

British Cactus & Succulent Society

Southampton & District Branch Newsletter

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Editorial

The weather continues to be somewhat changeable but I think it's fair to say that summer is almost over. Some of the trees suffered during that dry spell in July and early August and a few of them seem to be turning brown unusually early, despite the fact that we're getting some rain.

I think my conservatory no longer allows sufficient light for Lithops to flower (due to shade from a large tree in the corner of the garden) but some Conophytums are currently in flower, and some cacti continue to flower.

Announcements

The Branch will be putting on a display at the **Romsey Show** this coming Saturday. This has been quite a good event for us in recent years, so let's hope the weather is decent on the day.

At the end of the month, on Saturday 30th September, Portsmouth Branch will be holding their **Autumn Show** at Widley. This is a good chance to see a local show, with a full set of competitive classes. Further details are on the Portsmouth branch website, where you can also download the show schedule.

The Branch is planning to hold the **Annual Dinner** on Friday 6th October, at the usual venue of the Luzborough Inn, just outside Romsey. Maps are on the front table. Please let David have your name if you wish to attend.

Last Month's Meeting

Cultivation Masterclass - Composts, Repotting & Watering

We started the session with a few unusual plants. Paul Klaassen had brought in a *Mammillaria spinosissima* which he had bought 2 years ago, when Bill Maddams' collection was auctioned (Bill was the chairman of the Mammillaria society and passed away in January 2015). These plants had suffered some neglect at that time. Paul said this spring the plant had started developing new growths and for some reason, the new growths were monstrous woolly growths quite unlike the rest of the plant. People asked whether these were perhaps seeds that had germinated on the outside of the plant, but that didn't seem to be the case. Paul mentioned that the plant might have been shocked from having been repotted in new compost, after years of being grown hard. *M. spinosissima* has straight spines - and yet some of the new growths had hooked spines. Someone asked if the plant would be marked down if it was entered in a show? That would just depend on the judge. Another suggestion was to take off an offset and graft it onto something, to see how the new growth develops.

Peter Bircher had brought in a plant of *Melocactus matanzanus*. This is quite popular and it hails from Cuba - it is capable of maturing and forming a cephalium at a relatively young age. Peter had bought the plant at the Havering Mart, last spring. It had now formed a mass of growths in the centre of the cephalium and he wasn't sure if they were seedlings or offsets - the plant already had a cephalium when he bought it and it was normal at the time of purchase. Michelle Fox-Rousell said she had also bought one of these and it was doing something rather similar.

Next, Ben showed a plant which he wanted to sell. It was a large plant of *Lobivia ferox*, which he had acquired from Ciprian Suta, and which was originally grown by Dave Philips. The plant had been used for our display at the New Forest Show but at the end of the show, when Ben was carrying the plant, it leaned over and he realised that it had lost its roots. Given the size, it should have no

trouble re-rooting and re-establishing itself. Ben said he was open to offers. It's a slow growing species which stays solitary and will never offset. It had just flowered, and it produces a white Echinopsis-type flower. The plant was over a foot tall.

Now for a chat about composts. A few years ago at one of our practical meetings, Keith Flanagan ran a session on composts and repotting. David said we would chat a bit more about this topic today. He and Ivor had brought along samples of different composts and material that could be mixed in with the composts. David mentioned that many people in the hobby grow all their plants in John Innes compost. However, he had grown up in a plant nursery where all the bedding plants were grown in Fison's Levington Compost, and so he grew all his plants in the same compost - it was a peat based compost and he added perlite for drainage. He had never heard of John Innes for almost 20 years and all his plants used to grow well. Even for those who used John Innes, something was usually added to the compost to improve drainage, and common materials included perlite and grit. Also John Innes does include an amount of peat in its formula. You can also vary the aggregate that you add for drainage - there's a wide variety of grits, dried river clay, and material such as cat litter or akadama, perlite and even vermiculite which could be mixed in.

Ivor had brought along a really good selection of different composts. He mentioned that many years ago, Eric Greenaway was a member of our branch and he used to grow a full collection of Mammillarias, and he used perlite and pure peat, with nothing else mixed in, adding feed from time to time. At that time, the composts that we have now weren't available. When Ivor first started, he used to make up his own John Innes mix. He used to get turves from the allotment and turn these upside down and let them rot down. He used to mix 7 parts of this loam with 3 portions of peat and 2 portions of grit. You could also buy the John Innes base fertiliser and add this to the mix. (John Innes 3 uses the most and John Innes 1 the least). It is a 5-7-10 NPK mix, and if you can't find it, you can make a substitute from 1/3rd hoof & horn, 1/3rd superphosphate and 1/3rd sulphate of potash. You add 3g / litre for JI #1, 6g/litre for JI #2 and 9g / litre for JI #3. Ivor said he used to grow garden plants like Chrysanthemums and everything in this mix. Nowadays if you buy John Innes compost it seems to diverge from the original formula. He had brought along samples of three different types of John Innes #2 : Levington, Arthur Bowers and Westland. The Levington looked like peat, as did

the Arthur Bowers, and the Westland seemed like peat with bits of roots mixed in. None of the three resembled the original John Innes mix. These three are the most popular brands, and you can also buy composts with John Innes mixed in and Ivor had brought along Arthur Bowers Traditional Compost but it didn't seem that different from the pure John Innes, although it seemed to have more compost in it. The original John Innes is really crumbly and not at all like these examples of modern day John Innes. Ted Smith asked whether the material mixed into the compost was peat or coir - since there was supposed to be a move to stop using peat in composts a few years ago. Ivor didn't think they were coir, which tends to be quite fibrous. And Irish moss peat can still be purchased in garden centres. (Westland's Irish moss peat can be purchased from Homebase for just £10 for 100L.)

For a seedling compost, Ivor said he uses a smaller grade of grit around 3mm size, sieved from builder's grit. And to make his own John Innes, he buys a top soil - you can buy Arthur Bowers topsoil although it can be sticky, like clay sometimes, although when dry it can be sieved. It depends on where the top soil was sourced. Roger Labbett said he uses Westland topsoil and this seemed to be consistent and good quality, so he has stuck with using that. David said originally the John Innes mix was supposed to be 7 parts loam, 3 parts peat and 2 parts grit (9mm), so it should be around 25% peat. However, nowadays, if you look at Levington and Westland John Innes mixes, they seem to be 35-40% peat and there seems to be no signs of grit. Ivor said he always added grit to the ready-made John Innes composts.

Ivor moved on to describe vermiculite - this can be bought in two grades - the usual coarse grade and also a very fine grade. The fine grade is good for seedlings. Perlite has the drawback in that it floats, whereas vermiculite sinks. Ivor also showed slow release feed granules. With Christmas Cacti - he puts a scoop in each pot. David mentioned that originally the nutrient in John Innes was hoof and horn. The nutrients in John Innes #3 only last 4-6 weeks, whereas the slow release granules last 3-6 months and some types are even capable of lasting up to 12 months. He didn't know if they also contained trace elements. Ivor said he grows a lot of Lithops and he puts in some bone meal for them. David said he knows that several members of the Mesemb Study Group who just get topsoil and grit and mix their own compost. Mesembs don't like extra nutrients and prefer to be grown hard. Ivor said you can feed these plants when they are young, but there's no need after a year or two. The recommended cat litter to use was Tesco's "low dust cat litter" - this is the type that is made from a river

clay. It does not break down when wet and can be added to compost. He tried it for rooting plants but found perlite / vermiculite to be better for that purpose.

Tom Radford mentioned that the fine vermiculite wasn't good for rooting - it tends to get soggy and gets slimy, and doesn't drain as well. Ivor agreed that the coarse grade was better in that regard but the vermiculite was good for keeping the soil moist. David said he had never used it, always preferring perlite. Ivor said he added perlite to his ordinary seed mix - but all the seed lifted up from the soil - the roots were raising the seeds out the ground and vermiculite was better. However, the seedlings need to be transplanted to normal compost soon after germination.

David mentioned that John Innes used to be made by regional manufacturers but these were gradually dying out, leaving us with the mass produced rubbish now. 2-3 years ago we had noticed Alice had got some nice John Innes, obtained from Roffey Brothers (then in Bournemouth, now in New Milton) and some other members bought this at the time. However, Roffey's latest John Innes was nothing like as good, because they seem to buy it in from Wessex. Ben Turner said they had now changed to a Durstons mix which was even worse, with weeds coming up from the soil. Paul said there seems to be no quality control over this and even the good brands could change their mix at any time. Bruce felt most of them do sterilise the compost. The topsoil used to make the compost could be anything as could the "peat" that was mixed in, which explains the high amount of variation. David asked if anyone had found a good brand of John Innes? Bruce said Westlands seem OK. David said he gets his Levington John Innes from Haskins. Compost is supposed to be kept dry and cool at all times. The bags have aeration holes and once moisture gets in - all the slow release fertilisers gets active and could burn newly planted plants. Also it's best to use the compost within 12 months. He always get his John Innes from Haskins because they keep it under cover and it's never wet, unlike other garden centres where it's often stored outdoors. Carol mentioned that the Pickwell farm shop in Sholing also keep their composts under cover.

A member from the audience asked about the merits of specialist cactus compost. David said it was just normal compost with some added grit. It's not worth purchasing unless you only need a small amount for a plant or two or don't have the ability to make up your own compost and grit mix. Michelle mentioned she uses an ericaceous John Innes for her South

American plants and that seems to have peat in it. <https://johninnes.info> contains information from the John Innes Association on the composition of the various John Innes mixes.

David said he buys commercial/professional Levington - which is a really good quality compared to the retail version - from Warwicks in Wickham for around £8.50 for 75 litres, so that costs a bit more than some of the retail composts. "Tesco's low dust cat litter" is made from a dried baked river clay from Denmark and it's the same material as the akadama that bonsai users use, although it contains an added lavender perfume! A lot of the Haworthia growers are using this since it seems to help the roots grow better than soil composts. Some people mix it with compost, others grow their plants in 100% of these granules and just feed occasionally. It is very light. Another version of the same material is "Sophisticat Pink" from Pets At Home. It's the same material, but the individual granules are larger, for those who prefer a larger grade. "Hortag" is a lightweight expanded clay aggregate which consists of large pellets - it can absorb water and release it gradually. Perlite is easy to use and convenient, although it is lightweight, which could cause problems if you have top heavy plants - and as mentioned before, it does tend to float to the top. Cornish grit consists of crushed granite, and David had bought some from Roffeys in New Milton. Alice said she has bought it in 2 grades - 2.4mm and 10mm - and Ben said 6mm was also available. They will deliver 900kg sacks if you want!

In the second half of the meeting, we continued the discussion on growing mediums. On the continent they grow plants in pumice - but you can't easily buy it in the UK. A lot of Germans use it, but it has to be imported here. Bob Potter used to sell it. Ikea do sell 3 litre bags of "Vaxer" growing media for £3. It seems that in the UK, pumice tends to be used for filtration and is not used for plant culture. A peat free multipurpose compost had been purchased in Lidl's. Recycling centres also sell compost which they produce from garden waste. They do heat it up to sterilise it, but you wonder what else is in the compost in terms of other chemicals. The garden waste is chopped up, sieved and soil conditioner is added and the mix is sterilised. Peat free composts were also made from coir - a lot of people tried it when it first came out and they said it was rubbish, but you do see some people use it successfully. Coir is light so has an advantage for some growers. Mike Shaw mentioned that the Fairweather's nursery in Beaulieu grow all their plants in coir and pulverised wood and recycled compost. The plants are watered from beneath and they tend to stock a lot of Agapanthus & Heucheras. There seem to be efforts

to reduce peat usage, but peat is still coming in from Eastern Europe. Jane mentioned a lot of peat is burnt in power stations.

Paul Klaassen brought up the topic of the pH of the soil. Some people use ericaceous compost for South American plants. Our hard tap water will build up alkaline content – and you also have to remember some Mexican cacti do grow in quartz. Miracid is the form of Miracle Gro which is suitable for acid-loving plants. Keith and Kathy had talked about acidifying water following a visit to Elton Roberts in California, but Paul said they hadn't mentioned it at a recent talk which they gave to Portsmouth Branch.

Assuming you've found a compost you want to use, David now gave a demo of repotting. His compost was a mix of everything - John Innes and peat based compost, and for some of the more difficult Mexican cacti, he added grit. Some people add 25%, others add 50%. If you do use a lot of grit, then you'll have to remember to water more often and also the pots become heavier to lift!

Ivor said he mixes in around 1/3rd grit and Bruce said he mixes in a similar amount. Richard said he went to a talk at Wisley where it was advised that the grit content had to be at least 40% for it to be effective. Alec mentioned he uses 30% grit and 30% silver sand and this seemed to be working well for him. David said most of our plants will grow in just about anything, but it's the fussy ones you have to take extra care with. Ivor said he have given plants to a neighbour who was just growing them in garden soil and they appeared to be doing fine. David said his grandmother used ordinary soil and she had fabulous plants.

David said that with small plants in 5-10cm pots, the Dutch nurseries just tend to grow them in a peat compost and they don't add grit or perlite. With a small pot like that, the plant will dry out in just a couple of days, so the plants aren't at risk from overwatering, but as the volume of compost is increased then the plants are at some risk if the compost is kept too wet for too long. Young plants tend to be vigorous and will grow without any drainage but as they get bigger, the type of soil and drainage become more important.

David said if you take a plant out of the pot and it has a solid peat root ball - and then you put that whole root ball into a John Innes mix, when you water the plant, the outside ring of John Innes compost will get wet but the central peat core probably won't. You can use a gravel tray and soak the plants by watering from beneath and that will

saturate both composts and encourage the roots to spread out into the new compost. The peat tends to bind and forms a solid ball - but the John Innes would be crumbly and just come off. When repotting, try and tease off as much of the old compost as you can. Adrian said he found that lukewarm water with washing up liquid helped to loosen the old compost.

David said when he joined the branch in the mid-70s, plants grown by Chris Anderson and her husband Keith used to dominate at our shows. They used to repot all their plants every year and they seemed to be able to grow the most incredible large plants in a short space of time. They used a hose to blast the soil of the roots of every plant and repot everything every year. Peat dries out in the winter so when you resume watering in the spring, add a bit of soap or fairy liquid. If you are able to get a good deal of the peat off the roots, that should be fine. Never put a plant in too large a pot. There are some plants that are vigorous - you could put a 2-3 cm plant in the middle of a 10cm pot and it might fill it within a few months - but it's best to not use too large a pot. Trickle the compost in - do this by hand or use a spoon or tool. If you have a clay pot with a large drainage hole at the base, you might need something at the bottom of the pot to avoid the soil dropping out of the drainage holes. Use some compacted compost or some paper to line the bottom. Tap the pot and push the compost down. David mentioned that at Southfields (CactusLand) the owner there - Bryan Goodey - really used to push down with all his weight on the soil and all his plants seemed to be doing well. Add some top dressing if desired.

Should you water right away, after repotting? David suggested no, especially after all that root disturbance. When the soil is dry, it's easier to mix in around the roots. If the plant has a full root ball then you could water right away. Paul said that at Holly Gate, they used to water right away after repotting. The next plant to be repotted was an Aloe from Stuart Riley - not sure what it was in, looked like peat based compost with perlite. Aloes are strong rooted so they are easy to repot. The plant had nice strong roots on it. He had not picked anything prickly to repot today - it can be especially difficult with the hooked spined cacti! *Cleistocactus strausii* has glass like spines which are sharp. With plants like Gasterias etc, they often have dead roots and these need to be pulled off and removed. Most of the plants want to grow and you will have to do a lot to kill them. David said he always used to repot in January and February, so the plants would sit there sit there for around a month before being watered. Now he tends to do it at any time of the

year. Paul Maddison said he did the repotting at the start of the season. If you use a peat based compost, you really need to repot every 2 years. If the plants are kept in the same compost they will get tired. Repotting reinvigorates plants and they should spring into growth with new compost. How much water should you give the plants? In the growing season, it's difficult to overwater the plants. You can water until they are sodden and then let them dry out. You do need to water plants really thoroughly. Plants can be kept in saucers or in gravel trays so that you can be sure they are really well watered and the excess water is retained and soaked up later. David and Margaret Corina had a marvellous collection of plants but they were really scared of watering them. Richard mentioned that if you really water heavily, it will drive air out of the soil and then later on new air will come back into the soil. Heavy watering will also tend to leach out any accumulated salts.

Paul Klaassen mentioned the problem of summer dormancy - you have to be careful of those periods. Some cacti do stop growing in the height of summer when the day and night temperatures are both high. Mike Shaw asked about pots - for many plants, the traditional shape of plant pot was too high - some spreading plants don't have deep roots, so you need to look for a shallow pot. David said you do have to look around, but the selection of pots available to us has never been wider. There isn't a single place to buy them from, but you can get shallow pots and pans at many of the cactus shows and marts. Someone from the audience mentioned bamboo pots. These are made from natural material and are bio-degradable, but of course one would need to worry about just how long the pot would last for.

Everybody reuses their pots and Ben asked how people handled this - he said he would never re-use a dirty pot. What about using something like Jeyes fluid to kill off the bacteria? And cleaning off lime deposits? Pots can become filthy over time. Tom said he just washed them in water and I think that was what most people did.

You need to fertilise the plants and slow release fertilisers are useful for this. Chris Anderson used to use Phostrogen and sometimes the pots used to be encrusted in it. David said he also uses Phostrogen. Chempak (now owned by Thompson and Morgan) also make a number of feed mixes, and Chempak No.3 was his preferred one with a NPK rating of 20-20-20. Chempak No.8 was often recommended for cacti and succulents - it has lower Nitrogen with a 12.5-25-25 formulation. The various Chempak formulations are available from Amazon. Vitax also make a range of feeds. David said Cliff Thompson

uses Miracle Gro with good results. The Dutch nurseries do use feed to make their plants grow more quickly. David suggested trying some of the higher nitrogen feeds. Mike asked if anyone had tried to boosting magnesium by using Epsom salts. Using seaweed extract in the form of Maxicrop feeds was thought to be a good idea - the various Maxicrop feeds also contains a mix of minerals and trace elements.

David asked whether people had a preference regarding plastic pots or clay pots? Clay pots do dry out more quickly so plant grown in those would need more watering. When it comes to repotting, plastic pots are usually easier and lighter to handle - and with clay, the roots can stick to the sides of the pot. The shape of some decorative pots which have a narrow neck could make removing the root ball almost impossible. In this case, using a granular soil mix which can be broken up and poured out would be a good idea. David also briefly mentioned watering - he waters from overhead but feeds from the bottom to prevent the plants staining. Ivor said all his plants are in trays.

As the meeting came towards an end, we handed out some "gel beads" for people to experiment with. These sachets contained beads of a plastic polymer, which when soaked in water will absorb water and expand by a huge factor. If mixed into soil, the beads will release the water gradually over the coming days and at the next watering they would well up again. The beads are available in various sizes, although the 1mm size is probably best for mixing into soil since the swelling process can create big voids. Phostrogen "SwellGel" is a commercial version of the same material, intended for mixing into the soil of hanging baskets and trees/shrubs needing a good supply of moisture.

Vinay Shah

Table Show Results

There were 23 entries in the August table show, and 8 entries for “Plants in Flower”.

	Cacti – Mammillaria	Succulents – Agave
Open	(1) I Biddlecombe Mammillaria perbella	(1) I Biddlecombe Agave potatorum “Kichiokan”
	(2) B Beckerleg Mammillaria lenta	(2) M Fox-Roussel Agave leopoldii filifera
	(3) T Smith M. perezdelarosae	(3) M Shaw Agave lophantha
Intermediate	(1) B Beckerleg Mammillaria albilanata	(1) M Stevenson Yucca brevifolia
	(2) T Smith Mammillaria guelzowiana	(2) I Biddlecombe Agave victoria reginae
	(3) T Smith Mammillaria sp.	(3) M Stevenson Agave americana

Cacti/Succulent in Flower
(1) B Turner Aloe somaliensis
(2) A Mant Echinopsis oxygona
(3) T Radford Leuchtenbergia principis

Ivor Biddlecombe

Next Month’s Meeting

Our next meeting will be held on October 3rd and will feature a talk by Hazel Taylor on “Cacti of the Big Bend, Texas”. Texas has a large border with Mexico, and the Big Bend area lies along that border – it is home to over a hundred species of cacti and several genera of succulents, so we should see quite a wide variety of plants.

The October Table Show will consist of **Echinocereus Group** (cacti) and **Lithops Subgroup** (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 *Echinocereus* group includes *Echinocereus*, *Morangaya* and *Wilcoxia*.

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

Forthcoming Events

Sat 9 th Sep	Isle of Wight	Garden Snowdrops (Helen Mount)
Sat 9 th Sep	Southampton	Display / Plant Sales @ Romsey Show
Sat 16 rd Sep	Portsmouth	South West USA 2016 (Ian Woolnough)
Sat 30 th Sep	Portsmouth	Portsmouth Autumn Show, Christ Church Hall, Widley, PO7 5AU
Tue 3 rd Oct	Southampton	Cacti of the Big Bend, Texas (Hazel Taylor)
Fri 6 th Oct	Southampton	Annual Branch Dinner (venue & details to be confirmed)
Sat 14 th Oct	Isle of Wight	Southern Namibia (Rodney Sims)
Sat 21 st Oct	Portsmouth	Asclepiadaceae (Tom Radford)
Tue 7 th Nov	Southampton	Epiphytic Cacti - A General Introduction (Dr Mark Preston)
Sat 11 th Nov	Isle of Wight	title to be confirmed (David Neville)
Sat 18 th Nov	Portsmouth	Echeverias, Aloes and Gasterias (Stuart Riley)

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