. The key to growth and establishment is the regular repotting of plants.

Pests and Diseases

Gasteria are generally trouble free when it comes to pests and diseases. The only possible problems that might be encountered are the ever present mealybug and root mealybug. *Gasteria* may however suffer from rot caused by fungal infections which presents itself in various forms. Purple rot on the stems should be cut out at first sign if possible. Unsightly, necrotic black spots on the leaves will penetrate right through the leaf and are difficult to eradicate. A copper-based fungicide may help to alleviate the problem, but there is no proven evidence that this actually works and so many products have been taken off the market in recent years.

There has been much speculation regarding these black leaf spots with particular reference to the work of Ray Pierce from Oxford. Even in-vitro testing has proved inconclusive at pinning down the exact fungus responsible. It is believed that the black spot may be a stress reaction and will almost certainly lead to the eventual death of the entire leaf.

Propagation

Propagation is fairly easy and includes various different methods; Offsets are easy, but new plants can also be produced from leaf cuttings or even indiscriminate sections and bits of leaf. This is poor man's tissue culture! As with all succulent plants, always allow cuttings to callous over before placing into the propagation mix. The plant will differentiate between the new root section and shoot section along the edge of the cut, so bear this in mind when potting.

Seed collection is a possibility but as always it is difficult to guarantee that plants will come true to type. The possibility of hybridisation, especially amongst a mixed collection is almost certain. Seed is also extremely short-lived, but should not be sown immediately when fresh. It is best to wait a couple of months after collection before sowing, but don't leave it as long as nine months as the seed is likely to have lost viability by this time.

Distribution

The botanical epithet 'Gaster' means 'bulge' and relates to the distinctive ribbing on the leaves. Flower form is varied throughout the genus. Some have a massive inflorescence! The flowers are rich in nectar and are generally bird pollinated. The Malachite Sunbird for example lands on the flower stem and dips its long tongue deep into the flower in order to reach the nectar.

In South Africa, *Gasteria* are generally found in the south, not in the west (with the odd exception). They are particularly prevalent around the Karoo region, with some species also found in the Eastern Cape and up into the former Transvaal (modern day Gauteng). The genus can be divided into two distinct sections: Section *Longifolia*, with sub-categories; Series *Longifolia* and Series *Multifariae* along with Section *Gasteria* with sub-categories; Series *Namaquana* and Series *Gasteria*.

The first species we encountered was *G. batesiana* from the north. There is a separate form that is to be found in Barberton, *G. batesiana* var. *dolomitica*, which is distinguished by indiscriminate black spots, but even these are difficult to determine. The next species, *G. croucheri* has hanging flowers and has a sub-species *G. croucheri* ssp. *pendulifolia* that originates around Durban. *G. tukhelensis* and *G. acinacifolia* were also mentioned.

Next we saw *G. excelsa* which favours the type of undergrowth habitat so often associated with *Gasteria*. The stem of this species can often be as wide as the leaves themselves, but smaller forms can

also be found. *G. polita* has streaky tubercles on the margins of the leaves. *G. pulchra* is a highly endemic species found solely in one river valley near Humansdorp. This species has narrow shiny leaves and is very floriferous.

Fire is an integral part of the ecosystem and the Renosterbos that grow in association with *Gasteria* are certainly used to this environmental factor. *G. nitida* grows on acidic sandstone rock and has triangular leaves. *G. armstrongii* is a species that stays small and compact. *G. ellaphiaeae* was discovered by Ernst and named after Ellaphie Ward-Hilhorst, the botanic artist who illustrated his book. It is a tiny, dwarf species. *G. glauca* was also mentioned.

Moving on to the Groot Swartburg area, we find *G. vlokii* with associated variations. There are short-leaved forms, but overall this species is found in Fynbos habitat on acidic, nutrient-poor, sandstone soils that are dry for five to six months of the year during the long, hot South African summer. In the thicket habitat in these parts we find *G. carinata* with variations *G. carinata* var. *glabra* and *G. carinata* var. *verrucosa*. The last one is a coastal variety, but both the species and subspecies of *G. carinata* are characterised by their short flowers. To finish Section *Longiflora* we have *G. thunbergii*.

Moving on to Section *Gasteria* we start with *G. pillansii*, which doesn't quite fit into a specific category. This species is generally well-camouflaged and uses mimicry to blend into the undergrowth. *G. pillansii* var. *ernestii-ruschii* is found well within the boundaries of the winter rainfall region on crumbling quartzite substrate. *G. pillansii* var. *hallii* has leaves that are one inch long and is to be found around Port Nolloth in the Northern Cape. Around Matjiesfontein one is likely to find *G. disticha* with associated varieties; *G. disticha* var. *langebergensis* and *G. disticha* var. *robusta*.

The next species, *G. retusa* has a kinked edge to the leaves, with young growth coloured a distinctive orange. Around the Little Karoo one can expect to find *G. brachphylla* which is known for the double bend in the leaves, often described as an open 'S'. The variety *G. brachphylla* var. *bayeri* can be found around Port Elizabeth in the same thicket habitat as many other species and growing side-by-side with various *Aloes*. *G. bicolor* is known for the distinctive pointed tips to the leaves and spiralling of the leaves and stem on older plants. There are two varieties of *G. bicolor*, *G. bicolor* var. *fallax* and *G.*

bicolor var. *liliputana*. Also with in this area one is likely to find *G. doreeniae*.

The final selections of species are all specially adapted to survive their mountain habitats. *G. baylissiana* is slow growing and has 'crusty' leaves. *G. glomerata* is also a specialist, but the most bizarre and unique of all the *Gasteria* species has to be *G. rawlinsonii*. This is a true cliff-hanger, with flowers growing away from the plant and out into the sunshine. This means that plants of this species growing in the shade will be extra hungry on nutrients in captivity and will almost certainly require generous potting. This species doesn't quite fit in with any other and has a very primitive, elongated stem. DNA research into this species has been conducted by Ben Zonafeld based on DNA weight per unit. It was discovered that this species has the least amount DNA per unit of any other species of *Gasteria* in existence.

There are a few cultivars and clones of *Gasteria*. The variegated forms tend to be particularly unstable and some strains contain hardly any chlorophyll in the leaves at all. *Gasteria* cv 'Minima' is a tiny, variegated form. *Gasteria* cv 'Smokey' is an American cultivar with smoky-blue/grey leaves.

Thus ends an exceptional monograph of the genus *Gasteria* and a thoroughly enjoyable evening for all.

Ben Turner

Table Show Results

There were 14 entries in the table show at the April meeting.

	Cacti – Rebutia Group	Succulents – Echeveria Subgroup
Open	(1) B Beckerleg Weingartia corroana	(1) B Beckerleg Echeveria lilacina
	(2) T Smith Sulcorebutia sp.	(2) J Burnay Echeveria agavoidea
	(3) -	(3) J Burnay Echeveria glauca
Intermediate	(1) B Beckerleg Weingartia sp. H5158	(1) B Beckerleg Echeveria lauui
	(2) T Smith Rebutia heliosa x albiflora	(2) J Roskilly Echeveria lindsayana
	(3) T Smith Rebutia fabrisii v. nana	(3) -

Ivor Biddlecombe

Snippets

Dot has some updates on new material in our library:

Peter Down has given two folders for inclusion in our library. An eclectic collection of cuttings and other items forming an informal archive beginning in 1953. These folders will be available from the library from this month.

Richard White has kindly donated to the library a book entitled 'Growing Cacti and Other Succulents in the Garden'. It is by Shirley-Anne Bell, illustrated by Neville Bell and covers many aspects of outdoor cultivation such as planning, choosing plants, gravel and scree beds, patios, decking and small areas, containers, pool and water features, rockeries, combination gardening, carpet bedding and includes a plant directory. Available from the library from this month.

Dot England

Next Month's Meeting

Our next meeting will be held on the 1st of June and will feature a talk from Paul Klaassen titled "What I saw last winter". One presumes this will be an account of his trip to various parts of South America.

The June table show will consist of the **Echinopsis group** (cacti) and the **Aloe group** (succulents). Please note that you can submit more than one entry in any of the classes.

The Echinopsis group contains *Echinopsis*, *Lobivia*, *Acanthocalycium*, *Acantholobivia*, *Chamaecereus*, *Helianthocereus*, *Hymenorebutia*, *Leucostele*, *Mila*, *Neolobivia*, *Pseudoechinopsis*, *Pseudolobivia*, *Pygmaeocereus*, *Reicheocactus*, *Setiechinopsis*, *Soehrensia* and *Trichocereus*.

The Aloe group contains *Aloe*, *Bulbine*, *Chamaelaeloe*, *Guillauminia* and *Lomatophyllum*.

A reminder for Committee members that a **committee meeting** is due to be held on 17th May. The venue will be the same as the last meeting (the hall at St Winfrid's Church, on Salisbury Road in Totton).

Forthcoming Events

Sat 8 th May	Isle of Wight	"Southern Peru" – Cliff Thompson
Sat 15 th May	Portsmouth	"Travels in Southern Patagonia" - Martin & Anna-Liisa Shearer
Sat 15 th May	Sparsholt	Display / Plant Sales @ Sparsholt College Countryside Day
Mon 17 th May	Southampton	Branch Committee Meeting @ St Winfrid's Church, Totton
Sat 29 th May-	Whiteley	Display / Plant Sales @ Whiteley Village nr J9 M27
Sun 30 th		
Tue 1 st Jun	Southampton	"What I saw last winter" - Paul Klaassen
Sat 5 th Jun	Portsmouth	Summer Show @ Wickham Community Hall, Dairymoor, Wickham
Sat 12 th Jun	Isle of Wight	"Morro Do Chapeau, Brazil" - John Hughes
Sat 19 th Jun	Portsmouth	"Southern Peru" – Cliff Thompson
Tue 6 th Jul	Southampton	Arizona Adventure - Alan Phipps
Sat 10 th Jul	Isle of Wight	"What I did last winter 3" - Paul Klaassen
Sat 17 th Jul	Portsmouth	"What I did last winter" - Paul Klaassen

Branch website: <http://www.southampton.bcss.org.uk>