



THE NATIONAL CACTUS AND SUCCULENT SOCIETY
MANCHESTER BRANCH

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25, Broom Lane,
Salford. 7. LANCs

January 1966

Volume 1 No. 2.

EDITORIAL

This is perhaps not the time of the year when there is a great deal of interest shown in our collections. Most of us just take an occasional look into the greenhouse to see our sleeping cacti and other succulents, and think of the summer days to come, but for your committee these are not idle months. A great deal of the planning for the coming year has to be done now. The speakers who visit us, the annual summer outing, and our show, have all now been arranged.

Members will be pleased to learn, that included in our programme for 1966 will be two very special guest speakers. In April at an additional meeting we shall have the pleasure of listening to Mr. Bonifass, that very well known figure from Holland. For our meeting in May Professor Jacobson will be paying us a visit, the Professor of course is one of the world's great authorities on succulent plants and his three volume monograph on other succulents is accepted as a standard work of reference.

The response from our members to the first issue of the journal has been received by your editor with mixed feelings. Many of you have been kind enough to convey your good wishes, and congratulations, but there has been a negligible effort on the part of members to help in producing a journal of topical and local interest. We must have this member participation mentioned in the last editorial. To rely almost solely on our friends outside the Manchester branch for our material, is not entirely satisfactory. We also had virtually no response for suggestions of a name for the journal, so your committee have decided on MANCUNIAN CACTIVITIES.

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FORTHCOMING PROGRAMME

- Jan 8th Mrs. M.B.H. Evans. -- Chester
Travelogue. The Western States of America.
- Feb 12th Mr. L. Carruthers. -- Preston
Bowl Gardens and Artistic Arrangements of Cacti and Succulents
- Mar 12th Mrs. S. Ward. -- Newcastle-upon-Tyne
Window Sill Culture

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CRITICAL COMMENTS

by Ron Ginns.

The first number of the Manchester branch magazine contains much of interest, and naturally amongst such a mass of material there are points about which we do not all see eye to eye. It is helpful in clarifying our views to consider the opinions of other people. We may disagree with them in the main, but they may help us to improve on our own methods. If I comment on any of the points raised no disrespect is intended for the writers.

In view of Mr. William's article I should state that Desborough has a very low rainfall, and the atmosphere is largely free of industrial pollution. The main greenhouse is fully in the open with no shade, plants are grown in clay pots, and not plunged in any way. Compost is equal parts of light loam, sharp sand and leaf mould. Artificial manures are used very sparingly. The aim, as far as cacti are concerned, is relatively small, heavily spined plants which flower. Most have been grown from seed.

I am glad to see that Mr. Muss considers that most cacti like a non-acid or alkaline soil. In this we differ from Buxbaum, and many writers in the N.C. and S.S. Journal. The former states that they must have an acid soil, my experience shows that the soil PH is immaterial as long as it is not extreme in either direction.

Mr. Muss does not explain why sterilising will kill the harmful bacteria, but not the beneficial ones. I don't sterilise my compost as fresh bacteria would quickly be reintroduced either in the water or from the air. I would also point out that Potassium Sulphate is nearly as soluble as the Potassium Carbonate in wood ash.

Mr. Morris is unduly pessimistic about raising cacti from seed. Many genera will flower in a relatively short time. I have flowered *Careus aethiopis*, *Loxanthocereus*, *Matuscana*, *Neoporteria*, *Horridocactus*, *Chileorebutia*, *Weingartia*, and many others not easy to obtain as fully grown plants. At the age of 69 I am still seed sowing and don't despair of taking some of them along to shows.

He writes as if his *Echeverias* show their best colours in summer. Mine, on the other hand, are at their best in February. The colours are not so brilliant when plants are in full growth, and although I have over fifty varieties I always water from below. *E. carnicolor*, one of the best for flowering, is particularly susceptible to rotting if watered from above. The finest *Echeveria* is, in my opinion, *E. subgrida* if the true plant can be obtained. Mine, I am afraid is a hybrid. If anyone has one for disposal I am ready to buy or exchange. The true plant has almost white leaves with a pink edge, they are widest and thickest at the base, and so cannot be pulled off to use as leaf cuttings. This is where my plant differs.

Like Mr. Morris, I also grow my plants as close to the glass as possible, and I like them in three and a half inch pots.

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THE GRAFTING OF CACTI

by C. Williams

Many people consider the need for grafting to be non-existent. They argue that if a plant requires grafting, there is something wrong with the growing technique used by the grower. In many instances this is true: how many times do we see plants grafted which most other people grow on their own roots? However, one can cite other instances where grafting, although not strictly a necessity, is advantageous. Only in special circumstances is grafting a necessity, i.e. in the case of *Gymnocalycium mihanovichii* - Ruby Ball, and *Chamaecereus Silestria Lutea*, neither of which plants have any chlorophyll in them and rely on the stock to supply this essential ingredient to growth.

Grafting is advantageous in several ways - amongst them being

- (1) increasing the rate of growth of a plant. One must take care to ensure that the scion (the plant being grafted) does not grow too rapidly and lose its normal growth. It is better to grow the plant on for a year or so and then cut off the scion and re-root it for further growth.
- (11) permitting flowers to be observed more readily. Such plants as the Xmas Cactus, *Schlumbergera gartnerii*, *Aporocactus flagelliformis* etc. are displayed to a much greater advantage if they are grafted at the top of a *Pereskia* stock. One doesn't have need to pick up the plant to see the flowers.
- (111) saving plants from total destruction. In some cases plants which lose their roots and begin to rot can be saved by cutting off the top of the plant and grafting it. When the grafted plant has made sufficient growth it should be removed from the stock and re-rooted for growing on in the normal way. It should be understood that this is only an emergency treatment.

Now for the mechanics of grafting. Much has been made of the various methods, the straight graft, the wedge graft, the slit graft, the side graft, and many other grafts. In all methods, the important factor is to join the scion (the plant to be grafted) to the stock (the plant you are grafting to). Without going too deeply into the botanical aspects one should have as many as possible of the food channels in the scion and stock joined together. This means that where possible the scion and stock should be of approximately the same diameter.

A sharp knife or razor blade should be used, and should preferably be sterilised in meths between each cutting operation. A stock such as *Trichocereus pachanoi* or *T. spachianus* (the former being the best) should be chosen. It should also be growing well since success cannot be expected if the stock is not in good health. The top of the stock should be cut off leaving about $1\frac{1}{2}$ " - 2" above the soil. Trim the outer skin from the rim of the cut so that when the cut begins to dry the scion will not be pushed

off by the outer skin on the plant. The top which has been cut off should now be temporarily replaced onto the stock to prevent premature drying of the cut. Next, the base of the scion should be cut off and the exposed face examined for signs of disease (i.e. bright red/orange specks in the flesh). If any disease is found a new cut should be made and the scion once more examined. This should be repeated until there is no sign of disease. The top of the stock should be removed and the scion should then be replaced as quickly as possible onto the cut face of the stock. Some means of temporarily holding the scion in place is now required. One convenient method is to use elastic bands stretched over the plant and under the base of the pot, another is to use a bent piece of wire pushed into the compost.

No water should be given to the plant for a few days and when water is eventually given it should not come into contact with the graft joint for about 12 months, otherwise rotting may occur.

The type of grafting explained above is the most common, all other types being merely variations. Everyone who grafts plants quickly develops his own method of grafting and ways of holding the scion and stock together. I advise anyone interested in the art of grafting to try his hand at it. Interesting arrangements can be made by choosing, say, an *Opuntia robusta* pad and grafting 6 or 7 different plants onto it. Some people are interested in these oddities, others object violently to them. One thing is sure, they will cause lively comment in the greenhouse.

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A GEM FOR ANY COLLECTION

by C.R. Tyrrell

While Aloes in general are not my cup of tea, mainly because of the need to grow on into very large plants before flowering. Readers are recommended to read the N.C. & S.S. journals, Volume 14, No. 1 & 3, where, under "Rowley Reporting", is a eulogy on *Aloe thompsoniae*.

I was fortunate to obtain a small offset from the same source as Mr. Rowley and at about the same time, this was carefully rooted, and subsequently grown on into a 7" pot, when it carried 17 heads of orange blooms at the same time, continually flowering from April to November, I can endorse all Mr. Rowley's praises of this Kenyan grass Aloe.

My one large plant was split up some four years ago, and unlike *Aloe variegata* the offsets carry no roots, and patience is needed to root them in pots of real silver sand. I rooted 18 offsets from this original plant, and after parting with 15, I kept 3 for my own collection. These are now in 6" pots, and are full of bloom at the moment of writing (October).

Aloe thompsoniae sets seed freely, and I have raised a number of seedlings over the past two or three years, unfortunately, while germination is quite good, about 50% of the seedlings appear without chlorophyll and soon die off, so it is unlikely to become too common.

Aloe thompsoniae which comes from the Kenyan highlands requires a very porous compost, and liberal watering during summer, and just enough in winter to prevent shrivelling. Like most Aloes it appreciates a little shade, so I grow it along with my Epiphytes where it gets an occasional feed with Solufeed.

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EXPERIMENTS IN THE GROWING OF SUCCULENT PLANTS

by H. Kennewell.

On October 11th 1965 I gave a talk, illustrated with slides, to the members of the Manchester Branch. It was apparently very well received, and I was later approached by your editor with a view to writing an article based on the substance of the talk, for the benefit of those members not able to attend, and for those present who might like to refer back to it. Unfortunately I have to convey the general idea here without the aid of illustrations.

I use a compost made up as follows without any exception for all my plants, two parts "Eclipse Sedge Peat" and one part sharp sand, known in the trade as $\frac{1}{8}$ " down. If there is any difficulty in obtaining this, equal parts Bedford sand, and $\frac{1}{8}$ " inch granite chips can be used instead. This should be measured by bulk not by weight, otherwise it would work out in the case of peat at 5 to 1. To the above I add one 2" pot full of fertiliser and $\frac{5}{8}$ of an ounce of lime or chalk to each bushel of the mixture. A bushel is the amount which will go into a box 20" x 10" x 10" or the equivalent thereof. You now have a standard clean compost, any riddling left over may be put into the bottom of the pots, when potting up. This is the only drainage necessary.

I have used this mixture now for two years and my losses with approximately 2,000 plants have been nil, I repeat nil. I do not like any short cuts, such as using a proprietary type compost, i.e. "University of California mixture", as these are too fine for our plants.

During the past year I have been carrying out a second experiment, for this I have used established plants, cuttings of both cacti, and other succulents, habitat collected plants, and seedlings, making a sum total of 120 plants. The method is to stand the pots with their contents in $\frac{1}{2}$ " of water, any receptical will do from a single plant saucer to a wash bowl, or galvanized tray. Up to now I have only been carrying out this experiment from January to the end of October, but the results have been surprising. Imported plants obtained in June have made considerable root growth, and new growth above pot level. I have normally had to wait eighteen months to three years for this to happen. Leaf cuttings start into growth within three weeks without any shrivelling up of the old leaf, an Agave parviflora obtained from Mr. Fitzjohn two years ago with just the mono cotyledon and one true leaf has now some fifty leaves and has been potted on three times in the present year, and this is supposed to be a slow growing plant. I have let the trays dry out now but shall recommence the water treatment again at the end of next March.

I would stress that none of the plants having this treatment ave shown any sighs of being blown up, late flowering Mammillarias have flowered more than usual, Parodias and Notocactus have flowered twice. I would add that I have used plastic pots and the same peat and sand compost throughout these experiments. The temparature in the greenhouse at the time of writing (December 1st) this article is 37 F

I trust I have written sufficient to awaken your interest in what I know is a controversial method. Those of you who have any duplicates do try growing one by this method and note the difference in its developement.

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TREATMENT OF IMPORTED PLANTS

by C. Williams.

At some stage or other, a cactus collector obtains what are commonly called "Imported Plants". The plants dealt with in this article are those obtained from habitat, either directly or through an agent. They are generally mature plants which have been growing in the wild and are distinguished from the small plants grown from seed and bought from shops and nurseries which are imported from Continental growers.

When received, the plants are in a very dry condition with no roots, or at best, damaged roots. They have survived the roughest of treatment, having been torn from the ground by pick-axe or shovel and dispatched on a long sea voyage. By the time you receive them they can have been out of the ground up to six months. How are we then to induce them to grow for us ?

On receipt of the plants we must inspect them closely to check for any signs of disease, pests or damage. Any holes in the plant should be thoroughly investigated. It has been known for a grower to root his plant and grow it for twelve months only to find at the end of this time that some weevil or grub has completely eaten the inside of the plant.

Any pests which are found during the inspection should be removed and disposed of. Any disease should be cut out and the exposed flesh dusted with flowers of sulphur or charcoal dust. Any roots which are on the plant should be inspected and dead or damaged portions removed, the cuts being dealt with as above. If preferred, cuts to the root stock can be dusted with one of the rooting hormone powders. If short lengths of root can be left on the plant, so much the better, since new roots grow more easily from those remnants of old roots.

On inspecting the plants it will be found that the root-stock has a thick corky layer covering it. New roots form beneath this layer and have to push their way through. Therefore if the layer can be reduced in thickness new roots have a much better chance of forming. The best method of removing the layer is to soak the root stock in some warm water and scrape the cork carefully away. Extreme care has to be exercised whilst doing this since over enthusiasm may do more damage than leaving the cork in place. After this treatment the plant should be dusted as above, and left in an airy place to dry out. This only needs to be one or two days.

The methods of rooting the plants varies from grower to grower. Every grower has his own successful method. In general the main principals are bottom heat and water. This may sound as if only those people with electricity in the greenhouse will be successful. Bottom heat can be provided in many ways. A night-light under a metal tray, an electric bulb in a box, are amongst the methods adopted. Provided your wife does not mind, the mantel-piece is an ideal place, especially during the winter. Having decided where you are going to root the plant, pot up the plant in a coarse, poor compost and water it in. This may sound like sacrilige, but in order to form roots there must be some moisture present. This is not to say that the compost should be saturated. From then on, the compost should be kept just moist, the greater the bottom heat, the more easily the plant will root, and the more frequently water will be required.

Do not be tempted into lifting the plant out of its pot every day. This will only damage any new roots which are growing. Inspection can be carried out by gently rocking the plant. This also gives a check on whether or not rotting of the collar (the most vulnerable point of the plant) is taking place. Should there be any signs of rot, immediate action should be taken, otherwise the whole plant may be lost.

Having rooted the plant a little more care and attention should be given to it over the following few months. A poor compost is preferable in the first year since this helps to establish a good root system without trying to make the plant grow rapidly. Also, if a rich sompost is used non-typical growth will occur and there will always be a sharp division between the growth made in habitat and that made in this country.

The above notes are equally applicable to cacti and other succulents, especially such plants as Euphorbias. Soft succulent plants such as Kalanchoes are very easy to re-root if imported and can be treated as if they were cuttings taken from ones own plants.

As with most other aspects of cactus growing, experience counts. Why not throw away all the ideas of imported plants being difficult to root and keep, and try one or two yourself. You will be amazed how easy it is to grow these desirable plants if you follow the few basic steps given above.

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MONTHLY CULTURAL NOTES

by The Editor

January Epiphyllums, Zygocacti, Ripsalis, climbing Cacti, and leafy Euphorbias, Crassulas, Echeverias, and Conophytums may be given a very light watering with luke warm water once or twice during the month, if the weather is really fine and sunny.

Ventilate on sunny days and lightly spray your collection of plants, but it is essential that all surplus moisture should have dried away before sundown.

Make plans for the sowing of seeds. Consult the catalogues and decide on the varieties you wish to purchase, and grow. Seed raising is one of the most interesting phases of the hobby.

Keep the temperature of the Greenhouse about 40-42° Fahr during the month.

February The growing season is approaching and much useful preparatory work can be done this month. Seed and potting composts can be mixed and got under cover, so that without drying them out the winter chill has been taken off by the time you wish to use them. Pots and pans can be scrubbed and sterilised. The greenhouse can be cleaned up. Wipe down the window-panes to admit more light. Check upon your plant labels and names, and it is beneficial to the plants to stir the soil on the surface of the pots, using tweezers or a small fork, this in order to aerate the soil and so encourage healthy root growth, whilst doing this observe any signs of root aphid attacking the roots and set these plants aside, later to be cleaned and repotted. Towards the end of the month, start to sow seeds of Succulent Plants. Germinate in a temperature of 70° Fahr.

March This is a busy month for the enthusiast, for some species of Cacti commence new growth. Start to repot any plants requiring it. Sow more seeds.

A little water can be given to the general collection say about once a week, but avoid splashing water over the plants, for if this remains on the plants overnight, there is a risk of rot setting in, but a light spraying, when the weather is fine, will do no harm.

As light is an important factor to the growth of the plants, keep the Greenhouse glass clean, in order to admit all the light possible. Your plants are still tender from lack of light and sun during the winter, and some shade may be necessary in really bright sunshine, but as the plants become used to more light, the temporary shading can be dispensed with.

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A COSY 8' x 6' GREENHOUSE FOR £15.

by G.S. Allsager

It is peculiar how so many people follow tradition, regardless of how many new methods are produced to simplify old systems, not necessarily making the old ways easier, but surpassing by far the quality of the results. Similar circumstances arose at one time when it was thought that tropical plants were for conservatories and hothouses only. As usual time brought about changes as it always does, and now in the summer time we find many tropical plants, flourishing in well drained beds, and rock gardens. In the south it is not uncommon to see palm trees growing outside all through the winter months.

The same can be said about propagation, on the one hand there is the type of eccentric cactophile who won't touch anything but brickdust and superphosphate or John Innes. On the other hand there is the opposite eccentric who owns a post office type garden shed with delicately balanced scales for weighing minute particles of trace elements with death defying accuracy and precision.

Now you enterprising members, why not cast away your glasshouses and attempt a completely new type of greenhouse structure. With the production of P.V.C. sheeting in vast quantities it is as cheap as 9/6d. for a 2' x 6' sheet. In my short experience of this material I have found many advantages in favour of this type of structure.

1. The £8/10/- for P.V.C. sheeting, and approximately £6/10/- for the necessary quantity of timber and sundry materials to construct an 8' x 6' greenhouse.

2. It is possible to maintain a constant draft free atmosphere and still retain fresh air circulation throughout the greenhouse, this was made possible by double glazing with strong polythene round the sides and down to the ground.

3. Easy and quick to construct. I am not much of a joiner, but it took me only three days to tongue and groove the required lengths of 2" x 2" timber, nail and screw the structure together and glaze with the P.V.C. sheets.

4. This P.V.C. sheeting does not prevent the infra red rays of the sun from penetrating, but it does prevent, or rather it deflects the burning rays of the sun which cause so much damage to tender plants, on the other hand it does provide maximum light.

5. Easy to effect repairs, either nail another sheet in place or if the damage is not serious, such as a crack, or split near a place of strain, wonders can be worked by the careful use of a soldering iron. Another benefit is that this material will not burn, so that in the event of an oil heater causing a fire although the plants could be damaged, the plastic would not flare. I have tried lighting it and the only results were a soggy smoking mess melting but not burning.

6. Extensions are easy, if necessary. You may feel sentimental about hacking down a veteran *Tricocereus bridgesii*, or a prize *Opuntia* which has outgrown the greenhouse, and is pushing out the walls, but with this type of greenhouse this is no longer necessary. The appropriate number of P.V.C. sheets could easily be removed (they are only nailed with rustless foam backed 3" pins) a suitable framework in 2" x 2" assembled, and attached to the existing section of the greenhouse where the extension is necessary. Height could then be added in a similar manner by untacking the sheets which form the roof, and adding extra struts under the eaves, if the roof structure had previously been constructed as one piece. It would then be an easy matter (as the framework is light) to prise off or remove any securing bolts, and the extra struts are added as required. Replace the roof, which would now be a number of inches higher.

As I have built this plastic greenhouse, naturally I find it hard to criticise, no doubt many members will be able to find there own faults with it, there may be even more advantages that I have not yet discovered, or there may be some serious fault which has not yet reared its ugly head, the winter will no doubt bring any disadvantages to the surface, I should nevertheless be pleased to hear constructive criticism from any interested readers.

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THE PREPARATION OF SEED FOR SUCCESSFUL RAISING

by. G. M. Taylor

The preparation and storage of seed is at least as important an aspect as the means which we use to obtain successful germination. In the horticultural press you have no doubt read of the new means adopted by one famous seed house to dry and pack their seed. They have discovered that the dryer the seed the higher the degree of germination. This dryness must be obtained by means other than direct heat, and maintained until the time of sowing. They do not sell cactus seed etc and their process is too complicated for us to emulate. We can however get the message, and learn something from it. They recommend a degree of moisture present including atmospheric humidity of not more than 21%, at the time of writing my hygrometer shows 65% atmospheric humidity.

Many text books inform us that the safest method of preserving seed until we wish to sow it is in the capsule, a state of affairs which in our climate is designed to keep the seed as moist as possible. In habitat when the seed is ripe, the capsule splits; but the seed does not fall out immediately, not until the wind and sun have dried out the moisture surrounding each seed in turn. The seed will not germinate until its own casing is dry, whether it be one of those in a dry capsule or embedded in pulp.

Last year I carried out experiments with Rebutia seed. As soon as the fruit split I took out five seeds, washed them, dried them, and sowed them immediately - results? - Nil. Five seeds were taken at fortnightly intervals from those nearest the front, the capsule remaining on the plant, and the process being repeated. One additional seed was taken on each occasion and kept in a special container, of the sown seed there was no germination until the sixth sowing. The earlier sowings were then allowed to dry out completely, and as many as 60% germinated on subsequent watering. Of the retained seed all but one germinated when sown five months after the first split. I suspect that viability is seriously reduced from the sixth month onward in certain species, but that is another problem which dry storage may help rather than hinder. This experiment confirms that the seed jacket must be allowed to dry thoroughly before it will become sufficiently receptive to permit the seed to germinate but it was principally started not to confirm this, but in order to improve my storage methods.

My method of storage is simple yet efficient; using empty serum phials discarded by hospitals and doctors. Thoroughly rinsed they are heated in a hot oven until too hot to hold comfortably (about 120° f.) and then allowed to cool. The seed having been washed and dried is then dropped into the warmed phial and this is kept screwed up until required.

The packets in which seed is usually sent in is most unsuitable for lengthy storage, the paper responds to all changes in atmospheric humidity and can readily harbour fungal growths. Wax paper is in fact little better.

Seed should be stored at an even temperature 42° - 47° f. and at an even humidity (preferably below 25%) and in darkness. An airtight tin box would do as a container provided all the damp air is removed by heating the tin immediately before use. Large containers are on the whole not at all satisfactory.

Some experts advocate the use of pesticides, fungicides etc to protect the seed in storage. In practice there would appear no harm in this provided the seed is well washed before sowing. Most chemicals of this nature do tend to interfere with germination to some extent if present at the time the seed germinates. They are better kept as a cure than as a preventative. If one applies the cleanliness of an operating theatre to seed raising in all its aspects nothing should go wrong until the seed is sown.

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A BEGINNERS GUIDE TO COMPOSTS (concluded)

by "HUGH MUSS"

Two composts are given below. The first is an average of those quoted by Borg and the second is a modified John Innes compost which I have used successfully from time to time:-

<u>INGREDIENT</u>	<u>"AVERAGE BORG"</u>	<u>"MODIFIED J.I.P."</u>
LOAM	LOAM 3 parts	LOAM 7 parts
HUMUS	LEAF MOULD 1 part OLD COW MANURE 1 part	PEAT 3 parts
<u>CONDITIONERS</u>	SAND 1 part CRUSHED BRICK or GRIT 1 part LIMESTONE CHIPS OYSTER SHELL 1 part	SAND 2 parts CRUSHED BRICK or GRIT 2 parts LIMESTONE CHIPS OYSTER SHELL 2 parts
NITROGEN	(FROM MANURE ABOVE)	FROM JOHN INNES BASE
PHOSPHORUS	(BONE MEAL 1/10 part)	
POTASH	(SULPHATE OF POTASH 1/50 part)	

A little charcoal can be added to either compost as a general "sweetener".

John Innes Base is added to the John Innes Potting compost as follows for J.I. Potting 1.

To each bushel of compost:-

Hoof & Horn meal	1 $\frac{1}{2}$ ozs.
Superphosphate	1 $\frac{1}{2}$ ozs.
Sulphate of Potash	1 oz.
Chalk	1 oz.

These quantities should be doubled for J.I. Potting 2. or trebled for J.I. Potting 3. Generally speaking I use J.I. Potting 3. for all cacti/succulents as the extra food helps when plants are left in the same pot for 12 months or more.

If you buy J.I. Potting compost ready made it can be modified as follows:-

J.I.P.	6 parts
Crushed Brick or Grit	1 part
Limestone chips or oyster shell	1 part

It will be seen that the two composts quoted do in fact agree quite closely and they are suitable for all cacti/succulents. The only real exceptions are the *Heliocereus* and the various epiphytic genera which like a more acid soil. In this case the limestone chippings should be replaced by extra broken brick.

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NO for Mr. GINNS from HUGH MUSS

The Editor, having kindly allowed me a preview of Mr. Ginn's comments on my reference to sterilising soil in a recent article in "Cactivities", I think a little clarification of my remarks is required.

Mr. Ginn's has, of course, fastened on to one of the most controversial topics in gardening circles - many growers would never dream of using unsterilised soil, whilst an almost equal number, like Mr. Ginns, dismiss soil sterilisation as "just a fad" or go on to argue that sterilisation destroys useful as well as harmful bacteria etc.

Possibly my remarks were a little mis-leading, as complete sterilisation of the soil would, in fact, deprive the soil of all living organisms, including beneficial bacteria. Perhaps "sterilisation" is a mis-nomer for the process generally given that name in gardening parlance - a better label for the process to which I referred would be "partial sterilisation" or, if you like "pasteurisation". If the soil is heated to a steam temperature of approx 200°F - this I contend is sufficient to kill the harmful organisms without destroying all the beneficial bacteria and, of course, without affecting the various mineral salts and elements present in the soil.

Finally it seems to me that even complete sterilisation could be argued to be worthwhile (even though, as Mr. Ginns states, the soil will be re-infected in a short time). At least for a time we are able to control and improve the soil content by the addition of suitable slow-acting fertilisers and conditioners.

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The following letter was received from one of our members:-

Dear Mr. Nyman,

May I congratulate you on Vol 1 No 1 of Manchester Branch Journal - and wish it every success in the future.

Although not a very active member of Manchester Branch I am hoping to find more time in the future to attend meetings.

Is it possible that you could find space in a future edition to mention that I am looking for a mate for my female E. Horrida and would be very pleased to hear from anybody who has a male Horrida who would let me know when it was in flower so that I could visit them and collect some pollen? I would also be pleased to hear from anyone who has Euphorbias for sale or exchange.

It may also interest some members to know that Blandford Press will supply expensive books on a monthly payment basis. No interest is charged but the books will only be despatched when the total amount has been paid. Instead of paying say, £15.15.0 all at once for Jacobsen's three vols., one or two guineas per month can be sent until the total of £15.15.0. has been remitted, and then Blandford will send the books. If anyone is interested I will tell them how to go about it.

Best Wishes,

N. Berry,
27, Eden Street,
Bolton.

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