

British Cactus & Succulent Society

Southampton & District Branch Newsletter

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Editorial

Autumn is arriving and trees have started to drop their leaves. The evenings have begun to draw in and the weather is turning colder so it will soon be time to turn on the heating (if you haven't done so already!)

I've had a rather hectic month, culminating with a business trip to the United States, so have spent little time looking at the plants recently. A few Conophytums, Lithops, and Glottiphyllums were in flower in the middle of the month, and I also had a surprise when a hoyia cutting acquired some years ago finally flowered for the first time – the flowers were dark red/purple in colour. I did not have time to take a photograph, but hopefully it will flower again next year.

Announcements

High Wycombe branch will be holding their biennial convention on 13th October at Great Kingshill Village Hall (Buckinghamshire). Tickets are £12 and include refreshments and lunch. The speakers are Nico Uitenbroek (Gringo's Hobby & Gringo's Drear) and Wim Alsemgeest (Agaves), and there will also be plant/book/sundries sales.

Birmingham Branch will be holding their annual show at the Birmingham Botanical Gardens, Edgbaston, on Sunday October 7th.

Last Month's Meeting

Plants of Interest

Ivor mentioned that he had brought along some *Astrophytum* seeds to give to members. These were remnants of society seed left from the annual seed distribution. The seeds were labelled *Astrophytum* "Serendipity" since it was a mix of different species.

He had also brought along a copy of the American Journal which discussed a method of growing seed by using builders sand soaked in water for three days and then sprinkling the seeds on top. Ivor had tried a similar technique himself in August, and everything had good germination (despite the seeds being between 2-4 years old), apart from an *Echinocereus*. He had brought the seedlings along, and the pots were labelled *Epithelantha*, *Gymnocalycium mihanovichii*, *Melocactus matanzanus* *Echinocereus procumbens* (no germination), *Euphorbia obesa*, *Astrophytum* 'Serendipity', *Astrophytum ornatum*, and *Gymnocalycium taningaense*

Peter Down had also brought along a collection of around a dozen plants for *Plants of Interest*. These were a mixture of different genera, but all with white spines or white leaves. Some were normally white whereas others were white-spined forms. The plants featured were *Neoporteria multicolor*, *Gymnocactus subterraneus* var. *zaragosae*, *Astrophytum* cv. "Super Kabuto", *Rebutia heliosa*, *Parodia nivosa*, *Haworthia bolusii*, *Echinocereus longisetus* ssp. *delaetii*, *Notocactus leninghausii* (white form), *Notocactus scopa nivosa*, *Copiapoa krainziana*, *Mammillaria senilis*, *Sulcorebutia tarabucoensis* ssp. *hertusii*, *Espostoa melanostele*, *Espostoa lanata* (cristate), and *Cephalocereus senilis*.

The Plants of Rio Grande do Sul

Paul Klaassen introduced Marlon Machado, who had flown in from Zurich (where he is studying for a PhD). Marlon had arrived on Sunday and had spent most of Monday and Tuesday morning putting together his talk on a trip to Rio Grande do Sul. Marlon is studying the *Notocactus ottonis* complex which grows in and around Rio Grande do Sul, and

also in this area are several species of *Frailea*. (Some of you may have read Marlon's article which was published in the BCSS Journal earlier this year.) Marlon was using Paul's digital projector to show us the pictures, and I learned during the break that the talk consisted of 1022 pictures!

Marlon confirmed that he was studying plants in the Notocactus section of *Parodia*. Although he was particularly interested in the *Ottonis* group, he found lots of other plants in the area. Rio Grande do Sul is the southernmost state of Brazil and borders Argentina, Uruguay and Paraguay, and the capital is Porto Alegre. Marlon illustrated the regions he visited with a topographical map of the area, with different colours - brown for 1000m, yellow for 500m and green for 200m - showing us the height of the land. Serra Gaúcha is a mountainous area with very big caverns. The umbrella tree *Araucaria angustifolia* is a characteristic of this region. The first cactus he mentioned was *Parodia linkii*. On the top of the hills were rocky outcrops, while along the rivers there were dense forests. In some places the rock outcrops were prominent, for example near the town of Caçapava do Sul. It was amongst these rock outcrops that cacti could be found.

Another interesting region is the South Western part which is relatively low in altitude and called the Pampas. This is flat grassland and the bedrock is close to the surface, hence rocks are easy to find; we saw photos of stone walls which were the boundaries between properties. The main activity here is the raising of cattle and we saw a gaucho (a cowboy) with some dogs. Most of the time, it is quite green here. The roads are quite good although sometimes they had to go off track. We saw a picture of a bridge which didn't look safe and another river crossing where once there had been a bridge but it was no longer there! Next, Marlon showed a green field and asked the audience if we could see the path they took. The answer from the audience was a universal "no", so he put up another copy of the picture, this time with the path traced out, zig-zagging right through the middle of the field.

The next pictures featured some members of the party - Chris Pugh and Graham Charles, some of his Brazilian friends and also his tutor from Zurich. We saw more rock outcrops and a waterfall. Here they found *Cereus hildmannianus* and *Parodia sellowii*. We also saw a curious natural stone bridge which is a famous local landmark. Near Manoel Viana, they found *Gymnocalycium horstii* var. *buenekeri*, *Parodia fusca* and *Frailea castanea*. There was a close-up of a butterfly, and we saw fields of a

yellow-flowered *senecio*. There was also an *asclepiad* with typical 5-sided florets.

Few of these plants were truly succulent, although most have some form of subterranean storage. *Oxyptellum caeruleum* had striking sky blue flowers. They also found a few non-succulent euphorbias. We saw a *tradescantia*, and a bromeliad with nice flowers. *Dyckia delicata* is a newly described species, and there were several other *dyckias* which he could not identify. *Dyckia horrida* was growing in the cliffs along with *Cereus hildmannianus*. There were several epiphytes, such as *Tillandsias*, including the ever common *Tillandsia usneoides* which consists of twirling strands of hanging leaves, and which goes under the common name of Spanish Moss. A succulent plant with a tuber the size of a small football was a *Sinningia*. He found what he thought was a non-succulent *Dorstenia*, although he did not dig around it to see if it did have a tuber. We saw a *Passiflora* (passion flower) and several species of *petunia* with different coloured flowers including white and magenta. There was a pretty member of the *Iris* family with markings on the stem, and a species of *Convolvulus* formed carpets of flowers in the ground. We also saw an *Oxalis*, some *Verbenas* and a *Portulaca* with red/pink flowers. Marlon mentioned there were also members of the *orchidaceae* growing here, and we saw an *Oncidium* with yellow brown flowers, another terrestrial orchid and an epiphytic *Sophronitis* with a red flower. There were also species of *Lupin* (we saw one with blue flowers), and *Mimosa* with pink flowers.

Next we saw several birds, some of which were very well camouflaged. The *Rhea* is the largest bird in South America and can grow a metre tall. We also saw its nest, containing several eggs. After displaying a picture of a hare, Marlon said they found many different lizards, the largest being about a metre long from nose to tail. There were also some signs of dead animals and we saw the skull of an animal, possibly a sheep. After snakes, we proceeded to some close-ups of large and hairy spiders. "I hope you squashed them all!" said David. We moved on to insects and saw beetles, butterflies and a moth. A caterpillar was eating a cactus flower bud, and a grasshopper was covered in grey and white markings which mimicked the nearby rocks almost exactly. Cacti tend to be pollinated by bees, and showing a wasp's nest, Marlon said these were the most dangerous animals out there.

Having dealt with other plants and animals, Marlon moved on the cacti and members of the *Rhipsalis* family. *Lepismium* was represented by 4 species. *L.*

cruciforme was reddish (due to exposure to the sun) and was growing in a rock wall. We also saw *L. houlettianum* and *L. warmingianum*. Most interesting is *Lepismium lumbricoides* which looks like a rhipsalis – the stems hugged the trunks of the trees and the flowers larger than the other species. *Cereus hildmannianus* is very common in the region but it does not grow on to become a very tall plant. It was growing with globular plants of *Parodia sellowii*. One plant was covered in lichen. *Opuntia* is represented by at least two species; *Opuntia elata* which is very spiny, and has red flower buds with a blunt apex which open into orange flowers – the other is *Opuntia megapotamica* which is less spiny, the flower buds are not red and they are pointed at the apex. We also saw a cross section of the fruit of these plants which revealed further differences – the fruit of *O. megapotamica* is larger and is green inside whereas the fruit of *O. elata* is small and reddish inside.

Echinopsis was represented by *E. oxygona*. The short spined form of this has been described as *Echinopsis eyriesii*. The plant is variable, and they found plants with big/small areoles and long spines (or completely absent) growing side by side in habitat. The trumpet shaped flowers are very showy, being large and pink. *Gymnocalycium denudatum* usually has spines which lie very close to the body and few ribs, and it has white flowers. This was the most common *Gymnocalycium* they found, growing in several different locations. We saw a photo showing a *Gymnocalycium* and *Frailea* growing next to each other and the flowers were a similar size despite the gymno being a substantially larger plant. *G. uruguayense* has thicker spines and yellow flowers. *Gymnocalycium horstii* is the biggest Gymno they saw and perhaps the nicest. Subspecies *bueneckeri* is supposed to have large flowers but there were only a few of this form, and none were in flower.

Next was a picture of Graham Charles photographing a cactus – the same image as featured in the March 2007 BCSS journal. The plant being photographed was *Frailea pygmaea*, which is the most widespread of this genus, being found in several places. The bodies were completely green and had whitish spines and were very small, just 1½ to 2 cm in diameter. The next photograph showed plants with the pulp exposed and Marlon explained that although he tended to show pictures of the nicer plants, there were many which had been chewed by cattle or sheep, and these would either die or grow new offsets. Some forms of *F. pygmaea* had longer spines and looked different but it was the same species. There was a form with red markings below the areoles, and also a yellow spined form.

They found *Frailea albicolumnaris* plants which were 4 to 5 cm tall and 3 cm in diameter. Another species which is quite common in the eastern part is *Frailea gracillima* – unlike *F. pygmaea*, it is columnar and can grow quite tall. It is also very variable in colour of spines, spination, number of ribs, and size, with some plants being up to 5 cm in diameter. You don't realise how small the plants are, and without the flowers, they would be very hard to find. A member from the audience asked how long these plants live, and Marlon stated that they are short-lived. They grow in areas which are under disturbance and have to regenerate quickly.

They found a larger form of *Frailea gracillima* which was 15 cm tall, and 5cm in diameter. *Frailea phaeodisca* was very flat and dark brown in colour and the plants were a lot more dehydrated. All around the plant were sheep droppings – a form of compost! The perbella form has stronger spines and characteristic dark areoles. *Frailea pumila* is the largest of the globular *Fraileas*. It has golden spines and was easier to spot. It grows in shallow rocky areas which have a thin layer of soil, near dry river beds. When it rains, it is quite possible that these plants are under water for a while. Some have brown/red spines, and there are also white-spined forms. *Frailea bueneckeri* ssp. *densispina* was recently described from Rio Grande do Sul. *F. cataphracta* is dark in colour and also has dark markings below the areoles.

One wouldn't think there were cacti growing in grassland, but there were. A few of the plants were in flower when he visited, which helped one to find them. *Frailea mammifera* is named because it has tubercles, and a similar plant with central spines might be a new species. The spines were pubescent making the plant almost look like a *Mammillaria duwei*. Another species is *F. castanea* which grows very flat and disappears when the ground is dry. The colour of the plant body is the same as the dirt, so in the dry season, it is very difficult to find. It has yellow flowers. We saw a group of three plants, with *Frailea castanea* and *Frailea pumila* growing under the protection of a *Parodia mammulosus*. In one place he found a field of *F. castanea* - dozens of flowers were visible, but only some of the plants were flowering - so there must be 100s or 1000s of plants here. When not in flower, the small plants are almost impossible to find. He came back to the same spot a few weeks later when the flowering season was over and he couldn't find them at all!

After the break, Marlon discussed the *Parodias* of Rio Grande do Sul. It was in 1986 that David Hunt and Nigel Taylor took the controversial action of

merging *Notocactus* into *Parodia*. So now, *Parodia* contains *Notocactus*, which can be split into *Wigginsia*, *Eriocactus* and *Brasilicactus*, and *Parodia* which contains the *Boliviacactus* and *Microsperma* groups.

The first plant we were shown was *P. haselbergii*. It grows in the sheer rock walls, and Marlon only saw one plant in flower, and unfortunately this was out of range of his telephoto lens.

Eriocactus leninghausii grows near the home of famous cactus explorer Leopold Horst. One has to lower oneself down the cliff face to access the plants. It was a wonderful place to visit, with 100s of plants growing in the cliffs. He did not see the white-spined form or plants without spines, which are a couple of the forms found in cultivation. *Parodia magnifica* is also part of this group and it grows from the rock walls. Marlon noted that this region was very humid, with the only dry place being the rock wall. Unfortunately, the plants were growing on the other side of the river and had to be photographed from a distance. The plants may not have looked big in the photographs, but the clumps were 50 cm to 1 metre across, and some of the plants were in flower. *Parodia warasii* grows in the same environment but some of these were accessible and they were able to get some close-up pictures, although many of the plants remained out of reach since the cliff face was 30 metres tall. In response to a question about how these plants get there, Marlon mentioned that the seeds are small and very numerous and probably get carried to crevices in the rocks by rain and wind.

Parodia allosiphon is very localised but they came across lots of plants. Some were in flower. Small bees are the pollinators, and the plants are capable of flowering when only 3cm in diameter. They found larger plants which were 12-15cm across. *Parodia buiningii* has very sharp ribs, a bluish epidermis and variable spination. *Parodia concinna* had a ring of buds and has yellow flowers. *P. crassigiba* has very prominent tubercles between the areoles and nice yellow flowers. Some of the plants were reddish because of the sun. Some were growing in between the rocks with lots of lichens and mosses nearby. Marlon mentioned that many of the *Parodias* in habitat are disappearing – unfortunately people are collecting these plants since they are seen as “fashionable”. The plants are also affected by animals who graze them and knock them over. Sometimes they only found a few plants in amongst spiny shrubs where the cattle could not reach them.

They found *Parodia horstii* overlooking the town of Agudo. Just like the *Eriocacti* they had found earlier,

these were growing in the cliff faces. Another plant which likes to grow in the cliff walls and granite outcrops is *Parodia scopa*. The plants are variable in terms of spines and shape. The yellow spined form is described as variety *bueneckeri*.

At the natural stone bridge featured earlier in the talk, they found *Parodia fusca*. It is part of the *Mammulosus* group which he considers a bit of a mess since there are many different forms of plants and it is hard to tell them apart. *P. fusca* is however distinct enough. They found the many-ribbed form of *Parodia arnostiana* growing next to *P. linkii*. A plant of *Parodia permutata* had lots of ribs and strong spination. It can flower when quite small and this was indicated by a photo of a plant only 2cm diameter sporting a flower twice the size of the plant. One characteristic of the *mammulosus* group is the bell shaped flower and anthers clustered around the stigma. *Parodia mueller-melchersii* which has stronger spination and a single central and short radial spines. It has a columnar growth habit and we saw a colony of plants in habitat. *P. mammulosus* has less ribs, and 2 or 3 central spines otherwise it is similar. It is a very variable species and many of the forms are not formally described, They found bigger plants with more ribs and different spination. The plants are similar to *P. mueller-melchersii* but larger and globular, not columnar. We also saw the form described as *Parodia mammulosa ssp. brasiliensis*.

Amongst the populations, the flowers are usually yellow in colour, but sometimes there are departures from the norm and we saw an attractive apricot variant. We saw *P. mammulosus* and *P. mueller-melchersii* growing together, and also *P. mammulosus* and *P. permutata* together. At other sites, the plants were separated by a few metres.

Wigginsia sellowii is a member of another quite complicated group. When the plants become older they look quite different from the juvenile form, and this was illustrated by a photo showing a seedling growing next to an older plant - the young plant was smooth and the older plants have ribs and tubercles - one would almost think they are different species. The other species is *Parodia langsdorfii* and we saw an example growing between rocks. Even as a seedling it is different from *sellowii*. A different form has been described as *Notocactus wigginsia horstii* or *Notocactus neohorstii* - it has different spination and has central spines - but he thinks it is just a different form of *P. langsdorfii*.

In the *Otonis* group, the plants develop offsets on stolons which emerge up to 20 cm away from the parent plant. *Parodia tenuicylindrica* is very small,

almost like a Frailea, although in cultivation they grow much larger. A picture of an expanse of yellow flowers was actually a mixture of daisies and Notocacti. We also saw a man-made rock wall covered in plants of *Parodia linkii* – it was amazing how fast these plants can colonize an area. It has smaller flowers than the others in this group, but the throat is always yellow while the others in this group have a reddish throat. The stigmas are yellow to orange/red. *Parodia muricata* grows in wooded areas and some plants looked like they were very old specimens. Pines trees had escaped from cultivation and were growing here, and these cacti were growing buried in pine needles. With another population, there were no pine trees but it was still woody.

Parodia oxycostata is easy to recognise – it has few ribs which are hard, and dark spination. Some were growing in areas at a height of 800m where in the winter frost is a possibility. Some of the plants have very nice (almost double) flowers and there was one freak with white flowers. Now on to *Parodia ottonis* proper – it has more ribs which are rounded, and lots of reddish spines, some forms having even more spines. There were plants growing by the side of the road, just half a metre away from the tarmac. It is quite variable in morphology and there are several different forms and names attached. *Notocactus minusculus* is a dwarf form of ottonis. In cultivation, it grows to 4-5cm after several years. It has nice spination and is very neat. *Parodia glaucina* is sometimes viewed as a form of ottonis or oxycostata – the ribs are sharper and the epidermis is glossy. Within each species, the range of forms is wider than the range between the species. *Parodia stockingeri* has more ribs and is similar in morphology to *P. tenuicylindrica*.

Marlon ended his talk by showing a map marked with the distribution of the Parodia plants he had found and he went on to summarise the results of his DNA analysis. His studies indicate that *P. ottonis* has several types and that *P. minuscula* is the same genetic type as *P. ottonis*. However, *P. glaucina*, *P. oxycostata* and *P. stockingeri* are all different. This is perhaps explained by the fact that the pattern of valleys and lower-lying land acts as a natural barrier between the groups. He finished his presentation with not one but three sunsets.

At the end of the talk, Peter thanked Marlon - this was the first time we had someone show us plants from Rio Grande do Sul. Notocactus is a popular genus and most people are likely to have some in their collections, and they are easier than many of the other Brazilian cacti. Fraileas are also good if you have limited space! Marlon said they needed to be

watered well, and needed different treatment than normal cacti. The same goes for many of the cacti he had shown in the talk - this area is quite humid and the plants are used to more moisture.

Vinay Shah

Table Show Results

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

	Cacti – Gymnocalycium	Succulents – Mesembs
Open	(1) B Beckerleg Gymno. gibbosum	(1) J Roskilly Trichodiadema densum
	(2) A Grech Gymno. joossensianum	(2) B Beckerleg Glottiphyllum oligocarpum
	(3) J Roskilly Gymno. sp	(3) -
Intermediate	(1) B Beckerleg Gymno. mihanovichii	(1) J Roskilly Aloinopsis luehkei
	(2) J Roskilly Gymno. damsii var. tucavocense	(2) B Beckerleg Conophytum sp. (SE Steinkopf)
	(3) J Roskilly Gymno. friedrichii	(3) J Roskilly Glottiphyllum muiri

Ivor Biddlecombe

Branch Committee Meeting

A branch committee meeting was held on 17th September.

Branch finances are robust, and we have made a useful surplus over the year. The accounts for the year to September will be prepared shortly.

Recent meetings and events were discussed. The Branch Quiz was considered a success, but attendance at the Summer show/display at Romsey was disappointing. The allocation of tickets for the New Forest Show was less than ideal and we hope the situation will improve next year.

Philip Clemow wishes to step down as librarian so we would like a new person from the branch to join the committee to perform this role. Ivor Biddlecombe mentioned he was very disappointed with the response to our Branch Show in August (both in terms of entries and visitors) and he does not

wish to organise any more shows. Instead, he thinks it is better to concentrate our efforts on displays.

The programme of speakers for 2008 is in the process of being put together. If you have any ideas on speakers who you'd like to visit the branch, please let Margaret Corina know.

Our branch meeting next January would fall on New Year's Day which would be inconvenient for everyone, and the hall is not available on the following Tuesday. It was therefore decided that we will not hold a meeting in January next year.

At a recent meeting of the Zone 11 committee, the future of Zone activities and events was discussed.

Vinay Shah

Snippets

The following article was provided by Margaret Corina's plumber!

Plant Higher

Botanist Nigel Brown waited 28 years to see his rare plant bloom... then missed the magic moment as it burst through his greenhouse roof. Nigel was away for the weekend when his Mexican Agave Americana Century plant put on a six-foot spurt, sending a flower stalk with 3,000 blossoms through the glass.

He said: "I was completely dumbfounded when I came back on Monday and saw it. It had grown 6ft in the two days I was away, smashing straight through the glass, which, after 28 years watching over it, seemed a bit of a shock. It's like some monstrous creation from the little shop of horrors."

The plant, which thrives in the Mexican desert,

grows slowly over decades to an enormous size before blooming just once.

Nigel, curator at Bangor University botanic gardens in North Wales, was a young student when he transplanted a small specimen of the shrub back in 1979. Nigel graduated and took charge of the gardens and the plant began to grow giant leaves, taking over a large part of the greenhouse. But he missed the grand finale when it burst into flower. It has since grown another 12ft. and is now 20ft tall. In a few weeks, it will produce up to a million seeds.

Nigel added: "We planted it to see if it could survive the weather. This year's poor summer didn't augur well, so you can imagine my shock when I arrived at work-to see it."

He is unlikely to miss the next big event - the plant's imminent death. He said: "It is rather sad, but we will be saving the seeds." So just another 28 years to wait then, Nigel!

Daily Mirror, 13th September 2007

Next Month's Meeting

Our next branch meeting will be held on November 6th and will feature a talk by Rodney Simms on the Eastern Cape.

The November table show will feature the **Echinocereus Group** (Cacti) and **Lithops** (Succulents). Please note that members are allowed to submit more than one entry in any of the classes, and that points will be earned for each placed entry.

The Echinocereus group consists of *Echinocereus*, *Morangaya* and *Wilcoxia*.

The Lithops subgroup includes *Lithops*, *Dinteranthus* and *Lapidaria*.

Forthcoming Events

Fri	19 th	Oct	Isle of Wight	"The Richtersveldt" – Terry Smale
Sat	20 th	Oct	Portsmouth	"Succulents other than Mesembs" – Suzanne Mace
Tue	6 th	Nov	Southampton	"Eastern Cape" – Rodney Sims
Fri	16 th	Nov	Isle of Wight	"Pelargoniums and Gardens" – Ron Mitchell
Sat	17 th	Nov	Portsmouth	AGM
Mon	19 th	Nov	Southampton	Branch Committee Meeting
Sat	1 st	Dec	Portsmouth	Christmas Social / American Supper
Tue	4 th	Dec	Southampton	AGM & Christmas Social / American Supper
Fri	21 st	Dec	Isle of Wight	AGM & Christmas Social / American Supper

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