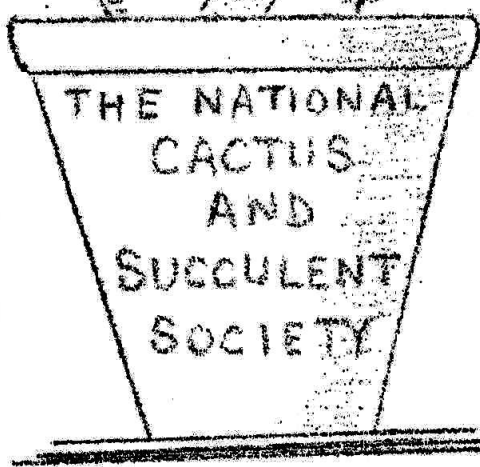


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THE NATIONAL CACTUS AND SUCCULENT SOCIETY

MANCHESTER BRANCH

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25, Broom Lane  
Salford 7. LANCs

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EDITORIAL

Volume 1 No1 the very first issue. This is the Manchester branch's new baby, wish us luck we need it. Apart from luck we need contributors and member's participation. Send me your articles, news items etc, and your points of view. These are the ways you can help.

Perhaps you have plants you want to dispose of, or exchange, or maybe you are looking for a certain plant? We will give you space to advertise, and it will cost you nothing. Why not swap the seeds your plants have produced, (seed raising is fascinating, why not try your hand at it) and if you don't want them, give them to another member.

As yet we haven't named our new journal, we want you to do this for us. Send your suggestions to me before November 10th, and your committee will award a prize for the name chosen.

To many of us our annual show last June will now be a rather dim memory, and next year's is too far away to think about, but perhaps this ensuing period of inactivity in our greenhouses or on our window ledge is the time to give some thought to what should be the highlight to our year in the Manchester branch.

The show this year surpassed your committee's expectations. Much interest was shown by the public resulting in some new members for the society, and a satisfactory profit was made. The standard and the number of plants shown was high, but it is regretted that the number of members who brought their plants to the show were far too few. It was in fact confined to less than 15% of total membership. The branch can only go from strength to strength through the active participation of all our members in one way or another, and what better way is there than once a year singling out a few of your best plants and pitting yourself against your fellow members.

Do not take the attitude that your plants don't stand a chance and think therefore that the effort is all pointless, let the judges decide this for you. The rather nice Mammillaria, or perhaps the ordinary looking Euphorbia might be rather better than you think, even if it is only a third place or a highly commended, or even nothing at all, you will have the opportunity of comparing your plants against the others. See where you are going wrong in cultivation and perhaps discuss with our more knowledgeable members how to improve your technique, and maybe the following year that plant that didn't quite make it will become a winner.

It is appreciated that some of our members have got the rather difficult problem of getting their plants to the show. This is a matter that your

committee is aware of, and hope to be able to assist with next year. Nobody will have a legitimate excuse not to make the effort next time, and now is the time to single out a few of our better plants potentials for next years show bench. Give them that little extra attention and have them at their best for next June. Do not leave it to the next person, Bring yours, and the other fellow will bring his.

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### Controversial Topics

by C. Williams.

Cactus growing, in common with many other hobbies, has its controversies. It does not seem to matter who you talk to, or to which lecturer you listen, at some stage you will say under your breath "don't talk rubbish". However let us stop and think; has he got a valid point? It may be that you personally do not agree with him, but I can guarantee that someone, somewhere will agree. We come then to the point, why do we disagree whilst others are equally adamant that they are correct?

The major cause of most disagreements is the differences in the growing conditions between any two greenhouses. Obviously the person who has a large greenhouse set in an open garden with no shade has a very different micro-climate than the grower in the middle of an industrial town who has a lean-to in his back yard. In the former case the grower will say he waters every day in summer, has his ventilators open all day and occasionally feeds his plants. The town grower on the other hand will say he only waters once a week, keeps his ventilators closed and uses a very poor, porous compost with no feed. The differences are accounted for by the fact that in a strong light and fresh air plants will thrive, and grow rapidly, but still retain their normal characteristics. In poor light, plants get etiolated (drawn) if they grow fast, so in order to prevent this happening the plants should be grown very slowly in a poor compost. We can see now why both the "feeders" and the "starvers" have their own very strong views.

Another topic which is guaranteed to cause an argument is that of plastic pots. Here again the normal growing conditions pertaining to each grower is the important factor in determining whether or not the grower likes plastic pots. Commercial men use gaily coloured plastic pots because the public like the pots and will therefore buy the plants. Grower 'A' likes them because he claims (probably because of good advertising by the manufacturers) the plastic pots give him a better root system and therefore better growth. Grower 'B' says he dislikes them because they get water-logged and the root-systems are not really any better than in clay pots.

Let us examine why we have these two opposite attitudes. Grower 'A' uses a very porous compost but one which is fairly rich in plant nutrients. He has his pots on open staging and has a low watering frequency. His pots therefore drain excess water away fairly quickly and have a chance to dry out between each watering. His clay pots dry extremely quickly and the roots get burnt due to the pot getting hot in the sun. Grower 'B', on the other hand, uses his normal water retentive compost and waters every day. His plants are

plunged in peat on the staging, the peat also being watered. Here we have a situation in which water is always present. The clay pots he uses drain fairly well through the wall of the pot into the damp peat. The plants will send out roots from the bottom of the pot and collect moisture from the peat, thus giving him a good root system with its consequent good plant growth. The plastic pots will quickly become water-logged and consequently the plant roots will either be retarded in growth or rot away. When grower 'B' examines the roots of his plants there is only one conclusion he can come to, namely - plastic pots are worse than clay pots. If however he had grown his plants under conditions similar to grower 'A' he would have come to the conclusion that plastic pots are better than clay pots.

I think you will agree, both these growers have very valid judgements based on their own experiences. What they have failed to realize is that there is another side to the coin. If grower 'A' had considered carefully the other persons point of view and coupled this with the growing conditions he would surely have come to the conclusion that "under my conditions plastic pots are better than clay pots, but if I alter my conditions clay pots may be superior to plastic pots".

Next time we hear a lecturer giving his opinions on how to grow plants let us consider why we disagree with him. It may be that, after all, he may have a very valid reason for using his controversial method.

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### DIDSBURY SHOW 1965

by J. Morris

I've heard it said that the worst part of a show is packing up and going home, but had you noticed those of our members who participated in the Didsbury Show all busy packing plants into boxes of every shape and size, each with "that look". The look that says, "it's been worth it". How much it was worth is revealed in the following facts:-

Mrs. Davison gained two firsts for bowl garden, and five 3" pots. Mrs. Beare first prize for three Mammillarias. Joe Morris silver medal award:- First for three Cereus, and first for type plant and cristate, and we havn't got to the Challenge Cup yet. This was taken by who else? Colin Partington. He gained first for Specimen Cacti, Succulents, and three Haworthias etc. There were seconds and thirds spread out amongst the lot, so a good time was had by all. Beg Pardon:- Oh yes, there were entrants who were non members, but we took all the prizes.

Quite a lot of interest was shown by the public, in our publicity stand, and from the enquiries received, the membership figures should show an increase. We hope.

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## ECHEVERIAS

by J. Morris

Many succulent lobbyists are imbued with bags and bags of patience, growing from seed, and tending their plants to maturity, with skill and know how. Unfortunately I am not of that class, and claim without a vestige of a blush that I like to see something for my hard earned cash, as soon as possible. This year? Next year? Some time? Always, or mostly always, turns out to be never when I grow from seed, although I am told that it is easy. Of course it is:- Ha, Ha. Cacti takes some time before one can proudly say "what do you think of this, I raised it from seed, but I can't take it to a show as I am too old now for that sort of thing".

Succulents to me are more rewarding, although I have one or two 'cactuses'. The aim in growing cacti is to bring it into flower, but succulents have such wonderful colours and they are admired by all. A great favourite of mine are Echeverias, which I grow in half leaf mould, half course sand, and a sprinkling of Gypsum, with plenty of crocks for drainage.

Living in the town I do not get the colour as early as those living in the country, so I keep them fairly dry in winter. Perhaps a light watering once a month when the weather is fine, increasing the amount given from April and fairly liberal watering from late spring onwards. Having got the plant to a decent size I give them top shelf treatment, and then by reducing the amount of water given later on I find colours them up nicely.

Most of my plants are in pots up to 4", with the larger gibbiflora varieties in 5" pots. If they become too elongated, I cut the tops off and reroot in sand and peat, using the stem for cuttings.

To go through the colour affinis which should be almost black, if kept fairly dry, varies onto red, and to green, according to the amount of water given. At the other end of the rainbow is runyonii a pale bluish white, and what a beautiful plant elegans is, a blue greeny white. Derenbergii, peacockii, and carnicolour, are all worthy plants in anybody's collection. There are several which have a hairy surface, like pulvinata, laucotricha, and setosa, and they are also very colourful. The gibbifloras:- metallica, crispata and carunculata grow rather large, but they can be cut back to size, this will produce a large head without it getting too tall. Agavoides as the name suggests is reminiscent of an Agave and is quite easy to grow up to 5" pot size.

Care must be taken when watering to avoid water lodging in the petals, this can be the cause of rot, and for the same reason take care when spraying. A representative collection of say half a dozen plants can give lots of colour irrespective of the flowers. A temperature of 40-45 degrees is quite adequate in winter.



Most of us enjoy seeing flowers on our cacti. Unfortunately, so many of them only bloom when large. Mammillarias, Rebutias, Lobivias and Notocacti are the four genera commonly seen in flower in small pots. Most Mammillaria flowers are small and many of them rather dingy in colour. Rebutias are very showy in flower but when not in bloom most of them are too much alike. Lobivia flowers are gorgeous but most of them very short-lived, some lasting less than a day. Practically all Notocacti have very similar golden flowers. None of these criticisms apply to the Parodias.

This being so it is strange that more Parodias are not seen in the average collection. Not many are offered by most nurseries, probably because they don't offset and so have to be grown from seed, whilst the seedlings are slower to make saleable plants than many genera. But it is worthwhile to sow seeds of as many species as possible, even if it is necessary to wait for a few years for flowers. Some species will flower in three years and I have had P. catamarcensis flowering in 2½" pots. Some species will show considerable variation in spine form and colour amongst the seedlings so it is worthwhile selecting the best forms.

For those wishing to specialise there is a considerable number of species and varieties to look for. Backeberg gives thirty-seven species and fourteen varieties. In addition Ritter has collected seeds of many new species although many of the names he uses are not recognised by botanists.

The large flowers are carried in a bunch at the top of the plant and are in various shades of yellow, orange and red, even violet in P. sanguiflora v. violacea. The plant bodies may be globular or cylindrical whilst the spine formations are excessively variable, both in size, shape and colour. Some are straight, some hooked, some little more than hairs, whilst P. maasii is covered with ferocious long hooked spines. In fact, when not in flower, a collection of Parodias offers all the variety that can be desired, whilst in June there is as much colour as with a collection of Rebutias.

The species most often seen is P. chrysacanthion with hair-like spines that should be golden in colour. This colour may fade in old specimens to straw yellow. The golden flowers are crowded together and small for the genus. Very similar in general appearance is P. aureaspina, although in this case the central spine is hooked and the flowers are much larger.

The following species are seen from time to time at shows:-

P. sanguiflora, with brownish red hooked spines and carmine flowers, body spherical.

P. microsperma, with strong reddish brown hooked spines and yellow or orange flowers with a reddish spine; small and globular.

P. setifera, with flesh coloured to black hooked spines and bright golden flowers; small and globular.

P. mutabilis, with hooked orange-brown spines and golden flowers with a reddish throat; much larger than preceding.

P. catamarcensis, with short hooked dark red spines and golden to orange flowers; globular when young, later cylindrical.

P. schwebsiana, is one of the most distinct, with down pointing short horn-coloured central spines, plenty of wool and small carmine flowers, body cylindrical.

P. maasii, with very long sturdy reddish brown hooked spines and coppery coloured blooms; body globular to elongated.

P. nivosa, with straight white spines and fiery red blooms; globular when young, later elongated.

I omit the Ritter introductions which have not yet flowered for me. Mine are camarguensis, castanea, comosa, culpensis, echinus, gracilis, procera, prolifera, rubida, subterranea and ritteri.

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### A BEGINNER'S GUIDE TO COMPOSTS

by Hugh Muss.

Plant foods can be added to your compost as indicated below to supply the required elements:-

Hoof and Horn Meal -----	mainly Nitrogen
Bone Meal -----	mainly Phosphorus & Nitrogen
Sulphate of Potash -----	Potassium
Superphosphate -----	Phosphorus
Lime -----	Calcium

The materials quoted are safe to use for succulent plants, and the quantities are adjustable and not very critical. Other foods, not mentioned above, while being excellent for other plants are not recommended for cactus compost as it is far too easy to use in excess. Lime is used not only to provide calcium but also to adjust or decrease the acidity of the compost (cacti and succulents with very few exceptions like a non-acid or even slightly alkaline soil).

Wood ash is sometimes recommended as a potash fertiliser, but the potassium available in this form is very soluble, and quickly washes out of the compost with frequent watering. A correct soil mixture makes the plant foods soluble over a period and not all at once.

A good cactus/succulent compost requires yet another main constituent in the form of a 'conditioner', a material that opens up the compost making air and water available to the roots in the correct quantity and not holding excess water. Such conditioners may be chosen with a limestone base, particularly if the plants are to be left in the same pots for more than a year or so. Ordinary burnt lime quickly washes away, but limestone breaks down very slowly keeping the compost slightly alkaline - old mortar, limestone gravel, and crushed oyster shell all perform this function. Alternatively crushed brick, silica sand or coarse Bedford sand may be used to keep the compost open.

It is always best to sterilise the loam to be used in compost making, as this kills any weeds, seeds or harmful bacteria. Soil should never be baked however, as this would destroy the beneficial and essential bacteria found in the loam.

I hope the remarks in these notes have helped some of our newer members to understand a little more readily the mixing of compost. In concluding this article in our next journal I hope to give details of two mixes, one from Borg and the other a modified John Innes compost which I have used with success.

to be concluded

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ON SAFARI 1965

by J. Morris.

AYTOUN ST - SUNDAY - 9.30 A.M. - these words sound magical to me, ever since I became a member of the branch, because this is the starting point of the trips I have enjoyed so much. This year's proved to be no exception to the good time we have always had in the past. This time things were swinging right from the beginning, coach full, off we started, out of a dull gloomy Manchester, eagerly anticipating all the purchases we were going to make, and our probable state of bankruptcy for the remainder of the week, when around came the Hon.sec with his little black book. As is usual on these trips, there are faces that are not always familiar, perhaps new members or friends. The two gentlemen clad in heavy leather jackets, cord trousers, and whacking great boots seemed reluctant to pay the amount asked for. Somehow they looked as if they were going digging, which strange as it may seem this was exactly what they were going to do, and it wasn't for cacti, they being two lost sheep from an amateur geologist crowd going somewhere in Derbyshire looking for fossils. It would appear that they had got on the wrong coach and very obligingly occupied the only two vacant seats we had, I'll bet they had a better time at Jolley's Nursery than some wet hole in the ground in Derbyshire. Come to think of it why didn't we sign them up for the society, well, perhaps they'll come back again next year.

We had a wonderful lunch at Kenilworth and it put us just in the right mood to go cacti hunting. So on we went to Jolley's Nursery near Coventry. If there is one thing I like to do more than looking at my own plants is looking at somebody else's, and those at Jolley's were well worth



gazing at. Now when I go on a trip, I say to myself, "Joe have a good look around by all means, but don't spend more than - ". Well after having a good look around, and a second cup of tea, and then another look around, I did only spend so much - so much more than I intended, five times more than I intended, and I enjoyed every minute of it.

I gazed at the specimen plants that were not for sale with my tongue hanging out panting like a dog, and if I had plants like these they wouldn't be for sale either, not for all the proverbial China tea. More refreshments, and a "Jolley" good chin wag and we then proceeded to fill the boot of the coach with our loot, having given the driver strict instructions to drive most carefully for fear of damaging the spines of our hard won spoils, we made our way home, pausing at Lichfield where we took the opportunity of visiting the very beautiful cathedral. We finally arrived back in dear old Manchester tired, and very happy.

To A.A.F and all concerned

We show appreciation

A job well done - we all had fun

And now ? anticipation.

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#### CULTURAL NOTES

October. Watering must now be reduced. Exceptions are Epiphyllums, Ripsalis, some Kleinias and Conophytums, which should continue to have a reasonably moist soil, although this should never be continually wet or sodden.

Check over your heating apparatus in the Greenhouse, boiler and pipes, tubular heaters and thermostat, or the oil stove, for soon you may want to use either. Keep a sharp look-out for sudden early frosts. A double layer of newspaper round or over your plants will give some protection if sudden fall in temperature is expected, and you have no heating.

November. On really sunny days you can still give a little water to plants where the soil has dried up unduly, but great care is called for so as not to overdo it. This is a month that little can be done but provides the best opportunities for the reading of Succulent Plant literature.

December. Epiphyllums, Zygocacti, Ripsalis, Echeverias, Crassulas, Kleinias, Senecios, Haworthias, Aeoniums, Euphorbias, Conophytums and similar plants can have an occasional very light watering to prevent them shrivelling. Endeavour during the month to keep the air in the Greenhouse as dry as possible. High temperatures are unnecessary. The plants will winter safely at 40° - 42° fahr.

Zygocacti will be showing buds and a fortnightly feed with Liquinure or Bio or similar liquid feed, will be beneficial to the plants.

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## THE CONTROL & ELIMINATION OF PATHOGENS & PARASITES

by M. E. Wilbraham

All keen plantsmen, whatever their choice of subject, naturally wish to grow their plants to perfection. This obviously cannot be done in the presence of pests and diseases. Therefore our first consideration should be to handle them in such a way as to eliminate or at least control as far as possible these undesirable factors.

In this article, by pathogens is meant harmful fungi, bacteria and other such soil organisms as cause disease in a plant. By parasites is meant organisms that obtain their food from the plant, such as mealy bugs, nematodes, etc.

Most untreated soils contain vast numbers of organisms amounting, in some cases, to as much as 10% of the weight of the soil. Not all of these are by any means injurious and many of them are, in fact, necessary for the growth of plants i.e. nitrogen fixing. The problem is to control the undesirable and encourage the beneficial. Normally under such conditions this teeming population is in active competition and no harm results. When however conditions arise that are favourable to one or more groups of organisms, thus enabling them to become dominant, trouble can be expected.

The easiest way to control pathogens then is to eliminate them to begin with. As a start the soil should be pathogen free. The U.C. soil mixtures<sup>1</sup> are excellent sterile mediums being made from sand and peat only<sup>2</sup> (except for fertilisers). Both these are naturally sterile and after use can be repeatedly re-sterilised before using again. Furthermore it can be kept indefinitely before use, providing that it is protected from infection. The John Innes composts also give excellent results but are unsuitable for continual re-use.

Now that we have a reasonably sterile soil the aim must be not to re-contaminate it. To this end all plants should be thoroughly disinfected and disinfested before potting unless they are known to be free of contamination. This particularly applies to new acquisitions. Most parasites can be removed by washing the whole plant in a mild detergent solution, preferably containing an addition of insecticide (in which case wear rubber gloves) and thoroughly rinsing. The plants should then be examined carefully and all broken parts and visible disease cut away. When disease is present the instrument should be sterilized during the operation and particularly before dealing with another plant. This can be achieved by dipping in a 2% Formaldehyde solution or Methylated spirit. In either case the instrument should be wiped before further use. Paper handkerchiefs are ideal for the purpose. The next and last step, although easiest of all, is perhaps the most important. It consists of dipping the whole plant in a suspension of fungicide. One containing Captan or Thiran or preferably both is suitable.

This procedure should also be followed when an affected plant is found in one's collection. The infection of a single plant in a pan can often be controlled by the removal of the plant and treatment of the

remainder by dusting or spraying of the pan with fungicide.

Finally all containers should be sterile. Clay pots should be washed and baked or soaked in 2% Formaldehydesolution, and allow to aerate for several weeks. Plastic pots may be wiped out with a similar solution or methylated spirit and allow to aerate for a day or two. If wooden trays are used they should be painted with Copper Naphthenate solution such as Cuprinol at not less frequently than yearly intervals. Before use allow several weeks to dry thoroughly. This treatment incidentally, will also prolong their life indefinitely. It is also ideal for use on wooden staging both as a preservative and to prevent a reservoir of infection for the future.

One other thing remains. That is to make a habit of spraying regularly with insecticide and fungicide, or even more effectively the use of the various smoke pellets that are available.

All this may seem a lot of trouble but ample repayment will be obtained by the improved condition of one's plants, and the reduced losses which will be experienced, always of course assuming that cultural conditions are suitable. It is particularly worth while in the case of a rare irreplaceable plant.

1. See Baker: "The U.C. System for Producing Healthy Container grown Plants".
2. Available from Garfords, Waipole St. Andrew, Wisbech, Cambs.

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SWAP Several flowering size Epiphyllums including Cooperii, will exchange for succulents, or what have you? Anyone interested please contact Joe Morris, while he can still get in and out of his greenhouse. 24, Franklin St. Patricroft, Eccles.

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EXCHANGE OR SELL A number of cacti which are surplus and not required, would like to exchange for other cacti or succulents, or sell. Anybody interested please phone.

Mr. L. Nyman, BRO 3150

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#### STOP PRESS

We are privileged in having Mr. H. Kennewell, of Sheffield as the speaker for our next meeting (October 9th) Mr. Partington who was to have been in the speakers chair on this occasion, has graciously stood down to give us the opportunity of hearing a speaker of Mr. Kennewell's repute.

Mr. Kennewell's own private collection is, indeed, a joy to behold. Plants grown to such perfection have attracted visitors from all parts of the country. He is also an expert photographer so come along and see his wonderful slides. A.A.F. 10