

British Cactus & Succulent Society

Southampton & District Branch Newsletter

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Editorial

Well, we are into the final month of the year. Although it's tempting to think about watering your plants on a sunny day, it's really not a good idea (apart from any winter growers) due to the risk of sustained frosts. Last month's talk on Epiphytic cacti did provide examples of plants which grow and flower in the winter so perhaps we should be trying to seek out some of those plants. And of course now is also the time to be thinking about which plants might be worth growing from seed – and trying to source those seeds.

Announcements

Our next meeting will be held on **2nd January** and will consist of short talks by branch members. We would like members to bring along photos or plants and talk about them for a few minutes. Pictures can be brought along on slides or a CD or memory stick/card, and should be prefixed with 001, 002, 003 etc. so that they are shown in the correct order. Please let David Neville know ASAP if you would like to present.

The **Branch Programme** for **2018** has been prepared and printed copies are available from the front table.

Committee Reports - 2017

Chairperson's Report

This was my fifth year as chairperson of our committee and the tenth year of serving the committee, previously as vice chair and librarian.

I have decided it is time to stand down and give another branch member the opportunity to take the role of chair and take the committee forward.

Many thanks to all the members of our committee for their hard work through the year. Despite a serious heart issue Adrian Bailey has been a stalwart vice chair and excellent and coherent taker of minutes. I have appreciated how much work Vinay Shah undertakes in supporting the branch updating our website, regularly producing our newsletter and being quick to volunteer to cover other assorted tasks. Having previously been the branch librarian I am aware of how much work Richard White has put in cataloguing and efficiently organising our collection of specialist books.

I would like to thank the catering support team of Glen Finn, Alec Mant, and Ted Smith who provide the very welcome catering at branch meetings and Peter Bircher who runs our fund raising raffle.

This year Bruce Beckerleg had an open day inviting the membership to visit his collection. It was a pleasant afternoon and I would like to thank him for his hospitality.

A special mention for Ivor Biddlecombe whose expertise in display has won us many medals and certificates over the years who is now looking to limit his workload.

I am looking forward to next year's programme of meetings, but when attending I will be in the 'body of the kirk'.

I wish you all a Happy Christmas and as ever a prosperous and bug free New Year.

Dot England

Secretary's Report

Looking back, 2017 seems to have been a good year for the Branch. We were fortunate to be able to welcome some new speakers to entertain us, along with some regular favourites. Attendance at meetings remains way above that of most BCSS branches around the country, although maybe a little down on a couple of years ago. Nonetheless, speakers are still generally impressed at the number of people at our monthly meetings. It is not just the attendance that gets noticed I have also received favourable comments about the friendly buzz and atmosphere while everyone is arriving and poring over the sales plants, and the number and choice of plants offered has warranted mention, along with the fact that we offer most speakers a pub meal before they undertake their presentation, and that they receive a bottle of wine as a thank you gift at the end of the evening.

I have been busy over recent weeks putting together a programme for 2018, and it is now complete and ready for distribution. There should, hopefully, be copies available at the December meeting, and a PDF version will be sent out shortly to all those members for whom I have an up to date email address. If you are reading this and you don't receive occasional emails from me, it is probably because I don't have your email details – all you need to do is contact me by sending an email to davnev@btopenworld.com and I will ensure that you are added to the circulation list.

Most of the activities of the Branch will be covered in the reports of the other members of the Committee, and I do not wish to steal their thunder, so I will close my report here, and take this opportunity to wish everyone a wonderful Christmas and New Year. I look forward to seeing you all at our January meeting, to be held on Tuesday 2nd, where we will enjoy a number of short presentations from Branch members, covering a range of topics

David Neville

Treasurer's Report

I would like to thank Colin and Lorraine Bielckus for completing our annual accounts in such a quick time. Through careful management of the branch spending by the committee we have managed to close the financial year with a profit of £124.00. This is only possible due the continued support by members at our monthly meetings and helping out at shows.

The Branch continues to maintain a very comfortable savings and current account balance of £7,809.

Finally, I would like to take this opportunity to wish you all the best throughout the festive season and look forward to seeing you all next year.

Alice Jankovec

Display Manager's Report

Sparsholt Countryside Day - I am pleased to say Geoff, Richard, Vinay and Bruce all arrived by 8am and we managed to have the gazebo up and the tables in position and the display and sale plants in place by 9am. Just as we finished this, it started to rain, but fortunately it was only a very brief shower and the rest of the day was dry with sunny periods. The sale of plants was slow during the morning with very few visitors, but it was better during the afternoon. The Countryside Show is a good event with lots to do and see on the Sparsholt campus.

New Forest Show - On Monday, Ben, Bruce, David, Dot, Ted, Tony and I arrived to set up our Branch display. The weather was dry, but the previous week's rain had made the road and the entrance to the car park muddy but we all managed to get parked with no problem. Once the plants were in, Ted was a great help in stapling the back cloth in position – something I find difficult to do now. I arranged the plants for the display but this year it was not as good a blend of plants as I would have liked. However the judges still awarded us a Silver Gilt medal which was not too bad as we had so many different pots on view – they usually prefer more consistency. The sale of plants was very good on Tuesday and Thursday but sales on Wednesday were lower due to the rain and lack of visitors that day. This will be the last New Forest Show that I will be setting up, as it is difficult for me to get all the show materials from my loft as well as load the car with the display plants.

Romsey Show - Ted, Bruce, Peter and I set up the display and I was again grateful to Ted who did all the stapling and put up the covers and back cloths. The weather on Friday was showery and the rain continued into the evening. I arrived at 6.30am on Saturday but was held up at the entrance and was told to fit my towing hitch to the car and had to be towed in to the show ground by tractor through the soft mud. I arrived on site at 7.30am Ted had managed to get in earlier, and Peter, Bruce and Ben arrived after 8:30am. The plant sales was slow to start at first but was better during the day. I was pleased our display won a large gold medal. The

show organizer said we would be able to start taking our display down at 4.30pm and we were all lined up to leave by 5.45pm but they did not tow me out until 7.00pm. I am sorry to say this will be the last show that I can bring the covers and signs to, as it is just too much effort for me to get the materials in and out from the loft.

The table show this year had a better entry than last year with 14 members entering at least one class. I would like it if more members entered classes, as it gives us all a chance to see some of your plants and how you are growing them.

This year will be the last time I will be able to keep the back cloths and covers for the displays as most are stored in my loft and require many journeys up and down stairs and ladders for each show. If any member is willing to take over the job of Display Manager, I will be pleased to help them in any way that I can.

Wishing you all a Merry Christmas and a Happy New Year

Ivor Biddlecombe

Librarian's Report

For those of you who are new members, or old members who have forgotten, the Southampton branch has a library of books acquired over the years, some of which are recent volumes on various popular genera, including those produced by the indefatigable John Pilbeam, some are old classics, and some are just old. The branch has continued with its practice of adding new books to the library each year. I have recently completed a "stock-taking" exercise, as a result of which Vinay has been able to update the book list on the branch website (southampton.bcss.org.uk/library.html). For those who like paper lists, I will also bring a few printed copies of the list to a meeting in the Spring of 2018.

The library now contains approximately 100 books, including some multi-volume and journal sets, which are available for you to borrow for a mere 20p per volume per month, a real bargain compared with the alternative of buying your own. Borrowing a relevant book can be a good way to develop any interests you have. There are a few books which I don't usually put out on display each month, so if you see something in the library list that you'd like to look at or borrow, feel free to contact me by email (richard@rjwhite.tk) or phone (01425 653840) or text (07751 937060) and I'll try to make sure it's on the library table at the next meeting. If

you have any books on loan from the library, please remember to return them at the next meeting.

This year we have again added several books. Two books were donated - thank you Ian and Ben! The books were all described in "Books and things" articles in some of the branch Newsletters during 2017, but in case you missed any, here is a summary:

Guide to the Aloes of South Africa by Ben-Erik van Wyk & Gideon Smith (1996)

Epiphyllum by Frank Süpplie (undated)

The Genus Ceropegia by Dennis de Kock (2017)

Mammillaria Now and Again by John Pilbeam (2017)

During the year we have also sold one or two duplicate books, and there are a few more "spares" which I will put out for sale at one or two of our meetings in the New Year.

Season's Greetings to all, and Good Growing in 2018! .

Richard White

Plant Sales Officer's Report

The season started off, as usual, with a small display at Sparsholt Countryside Day where we took £470 which is easily a record. This compares with £128 last year which was an all-time low. I am still unclear as to the reason for the enormous difference, but let's hope this year's performance continues into next year and beyond!

At the New Forest Show takings were £1333 which is a bit down on last year but still high historically.

Our last show was at Romsey where we took £563 which is a few pounds more than our best ever. Unfortunately, because of the muddy conditions, we all had to be towed on and off site which rather took the fun out of the day. We also won a large Gold for the second time, which yielded £110 in prize money, it's a pity the New Forest Show does not give us prize money as well!

Sales at branch meetings have been good as they were last year. We have continued to get a number of different sellers which adds extra interest to the sales table. I would like to thank all of you who brought sales plants to branch meetings and other events.

For those of you who do not know, anyone can bring plants for the sales table, just make sure each

plant has a price label with your initials on it. We charge 10% commission at branch meetings and 15% at shows.

Bruce Beckerleg

Newsletter Editor's Report

We've had good meeting attendances through the year and I've had to print extra newsletters on a couple of occasions. If you fail to receive a newsletter at a particular meeting, please remember that copies of them can be downloaded from our website.

The website home page continues to be updated with details of the upcoming meeting a few days before each meeting is held, and hopefully this gives members a better idea of what to expect and encourages more people to attend.

During the year I created some new web pages which contain images from the 2016 National Show and I've also updated the online list of books in the branch library. When I have time I will update the page containing links to other websites - there's a lot of interesting material out on the Internet which is constantly being updated, and some sites contain very useful information.

The programme of events for 2018 has been finalised by David, and the branch website will soon be updated to show next year's meetings and events. Once I receive the Portsmouth and Isle of Wight's programmes, I will also update the Zone 11 page.

Best wishes to everyone for 2018.

Vinay Shah

Last Month's Meeting

Epiphytic Cacti - A General Introduction

Mark mentioned it was lovely to see so many people at the meeting, despite the weather and the traffic. He mentioned he's been growing epiphytic cacti for very nearly 50 years. He started with Schlumbergeras as a teenager at his parents house - he then went to university and abroad, and 25-30 years later he found the plants were still there growing in his parents' conservatory and doing fine. If they could survive that long with just minimum care and attention, then they deserved a second look. After he took early retirement 10 years ago, he started to correspond with other people throughout Europe and elsewhere and built up quite a large collection. And although he's a doctor and studied botany, he didn't learn anything about cacti at

university - so everything he's learnt about these plants has been through reading and from the practical experience of growing (and killing!) an awful lot of these plants. We would at least learn what not to do!

To start off - what do we mean by epiphytic? The Collins dictionary defines it as "a plant growing on another plant". He showed a picture of a hop growing on an elder - that's growing on another plant - but it's not an epiphyte. Why not? Well it's still attached to the ground. So epiphytes do not include climbers, twiners and scramblers. The same is true for ivy - these are just lazy plants using another for support. We saw a picture of a proper epiphytic habitat in North Wales, with a horizontal branch spreading over a stream. It was very humid there and the branches had a complete layer of moss on them. We saw a common fern and an ivy growing on the moss and these were genuine epiphytes, growing on the tree without any connection to the ground. There is a related category called epilith / lithophyte which covers plants which grow on rocks. We saw a picture from Derbyshire, with a fern growing on a vertical rock face - it was actually growing in pockets of moss on the rock face. To all intents and purposes, epiphytes and lithophytes grow in the same way, and in his talk he was not going to distinguish between the two.

He mentioned that in the first half of the talk he would provide a background to the plants and advice on cultivation, and then in the second half there would be some pretty pictures of the plants. We started with a view of an epiphytic habitat in Chiapas in Mexico. You might think of Mexico as a hot and dry place, but the country has a variety of climates and there are plenty of places with more vegetation and trees. If there's a sunny side and a shady side to a habitat, you'll find things like ferns, orchids, bromeliads and cacti in amongst them. It's a different version of the habitat we saw in North Wales but it starts in the same way, with something like moss getting on the tree and then providing a foothold for the other plants. We saw a view of another tree growing in more light, and again saw cacti, orchids and bromeliads. So some epiphytes are adapted to growing in more light than others. We saw a picture from Serra dos Órgãos (The Organ Mountains) in Brazil, showing more epiphytes growing in shady conditions. One of the cacti was in bud. These plants are adapted to much deeper shade and they would not like exposure to full sun. Next - where are these plants found? We saw a map of the Americas, showing the south of the USA, and there are many epiphytic plants to be found in Mexico, Central America, and pretty much all of South America, apart from Chile. They are not found in

Chile because in that region the winds blow from the East to the West and all the rain has dropped by the time it gets over the mountain ranges to Chile, so it's just too dry there. Mark mentioned that it's important to realise that the "Rhipsalis Group" in the BCSS Guide to Shows is organised due to their growth habit – the plants in the group come from several different tribes.

Many people think epiphytes are primitive cacti - but that's not the case - they actually derive from ordinary cacti - so ordinary cacti are specialised plants, and epiphytic cacti are specialised cacti. If one thinks about the adaptations of normal cacti, they have lost their leaves and the stem has taken over the job of photosynthesis, they have developed wool and/or spines – as protection from too much light, and also to trap humid air (the hair can slow down loss of water from the plant, and in some species dense spination can do the same) and the spines also offer protection from grazing animals. The third main adaptation is to have round or cylindrical stems. If you think of a cactus as a water storage organ, then a sphere has the lowest surface area for a given volume, so a football shaped cactus would be ideal but of course it needs to attach itself to the ground and also compete with surrounding vegetation - hence many cylindrical shaped plants have evolved and some can grow quite tall. They also have ribs - these allow the body to expand or contract, allowing the plants to cope with different amounts of water and they can take up more water without splitting the epidermis. When these plants evolved to grow on trees they had different difficulties to deal with. The lack of light was the main one - the trees usually have a dense canopy of leaves and the epiphytic plants will be growing amongst the lower branches. This means the spines and wool have mostly been dispensed with, although some still do have spines, especially those living in more open environments. The stems have also become flatter to capture more light and some have become thin and tubular to increase their surface area. The result of these changes is that they are much less good at storing water - so they do not grow in dry environments. Basically – you cannot expect to grow an epiphytic cactus in the same way as a terrestrial cactus - it will die. It needs more water and more shade and high humidity helps to reduce water loss from the plants.

The next slide explained the constituents of the Rhipsalis grouping. As far as the New Cactus Lexicon (2006) is concerned, the grouping contains plants from three different tribes – the Hylocereeae, the Echinocereae and the Rhipsalideae. The genera covered by these tribes included *Hylocereus*, *Weberocereus*, *Selenicereus*, *Pseudorhipsalis*,

Epiphyllum, *Disocactus*, *Strophocactus*, *Pfeiffera*, *Lepismium*, *Rhipsalis*, *Scumbergera* and *Hattiora*. Work since 2006 has caused some changes to these groups and Mark would cover that later. He also put a heat gradient on the listing of the genera - some of the species like heat and light and lots of food - these are the "thugs" – *Epiphyllum grandilobum* has been measured at 150m in size! Others are the opposite and some can be considered mature at just 6 inches – these are the "Cinderella" plants and some can withstand quite low temperatures.

So how does one grow them? If you are living up in a tree you won't have any soil – instead you'll have moss, leaf litter, twigs and other things like bird feathers. So the soil you should use needs to try and reproduce these items, and the compost needs to be light and spongy, and hold moisture. In the UK, the easiest way is to use a compost with chopped bark and coir - once you have that, you can add other items. He uses a wool and composted bracken mix, a small amount of sand for stability, and Seramis or cat litter or vermiculite to keep the compost open and capable of storing moisture while allowing access to air. Even pine needle can be used – anything that creates an open compost works. He uses this for the smaller "Cinderella" type plants.

For the thugs and larger plants – he uses an alternative mix of composted bark, coir, wool/bracken, and John Innes. They are larger plants which need more feeding - and they also tend to be quite large, so a heavier compost makes the pot more stable. So his mixes were as follows (the numbers in brackets are ratios) - mix 1 was composted bark (12), chopped coir (6), wool / bracken compost (4), sand (4), vermiculite (4), Seramis/cat litter (2), perlite (1) and mix 2 was composted bark (12), chopped coir (4), wool / bracken compost (4), John Innes (6).

He showed a picture of a pot with holes in the lower half (designed for aquarium plants) and the grower (Bob Martin, Ralph's father) had cut some extra holes and pushed in some cuttings of *Hattiora herminiae* into a mixture of bark and living moss. We saw images of the pot soon after the cuttings had been planted and then 6 months later, where all the stems had taken to the growing conditions very well – all that Bob does is drip water onto it every couple of days – the plant obviously likes the light airy mixture. He himself did something similar, but slightly different – the next picture was published in the BCSS journal, where he did an article on growing epiphytic plants on clay cylinders. The cylinder was solid at the bottom and it was a U shaped cylinder with a hole in the middle. You hang the cylinder from the top, wrap moss round the

outside and stick plants in the moss and drip water into the centre and the clay lets it seep out into the moss - if the moss is happy, the cuttings are happy. His plant of *Hatiora salicornioides* grew very well on such a structure for several years. However, he was also experimenting with how cold tolerant they were and he lost the plant in 2009/2010, when a severe winter meant that temperatures went below -10°C - unfortunately he had no good pictures of the plant at its best. Another plant which likes growing this way is *Schlumbergera russelliana*, which is usually a challenge to grow well - plants grown this way resemble the plants in their natural habitat in Brazil and it's a good way to grow them.

As for light, some of the plants can tolerate more light than others. Put another way, some of them need some shade. Mark had a conservatory built in 2001 - and it was on the south face of the house. It initially proved to be no use for epiphytic cacti, it was just too bright for them. The next picture showed an early improvisation - a table tennis table being used to provide some shade for the plants. The plants growing underneath were much happier. It was late autumn and a bunch of the *Schlumbergeras* were growing and flowering happily. They are quite tolerant plants, but they don't like full sun. And when you find something that works, you grow more of them - so he grew more and more plants, and eventually couldn't fit them all underneath the table. So he used several layers of fleece, to provide more areas of shading. We had a peek underneath the fleece and saw a whole load of plants and cuttings and seedlings. That was in the winter. In the summer - the plants had grown and he put them outside, preferably hanging them in trees. His garden had a number of large Sumac trees and they have branches that go sideways, and these are ideal for hanging pots on. Unfortunately a number of them have suffered from verticillium wilt and so he's having to find new trees to hang the epiphytes on. He showed a picture taken a year or so ago, with a number of plants on the north side of a bank of trees - they get early morning sun and late afternoon sun but are protected from the mid-day sun. They are also protected from strong winds, so the air around them is more humid and that's important. Of course when the plants do well, they get bigger, and tiny cuttings can turn into 4-5 foot plants and then the problem is what do with them in the winter, when they need to come back inside! Mark mentioned that it may be tempting to put the plants on any flat surface you find, and a windowsill might seem like a good idea. However if they receive direct sun, they can scorch easily. And if there's a radiator under the window, when the central heating is on it can cause the air to become very dry around the plant and the plant will suffer badly within just a few days.

Moving on to watering, the plants need water - and more so than terrestrial cacti, but they also don't like being waterlogged. There's very little information about cultivating epiphytic cacti so he's had to learn through trial and error. In his opinion, what they need is not water, but humidity, and high humidity slows down the loss of water. To achieve this, he grows some of the plants in plastic bags. We saw a view of one of his windows, looking in from outside - there were a whole lot of plants of *Rhipsalidopsis rosea* which were growing very well in plastic bags. These plants receive sun for several hours of the day, but the plants don't seem to mind that when they have high humidity around their stems. You can't really see the plants properly in the bags but it does keep them alive. *Rhipsalidopsis rosea* is one of the plants that grows for about 4 years and then the plant seems to decide to give up and the plant segments all fall to bits. Grown in bags, it means that the stem segments don't fall all over the place and get mixed up with other plants. Mark mentioned some of the *Rhipsalidopsis* clones are fragrant. Another picture showed the view inside their dining room. He was growing a few other things as well. Down on the floor were a couple of plastic storage boxes and growing in here were plants that needed higher humidity and less light. This has now grown to 4 boxes as his collection of the "Cinderella" plants has grown.

Moving on to temperature, he reminded us of the map which showed which countries the plants grow in - in addition the plants can grow from sea level all the way up to several thousand metres, and even be subject to frosts in the winters. Hence the temperature needed by the plant varies and you really need to know the origins of the species you are growing, and also how tolerant it is. There is very little published information about many of the plants so when he gets new plants, he simply tries to keep them alive using moderate conditions until he has 3-4 cuttings, at which point he will experiment by growing them in different conditions, and seeing which of the plant fares the best (dies the slowest!).

We saw a view of their conservatory in mid winter - some of the cacti have been brought in from outside and they can continue flowering indoors - many of them do flower in the winter months. We saw the plant called *Epiphyllum floribundum* in flower. His conservatory is unheated and temperatures vary from -2°C or -3°C in the winter up to 30°C in the summer months. It's from May onwards when the temperatures hit the higher levels and he starts moving the plants outdoors. He does use 50% shading from the spring equinox to the autumn equinox. It's better to put the plants out in mid May since they can tolerate slight frosts as long as the

temperatures pick up the next day. In the winters where he has lost plants, it was often because the temperatures remained below 0°C for a sustained period – in 2009/10 it was below 0°C for 3 weeks nonstop. We saw more pictures of plants flowering in the conservatory. If plants are in flower, then he tries to leave them visible. *Lepismium floribundum* is a relatively recent discovery and it's a lovely plant – he had brought some cuttings in for sale. It is like *Lepismium cruciforme*, but flowers are larger, it is capable of flowering in every month of the year and the flowers are fragrant too. It's also very cold tolerant - we saw a plant that had been left outside and which eventually died in the second half of February due to a combination of cold and wet. We saw *Disocactus* seedlings the morning after they had been affected by frost – they had a waxy pallid look about them and that's it – it's too late to save them. Not all the cacti that have been in the trees can go into the conservatory since he's got a limited amount of space. Once, he walked into the living room with a handful of plants and his wife said "They're not coming in here!". He wasn't allowed to put them in the bedrooms either - so he decided to use the loft, and cut an entrance into the roof from his daughter's room. He installed a Velux window and some copper pipes to hang the plants from. The temperature seems to go down to 1°C to 2°C as a minimum and we saw the plants doing well in January. Some of them have liked it so much that they have grown and are now too large to be brought out through the trap door! Many plants do well in these conditions and we saw *Disocactus aurantiacus* flowering beautifully in the loft – it was mid May and he was about to take the plant out.

With pests, there are a few to be concerned about – the plants can be attacked by all sorts of things including mealy bugs. The plants have soft tissue and many have no spines or hair, so slugs and snails also like them. Caterpillars, such as those of the yellow underwing moth can be an issue. Birds and bees can also inflict damage by cutting out bits of the stems. Other possible pests include sciara fly, vine weevils aphids and thrips.

With diseases, these can be bacterial, fungal and viral. Bacterial problems are relatively uncommon and usually associated with waterlogging. Fungal issues are very common and also occur due to water logging. Viral problems are due to the fact that many of the plants are propagated vegetatively (from cuttings), and so once a virus enters the plant, it will persist in any cuttings for ever more. It's pernicious and a problem.

Moving on to propagation, he loves growing plants from seed. He also loves the seed pods the plants

produce and watching the seedlings grow. We saw a *Disocactus* seed pod cut open and also a *Schlumbergera* pod – there were probably 200 seeds in there. We saw a bigger *Disocactus* seed pod with seeds spread through the pulp inside the pod – Mark mentioned it tastes like a chinese gooseberry. The growing medium he uses for seedlings is similar to the mixture he mentioned before - but it has to be fine to allow the small roots to develop, so there's no need for all the fancy stuff - just use the basics of composted bark, coir and a small amount of sand in a 8-6-2 ratio. We saw what the seeds looked like after they came up. *Rhipsalidopsis* seedlings were slightly dumpier. The seeds of *Schlumbergera* tend to grow with a long flat stem before they start to develop as segments – and there are others which develop tubes or cylindrical sections before the adult form of the stem starts to form.

Vegetative propagation is done largely because it's so easy and fast. We saw *Selenicereus* with roots already developing on the stems – it would be easy cut off the segment and pot it up or even just air-layer it. *Epiphyllums* do the same – when they stop growing at the end of their year, they form roots at the tips of the stems. The smaller plants will root in the same way, once they are detached from the parent plant. We saw him rooting a whole lot of stems of *Rhipsalidopsis*. He used to put the stems into pots of the potting mix, but one year he had some left over and he just left them in the seed tray. These all went on to grow roots and they were actually better than the ones that were put in pots. So now he doesn't root in pots since they seem to develop more slowly and can have fungal issues. As long as there is humidity near the cuttings, they will form roots. For the cuttings he had brought along for sale, his advice was just to put them in a plastic bag with a tiny squirt of water and put them somewhere out of direct sun and wait for roots to form before potting them up. We saw plants in his son's bedroom two weeks after he had left for University – there was fleece in the window to protect the plants, and we saw the plants in plastic bags, being used to keep the humidity high.

Grafting is a matter of taste and fancy. He showed us pictures of 2 plants of *Schlumbergera microsphaerica*, which is like an alpine - both were around 3½ years old from single cuttings. The one on its own roots had grown normally but there were no signs of any flower buds. The other had been grafted onto a stem of *Selenicereus* – and it was much larger and covered in flower buds. However the plant did not look the way it should. So grafting is good if you have a rare plant and need to propagate it rapidly - but there is the possibility that the plant will lose its character. People have also

discovered that sometimes there's a virus in the stock and this can pass into the grafted plant, affecting it forever - so you do need to be careful.

In the second half of the meeting, before Mark started on the pictures, he mentioned that he had left out information about watering and feeding in the first half. The thugs need a fair amount of feeding – either mixed into the soil or as phostrogen included in the water. The “Cinderellas” do not like to be pushed - so he puts some very dilute feed in their water, at each watering. This mimics the slow release of nutrients that they will get in nature. Of course sometimes they may get a burst of feed from something like a dead rat(!) or bird droppings, but they seem OK with the gradual feeding. Certainly for the slower growing plants you'll do more harm than good from providing too much nutrients. Basically, the thugs need more, the Cinderellas need a lot less. Mark mentioned he lives in an area where the water is slightly acid and that is OK for these plants. If you live in an area where the tap water is alkaline, then you will need to boil the water or make it slightly acid by adding some lemon juice - or consider using rain water. Responding to a question from the audience, the plants do prefer slightly acid compost. He's against using peat, but composted bark, pine needles is OK.

He showed again the table showing the genera considered to be members of the Epiphytic cacti and proceeded to discuss each genus. He started with *Hylocereus*, at the thuggy end of the table. We were at the edge of a precipice – there was a tree growing up the precipice and a *Hylocereus* was growing on the tree and taking it over. We could see some of the old flowers. We saw another plant growing lithophytically on rocks – this picture was from Central America somewhere. The plant had large chunky three angled stems. And we saw one at Birmingham Botanic gardens, growing on a support some 10-12 feet up in the air. The plants can take up a lot of space, and they need warmth, water and food. And they are night flowering and the flowers usually only last a single day. Mark mentioned he gave a talk 10 days ago and someone from the audience said the plants can flower into a 2nd night but Mark has his doubts about this. The flowers of *Hylocereus undatus* are pollinated by a bat and they face upwards. We saw another plant (in Thailand) where he knew the flowers opened one evening and the flower had gone over by the following morning. Perhaps sometimes in cultivation in Northern Europe, the flowers might last longer. We saw some more examples of the flowers when open, and in some cases they can be up to 12-14 inches across! Mark mentioned you may have come across them without knowing it – we saw a load of plants of *H.*

undatus being grown as a crop, and they were being used to produce the red “dragon fruit”, which is sometimes sold in our supermarket. If you grow the seed from one of these, just be aware of how large a plant you'll eventually get! *Hylocereus* is also commonly used as a grafting stock for other plants, and he showed a view of grafted coloured gymnos which are frequently put on *Hylocereus*. Because it's tender, the stock will die if the temperature goes below 5°C and of course the grafted top cannot survive without the stock since it has no chlorophyll.

Weberocereus is closely related to *Hylocereus* and we saw *Weberocereus tonduzii* but he didn't have any pictures of *Weberocereus* in flower. They are similar to *Hylocereus* and the plants need the same care and attention, but the flowers are smaller, so he saw no reason for growing them really. A paper published recently claims that *Weberocereus* is the same as *Hylocereus*, and they should be in the same genus. The authors also couldn't find any difference between them and *Selenicereus*, and so being the oldest of the three genera, *Selenicereus* might be the name they all have to go under in the future.

Staying with the old names, we did see a *Selenicereus* scrambling through the undergrowth, with bromeliads around it on the ground. It's another “thug”. Next was a picture of one growing as a lithophyte, with white flowers. We saw the flower of *Selenicereus grandiflorus* opening in the late evening – it has 8"-10" inch flowers. The plants need heat, light, and water (so they are demanding creatures), and they are nocturnal flowerers, but the flowers do last into the beginning of the next day. We saw a plant in Stuart Estell's greenhouse which had taken over the bench - he had cut it back with the threat of "flower or else" and it did flower very well after this treatment. There are other *Selenicereus* with smaller flowers which are more tolerant of the cold. *Selenicereus spinulosus* is commonly used as grafting stock. It is more tolerant of the cold but it has all the disadvantages of *Selenicereus*. *Selenicereus validus* is a recently identified plant which forms lots of shoots from the centre of the plant, and will flower on stems which are 18 inches long or less. It is more compact than the others and has the same large flowers. Unfortunately, it will die below 15°C.

Various other plants have ended up in *Selenicereus*. We saw *S. anthonyanus*, which had been planted in a corner of the Princess of Wales conservatory at Kew, and which had completely taken over that corner - it just climbs over anything it finds. Usually they have flowers which are red in the middle with white outer petals, but we saw an all-red one at the Berlin Botanic gardens. Another plant placed into

Selenicereus by the New Cactus Lexicon is *S. chrysocardium* – it looks like a palm tree or fern. The plant we saw was 6 feet across from side to side but it's still a baby - we saw another one which was growing up a 100 foot tree. The main shoot sends out 6-8 feet side stems as it grows upwards. We saw a picture of it flowering in nature, and it's this flower which features on the cover of the NCL. It needs lots of heat and feeding and the flowers are still nocturnal. The 4th genus in Hylocereae is *Pseudorhipsalis*, which means "fake rhipsalis". So these are plants that were thought to be *Rhipsalis* but then found to have no association with that genus, so a new genus was set up. They are fairly unassuming plants a foot or two long, which have small white flowers followed by big white berries and we saw *P. ramulosus*. There's not a lot more to be said about them, they are more tolerant of cooler conditions. However one is worth highlighting - it's called *Pseudorhipsalis amazonica* ssp. *panamensis* and this deserves a mention because it's the only cactus with genuinely blue colour in the flowers – they are cream at the base, which transitions to pink and then the petals have blue tips. We also saw the buds. When open, they are around an inch and a half long and they are full of nectar which will drip onto the floor. The flowers are very beautiful and will open during the day. He's tried growing it a few times, but the plant suffers below 15°C, so it does need good warmth.

The next genus in this tribe is *Epiphyllum*. They have white flowers and they are night flowering. We saw a typical flower – with white petals, sepals at the back and white filaments and stamens and a red style in the middle. We saw a side view of another one, with a long floral tube. They are pollinated by hummingbirds and hawk moths with long tongues. They are mainly night flowering plants but *Epiphyllum crenatum* stays open during the day and the blooms can last for 3-4 days. The flowers are 8 inches across, and 10 inches from front to back. We saw the cultivar "Chichicastenango" which has deeply lobed stems. *E. crenatum* interbreeds with *Disocactus*, and *Disocactus* have brightly coloured flowers, are day flowering and can tolerate cooler conditions and generally need less mollycoddling.

Disocactus speciosus is one of the commonest ones, and we saw it in Mexico growing up a tree. There are several varieties of this, and ssp. *cinnabarinus* has smaller tubular flowers which don't open fully – however the featured plant had something like 200 to 300 flowers on it. It can grow with different stem shapes too – some stems are 4-angled and others are flat, but the flowers are the same on both stem types. *Disocactus speciosus* f. *amecamensis* is a complete

albino. We saw the brightly coloured flowers of a *D. speciosus* hybrid - but no one knows its origin. It's very spiny so he hadn't brought any cuttings of it. *D. aurantiacus* used to be considered a subspecies of *speciosus* but is now considered a species in its own right. It has long thin stems ½ inch wide. 5-6 feet long and we saw it growing in one of his trees, along with a close up of the 4-5 inch flowers. They are glorious when the sun is on them and it is one of his favourite plants. He has several clones and he's been cross breeding them in the hope of producing a more vigorous clone. A red one called *D. ackermannii* was flowering in Spring in his garden. *Disocactus phyllanthoides* has pink flowers – it was initially placed in a genus called *Nopalxochia* which is no longer in use. Not all the plants have big petals, we saw *Disocactus quezaltecus* which just forms pink 1½ inch tubes which never really open up. A hummingbird would pollinate these flowers. The next flower was one he had showed us before, flowering in his conservatory at Christmas. It was distributed by the ISI as *Epiphyllum floribundum* but there's no such species and it's probably a *Disocactus macranthus* hybrid. It flowers for 9 months of the year, from September to the next summer. Strangely, his plant keeled over a couple of years ago and so did plants of the same species which others were growing. He's got one plant left and is watching over it carefully. There are other *D. macranthus* hybrids – this one was 7-8 inches across and the flower has a smell like TCP! It's a very vigorous plant, tolerant and produces 8" flowers and he'd brought many cuttings of it tonight.

The NCL put several things into *Disocactus* which they probably shouldn't have. *Aporocactus flagelliformis* was included, but recent molecular analysis suggests it's not a *Disocactus* so the old name may be valid after all. It's a nice plant but if mealy gets onto it, it's very hard to eradicate. When growing well, it makes a beautiful plant. *Disocactus martianus* has a similar flower but in red. These hybridise with other *Disocactus* and the results were called *Aporophyllums*. There used to be dozens of named hybrids of these, but they are less common these days, which is a shame. *Aporophyllum* "Shirley" is very floriferous and it produces large flowers every year while being a compact plant. We saw another hybrid with different parents and different shaped flowers. "Tangerine" is another pretty flower. As mentioned before, *Epiphyllum crenatum* hybridizes with *Disocactus* and it's the hybrids of these crosses with other *Disocactus* which are the basis of the many hundreds and thousands of large bloomed hybrids that are sold as brightly coloured hybrid *Epiphyllums* – we saw a pink one called "Pegasus". Since they contain a mixture of genera they should really be called

something other than Epiphyllum - and some may have hardly any Epiphyllum genes at all. On the continent many new compact and floriferous hybrids are being created, and we saw an example of one of these called "Elfentraum".

Now to Echinocereae - 2 of the genera have some epiphytic cacti and these are presumed to have independently evolved compared to the genera we had already discussed. Strophocactus has 3 species - one is a climbing one and a bit of thug, and then there is a scrambler and the third is a true epiphyte but he didn't have a picture of it. It's a very rare plant which grows in the seasonally flooded Amazonian rainforest - it's just not possible to grow it in cultivation. He believes it to be white flowered and it stays open in the daytime. The 2nd genus is Pfeiffera which used to contain 9 species and then a paper by Nadja Korotkova in 2010 did a molecular analysis on the known Pfeiffera and they found out it was comprised of two distinct groups which were different enough to require a new tribe (Lymanbensonieae) and genus (Lymanbensonia) to be set up, and 4 species got exported from Pfeiffera to the new genus. A new Pfeiffera was also identified so we went from 9 Pfeiffera to 6 Pfeiffera and 4 Lymanbensonia. He showed a picture of a Lymanbensonia and they are fairly upright climbing plants with small flowers which are creamy or slightly coloured. They are not easy to grow and you're unlikely to come across the genus. The most common Pfeiffera is *P. monacantha*, which is grown a lot in Europe - it produces lots of orange flowers which turn into pink gooseberry type fruits. It does have spines, but there is a variety called "kinnachii" which is spineless and worth seeking out. *P. boliviana* cv "Innes" has apple blossom flowers once a year in April/May - it's a very pretty plant. Other Pfeifferas are not epiphytic - *P. ianthothele* is a scrambler and can be grown as a hanging basket plant - it produces white flowers and is a bit spiny.

The final group is the Rhipsalideae - and the first genus is Lepismium. This is a smallish genus of fairly tolerant plants. If you give *L. cruciforme* some sun it forms red edges to the stems and produces lots of flowers over a good period of time - they are hard to photograph properly, and it's better looking in real life. It sometimes has flat stems, sometimes 3 angled. The smallish flowers vary from pale to dark pink, and there are orange and purple shades too. It's a tolerant plant, one of the plants you may find in a mixed collection as they are "slow to die". *Lepismium floribundum* is like *L. cruciforme* on steroids - the stems are x2 or x3 the width, the flowers are twice the size, it flowers a lot, and if you grow 2 or 3 of them, you may have flowers throughout the year. He had brought in cuttings of

Lepismium warmingianum as a hanging basket plant - it only flowers once a year, but when it does, you get masses of snow drop type flowers. Another with similar flowers is *L. houlettianum* - it can get quite large eventually, and has a red centre to the white flowers.

Rhipsalis is the biggest genus of all, containing almost 40 species. Rhips means wickerwork in Greek - one of the English names is mistletoe cacti - it is self-fertile and it produces masses of white berries, just like mistletoe. There are lots of different types of Rhipsalis and they vary. Some of them are flat stemmed and can grow quite large - we saw an 8 foot section of wall in the Berlin Botanic Garden with a plant growing all over it - they can produce 5-6 flowers from each areole, followed by berries in many cases. They can be quite spectacular if you have the space for them. He prefers the smaller growing plants - *Rhipsalis neves-armondii* is one of them - it has a typical Rhipsalis flower. The pendant ones are really attractive plants and can produce masses of flowers when they feel like it. We saw *R. cerescula* which was Colin Walker's entry in the 2012 National Show - the stems looked a little yellow - so it may be getting too much light and the stems would expected to be longer than they were - in high light it gets stunted. It was still awarded a "highly commended". *R. pilocarpa* - he had cuttings of it here for sale - flowers in the winter. If you put the basket of it out in May and we get some cold nights, the plant can be fooled into thinking winter is coming and produce a second batch of flowers in the summer.

Moving on to Schlumbergera, we saw *S. truncata*. It's an autumn flowering species - the stems have teeth at the tips and along the side - the flowers held horizontally and they are zygomorphic, i.e. symmetric about a vertical axis. They are hummingbird pollinated. Many cultivars of it exist and you'll see large numbers for sale in the autumn. We saw a bicoloured one and a yellow one. If you keep them cold, a pink colour develops, so white becomes pink, pink becomes dark pink and yellow becomes yellow-pink. The magenta pigment is produced at low temperatures, so keep the plant warm if you care what flower colours are produced. As plants they are quite cold tolerant. *S. russelliana* is a spring flowering plant and very different from *S. truncata*. The stem sections are smaller, there are no teeth and it has lobes instead. The flowers hang down and are symmetrical - it is also a lot more finicky to grow. In the 1840s it was crossed with *S. truncata* to produce several seedlings - one of which became the Xmas cactus - *S. x Buckleyi* - so this is a hybrid of an autumn flowering species and a spring flowering species, and its flowering time moved

closer to Xmas. It is not as common as it used to be, since it's not a good commercial plant – the stems are too dangly - whereas the growers prefer something with upright stems that can be packed tightly together. It's still a very good plant after 170 years. Many people have tried to recreate the cross between *truncata* and *russelliana* and we saw x "Charles Lemaire", produced by Professor Boyle in the USA – it is much larger than the original and makes fine plants. Next was *S. opuntoides* - Opuntia growers might love it until it flowers and then they get the shock of their life. He showed a plant covered in flowers and mentioned that it doesn't normally produce so many blooms – it's only done it once and the plant very nearly died after over-exerting itself. That number of flowers on a plant causes a big increase in the amount of water loss from the plant and you can already see in the picture that some of the stems are struggling and shrivelling, even though he was spraying it every day. Eventually, all the stems dropped off and it went back to just 2-3 stems and he's now nursing it back to health.

The one genus that is left after this is *Hatiora*. 3 of them had slim cylindrical stems and 3 had flat stems. A new paper in 2011 decided that only the three cylindrical-stemmed species should remain in *Hatiora* – of the others, 2 went into *Rhipsalidopsis* and 1 into *Schlumbergera*. *Hatiora herminiae* is one of the cylindrical stemmed plants. The flowers are brightly coloured and ½ to ¾ inch across, when it's happy you get lots of flowers. The other two species are yellow flowered. One you are likely to encounter is *H. salicornioides* – it is narrow at the base and wider at the tip. There are different clones in cultivation, all with lemon yellow to orangey yellow flowers. They are all nice things to grow. The other *Hatiora* species is *Hatiora cylindrica* – it may be a different species or an extreme form of *H. salicornioides*. The two plants that went into *Rhipsalidopsis* were *R. rosea* which he's already shown – they have pink flowers and some of the clones are fragrant so sniff before you buy. They are lovely plants with flowers an inch or more across. The other is *R. gartneri* which has much bigger stems. The flowers are longer, and orange scarlet in colour. The two were crossed and produced a plant which became the Easter cactus, *Rhipsalidopsis x graeseri*. He doesn't find it easy to grow these well. A cultivar was photographed on the continent, and it's one he would like to grow. Many of the hybrids are not commercial because they are dangly plants with flowers which hang down. The other species that used to be in *Hatiora* was *H. epiphylloides*. In the ssp *bradei* the individual segments are ½ inch to an inch long but the flowers are 1¼ to 1½ inches across, so compared to the stems the flowers are

massive, but the whole thing is still a small plant. It's a lovely plant. The molecular analysis says it's a *Schlumbergera*. The flower looks like a *Hatiora* flower and the stems resemble other *Hatioras*. Anyway it's now called *Schlumbergera lutea*. Of course it doesn't matter what you call the plant – it's a lovely plant, well worth growing whatever name you find it under. Of course you need to know the new names to find sources of the plants.

Mark ended by saying he hoped we had at least seen some plants we'd like to try growing and even think of some places where we can perhaps grow them. If you want more advice or information on where to get some of these plants, do get in touch with him.

Vinay Shah

Table Show Results

There were 13 entries in the November table show, and 5 entries for "Plants in Flower".

	Cacti – Copiapoa	Succulents – Echeveria
Open	(1) G Penrose <i>Copiapoa ahremephiana</i>	(1) B Beckerleg <i>Dudleya Brittonii</i>
	(2) I Biddlecombe <i>Copiapoa cinerea</i>	(2) I Biddlecombe <i>E. agavoides</i> "red edge"
	(3) B Beckerleg <i>Copiapoa</i> sp. (tigrillo form)	(3) I Biddlecombe <i>Echeveria laui</i>
Intermediate	(1) G Penrose <i>Copiapoa hypogea</i>	(1) B Beckerleg <i>Echeveria laui</i>
	(2) B Beckerleg <i>Copiapoa cinerea</i>	(2) M Stevenson <i>E. cuspidata</i> v <i>zaragozae</i>
	(3) I Biddlecombe <i>Copiapoa krainziana</i>	(3) I Biddlecombe <i>Echeveria lindsayana</i>

Cacti/Succulent in Flower
(1) M Fox Rousell <i>Rhipsalis pilocarpus</i>
(2) B Beckerleg <i>Neoperteria microsperma</i>
(3) M Stevenson <i>Zygocactus</i> (<i>Schlumbergera</i>) <i>truncata</i>

Ivor Biddlecombe

Table Show 2017 – Overall Results

Open Section – Cacti (50th Anniversary Trophy)

- | | |
|------------------|----|
| 1) I Biddlecombe | 33 |
| 2) B Beckerleg | 28 |
| 3) T Smith | 9 |

Open Section – Succulents (50th Anniversary Trophy)

- | | |
|------------------|----|
| 1) I Biddlecombe | 38 |
| 2) B Beckerleg | 30 |
| 3) M Stevenson | 14 |

Intermediate Section – Cacti (Peter Down 50th Golden Jubilee Trophy)

- | | |
|------------------|----|
| 1) B Beckerleg | 33 |
| 2) I Biddlecombe | 26 |
| 3) T Smith | 10 |

Intermediate Section – Succulents (25th Anniversary Paperweight)

- | | |
|------------------|----|
| 1) B Beckerleg | 32 |
| 2) I Biddlecombe | 26 |
| 3) G Penrose | 15 |

Ladies Cup (highest points total/Female entrant)

- | | |
|------------------|----|
| 1) M Stevenson | 39 |
| 2) M Fox-Rousell | 30 |
| 3) C Weston | 4 |

Solent Cup (Cactus or Succulent in flower)

- | | |
|------------------|----|
| 1) B Beckerleg | 31 |
| 2) M Fox-Rousell | 15 |
| 3) T Radford | 13 |

Ivor Biddlecombe

Next Month's Meeting

Our first meeting of 2018 will be held on January 2nd. The meeting will feature short talks by branch members, and if you have a subject that you would like to talk about (even if only for a few minutes), please let Daid Neville know as soon as possible.

We will have access to conventional and digital projectors, so members are welcome to bring along slides, or a CD or memory card or memory stick containing digital pictures. You can also bring along live plants, if you want to talk about those!

The January Table Show will consist of the **Echinocactus** group (cacti) and the **Aloe** group (succulents), along with "plant in flower". Please note that members can submit more than one entry in any of the classes, and that points will be earned for each placed entry.

The table show classes use the classifications from the *Guide to Shows 10th Edition* (contact me if you don't have a copy of this).

The Echinocactus group includes *Echinocactus*, *Ferocactus*, *Homalocephala*, and *Leuchtenbergia*.

The Aloe group contains *Aloe*, *Aloiampelos*, *Aloidendron*, *Bulbine*, *Chamaealoe*, *Kumara* and *Lomatophyllum*.

*Best Wishes for a
happy Christmas and
a merry New Year!*



Forthcoming Events

Sat	9 th Dec	Isle of Wight	Annual General Meeting followed by American Supper
Tue	2 nd Jan	Southampton	Members' Mini Talks
Sat	13 th Jan	Isle of Wight	No Meeting
Sat	20 th Jan	Portsmouth	Echinocereus- Julian Cook
Tue	6 th Feb	Southampton	Brazil - The Land of the Uebelmannia – Cliff Thompson
Sat	10 th Feb	Isle of Wight	Sweet Peas - Keith Brewer
Sat	17 th Feb	Portsmouth	Gymnocalycium – Graham Evans
Tue	6 th Mar	Southampton	Peru 2017 – Ian Woolnough

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

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