

Gaultonia

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The Future of BCSS Branches.

On 29th September our Zone committee again did us all proud with a wonderful day out at AstraZeneca. Our theme for the day was set early on by Graham Charles who pointed out that habitat destruction in South America was ongoing at an alarming rate due to the ever-expanding population of the planet. Sheila Collonette repeated this theme as she shared with us her life's work exploring the plants and wildlife of Saudi Arabia. To complete the day, Anton Hoffer led us around Mexico and shared with us some of his special places.

Over lunch I had the opportunity to explore some thoughts on the future of the branches. All three branches within the zone are now producing quarterly magazine style newsletters with colour printing or photocopying. All three are financed by individuals within each branch and are free to branch members. This will not be sustained indefinitely. Other branches are now trying to sell their newsletter outside their branch to keep their newsletter free to members. As other branches follow suit it means, in effect, that if you buy another branches newsletter you are paying around twice the production cost so it can remain free at its home branch.

Most local branches now report falling attendance. One factor eroding branch attendance seems to be the abundance nowadays of specialist societies. Tephrocacti, Mammillaria, Mesemb, Haworthia, Chilean cacti each have their own specialist group and meetings. It seems only a matter of time before Ariocarpus and Copiapoa join the list. Zone conferences, ELK, and field trips can also be added to the list. The Internet has also brought specialists further together. Average turn-round time for a query to a friend in say South America or Australia amounted to several weeks by airmail or a very expensive international phone call. Over the Internet it can be seconds in theory and often within 24 hours in practice. Finally, there is now almost a constant flood of new books onto the market. Many genera or geographical locations are now covered by an ever-increasing supply of modern books and magazines.

So, far from stagnating, the hobby is slowly but surely being transformed and revitalised. We have never had it so good. Zone conference one weekend, new book to read in the week, specialist study groups the following weekend and not forgetting branch meetings the next. With all this competition for our attention and attendance why must we ensure that our branch meetings survive? I think the answer is simple - for the future of the hobby. Newcomers to the hobby rarely seem to start out by joining specialist societies. That is not what I did. I came along to some branch meetings, enjoyed a few diverse talks, met people with diverse interests, visited their collections and developed my own tastes and interests within the hobby.

Branch meetings must not only remain for the sake of a cheap night out but also as the spawning ground for future hobbyists. They should remain as their entry point into the greater depths of the hobby as a whole. But remember, there is no such thing as a free lunch. At the end of the day we will only get

out what people put in. Whilst I feel they should remain a cheap night out, they have to be self sustaining also. Newsletter, like branches, cannot continue to run on favours forever.

MORE MAMMILLARIAS by Peter Bint

My selection for this month is from the **section Subhydrochylus**. The Series **Supertextae** has some lovely, easy to grow members. The flowers are usually small or very small, usually purplish, rarely yellowish-pink. These are followed by bright red fruits. Any central spines are straight or curved if present whilst the radials often obscure the stem giving the whole a white or occasionally a yellowish or brownish appearance. Plants are short cylindrical stems or even stoutly columnar with short tubercles. The plants often cluster giving a pleasing appearance. It is considered that there are about 11 species in the group extending from **southern Mexico** with one being found in **Jamaica, Columbia and Venezuela** (*M. columbiana*).

The plants in question are:

M. albilanata, *M. columbiana*, *M. crucigera* (*buchenauii*), *M. dixanthocentron*, *M. haageana*, *M. huitzilopochtlii*, *M. reppenhagenii*, *M. ruestii*, *M. supertexta*, *M. tegelbergiana* and *M. yucatanensis*.

M. albilanata: a beautiful plant with a snowy white appearance especially in its upper third due to the persistent, very coarse, white, woolly hair. It is reluctant to flower unless given a good sunny position. Referred to this species is *M. fuauxiana* which differs only in that the central spines are longer than normal.

M. columbiana: found originally 200 miles north east of Bogota this is a plant that causes little problem in cultivation. It's yellow spines give the whole plant a golden glow. At about 15cm (6ins) in height it will cluster round the base. The tiny flowers are superseded by orange fruits in proliferation. Once they wither and go brown it is advisable to remove them to avoid the formation of sooty mould. A synonym for the plant is *M. bogotensis*. It is also found in N. Peru and Venezuela in S. America as well as on inaccessible cliffs in Jamaica.

M. crucigera: this is the gem of the group, discovered originally in the late 1820's and described in 1832 by Karl von Martius. It became lost to cultivation due to lack of locality data in this description. It was rediscovered in the 1960's and more often seen under the name *M. buchenauii* but even to this day it is not a common plant in cultivation. It is very slow growing and reputedly not one of the easiest to raise from seed. Central and radial spines are only 2mm in length. The centrals are often brownish (occasionally yellowish) and in the shape of a cross, hence the specific name. The purple-red flowers barely extend beyond the spines. As they grow in near pure gypsum they enjoy some in the compost. Grow one if you can.

M. dixanthocentron: a distinctive plant on account of the prominent, curved, yellow central spines. It is described as a solitary plant up to 20cm tall and 7 to 8cm in diameter. Although the flowers were said to be red, in cultivation they are usually yellowish-pink.

M. haageana: this is a very variable plant and most collections have one masquerading under one of a plethora of names. Do you have one of the following? *M. albidula*, *acanthophlegma*, *collina*, *conspicua*, *dealbata*, *donatii*, *dyckiana*, *miessneri*, *elegans* or *elegans v. schmollii*. If the answer is 'yes' rename it as *M. haageana*. Usually a solitary stem it will cluster in age. It remains a low stumpy plant with dark central spines which are very conspicuous against the white wool and glistening white radial spine background.

M. huitzilipochtlii: another gem to rank alongside *M. crucigera* this is a newcomer to the ranks only being described in 1972 by David Hunt. It looks just like *M. crucigera* in early growth but on reaching maturity it suddenly throws out long, dark central spines. At about 5cm in height it will branch from the base and in extreme age it can grow to 13cm+ tall. You may find plants labelled *M. sp. 066* or *066a*. These are the same as the species here.

M. reppenhagenii: Another late arrival, described in 1977, I have grown this plant from seed many times but found it hard to bring through the first winter but I don't know why. An attractive white spined species with plentiful, persistent white wool in the axils, it was originally attributed to *M. albilanata* by some. It will often clump up in age making it a lovely plant to grow.

M. ruestii: I doubt you will have a plant correctly named as this species. The original description calls for a solitary plant which clusters in age at the base, globose to elongate, with bristles in the axils, and 4 central spines, 7mm long, needle like, fox-red; radial spines 16 to 18 unequal in length up to 6mm in length. Flower deep carmine, 20mm long, 15 to 20mm wide, fruit deep red, seeds black. Most plants in cultivation have no bristles in the axils and longer, dark honey yellow central spines making it a *M. yucatanensis*. The correct plant could be allied to *M. columbiana*.

M. supertexta: this species forms narrow stems, about 5cm thick to a height of 8 or more cm. It clusters from the base and higher up the sides. Slender, white radial spines number about 143 to 6 mm long with the lower ones longer than the upper ones. Central spines are thicker, more likely developing when the plant is older, and brown tipped to the white spines. Small purple red flowers just poke through the close knit spines.

M. tegelbergiana: a less columnar example of *M. albilanata* in appearance it may be a long time in offsetting. Radial spines are more numerous (18 - 24) up to 4mm long, white and needle like, whilst the centrals (4 - 6) up to 7mm long are white to pale yellow with a dark brown tip. Flowers are a purple pink.

M. yucatanensis: there is actually little to distinguish this plant from *M. columbiana* and many experts would like to sink this plant, *M. ruestii* and *M. yucatanensis* into one slightly more variable species.

I hope you enjoy growing one or more of these plants in your collection. People with small greenhouses will benefit from the fact that none of them ever gets large.

The Genus *Oroya* - by Ivor Crook

Plants from the genus *Oroya* are not commonly seen in our collections but like a great many other plants probably deserve to be much more widely cultivated. The genus was erected in 1920 by Britton and Rose in their classical work 'The Cactaceae' for a solitary species which they separated from the genus *Echinocactus*. Britton and Rose were probably the first to truly appreciate that North and South American cacti had evolved separately and therefore that it was inappropriate to include plants from North and South America in the same genus. *Echinocactus peruvianus* was first described by Schumann in 1903 from the high mountains above Lima, Peru. In 1914 Dr Rose rediscovered the plant in abundance in the high Andes close to Oroya.

Plants from the genus *Oroya* are solitary, depressed-globose (slightly squashed spheres) with low ribs. The bodies are often dark green and very shiny in appearance. Flowers arise from the upper edge of the areole and are similar to *Matucana* flowers but are much shorter, pink to red or orange in colour. The genus is typically a high altitude genus from the Peruvian Andes.

Since 1920 several new species and subspecies have been described. Both Friedrich Ritter in 'Kakteen in Sudamerika' and more recently Edward Anderson in 2001 have revised the genus. Ritter revised the genus to three species and one subspecies as shown below.

- 1a. *Oroya peruviana* (Sch) Br&R 1922
synonyms: *Echinocactus peruvianus*
Oroya neoperuvianus Backbg 1935
Oroya laxiareolata Rauh & Backbg 1956
Oroya subocculata Rauh & Backbg 1956
- 1b. *Oroya peruviana* var *pleuricentralis* (Backbg) Ritt comb nov 1981
synonyms: *Oroya laxiareolata* var *pluricentralis* Backbg 1963
2. *Oroya gibbosa* Ritter 1981
possible synonym: *Oroya gibbosa* var *citriflora*
3. *Oroya borchersii* (Boed) Rauh 1958
synonym: *Echinocactus borchersii* Boed 1933

Anderson, in his recent revision 'The Cactus Family', has revised the genus into two species. He retains *borchersii* as a good species and lumps all the rest into *Oroya peruviana*.

The map shows the distribution of the genus across the high Andes of Peru. Furthest south in the Cuzco and Apurimac departments lie the *gibbosa* group at a height of 3500m to 4200m above sea level. Next, above Lima grow the *peruviana* group from 2000m near Tarma up to 4200m along the road to La Oroya. Finally, most northerly is species *borchersii* growing in a peat bog at lake Conococha at 3962m and as high as 4250m near Carpa in the Ancash department.

Oroya share a similar high Andean Peruvian habitat with their closest neighbours and relatives, the genus *Matucana*. Indeed, Friedrich Ritter discovered a natural hybrid between *O. borchersii* and *Matucana yanganucensis* near Recuay, Ancash department between 3500 and 4000m. Their cultural requirements seem similar. Lots of light and not too much heat in summer to prevent etiolation and sun scorch in the warmer months. I can find little in the literature about their ability to withstand cold during the winter. Graham Charles, in a recent conversation over a pot of *O. borchersii* commented that this particular species, growing in a peat bog, does require some water throughout the winter months.

Question and Answer - From Geoff Bailey

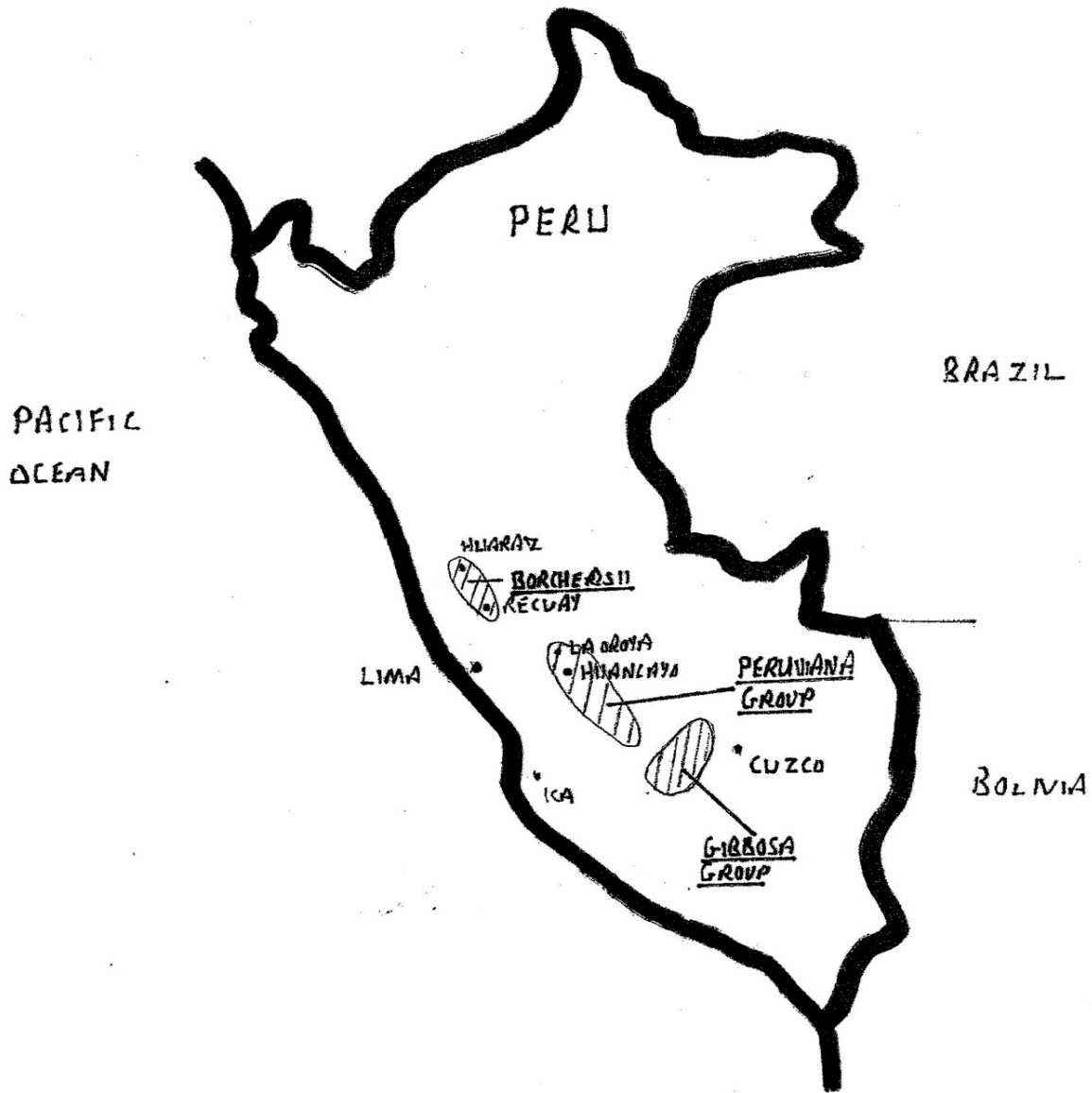
Question:

When entering cacti's in a show and it states cacti's in not exceeding pots 3.5ins - do they have to be round pots ?

Geoff's reply:

Square pots of the same dimensions - across the sides not across the corners - are allowable under BCSS rules. Watch out that you don't exceed the tolerances allowed and that the square pots have not bulged to a larger size because of root pressure. They can become almost round pots of a larger diameter!

Map showing the distribution of the Genus *Oroya* in Peru.



STREPTOCARPUS: A BRIEF STUDY IN MPUMALANGA AND THE ROYAL NATAL NATIONAL PARK - Part 1

An article by Lynne Dibley recounting her hunt for *Streptocarpus* plants in South Africa during January 1997. (Reproduced here with kind permission from Dibleys Nursery).

About a third of all the known species of *streptocarpus* (around 40) are indigenous to South Africa. The genus *streptocarpus* is limited in its geographical location to shaded areas which have dry winters but have high levels of rain during the summer. I had been in touch with collectors and growers of *streptocarpus* plants in South Africa. It was from one of these that I received some bad news about *streptocarpus*. In the latest red data list of threatened plants in South Africa, there were ten *streptocarpus* species mentioned. The habitat of this genus is being destroyed by agricultural methods, timber farming and the introduction of non-native plants. In my quest to see some of these plants growing in their natural habitat, I flew into Johannesburg and then headed east to the Mpumalanga province ([figure 1](#)). Approximately ten species have been recorded in this area.

MPUMALANGA PROVINCE

I travelled five miles from Sabie into an indigenous forest and followed a trail, the first section of which was fairly popular with tourists. After a fork in the path some way along the trek, I saw on a rock to my left, several small *streptocarpus unifoliate*s ([plate 1](#)). With mounting excitement I explored other rocks and trees and discovered more and more plants. They all looked similar: *unifoliate*s with a reddish purple underneath ([plate 2](#)). The plants to my right, a couple of metres from the path, had a few flowers and ripe seed pods. All the plants were *unifoliate*s with no secondary leaves growing from the petiolode of the main leaf and the ripe seed capsules were attached at the base to a leaf that had almost entirely withered away. They were growing close to the stream, under heavy shade on moss covered rocks and trees that faced southwest.

I believed these plants to be *S. pentherianus*. They had only one flower open on an inflorescence at any one time. The leaves were approximately 190mm long and 150mm wide; not the largest of *unifoliate*s, some of which can grow to over 400mm in length. One particular plant I noticed was heavily infested with aphids. It is nice to know that plants suffer from the same problems in the wild as they do back home!

At Bridal Veil Falls I found a group of rosulate *streptocarpus*, none of which were in flower. The plants varied in size from those with two or three leaves which were about 30mm to 50mm long, to huge plants that consisted of over fifty leaves, with a diameter of approximately 600mm ([plate 3](#)).

I continued to find more and more *S. pentherianus* which tended to grow in heavily shaded areas. The rosulate species, however, tended to grow on vertical rock faces in south facing clearings.

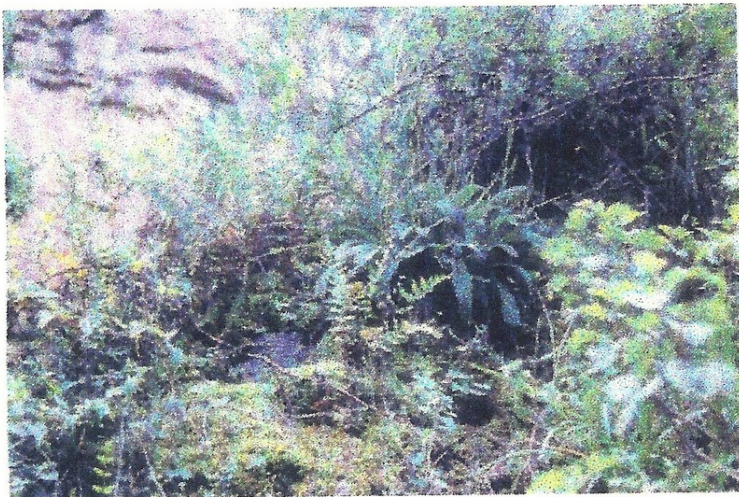
The path became continually steeper until I turned northwards and following the course of a stream, entered a clearing with a huge waterfall. What a beautiful sight! A couple of metres up the fall, there was a clump of streptocarpus in full bloom. These were a rosulate variety with cornflower blue flowers. Each flower had seven deep purple veins and a yellow bar radiating out of the corolla tube (plate 4). This had to be *S. cyaneus*.

The average rainfall in this area is 1269mm per year, with the highest rainfall in January and February (170mm-190mm per month). Mist is a common sight in the summer and snow often occurs on the mountain tops during the winter. The temperature of this area ranges from 26.3C in December to 3.4C in June. streptocarpus are very well adapted to the wet summer and dry winter conditions which they encounter in this area of South Africa. During the winter, the plants produce an abscission layer in order to minimise water loss and reduce the photosynthesis area. The plants wilt during a drought and recover when the rains come.

BLYDE RIVER SPORT NATURE RESERVE

A few days later I journeyed to the Blyde River Sport Nature Reserve, an area of outstanding beauty. At an altitude of 2km, the land to the east suddenly drops away by a kilometre into a forested canyon. In certain areas, especially at God's Window, you are able to see kilometres into the distance - right over the Kruger National Park and into Mozambique. Fortunately, it was an exceptionally clear day (plate 5).

A short walk from God's Window, I found a group of plants, possibly *S. parviflorus* (plate 6). These plants, which were growing in a cool, damp gully in dappled sunlight, varied slightly to those already documented in this area. The plants had vigorous vegetative growth with up to three leaves, growing to a length of 750mm. The streptocarpus plants recorded previously were white or faintly violet, with seven violet lines and a faint yellow bar in the throat, on several flowered inflorescences. The one plant in bloom had white flowers, with two rows of purple spots over a yellow bar in the throat of the corolla. Both *S. parviflorus* and *S. cyaneus* are present in this area, as *S. cyaneus* tends to grow northwards from this point and *S. parviflorus* grows southwards. The fact that each species has many forms makes it difficult to draw a distinction between the sub-species. Perhaps they are still changing and hybridising. This could explain why the colony at God's Window appears to differ from its description forty years ago. One young plant with only one leaf, which had produced one inflorescence, was beginning to grow a second leaf from the base of its original leaf at its petiolade.



Top Left-fig1

Top right fig 2

Centre left fig 3

Centre right fig 4