

British Cactus & Succulent Society

Southampton & District Branch Newsletter

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Branch Secretary
D & M Corina
79 Shirley Avenue
Shirley
Southampton
Hampshire
SO15 5NH

(023) 80779057

Newsletter Editor
Vinay Shah
29 Heathlands Road
Eastleigh
Hampshire
SO53 1GU

(023) 80261989
vvshah@clara.co.uk

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Editorial

It's two months since our last Branch meeting, although quite a few of the members (and all of the committee) did meet up at the Spring Flower and Garden Show at Broadlands, Romsey.

Warmer weather has certainly arrived and I have increased the watering frequency to once or twice a week. Amongst the succulents, a few Echeverias and Haworthias are in flower. Quite a few cacti are also in flower, including Rebutias, Mammillarias and Gymnocalyciums. I did get some new plants in April – David Neville's been across to the Continent and had a nice selection of plants on sale at Romsey. *Rebutia masoneri* usually has bright yellow flowers but I was able to find a new one with more intense cadmium yellow flowers. There was also *Rebutia* cv. "Snow Storm" which had pure white flowers.

Announcements

A reminder that today's meeting will be a **Mini-Show**, which provides an opportunity to learn about showing and judging plants. In the first half, after a brief explanation of the basics of judging, the audience will be given an opportunity to judge 10 classes. A marking sheet is attached to the back of the newsletter. After the break, Cliff Thompson will reveal which entries he would have placed 1st, 2nd and 3rd and also explain the reasons for his selections.

The **Spring Flower and Garden Show** at Romsey went well, with pleasant (if somewhat cool) weather throughout. We had good numbers of people going through the marquee on all three days, but plant sales appeared to be slightly down on previous years. This was also the case with "Prickly Potting", where the number of children who participated was 415 – last year, the total was over 500. Thanks are due to the

branch committee for helping out, especially Ivor who was on duty providing cuttings and explaining seed sowing for the entire three days. The branch would also like to thank Derek, Merrilyn, Dot, Mark, Rebecca, Russell and Ivor's brother Peter for their help at the event.

Margaret and David Corina will not be attending today's meeting – David has been poorly for a number of days with an inflamed liver and is awaiting the results of some CT scans and hospital tests. Margaret mentioned that even at the hospital, there was no escape – there was a bowl of Cacti in the reception area and they also found a copy of *Cactus World* in the waiting room!

Copies of the **Zone 11 Programme** are now available from the front table. This details the events and meetings of all the branches in our Zone.

Our neighbouring branches will both be holding their **annual shows** in the coming weeks. **Isle of Wight's** annual show will be at Newport on Sunday 20th May, and **Portsmouth** Branch will be holding their annual show at the Wickham Community Hall, on Saturday, 2nd June.

A provisional date and venue has been selected for the **2007 Branch Dinner** – we are planning to hold this on 22nd June at Luzborough House, which is situated between Romsey and North Baddesley. Details will be confirmed at the next branch meeting. Please let a member of the committee know if you would like to attend.

At the end of this month (26-28th May), the Branch will be putting on a display and sales table at the Home and Garden Show at the Whiteley Village Shopping Outlet. This is signposted from Junction 9 of the M27, so if you have some spare time during that bank holiday weekend, please do come along and lend a hand. Parking is free and the shopping outlet has over 45 stores selling branded goods at discounted prices.

March Meeting

I am sure members will have pleasant memories of the March meeting. A total of 64 people attended the meeting (a record for us at this hall) and it was good to see many familiar friends from far and wide.

Peter Down asked Terry Smale to introduce the speaker for the evening, and Terry duly obliged. He started by thanking Southampton Branch for hosting the meeting and opening it to visitors. Terry mentioned that he first met Steven Hammer in 1985 at one of the first Mesemb Study Group events. Steven grew some mesembs as a teenager, but then trained and worked professionally as a pianist before eventually returning to his love of succulent plants. He worked at Mesa Gardens in Albuquerque (New Mexico), and in the 1990's settled in Vista (California). Steven is an acknowledged expert in Mesembs and especially Conophytums, and we were all looking forward to his talk.

The Plants of N. E. Brown

Steven mentioned that he was visiting England because he had been invited to talk at Alston Hall, and he had been glad to be able to fit in talks at three additional meetings, of which this was the first. He hoped his accent wasn't too strong and that his voice could be heard clearly. He had broken his jaw a year and a half ago and had got used to not talking at all for a while, but felt that he had now recovered from that.

He mentioned that his talk would be about the plants described by **N. E. Brown**, who worked as a botanist and gardener at Kew. Brown was responsible for setting up many of the genera within the Mesembs that we are familiar with today – including Lithops and Conophytum which all mesemb growers should be familiar with. Although Brown retired in 1914, he carried on working for another 20 years and up to a few months before his death in 1934 (aged 85), he was still illustrating Conophytums.

Steven started by reading a piece from *The Complete Works on Succulent Plants*, by Haworth. Haworth, starting in 1794, published 4 volumes which described many of the Mesembs known at that time. A reprint was published by the Gregg Press in 1965, but the print run was only 200 copies. The copy Steven had brought to the meeting was on loan from Myron Kinnach.

According to Steven, Haworth's work and observations are still relevant today. If you read Brown's work, a lot of his understanding seems to derive from Haworth early work.

Haworth wrote wonderful prose, and talking about Mesemb flowers in 1794, he wrote "The most remarkable circumstance attending the flowering of mesembryanthemum is their inability or unwillingness to extend their blossoms on such days as are not sunny not withstanding that they had opened them a day or more before, and they are capable and ready to open them again as soon as the sun shines if he does so before their time of opening has expired beyond which no power of their charming luminary can tempt them to unfold." The language is flowery but entirely accurate. In another piece by Haworth where he is dissecting the flowers of what we now call *Phyllobolus* – "The petals are deep green and by arching protect the turgid whitish unopened anthers as yet big with the principles of life beneath which there appears the urn shaped germ in whose inversely ovate cells the infant and as yet unimpregnated ovaries are observed to nestle."

To illustrate the similarities, here are some notes from a paper written in 1920, where Brown was talking about plant evolution : "The fissure across the top gives evidence that the single body of which the growths apparently consist in the spheroid group is in reality composed of a pair of opposed leaves. In the sections bilobens fissuratus(?) the first stages of the separation of the leaves of which the body is composed give an indication of the manner in which these plants began to evolve from the simple spheroid types through varying stem-less types into bushy and trailing types." It is interesting to note that Brown imagined that advanced genera such as *Lithops* gave rise to something like *Carpobrotus* – most people believe the opposite these days. Steven also mentioned that Brown had remarkably good eyesight and could notice minute detail on the plants he studied.

Haworth had described everything under the single genus *Mesembryanthemum*, but in 1921 Brown started the process of dividing this enormous genus by suggesting some new genera. He expected to be able to do this work at his leisure, and decided to spend time studying the seed capsules in order to categorise the plants. In 1925, Brown published more genera. However in 1926, the German **Gustav Schwantes** started publishing new Mesemb genera and in 1927, the South African **Louisa Bolus** also started publishing her thoughts. They were both eager to share their opinions, so by 1928 we had three authors writing about the same group of plants. This resulted in duplicate names being proposed. Today, a standard lexicon of mesembs has 2000 names and there are probably another 2000 synonyms – but at that time,

around 1200 species were recognised.

Steven now gave us a slide tour in chronological order, of the plants and genera which Brown published, starting with some examples before *Mesembryanthemum* was split. First was *Lithops lesliei*, described in 1912 as *Mesembryanthemum lesliei*. In 1916 *M. fulviceps* (now *L. fulviceps*) was listed (the specific name refers to the tawny brown heads) and in 1920 *M. locale* (now *L. localis*). Also mentioned in 1920 were *M. marmorata* (*L. marmorata*) and *M. pageae*, (now named *Conophytum pageae*) and another mesemb which could be recognised as a *Mitrophyllum*.

In reality, Haworth had already split the genus *Mesembryanthemum* into many sections and some of these sections were used by Brown and Schwantes when setting up new genera. The next slide showed *Gibbaeum pilosulum* - at the end of 1921 Brown published the first of his new genera, *Gibbaeum*, a name which Haworth had previously used. *Gibbaeum pubescens* is recognised by the leaves and the flowers, and had originally been described by Haworth in 1795. *Glottiphyllum depressum* was transferred into *Glottiphyllum* in 1922.

The name *Lithops lesliei* was formally published in 1922, the genus being named for its stone-like appearance. No one has questioned the validity of *Lithops* since then, and it is likely to remain with us forever. Next was *Lithops bellum* (now known as *Lithops karasmontana* ssp. *bella*) and then *Lithops rubra* (*Lithops optica rubra*). Not many of Brown's proposed *Lithops* names have survived without change to this day, but in 1928 he described *Lithops fulleri* (now *L. julii fulleri*) and this was the last of his published *Lithops* taxons to survive.

Brown also worked on other genera such as *Crassula*, *Orchids*, and *Asclepiads*. After 1920, he published in the *Gardeners' Chronicle*, and was paid by the word so his descriptions tended to get longer and longer. In 1922 he set up *Argyroderma*. The slide showed how the flowers have several layers of petals which creates a beautiful ruffled effect. It flowers late in December or January when unfortunately the light is poor in England. Steven mentioned that although growing conditions in London may not have been ideal, Brown had many friends in the south of England who grew plants and who summoned him when those plants flowered.

Conophytum was set up in 1922 by Brown (Haworth had suggested a name "Conophyton" but never published it as a genus) and we saw a slide of the beautifully marked *Conophytum obcordellum*.

Conophytum uvaeforme was transferred into the new genus in 1922. Then there was a long interruption in Brown's published work while he studied the seed capsules.

Steven mentioned that he has about 60 original plants grown by Brown which were handed down to Tischer and then to Myron Kimmach. Most of these plants are old and leggy and don't photograph too well. Showing a picture of a nice multi-headed *Conophytum*, he mentioned that as the clump grows larger, the bodies start to crowd and squash each other and grow leggy, causing the plant to form a dome. Ideally one should start dividing up the plants or restart from seed when they get to that stage.

Conophytum angelicae is from Namibia and was originally described by Dinter & Schwantes in 1925 - it was transferred into *Conophytum* by Brown. Steven said he saw a good collection of these being tended by Anthony Mitchell in Springbok, Anthony having discovered a number of populations of this in habitat. It is easy to grow if protected from excess light. *Conophytum ectypum* (*ectypum* means beaten metal) has bodies which do indeed look like embossed metal. The picture illustrated the flower tube and the recessed anthers and connected petals, which is quite different from a *Lithops* flower, and used by Brown to distinguish between these genera. *Conophytum pelludicium* was initially described by Brown as *Lithops marlothii* because he had not seen it in bloom - but he realised his mistake as soon as it flowered - the move to *Conophytum* required the use of the earlier specific name from Schwantes. Steven mentioned that in those days, the authors could describe something and get it published quickly, which is not the case these days. One of the valuable lessons Anthony Mitchell had taught him was to put a new description aside for ten years and then look at it after that time to decide if it is still valid.

Conophytum terricolor has curious dots on the side of the body which act as extra windows. *Conophytum comptonii* was described in 1927. The heads bear a moss-like pattern which makes them well camouflaged, but once you see one clump they tend to become more conspicuous. The bodies are only 2.5mm across. It is one of the most beautiful and elegant *Conophytums*, but it is hard to see which other species it might be related to.

As an aside, he mentioned that he relied on various people to take photographs for his publications. However, he had fun playing with Terry Smale's camera. Digital cameras are easy to use and their resolution and colour rendition are now so improved

that he can even think about using one himself to take photos for his next book.

Conophytum maughanii was described in 1930 - Brown gave it two names: *C. maughanii* and *C. rufescens* (rich brown) since he came across two different looking plants. The illustrated plant was grown from seed collected in Steinkopf – the wrinkles are not lack of water but the old bodies dying. One of the nice features is of course that the bodies renew themselves each year. The last *Conophytum* described by Brown was *C. lucipunctum* (clear point) in 1933 but it is now considered to be *C. subfenestratum* which had been described in 1928 by Schwantes. Brown had also described it as *C. edithae* (named after his daughter).

Steven then went on to show some of the other genera that Brown published. In 1925 Brown described *Sceletium* and also set up *Dactylopsis* (illustrated by *D. digitata*) and *Phyllobolus*, illustrated by *P. resurgens*. This forms a caudex from which the leaves grow, and at the end of winter, yellow flowers emerge. The arrangement of the ovules is from the centre unlike *Lithops* or *Conophytums* which are from the side. The flowers smell of black pepper. Also described in 1925 was *Oophytum* (egg plant, due to the shape of the leaves) which is reminiscent of *Phyllobolus*, but the flower petals are not connected together. The flower was open and the anthers were readily visible. Continuing in 1925 we saw *Cephalophyllum alstonii* – the genus's name means 'head of leaves'. *Mesemb*s flowers typically have yellow and purple petals, with *Lithops* being yellow or white, but this plant has pure red flowers which is rare. With *mesemb*s, the flower colour range within a species can be quite wide.

Cheiridopsis cigarettifera now goes under the name *C. namaquensis*. The old leaves form a cigarette-like sheath around the new leaves. Several *mesemb*s have the characteristic where the leaves are divergent, i.e. the plant is capable of forming different types of leaves. Within a couple of years, the new genus was accepted by other authors and in 1927, Bolus described *C. speciosa* which has purple flowers with brown pollen. This species has equal sized sets of leaves. Unlike Brown and Schwantes, Bolus had the great advantage of living in Cape Town and being able to make field trips, at least until she injured her ankle. Up to 1940, she described 1500 *mesemb*s and many other species too. She visited Kew several times but apparently never met Brown. She died in 1970 aged 93.

Cheiridopsis brownii was named in honour of Brown by Dr Tischer who died in 2000 at the age of 105 (it

seems all these botanists lived to a good age!) It is found at the coast around Alexander Bay. It is about the size of a *Lithops* and the head is hard to distinguish from a *Lithops*, other than the fact that the flower has 12 stigmas, versus 5 or 6 in *Lithops*. This directly affects the number of seed chambers.

Phyllobolus tenuiflorus has flowers where the inner and outer petals have different colours. It also smells nice, rather like a *calendula*. Leaves have bumps. Brown described this as *Sphalmanthus* which means double flower but it is better in *Phyllobolus*. The whole plant is around three inches tall. Still in 1925, *Frithia pulchra* and *F. humilis* both have an alternate leaf structure which causes the leaves to grow in a spiral design. The illustrated plant of *F. humilis* looked almost like *Haworthia maughanii* despite being geographically detached and not related at all. The next genus was *Fenestraria* which means windowed leaf. The featured plant was the cultivar "Fireworth" which Steven had named because of the fiery colour and after a Mr. Hepworth who supplied Steven with two plants which produced flowers which were red with orange streaks instead of the normal yellow. Steven mentioned that paintings by Brown of *Frithias* from Port Nolloth showed orange flowers.

Nananthus (the name means small flower – they're about ½ inch across) is a genus with tuberous roots. The plant we saw had a flower with yellow petals and a maroon mid-stripe. We also saw a slide showing some typical *mesemb* seedlings. *Lithops* and *Conophytum* seedlings have a long fissure or a small slit in the middle.

A member of the genus *Pleiospilos* was first published by Haworth as *Mesembryanthemum compactum*, but Brown used *Pleiospilos* to mean "full of dots". The leaves are covered in dots which are actually tannin sacs. The tannin is there as preservative and may also make the plant unpalatable. It's the tannin which makes the old leaves brown when they die. They typically have yellow flowers, but the slide featured a white-flowered *Pleiospilos bolusii* which was missing the gene which produces the yellow pigment. You do find white-flowered species (e.g. in *Conophytum* or *Lithops*) but it's quite a rare colour overall.

Didymaotus means twin flowers. The main body is spotted and pseudobracts form on either side. The flowers are beautiful - whitish with pink/purple anthers. When young the plants only support one flower (on one side), but eventually they will mature and start to produce two flowers. *Odontophorus* (1927) is very similar to *Cheiridopsis* - the leaves are toothed, hence the name. The next slide featured *Muiria hortenseae*. This is one of the most famous

genera within the Mesembs, and the plant is named after Hortense, the daughter of Scotsman John Muir who lived in Riversdale. The slide showed 10-year old plants in the middle of winter. The plant is very sought after since it is hard to grow. Steven said people usually don't water it enough and end up starving it to death, but in a country like the UK it's more likely to rot, so probably needs to be kept in a dry and sunny part of the greenhouse.

Another genus proposed by Brown was *Imitaria*, which imitates the shape of a *Conophytum*, however the plants are now viewed as *Gibbaeums* and *Imitaria muirii* is now known as *Gibbaeum nebrownii*. The petals are joined together at the base and Brown thought it might also be a hybrid between *Conophytum* and *Gibbaeum*.

Next was *Rhinephyllum muirii* – the species name means “file leaf” due to the rough surface. The flowers are typically white and scented and pollinated by moths so there's no need for coloured flowers. *Stomatium alboroseum* also has rough leaves and white flowers. This was described in 1926 by Schwantes. The next slide showed *Stomatium musculinum* / *Stomatium pyrodorum* which has yellow flowers.

Cerochlamys has pink flowers and was proposed by Brown in 1928, as was *Bijlia*. The similar genus *Carruanthus* was set up by Schwantes a year earlier – he also proposed *Aloinopsis* in 1926. *Pherolobus* was an obscure Brown genus, featuring white flowers with a yellow ring, and this has now been sunk into *Dorotheanthus*. *D. bellidiformis ssp. hestermalensis* is a nice colourful annual which grows around Springbok.

Nelia was set up by Schwantes in preference to Brown's *Perissolobus*. *Rabiea* was set up by Brown in 1930 – the plants are covered in dots and have yellow flowers which age to red. 1930 also saw the creation of *Lampranthus*. The next slide showed a white flowered form of a *Titanopsis* – the flowers are usually yellow. Brown decided to call this genus *Verrucifera* but the Schwantes name of *Titanopsis* was accepted.

The last of Brown's genera which Steven mentioned was *Antimima* which means to imitate. This resembles *Argyroderma* in leaf shape but the flowers are very different. Since Brown's death in 1934, it has been expanded greatly and now contains around 100 species. *Antimima levynsiae* has only recently been published by Steven – the petals are bunched in groups, and are not regular like in *Lithops*. *Antimima fenestrata* is a Bolus species which was transferred

into *Antimima*. It also has grouped petals, stripes on the flowers and another feature – windowed leaves. stripes. *Brachyphylla* is a name meaning short leaf, mentioned in Brown's notes at Kew but which was never published - it might have been a good name for this species. *Antimima ventricosta* has one of the nicest flowers – 3 inches in size, it has a white centre with raspberry outer petals. It is quite easy to grow since it is a coastal mesemb which is more tolerant of water.

Following Brown's death, Bolus and Schwantes continued to publish many new plants. Today, 10 to 12 people are actively involved in Mesemb research and there are also many other growers with a significant horticultural interest.

Steven finished off his talk by showing some slides of *Lithops* cultivars. He explained that you can reinforce any characteristic you like by crossing two similar plants and then backcrossing with the mother plant. You can eventually get some interesting results. start with the most attractive parents. We were shown a couple of slides of *L. villetii ssp. kennedyi* to illustrate this point. Of course, the plants we grow in cultivation have already been selected over time. *L. julii ssp. fulleri* is already a nice plant which can't really be improved, on the other hand, the slide showed us an example with nicer markings.

With *Lithops hallii*, one could try to improve the red markings. *Lithops schwantesii rugosa* is normally an off-pink colour but he found one blue seedling which was tagged “Blue Moon”. Now he two plants and is attempting to breed between them and can maybe get a whole population and then select some better offspring. He had obtained the “Malachite” form of *L. salicola* from the Coles. This is missing the gene which makes them greyish brown. character. Another *L. salicola* cultivar he has is called “Bacchus” after the God of wine, because of its burgundy colour. It is one of most popular cultivars. He obtained it from Japan and it was already stable. However he has crossed a purple one with a green and somehow managed to get a more intense purple, which is nearly the colour of *Lithops optica rubra*. That is likely to become quite popular in the future. The last slide featured the same species as his first slide – it was a red form of *L. lesliei*. He mentioned that people seem attracted to the richer colours. Unfortunately the plant is not very fertile – it had 12 big flowers and 12 fruits, but hardly set any seeds at all. The annual harvest was 60-100 seeds whereas one would normally have expected 1000's.

I am sure everyone present at the meeting will agree that this was a fascinating talk – to hear such

interesting details about some of the characters who have helped to set up the Mesemb family as we currently know it was a unique experience. The slides used to illustrate the talk were of excellent quality, and I am sure people went away inspired to try and grow a few of the plants they had seen.

Vinay Shah

Committee Meeting

A committee meeting was held at 79 Shirley Avenue on March 19th.

The March meeting was discussed and everyone agreed that it went very well. A total of 64 people attended and we had good support from Portsmouth and Isle of Wight. Catering went well and the parking arrangements proved to be satisfactory. The Branch did make a donation towards Steven Hammer's costs.

In February, it had been decided to buy a new (large) projector screen, and David Neville picked out a suitable model. The screen was obtained and used at the March meeting, where it had worked very well.

Arrangements for the Spring Garden and Flower Show were discussed. David Neville would again obtain plants from Holland for Prickly Potting. Most of the committee appeared to be available to help out over the Easter weekend.

Arrangements for the Branch Dinner were discussed. It was felt that a change from the Clump Inn was in order, and the Luzborough (situated between Romsey

and North Baddesley) was suggested. The date chosen was 22nd June.

Vinay Shah

Next Month's Meeting

Our next branch meeting will be held on June 5th and will feature Barry Glover, who will be talking about the "Desert In Bloom". I assume this means that we shall be seeing some cacti (or succulents) in flower!

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

The Parodia group contains *Parodia*, *Brasilicactus*, *Brasiliparodia*, *Eriocactus*, *Malacocarpus*, *Notocactus*, and *Wigginsia*.

The Crassula group is large and contains several subgroups (Adromischus, Aeonium, Echeveria, Sedum and Semperivium). Hence it includes many genera, such as *Adromischus*, *Bryophyllum*, *Cotyledon*, *Crassula*, *Kalanchoe*, *Rochea*, *Tylecodon*, *Aeonium*, *Greenovia* and *Monanthes*, *Echeveria*, *Dudleya*, *Graptopetalum*, *Pachyphytum*, *Tacitus*, *Sedum*, *Sempervivum* and *Jovibarba*.

A reminder for Committee members that a committee meeting will be held on 21st May.

Forthcoming Events

Sat	12 th	May	Portsmouth	"A Personal Choice - Cacti & Succulents" - Tom Radford
Fri	18 th	May	Isle of Wight	No Meeting
Sun	20 th	May	Isle of Wight	Isle of Wight Branch Annual Show Church Hall, Town Lane, Newport, Isle of Wight
Mon	21 st	May	Southampton	Branch Committee Meeting, venue to be confirmed
Sat	2 nd	Jun	Portsmouth	Portsmouth & District Summer Cactus Show @ Wickham Community Hall, Wickham, Portsmouth
Tue	5 th	Jun	Southampton	"Desert In Bloom" – Barry Glover
Fri	15 th	Jun	Isle of Wight	"The Galapagos" – John Hughes
Sat	16 th	Jun	Portsmouth	"Three Men and a Condor" - Eddie Harris
Sat	16 th	Jun	Southampton	Display & Plant Sales @ Sir Harold Hillier Gardens, Jermyn Lane, Ampfield, Romsey
Sun	17 th			
Fri	22 nd	Jun	Southampton	Branch Dinner – details to be confirmed
Tue	3 rd	Jul	Southampton	"Wild West" – Neil Oakman

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