

British Cactus & Succulent Society

Southampton & District Branch Newsletter

October 2005



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

Editorial	1
Announcements.....	1
Last Month's Meeting.....	1
Plants of Interest.....	1
South American Cacti.....	2
Table Show – September	5
Snippets.....	5
Agaves - Hardy or Otherwise?.....	5
Forthcoming Events.....	6
Next Month's Meeting	6

Editorial

We are now into Autumn and the evenings are starting to draw in, and the night time temperatures have dropped. However, the days are still pleasant, with a decent amount of sunshine. I am still having to water my plants every few days, although I will start to reduce this through October.

Plants in flower include Aloes, Haworthias and an Echeveria. Several Lithops and Conophytums have also put on a nice show of colour in recent weeks. This is also a good time of the year to do some repotting. My Rebutia cv. "Apricot Ice" has grown into a nice sized plant after being moved from a two inch pot to 3 and a half inches at the end of last year, and although it's probably OK for now, sometime next year it will definitely need to be moved on again.

Announcements

Portsmouth Branch's Autumn Show will be held at Widley this coming Saturday. Show schedules and entry forms are available from the front table.

The late Keith Mortimer's plants will be auctioned at Huntingdon on 9th October. It is expected that 200-300 lots, including many choice plants, will be up for sale. Further details are available from the BCSS Website.

The Haworthia Society will be holding their 8th Convention in Leicester, and a variety of talks will be given between dates of 21st and 23rd October. Further details are available from the Haworthia Society's website : <http://www.haworthia.org/>

The branch's **Programme** of speakers for **2006** is in the process of being put together. If you have any favourite speakers or topics which you would like covered, please let one of the committee know.

Those who were present at the last meeting may have met Stefan Rau, who had brought along several bags of good quality sharp **grit**, for sale at £3 / bag. This sold very quickly, and a few of you may have missed out. If anyone would like to purchase more of this grit, please let me know and I'll pass the message on to Stefan.

Last Month's Meeting

Plants of Interest

For the second month running, the *Plants of Interest* table featured some of Ivor Biddlecombe's plants. First was a specimen of *Echinocereus brandegeei* with about 20 heads. The plant was 18" across and in a 12" pan, and covered in fierce spines. Ivor mentioned that you don't see this species in flower often, although it was the second year that it had flowered for him. The pink flowers had been out for 3 days.

Next was a three-headed dwarf Copiapoa (*C. barquitensis*) in a 4" pot. The brown-bodied plant was in flower, but the blooms had closed up. Ivor mentioned that Copiapoa flowers contained a massive number of stamens, and hover flies seem to be attracted to the flowers.

Next was a plant of *Cyclamen hederifolia* which was intended as a prize on the raffle table. The reason for its presence here was to illustrate the result you might get if you were to plant some of the seeds of this plant which Ivor was giving away. He asked the audience to help themselves to the packets of seed - all that was necessary was to sprinkle them in the garden. They would germinate easily and will spread in due course.

Euphorbia obesa got a mention last month and there were more examples on show today. Ivor mentioned that he now had 9 plants of *E. obesa* in

his Euphorbia “farm”. These plants set seed readily, and on display were a tray and some small pots of *E.obesa* seedlings (15 in all) planted last year and this. He had replanted the spindly ones which we saw at the May meeting, and these were now a normal spherical shape. Despite some of the seedlings only being a few months old, all seemed to be doing well. Ivor remarked that the seedlings were very variable - all of them were showing slightly different markings or forms.

Finally, there was an assortment of 13 plants of *Lithops dorotheae*. Some of these had red blotches, others had green markings. The seeds were from Steve Hamer and the variability of the offspring suggests that the parent plants might themselves have been variable. Ivor considered this as one of the prettiest of the Lithops when not in flower.

The final plant on the table was Jim Roskilly’s *Yavia cryptocarpa* which was on a graft. The plant had been attacked by a slug and had grown into a rather weird fan shape, rather like the head of a club!

South American Cacti

Paul Klaassen’s talk involved the use of some *new technology* – he used a laptop computer and a digital projector (Benq PB8220 DLP) to project the photos which he had taken on various trips to Chile. He mentioned that the first half of the talk was going to cover his trip from October 2004.

We started at Baquedano. The railway system used to be quite extensive and the railtracks are still there although most of system now seems to be used very infrequently, usually just for freight trains. Paul advised that you must stop at railway crossings even if no train was in sight, otherwise you were liable to get a traffic ticket. Just occasionally, there is a train! Driving along the Pan American highway (Ruta 5) is very boring and it’s easy to lose concentration so they were glad of any distractions.

They started off in the south, at Taltal and then travelled north to “Secret Valley”. The weather here was miserable - grey and overcast. They headed towards the Equator, to Maria Elena, which is said to be the driest place on earth. The average rainfall is .04mm over 33 years which equates to one shower in 33 years. There was no other reason that you would want to visit here. There was a mine which used to produce talcum, and the Aerodromo (airport) was now closed. There also weren’t any cacti to be found here.

Further inland, at San Pedro de Atacama and El Tatio, they were amongst the Andes and at a height of 3000-4000 metres. It’s possible to drive along the volcanoes. At least one member of their party suffered from altitude sickness. Here they came across *Trichocereus atacamensis*. At Puritama there is a well but it is not worth the £5 sightseeing fee. It is also possible to travel out from San Pedro and have breakfast in the volcanoes, watching steam emerging from geysers.

They found many mounds of Tephrocactus in the hillsides. There were several suggestions for species names, and some are also classified as Cumulopuntias. They also came across *Oreocereus leucotrichus* - originally called *Arequipa leucotricha*. This particular plant was in poor condition and did not seem to be the happiest of plants. He mentioned that if a cactus thinks its about to die it will produce flowers which prompted Margaret to start worrying since several of her cacti had flowered earlier this year!

Paul mentioned that these plants have probably never seen rainwater, but they may get some meltwater from snow. The temperatures would get down to freezing at night but the plants in this habitat are hardened to this (seedlings you buy from a nursery might not be as hardy). We saw a seed berry which, when cut in half, revealed seeds amongst the red pulp. The buds were red and the flowers were pink. When asked by one of the audience about what pollinated these flowers, Paul mentioned that he had seen small black bees around some of the Opuntias. The shape of the flower of the Oreocereus suggested a hummingbird as a pollinator – but he couldn’t imagine any at this altitude.

Paul said he did not feel comfortable calling these plants Echinopsis since they were tall plants and not globular. We saw *Echinopsis (Trichocereus) atacamensis* 10-12 feet high, with flowers at the top. There are llamas and alpacas around here and they would have a nibble at these plants if they could, but the spines discourage them. The sunlight is very strong and the spines act as a sunblock too. The spines provide some thermal insulation at night, and also help to direct any moisture that condenses towards the roots.

All these Tephros tend to be treated as one of two species: either *Cumulopuntia ignescens* or *Maihueiopsis conoidea*. There are many different spine colours and some “splitters” might be tempted to give each a different name. Another Tephrocactus had draped itself over a large rock.

Paul mentioned that there used to be forests of *E. atacamensis* around San Pedro. But once the plant dies, its remains can be used in construction, in place of wood. It is used as a frame for buildings and other items such as souvenirs, doors, signs and even a car number plate.

At Cuesto el Diablo (Devil's valley) the roads featured sharp bends. The mounds of cacti dotted around the hills looked just like sleeping sheep. In the colder months, this area would be covered by snow. As they got higher, they found alpine grasses. An example of *Maihueiopsis conoidea* was a miserable looking plant, but below the soil, it has a huge taproot, probably a metre deep. There were pink flowers amongst the spines. Paul said that some of the cacti fruits are watery and some were hard. The spines on many of the plants are very long and protective, so it's a difficult job to get to seeds or to take good pictures of the flowers.

In some of the pictures of the hillsides, it was possible to see the mimicry between the grass and the cacti. From a distance it was not possible to tell which was which. As you got higher, there was more vegetation – a mixture of golden grass and Tephrocactus. Going back to a previous question about insects, Paul said there were some crickets around.

Anne Adams pointed out an area of sand to him where it looked like someone might have been sick(!) Paul pointed the camera and took some pictures. On later examination, they saw small succulent leaves and thought they had found a new *Anacamperos* - one had been one found across the border in Argentina by Roberto Kiesling. This was very exciting but the plant was eventually identified as *Pycnophyllum macropetalum* which had been discovered in 1926. It is a member of carnation family. It looks just like an *Anacamperos* and is an example of parallel evolution. The next picture showed what appeared to be a moss growing like liquid flowing over some stones. However, a close up showed delicate foliage and the plant was later identified as a miniature member of the carrot family!

The scenery on these trips is a tremendous bonus, as is the solitude. They also saw *Soehrensia uebelmanniana* (now called *Echinopsis formosa*) which had long spines and yellow flowers. Paul mentioned that digital cameras were ideal to record the variability of plants since he could take dozens of photos. Previously, with slide film he used to restrict himself to one slide film a day. Now, with a digital camera he could take 200-300 shots in a day

quite easily. For a slide talk he would reckon on using a maximum of 200 slides for the evening. However, with the laptop and the digital projector he was showing us images every 9 seconds, and so would probably be showing us twice that amount tonight.

The valley of the Copiapoa river is usually desolate but they got to see the benefits of the recent rainfalls. There was a purple haze on the ground and closer examination revealed the colourful flowers of *Calandrinia longicarpa*. The sand dunes around the town of Copiapoa are supposed to be the location of *Euphorbia copiapina*. Paul is allergic to *Euphorbia* latex and he sensed there must be some nearby. They eventually found plants which were visible only because of the foliage which had grown after the rains. The plant is supposedly rare but here they found 6 plants in one square metre. The plant has huge taproots.

There were miles and miles of the small flowers and the group made several stops to take pictures. There were lots of beetles climbing into the flowers and they also found a member of the Geranium / Cranebill family. They also saw a parasitic *Cuscuta* (a dodder) on the *Euphorbia*. A yellow-flowered plant appeared to be related to *Rudbeckia*. Paul said the carpet of flowers extended for 30km. There was a bit of a breeze so it was hard to get a really sharp picture of some of the flowers.

As they approached the sea, they broke up into different teams to investigate the various hills. They found *Copiapoa megarhiza* v. *borealis* on just one hill. It forms multi-headed clumps and has a big tap root. The plants bore yellow flowers with streaks of red on the outside petals.

Eriosyce confinis had large tap roots and looked striking, growing in white sand. The plant had nice pink flowers, although the spines made it difficult for the flowers to open.. Here, near the coast, there was the buzz of insects in the air and an incredible amount of birdsong too.

Paul mentioned he has been persuaded to do a Copiapoa website. He has been talking to John Miller and Geoff Bailey who have done a *Ariocarpus* website (<http://www.living-rocks.com/>) and he will use their templates as a basis. They hope that eventually they can cover a lot of the species, and end up with a digital on-line cactus lexicon. Paul said he will also cover *Eulychnia* – since there are only 4 species, this should be a lot easier. We saw a large (3 feet across) clump multi-

headed of *Copiapoa* where each head was 4", and also *Cumulopuntia spherica*.

After the mid-meeting break, Paul gave us a demo of some mapping / satellite imagery software which the Google company has recently released. The software is called **Google Earth** and the basic version can be downloaded free of charge from : <http://earth.google.com/>

The size of the initial download is about 10MB, which will take an hour on a modem connection and a few minutes on a broadband connection. However the software then downloads additional files as needed, so the total disk space required is specified as 200MB. Note also that the software requires a fairly modern PC with a decent graphics card - something purchased in the last 2-3 years should be OK. The minimum requirements are defined as follows:

Operating system: Windows 2000, Windows XP
 CPU speed: Intel® Pentium® PIII 500 MHz
 System memory (RAM): 128MB
 200MB hard-disk space
 3D graphics: 3D-capable video card with 16MB
 1024x768 resolution, 32-bit true colour screen
 Network speed: 128 kbps ("Broadband")

Once loaded, the software allows you to view the terrain of any part of the world, using collages of satellite images. The detail is amazing - you can zoom into specific areas and even see roads and buildings. You can also use "push pins" to locate and identify points of interest to you. Paul showed us views of Santiago airport where one could see the planes next to the terminal buildings and the runways and surrounding roads. The software updates itself from the Internet as you visit new areas and zoom in for more detail. Once this detail is loaded onto your PC, it remains there and hence next time you can view the same region without needing to be connected to the Internet.

Paul mentioned that some of the images were a few years old since there are concerns that this sort of detailed information could get into the wrong hands and could be misused. He was hoping that one day it would be possible to have software which can link the pictures on his laptop's hard disk with the locations at which they were taken. With the Google software, it is also possible to pan and tilt the view, so one can obtain a side view of the Chilean coastline, as viewed from the Pacific Ocean. Paul thinks this will be very helpful when planning future trips.

They found *Copiapoa uhligiana* (*Copiapoa cinerea*) in Tigrillo valley and *C. longistaminea* growing in Guanillos valley and Tigrillo valley. The appearance of *C. longistaminea* changes as you move along the coast, and the plants at Cifuncho are different from those at Taltal. They were going on to "Secret Valley" which is a small canyon which links up Guanillos valley with Tigrillo valley. Rudolf Schulz named this as "secret" but the location has been published in Rudolf's book. It is a place where they have camped on previous trips. Paul said that *C. longistaminea* is not considered a type of *C. cinerea* because *C. columna-alba* is said to be a subspecies of *C. cinerea* and according to botanists, two subspecies do not grow together.

Pictures of *Copiapoa columna-alba* showed the plants leaning at an angle which matches that of the sun at maximum intensity, so that the rest of the plant can be cool in the shadow. They could not find any examples of *Copiapoa laui* here, despite having precise GPS readings from previous trips. They did notice that in the Guanillos valley, a number of clumps of plants had affected by rot since their previous visit. The terrain was very rocky and Paul said they did find some plants with mealy bug on them. The Tigrillo form of *C. longistaminea* was about 10km away. In his view, these big waxy Copiapoas were amongst the most photogenic of all cacti.

Thy encountered some rain and to prove it, we saw a windscreen with some droplets of water on it. It was a light drizzle which lasted a couple of hours and this was probably the only rain in this region for several years.

Paul mentioned that he and Marlon Machado are considering writing a book about South American cacti from coast to coast, to contrast plants found in Chile with those from the Atlantic coast. The ones in Chile grow at sea level, and in Argentina they would have plants from a higher altitude.

The late Alan Craig loved Copiapoas and he and his wife used to travel here regularly. When he passed away, his widow scattered his ashes here. There's a small cross to commemorate Alan on the ocean front at Caleta Esmeralda, at the mouth of the Guanillos valley.

Paul said that the change in colour of the spination of plants down the stem is typical of many which grow close to the sea. This may be due to the bleaching action of the salty water and also the higher concentration of ozone and the intense

sunshine. The new spines The older spines seem like they have been bleached. Copiapoa plants taken from here to a cactus garden in Santiago (1000km south) have lost their white waxy coating due to the lower intensity of the sun. Long black spination in only found on plants further north. *Eulychnia saint-pieana* is not considered a valid name any more, and the featured plant is considered *Eulychnia iquiquensis* or *Eulychnia breviflora* in the new lexicon..

Paul mentioned that one of the differences between conventional and digital photography was that if you were limited to just 36 shots per day, you would be unlikely to take pictures of tatty or dead plants, even if they might later on prove to be quite interesting to study, for example showing signs of new growth or the teeth marks of various animals.

Some pictures showed people living on the beach. They risk their lives collecting seaweed/kelp from the ocean. Apparently the toothpaste you use could well have some Chilean seaweed in it (in the form of a thickening compound called carrageenan). We also saw the flower of a plant from the nolanaceae family

Going further north, the valley was much wider and covered in plants of *Copiapoa columna-alba*. These plants are considered endangered and are in appendix 2 of CITES, but there must be thousands of plants here. Inland, their numbers reduce and *Copiapoa longistraminea* takes over. Some of the plants had white scale insect on them. Some also featured a dark cyanobacterium called Nostoc which grows on the plants - it seems to like the wax coating. Although not a parasite, it can eventually end up killing the plant by hindering the plant's ability to photosynthesise.

We saw the remains of a plant hit by a truck. In the dry heat, plant remains can be preserved and remain intact for many years. We saw more valleys filled with thousands of *Copiapoa columna-alba* plants, all leaning into the sun. At this point Paul's laptop decided to go into standby mode and this proved to be a good time for the talk to end!

This was our first example of a complete talk given using a digital projector and I think people will have found the image quality impressive. Seeing the Copiapoas in habitat was interesting, and the demonstration of the Google Earth software was also fascinating.

Vinay Shah

Table Show – September

There were 8 entries in the September table show.

	Cacti – 3 Cacti	Succulents – 3 Succulents
Open	(1) B Beckerleg	(1) -
	(2) -	(2) -
	(3) -	(3) -
Intermediate	(1) B Beckerleg	(1) B Beckerleg
	(2) P Clemow	(2) G Finn
	(3) J Roskilly	(3) P Clemow

Ivor Biddlecombe

Snippets

The following article by Ian Action was prompted by a recent article in the RHS's journal 'The Garden'.

Agaves - Hardy or Otherwise?

The August edition of *The Garden* (Journal of the Royal Horticultural Society) featured an article by Gordon Rowley on 'Suburban Succulents'. Among several other genera, he mentioned two species of Agave which he had grown outdoors, with greater or lesser degrees of success, in his suburban garden near Reading.

Everyone knows *Agave americana* and its silver and golden striped forms. This is a large and fast growing species which soon outlives its welcome in the greenhouse. According to Gordon Rowley, it "needs protection in most areas" when grown outside. This is a view I would endorse from experience. Large plants are now being sold by garden centres at some cost. Having been sourced from southern Europe, they are likely to be even less hardy than might otherwise be anticipated when compared with plants raised and grown in this country.

The other Agave mentioned by Gordon Rowley was *A. parryi*, which he said "has survived for 50 years unprotected". It had not flowered, and after this time did not exceed two feet across. This species is closely related to *A. havardiana* which we found growing at heights of up to 7,000 feet in the Big Bend National Park in southern Texas.

This was well above the level at which frost occurred in November, and is an indication of its potential hardiness.

Two other *Agave* species which I have left to their fate outside in winter are *A. filifera* and *A. victoria-reginae*. These were large plants which had outgrown their allotted space in the greenhouse, and I had already propagated smaller replacements. Unfortunately both succumbed in spite of the protection afforded by a south-west facing house wall.

Gordon Rowley recommended that “when planting Agaves, tilt rosettes forward if you can to face the sun. This throws off rainwater from the centre and avoids rotting”. I have found that a plant which is growing well soon returns to the vertical, thereby distorting its symmetry.

Agave parryi has appeared in the Society seed list, along with other *Agave* species, twice in the last ten or so years. I wonder if any Branch members, apart from myself, have requested seed of these? *A. ghiesbreghtii* and *A. parryi* grown from Society seed have remained relatively compact, although I have not yet tested the hardiness of the latter.

Unfortunately plants raised from seed distributed in December 1994 as *Agave macroacantha* and *A. verschaffeltii* have grown to look and behave like *A. americana*. Regrettably this is not the first time seeds purchased under choice names have turned out to be common everyday species. As a consequence, there must be many plants in collections which are masquerading under names which are more exotic than they deserve. However, plants grown as *A. verschaffeltii* from the

December 2001 seed distribution look more hopeful, although this may simply be because they are still confined to the pot in which they were sown.

All the species of *Agave* mentioned above are medium to large growing. There are several other *Agaves* which are dwarf growing, and I have even found some temperamental to keep. These are well worth the greenhouse space, and the name *Agave* should not be an automatic deterrent to trying them. Such species are worthy of an article to themselves.

(P.S. I should be pleased to pass surplus plants on to any Branch members willing to test their hardiness before they are consigned to the big green bin in the sky.)

Ian Acton

Next Month's Meeting

Our next branch meeting will be held on November 1st. It's our turn to host the **Zone 11 Quiz** and we will be welcoming members from the Portsmouth and Isle of Wight Branches, who will be trying to lay claim to the Mealy Bug trophy which we won last year!

Because of the extra visitors, our car park outside the meeting hall may fill up. In this event, I would encourage members to use the main Church car park (accessible from West End Road).

There will be no table show at the November Meeting.

Forthcoming Events

Sat	8 th	Oct	Portsmouth	Portsmouth & District Autumn Show – Christ Church Hall, Widley
Sat	15 th	Oct	Portsmouth	“Cacti of Ecuador” – John Hughes
Fri	21 st	Oct	Isle of Wight	“Plants and Things Around the World” – Jean Ellis
Fri	21 st	Oct–	Leicester	Haworthia Society 8 th Convention – Hilton Hotel, Leicester
Sun	23 rd	Oct		
Tue	1 st	Nov	Southampton	Zone 11 Quiz – hosted by Southampton Branch
Mon	14 th	Nov	Southampton	Branch Committee Meeting (@ 79 Shirley Avenue)
Fri	18 th	Nov	Isle of Wight	Society Slides
Sat	19 th	Nov	Portsmouth	Annual General Meeting
Sat	3 rd	Dec	Portsmouth	Christmas Social
Tue	6 th	Dec	Southampton	AGM and Christmas Social/American Supper
Fri	16 th	Dec	Isle of Wight	AGM and Christmas Social/American Supper

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