

Essex **Succulent** Review

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Editorial

Welcome to the Essex Succulent Review.

I have only recently realised that a mistake crept into the June issue of the Essex Succulent Review. Part of the final paragraph of John Watmough's account of the Cactus Crawl had disappeared from the files which were emailed to you. It should have read: 'Also, experience indicates that the organiser needs five assistants: Nicky and the driver obviously, but also a nursemaid, a policeman and a magician. Thanks to James and to those who fulfilled those roles on this trip.' My apologies to John, and to everyone who read this, and thought it ended a little abruptly.

Now just my usual reminder that back issues of the Essex Succulent Review are archived at www.essexsucculentreview.org.uk The more recent issues are at a slightly higher resolution than the ones emailed to you.

If you do not already do so, and would like to receive the Essex Succulent Review as a pdf as soon as it is ready, please email me and I will add you to the notification list. This is completely free and you can unsubscribe at any time.

Sheila Cude

Essex

SucculentReview

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Zone 15 – News

Congratulations to Colin Parker, from the Southend Branch, who gained most points in the BCSS National Show, held on 20 August 2016, and was awarded an RHS Banksian Medal.

Colin has been growing cacti and succulents for nearly 50 years joining the National Cactus and Succulent Society in 1969. Today he has a collection of over 2,000 plants, approximately 70% of which are cacti and the remainder other succulents. He exhibited a number of superb plants, but I have chosen just one to illustrate here with some notes provided by Colin.



***Cyphostemma betiforme* – awarded first in Class 117, Adenia group, pot limit 140mm**

Cyphostemma betiforme is a native of Somalia. It is regarded as one of the more desirable cyphostemmas because of its moderate size. The caudex only gets to approximately three feet across in the wild! To give a sense of scale my plant is four inches in diameter and seven inches tall. There were some much larger cyphostemmas in the unrestricted pot size class at the show – although these were not the *C. betiforme* species.

I cannot recall ever seeing this species offered for sale as seedlings. I purchased my plant from the late, and much lamented, Specks nursery in Germany about eight years ago. I have not found it difficult but it is very slow growing and needs a high winter temperature.



Fig. 1 Difficult driving conditions

Like it or lump it – Madagascan caudiciforms

by Al Laius

Madagascar is the fourth largest island in the world and, owing to its geological history and present geographical position, its vegetation is characterised by a high percentage of endemic plants (and animals). About 80% of all flowering plants on the island are endemic to it.

A recent trip to the Galoko mountains in north-west Madagascar in search of the rare and elusive *Sansevieria sambiranensis* ended in failure. With our Land Rover stuck in deep mud (Fig. 1) and the waters of the mangrove swamps rising above the level of the exhaust pipe, being eaten alive by mosquitoes, stung by wild wasps and attacked by what seemed like the

fastest moving leeches on planet Earth, we just did not have the time or resources then to climb higher than we did, where we might have had a chance to find the plant. Still we

Fig. 2 *Ravenala* palms and secondary forest in northern Madagascar





Above:
Fig. 3 *Sansevieria canaliculata* near Ankify

Fig. 4 View over the tsingy at Ankarana National Park and
Fig. 5 Crowned lemur (*Eulemur coronatus*) on tsingy

reached high enough to experience one of the last vestiges of the natural primeval forest of the 'Great Red Island'. Madagascar has lost almost 90% of its natural forest cover over the last few hundred years due to deforestation and slash-and-burn practices. Of the taller growing plants only the *Ravenala madagascariensis* palm (not a true palm but actually a member of the banana family) can survive fire and it is easy to differentiate between primary and secondary forest by the number of these palms present (Fig. 2).

So, not having seen a succulent plant in over five days, we decided to head further north and visit the Ankarana National Park and surrounding area. On the way there, a stop-off at Ankify was essential in order to see the only other *Sansevieria* on the island, *S. canaliculata* (Fig. 3). Although not endemic to the island, being an introduction from Mozambique many years ago, it has already evolved there over time and differs mainly by having up to five flowers per tuft (as opposed to three).

The Ankarana plateau consists of a mixture of dry deciduous forest and limestone karst pinnacles known as 'tsingy' (Fig. 4). Tsingy is the Malagasy name for the bizarrely eroded limestone formations found here and in several other places in Madagascar. Its 500 foot thick limestone is riddled with caves and canyons, and the knife-edged pinnacles rise 3–4 feet high. The limestone is so hard and uniform that, on the surface or inside the caves, blades left in the erosion process produce melodious tones when struck – making a 'tsing' like sound.





Apart from the adorable lemurs (Fig. 5) it was the euphorbias and various caudiciform plants that caught my eye, and which form the basis of this short article. Plants of *Adenia epigea* (Fig. 6) were not difficult to find as their large caudices, ranging in shape from round, globular, flattened or irregular, and often reaching up to one metre in diameter, were in plain view above the ground. They were often found growing together with other 'lumps' such as *Cyphostemma pachypus* (Fig. 7) and *Euphorbia ankaranensis* (Fig. 8). This

Euphorbia is only found in northern Madagascar where it grows in pockets of humus on limestone escarpments in deciduous forest. We were lucky to catch it in flower during the dry season. The cyathia often appear in such large numbers that they form a globose head. After the fruits ripen, the cyathia drop off and new leaves emerge at the start of the rainy season. The other *Euphorbia* frequently encountered in this area is *E. pachypodioides* (Figs. 9 and 10). This is an attractive plant which derives its

Above left:
Fig. 6 *Adenia epigea*

Above right:
Fig. 7 *Adenia epigea* (left) and *Cyphostemma pachypus* (right)



Fig. 8 *Euphorbia ankaranensis*



Fig. 9 *Euphorbia pachypodioides*



Fig. 10 *Euphorbia pachypodioides* clinging perilously to life

specific name from the columnar, unbranched stems which look like the juvenile form of *Pachypodium geayi* or *P. lameri*.

Other caudiciform plants include *Adenia lapiazicola* (with a liana in the shape of a demijohn in juvenile growth) which was only described as recently as 1997 by Martine Bardot-Vaucoulon, and is found growing in cracks in the limestone (Fig. 11);

Cyphostemma rutilans (Fig. 12); *Trochomeriopsis* sp., a cucurbit (Fig. 13) and of course no article on Madagascar would be complete without mentioning pachypodiums. One of the rarest and also the least spiny species of the genus is *Pachypodium decaryi* (Fig. 14). This is a bottle-shaped species which grows on limestone plateaux in just a couple of locations in northern Madagascar. The flowers are also supposedly the largest in the genus, and we were fortunate to be there during flowering time which is mainly between

April and June (Fig. 15). Gordon Rowley in his book '*Pachypodium and Adenium*' (*Cactus File Handbook* No. 5) suggests that this species is of great botanical interest as it could be a bridge to the genus *Adenium*, from which it differs mainly in the narrower flower tube and tail-less anthers.

Wandering around in the tsingy was a thrilling experience and succulent plant discoveries were round every corner. Wherever you looked there were 'lumps' just lying around! (See front cover.)

After a couple of days in the National Park we decided to explore some other areas in the region. We had already seen some examples of tall tree-like pachypodiums in the distance on our drive north, so it was therefore essential to set off on foot in order to get closer to them. These were *Pachypodium rutenbergianum* (Fig. 17), a tree-like species which is widespread in the north in deciduous forests, savannah and on limestone rocks. These plants can reach up to 12 metres high although the average is around 3–6 metres. Young plants have spiny trunks and the branches, even on large mature plants, are also spiny. The scented white flowers appear after the leaves have fallen (Fig. 18). We also photographed two other *Euphorbia* species which did not occur in the National Park – *E. alfredii* and *E. neohumbertii*. *E. alfredii*



Fig. 11 A particularly large example of *Adenia lapiazicola*



Fig. 12 *Cyphostemma rutilans* growing in a most unlikely place

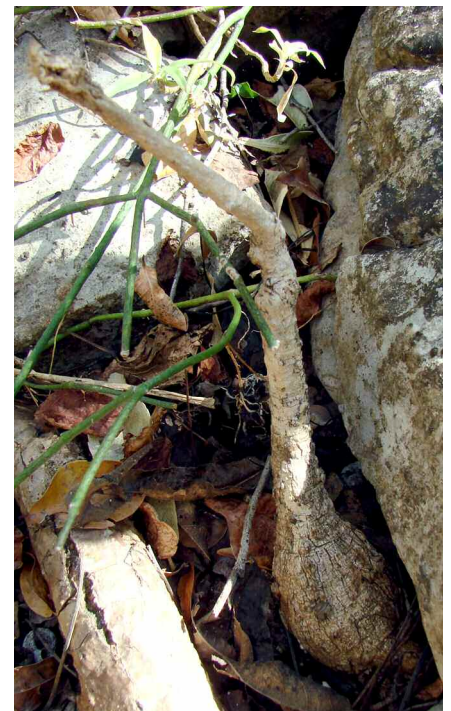


Fig. 13 *Trochomeriopsis* sp.

Like it or lump it continued

(Fig. 19) is very close to *E. ankarensis* but it has thinner stems and both the leaves and cyathophylls differ. *E. neohumbertii* (Fig. 20) is a very attractive plant both with or without flowers. The plants are usually unbranched and can reach up to one metre tall. The epidermis is a bright green colour and the corky grey leaf scars are arranged across the stem – this is particularly evident in younger plants.

While some of these photos may whet your appetite and you may be keen to acquire them for your collections, please bear in mind that much of the flora of Madagascar is endangered and that wholesale collection of plants from habitat, for the export market, still occurs. Obviously this is not sustainable

and, as many of these plants are difficult in cultivation, it is surely better to grow them from seed or acquire vegetative propagations (where appropriate) than to purchase habitat plants. Please develop the habit of always asking the source of any plants you buy and remember that often plants from habitat are grown on in gardens in Madagascar and then shipped overseas as so-called nursery-grown stock. Let us try to conserve these plants by not buying habitat collected material.



Fig. 14 *Pachypodium decaryi*, and

Fig. 15 *P. decaryi* flower

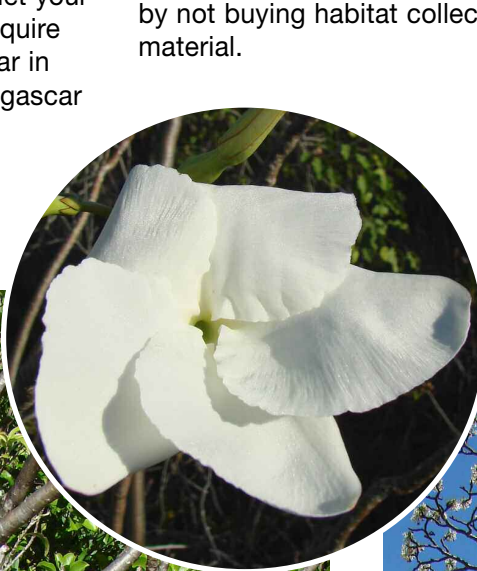


Fig. 17 *Pachypodium rutenbergianum*, and

Fig. 18 Close up of the flowers of *P. rutenbergianum*



Above:
Fig. 19
Euphorbia alfredii

Above right:
Fig. 20
Euphorbia
neohumbertii

My trip would not have been possible without the expertise and botanical knowledge of Christophe Qu  nel, a resident of Madagascar and botanical tour operator. A Frenchman, he also speaks English and a few other languages and his wife Nadia (who often accompanies tours) is Malagasy. Christophe can offer fixed itineraries or will put together specific plant-orientated circuits depending on your personal interests.



For further information contact Christophe Qu  nel at: christophe.quenel@yahoo.fr or visit his website: www.madabotanik.com ■

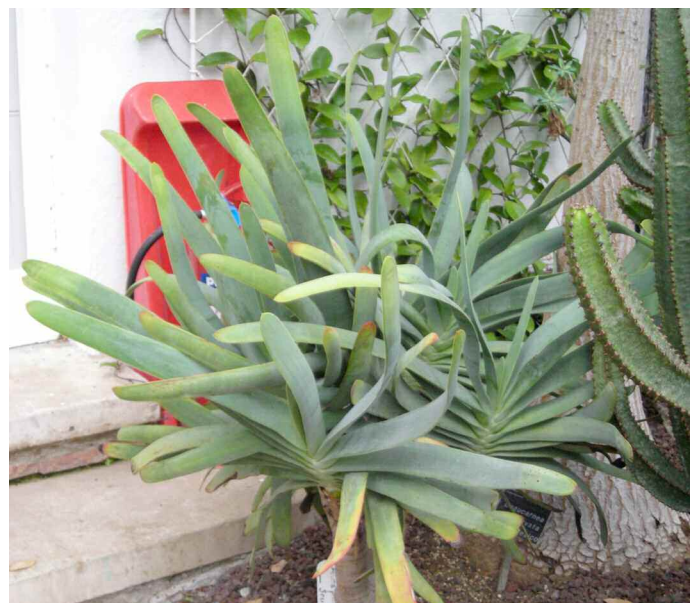
Photos: Al Laius

E A Bowles – horticulturist and cactus grower

by Sheila Cude

E A Bowles is well-known to gardeners as a horticulturalist, writer, artist and creator of the magnificent gardens at Myddelton House which was his lifelong home.

Myddelton House, located near Enfield, (north London) was built by E A Bowles' great-grandfather from 1812–1818, replacing an earlier Tudor property. It was named Myddelton House in honour of Sir Hugh Myddelton, the engineer who created the New River in 1613 to supply London with fresh water. E A Bowles (Edward Augustus, Gus or Gussie to his friends, but always known professionally as E A Bowles) was born there in 1865. He was one of five siblings, although his eldest brother died in infancy. Edward Augustus was educated at home, as he was considered too delicate for public school, and later attended Jesus College, Cambridge hoping to enter the Church. In 1887 however, one of his brothers contracted tuberculosis while serving in the army in Sudan. He came home, to



***Aloe plicatilis* in the small conservatory**

E A Bowles continued

be nursed by their younger sister, who also contracted the disease. Following their deaths, E A Bowles abandoned his studies and returned home to be with his parents.

In 1890 his father allowed him to take over the extensive garden, which was then mainly lawn and some fine trees, including a line of ancient yews which could well date from the 16th century. He started work on the rock garden, which was always a favourite location with him. Also in 1890 he made the first of many trips to the Alps to collect plants and regularly made plant hunting trips each year after that. He was also an avid collector of many other things ranging from statutory (including Enfield's old market cross which still stands in the gardens) to fossils and a small museum in the grounds of Myddelton House housed collections of insects and stuffed

animals and birds. He diverted an arm of the New River to run through the gardens, where it remained until 1968 when it was filled in with rubble from the Victoria line, and laid to lawn.

E A Bowles' first plant loves were probably alpinists and bulbs, but he was interested in unusual plants of all kinds, including cacti and succulents.

He grew a number of cacti on a specially prepared cactus bank forming part of the rock garden. It faced due south and was prepared with "brick rubble" and "coarse gravel" with a system of drain pipes and gullies to carry off excess rain. He described the soil as "chiefly turfy loam mixed liberally with old mortar

rubble, silver sand, sandy peat, and some well-weathered cinders from the furnaces". He also recommended feeding his cacti with a little guano, (E A Bowles, *Hardy Cacti and Succulents*, RHS Garden Anthology).

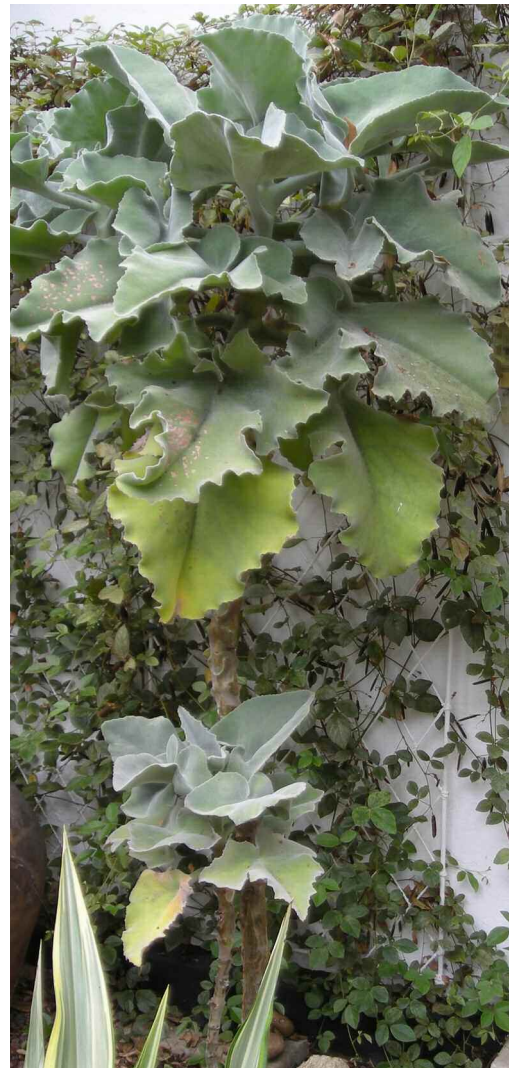
The plants were sheltered over the winter by "glazed lights" which were placed over them resting on posts,



Looking into the small conservatory. The plant on the right is a Furcraea



A fine old cactus (unlabelled) growing in the conservatory



Kalanchoe beharensis or Elephant Ear Kalanchoe

E A Bowles continued

meaning they were protected from above but open at the sides. Most years this presumably worked well, but the winter of 1907–8 seems to have been particularly unpleasant with temperatures in the gardens falling to 26°F (about –3°C) and many plants were lost. The remaining plants probably succumbed to the even worse winter of 1939–40. At present the rock garden at Myddelton House is being renovated but there is no indication of where the cactus bank was located.

However, there are still a number of cacti and succulent plants on display in the gardens

at Myddelton House. Some of these are housed in a small conservatory and include some fine old plants. It is tempting to imagine that some of them might have been grown originally by E A Bowles.

As well as the cactus bank E A Bowles grew cacti and succulents in a greenhouse in the kitchen garden. When the kitchen garden was restored the foundations of the original greenhouses were discovered, and new ones were built following Victorian designs. There are a number of cacti and succulents housed in one of these. Some of these are old plants, and some look a little neglected, but there are also some smaller plants which are possibly more recent acquisitions.

A number of cacti and succulents are planted out during the summer, but return to the protection of a greenhouse during the winter. These include a fine display of *Aeonium*, which appears in various places each summer; this year they are standing on some steps next to the conservatory. There are

The magnificent pan of Adromischus cooperi seen in the bottom right hand corner of the picture below



Inside the greenhouse in the kitchen garden. The spiral plant on the far left was labelled Cereus forbesii (spiralis)

E A Bowles continued

also pots of agaves and other succulents which stand on the wall above the kitchen garden.

E A Bowles died in 1954. The gardens were transformed, although the house remained as it had been in his parents' time with no gas, electricity or telephone. The gardens passed to the Royal Free Hospital School of Medicine and the London School of Pharmacy who used the kitchen garden to grow medicinal, poisonous and narcotic plants including opium poppies and cannabis for research purposes. No sign of those today of course.

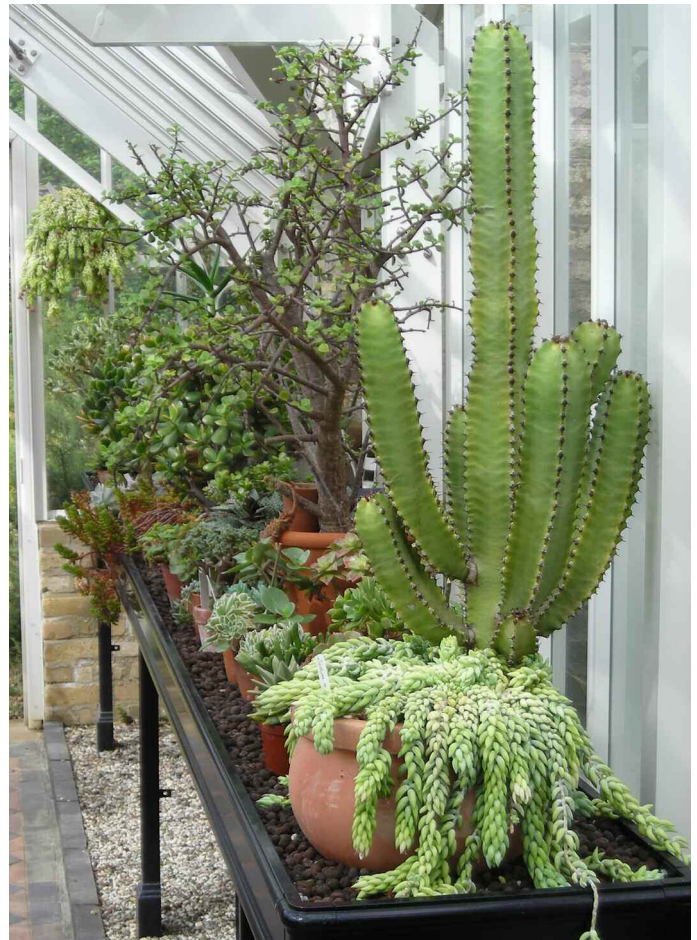
The estate is now managed by the Lee Valley Regional Park Authority which is restoring the gardens, as far as possible to E A Bowles' original layout. In the meantime the gardens are open to the public free of charge which I think is what E A Bowles would have wanted. ■

Reference

- 1 Bowles E A, (April 1908) *Hardy cacti and other succulents*, collected in RHS *The garden anthology* ed. Ursula Buchan (2014) Frances Lincoln Ltd

Websites

- 1 [Lee Valley Park History](#) for images of Myddelton House including a picture of the old cactus house.
(Please note this site may not work on older browsers.)
- 2 [E A Bowles Society](#) for information on E A Bowles and Myddelton House



The side of the kitchen garden greenhouse



Summer display of Aeonium and other succulents next to the conservatory

The day of the Triffid

by James Gold

Readers of 'The Cactus Crawl Reunion Tour' in the June 2016 issue of the Essex Succulent Review will remember that James bought a 'triffid' – otherwise known as *Euphorbia venenifica*.

Euphorbia unispina is my favourite plant, no, I mean *E. poissonii*, or do I mean *E. venenifica*?...read on.

Initially, I started growing *E. unispina* and found out the hard way that it likes to be very warm all year round. I replaced it with what I thought was the same plant only to find that it was labelled *E. poissonii*. This plant lasted for many years, only to collapse most unexpectedly, during a warm spell one summer. I tried for some time to replace it and thought I had, with the current plant which, when I checked the label, read, *E. venenifica*.

Curious that I had now grown three plants with different names but which all looked remarkably similar, I made the fatal mistake of trying to make sense of it all.

The *E. venenifica* label stated quite clearly that it originated in Benin. Benin is a little off the tourist trail so I consulted my maps of tropical west Africa. After several attempts to rub out a pencil mark, I realised I was trying to rub Benin off the map. It is a thin vertical strip of land that dips its southernmost end into the South Atlantic Ocean. To compound my surprise, I am led to believe that the population is approximately 11 million people, most of whom live by the ocean. Perhaps it is the narrowness of this strip of land, combined with some sort of Darwinian survival mechanism, which gives rise to these tall narrow plants?

I then consult my trusty ten-volume 'The Euphorbia Journal' to read the following piece from Len Newton, in Volume 7: "One of the triumvirate of species that are commonly confused with one another, *E. venenifica* is probably the least common of the trio, the other two similar species are *E. unispina* and *E. poissonii*... *E. venenifica* is a striking species from West Africa,

particularly the Ivory Coast. In habitat, it forms a succulent shrub 1–2m high, branching basally. Stems are cylindrical, 2–3cm in diameter, with tubercles arranged in many spiralled rows. Spines are solitary (two fused), about 1cm long, and bear no spine shield. The remarkably beautiful leaves are clustered at the branch tips".

From my initial research I was pleased to realise that I am not the only one who thinks they all look very similar. However, Volume 8 of the above refers to a "number of errata" and stated that *E. venenifica* does not occur in west tropical Africa.

So, even among the experts, there is no consensus. While I applaud advances in science and take an interested layman's interest in DNA sampling and so on, none of it keeps me awake at night. I just enjoy the plants for themselves – and keep this trio (or one) very warm all year round. ■

Reference

The Euphorbia Journal, Vols. 7&8, Strawberry Press

Photo: James Gold



Euphorbia venenifica



Delosperma nubigena

Gardening with succulents

Part 5 – More smaller succulents

by Paul Spracklin

In this article we finish our look at smaller succulents.

Aizoaceae

Broadly (and with a few extras thrown in) these are the Mesembryanthemums, usually called mesembs for short. A vast group of plants, almost (but not entirely) exclusively from southern Africa, that come in all shapes and sizes. Many make excellent garden plants and can now be easily found in the alpine plant section of larger garden centres – a testament to their hardiness and ease of culture.

Bergeranthus

A compact group of succulents that have triangular, finger-shaped leaves that spread to form a mat. The plants I have grown are possibly (or possibly not) now in the genus *Hereroa*, but it is under the name *Bergeranthus* that they will be found for sale.

***Bergeranthus glenensis*:** – deep green, succulent three-sided fingers, to around 3cm long, that will slowly spread to fill a rock crevice. Yellow flowers, tipped with pinky-red on the reverse, open in the afternoon sun (assuming we get any) in late spring and early summer. I find these incredibly charming, discreet little things that go quietly about their business with little fuss. I have never lost one to cold or wet in 20 years here. I have a white-flowered form and also a larger growing type which may or may not be a different species.

Delosperma

A genus of (mainly) spreading, mat-forming plants, sometimes with a swollen tuberous rootstock and often distinguished from some other trailing mesembs by the glittering appearance of the leaves. The two species below should be reliably hardy throughout most of the UK and, in recent years, there has been a lot of

hybridisation with many colour shades of flowers available.

***Delosperma cooperi*:** – spreading stems of long, flattened leaves form extensive mats of apple-green foliage that tints pink when stressed by cold or drought. Huge magenta daisies are produced all summer long. Invaluable and bullet-proof evergreen ground cover. There is a plant offered called *D. cooperi* 'Compactum' but this is a different species.



Bergeranthus glenensis



Delosperma cooperi

***Delosperma nubigena*:** – spreading dense mats of apple green, almost triangular leaves that often flush attractively with red when drought-stressed. The foliage can be completely covered by bright yellow daisies for weeks in summer. A cultivar ‘Basutoland’ is offered but in my garden appears identical to the type.

Drosanthemum

A genus of short-lived, slightly shrubby and scruffy plants with strongly glistening leaves and, often, immense flower-power.

***Drosanthemum micans*:** – for my money this has the most spectacular flower of all the mesembs. Bright golden daisies are tipped with maroon – an absolutely winning combination. Which is a shame as I have also found it one of the more difficult species to keep for any length of time!

***Drosanthemum hispidum*:** – denser foliage than many *Drosanthemum* species, this has smallish mauve daisy flowers.

Faucaria

The common name of ‘Tiger Jaws’ gives a good impression of these cute little succulent plants. Fat pairs of leaves are armed at the edges with what look like fearsome teeth and the leaf surface itself is often



Faucaria tigrina



Delosperma compactum

beautifully marked and furrowed. Rosettes will offset to grow into quite a substantial clump in time. Yellow daisies are produced from between the topmost leaves in autumn/winter. I grow a few species here, superficially similar but varying in size and colouration.

***Faucaria tigrina*:** – I have been growing this one for the longest, surviving for 15 years grown vertically in a crevice between rocks and flowering reliably through even the worst weather. Like many of these little succulent plants, keeping it dry is the key

Titanopsis

A genus of small, mat-forming succulents that have blunt tipped leaves that feature rough, warty ‘tubercles’ and a marbling of reddish-brown and grey colours that can give the plant an appearance of being a pile of gravel.

***Titanopsis calcarea*:** – the only species I have kept in the garden long-term, even flowering in some winters. As with *Faucaria*, this must be grown planted vertically in a crevice to keep the weather from direct contact with the rosettes.

Lampranthus

Ostensibly similar to *Delosperma* but with smooth, cylindrical leaves, some *Lampranthus* flower colours



Titanopsis calcarea



Lampranthus spectabilis

are amongst the brightest of the plant world. A handful of species are fairly hardy but all are easily perpetuated by 'insurance cuttings' kept frost-free over winter.

***Lampranthus spectabilis*:** – large flowers of the most intense magenta. *L. roseus* is similar.

***Lampranthus aureus*:** – larger growing with fatter leaves, this has huge bright yellow or orange daisies – an extremely showy plant.

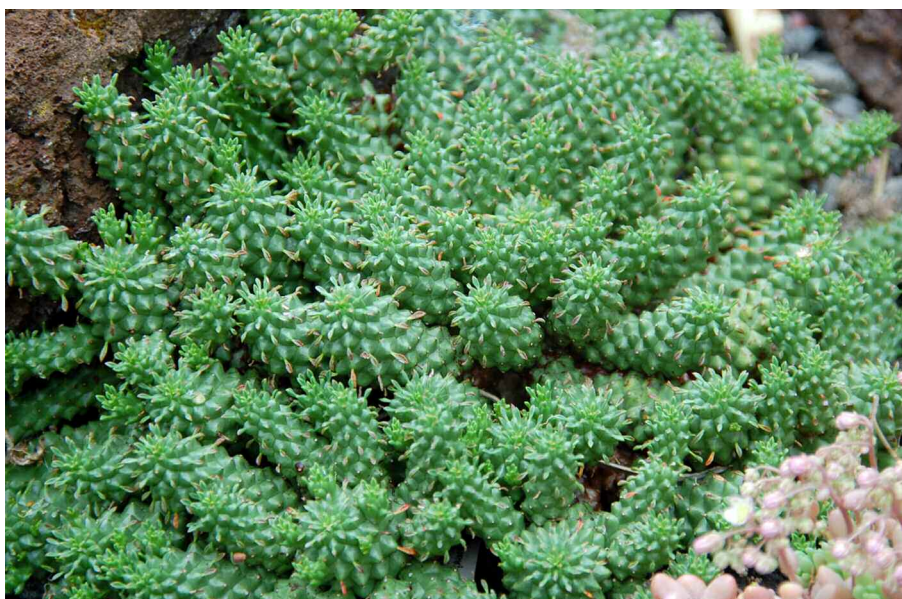
***Lampranthus brownii*:** – dark red, slightly smaller flowers and thinner, more spindly habit. What this lacks in flower power is made up for with increased hardiness

Waifs and strays

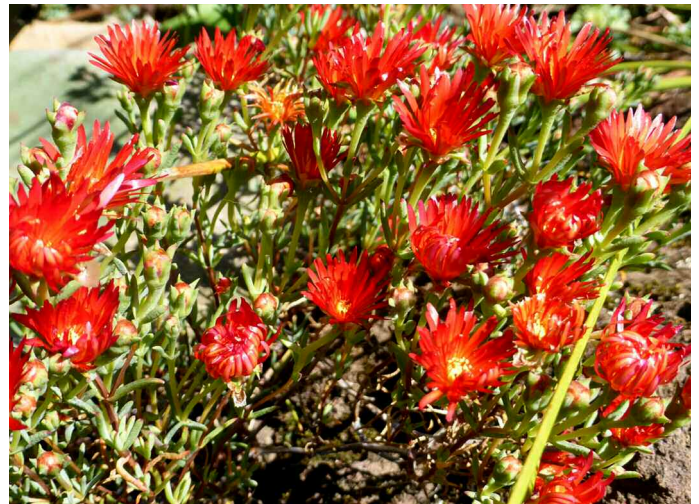
Bulbine

A group of succulent asphodels from South Africa one of which has proved hardy for me in all but the coldest winters.

***Bulbine frutescens*:** – clusters of tubular green leaves from a wiry, woody base are topped by dense pokers of attractive flowers. These are pale yellow in the species but in cultivation this is almost always seen as the cultivar 'Hallmark' which has bright orange petals and a fuzzy yellow central boss.



Euphorbia clavaroides var. truncata



Lampranthus brownii

Interesting, showy and easy from 'insurance cuttings'.

Euphorbia

An immense genus of plants from all over the world with many succulent species – all the more disappointing, perhaps, that there is only one succulent species that is reliably hardy.

***Euphorbia clavaroides var truncata*:** – from the alpine region of Lesotho in southern Africa this grows from a central 'Medusa head' body into a spreading dense cushion of upwardly arching fingers, each knobbly and bobbly. It will slowly mould itself to its surrounding, climbing over rocks and into crevices and in time makes a spectacularly fascinating ground cover. I have seen it listed as hardy to USDA z5 by growers in the USA, which is staggeringly cold. Closer to home I know of a plant that has survived –18C unprotected in the Cotswolds.

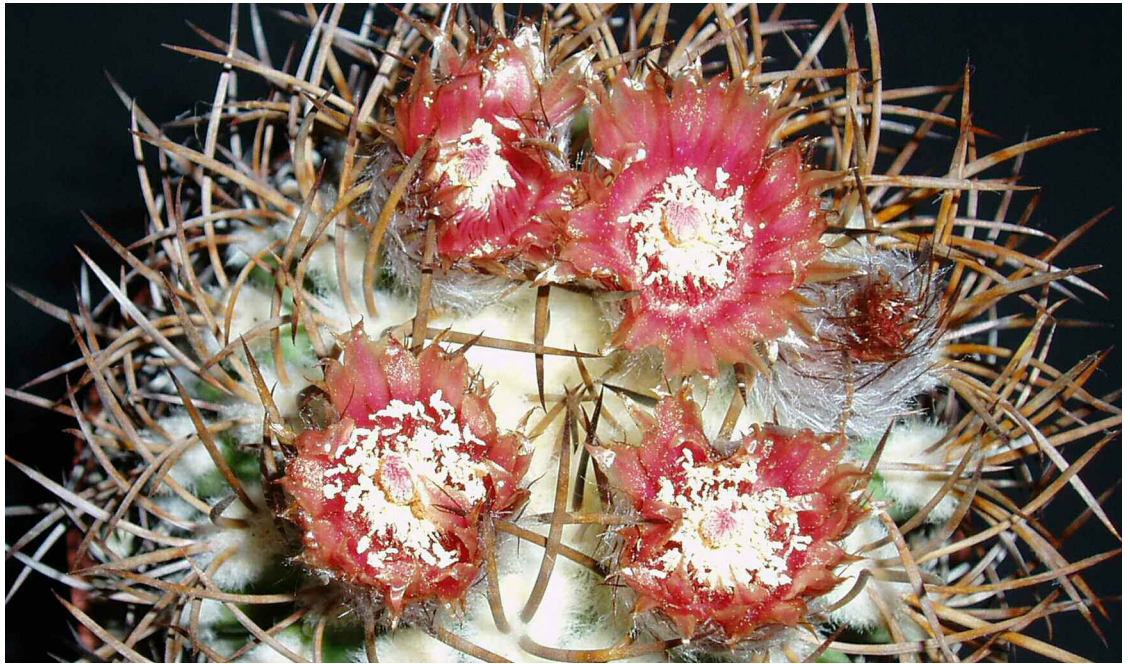
Another species from Morocco – *Euphorbia resinifera* – is larger with angular stems but a very similar growth habit. I kept this going for many years, finally losing it in a wet summer.

In the next and final article we look at some of the smaller cacti it is possible to grow outside. ■

Photos:
Paul Spracklin

Paul Spracklin is a garden designer with a specialist interest in gardening with succulents. See his website [Oasis Designs](#)

Eriosyce rodentiophila.
An *Eriosyce sensu stricto*, slow growing but handsome and flowers more readily in cultivation than other true *Eriosyce*



Eriosyce, etc: A symphony of synonyms

An aficionado's simplistic overview by Graham Evans

In the mid 1970s, when I first started growing cacti and would avidly read everything I could find on the subject, *Eriosyce* was innocuous. The greatest debate seemed to be whether, in pronunciation, there should be four or five syllables. In fact, it was something of an aspirational genus, for its few, slow-growing species were rarely encountered in any of the nurseries within a teenager's reach of Hastings.

I remember feeling some excitement on acquiring a small plant of *Eriosyce ceratistes* on a visit to Holly Gate Nursery. Following my taxonomic guru of the time, John Borg, I placed the plant within my growing collection among the cerei, before moving it alongside *Neoporteria* and *Neochilenia* a year or two later when Curt Backeberg's 1966 '*Cactus Lexicon*', updated in 1974 by Walther Haage, finally became available in English in 1977. Like many of my generation I regarded the work as my catalogue, yet I also initially fought with many of the radical departures from Borg. (I did not read Britton and Rose until many years later.) So commenced my ongoing fascination with the relationships within the cactus family.

Eriosyce remained fairly straightforward, other than a question mark over the

inclusion of *Rodentiophila*. Backeberg compared the genus, then not fully described but merely proposed by Friedrich Ritter, to both *Eriosyce* and *Soehrensia*. When my father and I bought a large, ex-habitat *Rodentiophila megacarpa*, (a plant he would retain for 30 years), from Bill Stevens as part of an old collection disposal, I boldly decided it more closely resembled the former and so that is where it was placed in the greenhouse. Happy days!

Then, in 1994, our peaceful little group of collectors' plants became embroiled in a major controversy as they were overrun by a plethora of species from surrounding genera. Commanded by Fred Kattermann (*Eriosyce: The genus revised and amplified*), apparently under the influence of Nigel Taylor and David Hunt, these invaders have made *Eriosyce* a key theatre in the ongoing war between the lumpers and splitters for over two decades. From the hobbyists' perspective, the likelihood is the change would have been far less ill-received had *Eriosyce* been lumped into *Neoporteria*, there being only a handful of the former and potentially scores of the latter, but the rules of botanical nomenclature require that the oldest valid name should have precedence. So, as *Eriosyce* had been erected by Rudolf



***Eriosyce subgibbosa* (*Neoporteria castanea*).**
The pink, longer tubed flowers are hummingbird pollinated, a feature Backeberg decided was key when he reduced *Neoporteria* and erected several replacement genera for species with short-tubed flowers

Philippi in 1872, beating *Neoporteria* (Nathaniel Britton and Joseph Rose 1922) by half a century, it was forced to expand and accommodate.

Kattermann's merger was complicated by instability among the new majority, whose identity and heritage had already long been questioned, resulting in an unmanageable array of factions and splinter groups. By 1994 there were at least eight related genera in need of rationalisation, including *Neoporteria*, *Pyrrhocactus*, *Islaya*, *Horridocactus*, *Neochilenia*, *Thelocephala*, *Chileorebutia* and *Delaetia* plus a few others that were either invalidly described or generally never accepted, such as *Friesia*, *Chilenia*, *Euporteria*, *Hildmannia* and *Rodentiophila*, (Ritter himself deciding this was an *Eriosyce* sensu stricto), meaning there can be no doubt that work needed to be done.

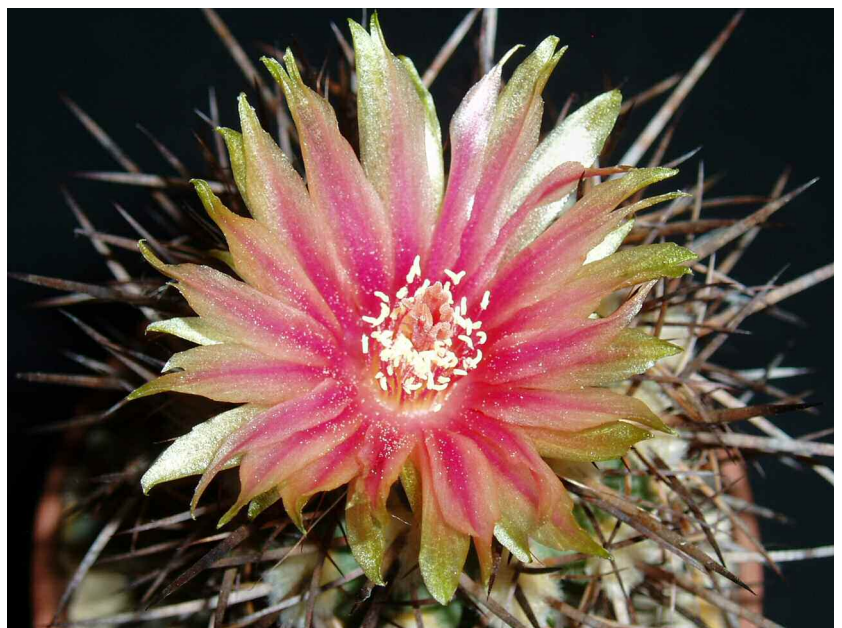
How did all this confusion arise? Britton and Rose, probably the earliest real exponents of splitting, erected *Neoporteria* in 1922, selecting as their type the former *Echinocactus subgibbosus*, which had been described by Adrian Haworth in 1831, and including a number of morphologically similar South American species from both sides of the Andes. Alwin Berger then circumscribed *Pyrrhocactus* in 1929 for a very few primarily red-flowered, east Andean taxa. This was before Backeberg's erection of *Islaya*, *Horridocactus* and *Neochilenia*, together with a revision of *Pyrrhocactus*, between 1934 and 1942, based on flower structure (shape and wool,

hair or scales on the floral tube), root morphology and geographical considerations reduced *Neoporteria* to solely long-tubed, pink-flowered, hummingbird-pollinated species from the West Andes.

Yoshi Ito came up with *Thelocephala* in 1957 but it was not until 1980 that Ritter properly expanded this to include all the tiny, low-growing, geophytic species similar to *Thelocephala napina*, the type. Finally, subsequent to Kattermann, Roy Mottram erected *Rimacactus* for a single distinctive, possibly deciduous and definitely difficult species, *Rimacactus laui*, in 2001.

So, we had a number of narrowly circumscribed genera in an era of

***Eriosyce* (*Pyrrhocactus*) *simulans*.**
The flame-effect flowers gave *Pyrrhocactus* its name. This species is sympatric with *Copiapoa coquimbana* and seems to simulate its appearance





Above: *Eriosyce* (*Thelocephala*) *napina*.

A popular, dwarf species typical of the *Thelocephala* group. It is easy to grow and flowers readily. The specific name derives from its large, turnip-like root

Above right: *Eriosyce* (*Thelocephala*) *napina* ssp. *aerocarpa*.

A very pretty, tiny species with lovely flowers, the glossy shine of which makes flash photography tricky!

taxonomic splitting, what could possibly go wrong? The answer seems to be that the two highest profile authorities of the day, Ritter and Backeberg, despite both being regarded as splitters today, could never agree on the day of the week. Neither accepted the other's generic delimitations and each had his own concept of the group. Both also changed their minds on more than one occasion!

Meanwhile, as the two German splitters waged warfare, many English speaking taxonomists were moving more towards lumping. Authorities such as Paul Hutchison, John Donald and, most eloquently, Gordon Rowley argued that *Neoporteria* was correct as envisaged by Britton and Rose and should contain all the later genera. In 1966 Rowley and Donald set about publishing all the necessary new combinations in *Neoporteria*. As a consequence, a multitude of affected taxa became nomenclatural nomads with valid identities in several genera – the original plus the respective opinions of Backeberg, Ritter, and Rowley and Donald – and new discoveries suffered almost immediate recombination. The most confused of the unfortunates is probably *Eriosyce napina*, which has been placed in at least eight different genera!

I have deliberately ignored *Reicheocactus*, as that could be said to be taking a comedy of errors into the theatre of the absurd, the type being a redescription of a *Lobivia* that its author still held to be a *Lobivia*. That *Reicheocactus* now appears to be justified for the (former) *Lobivia* has no relevance here. It is, however, a fine example of the mess out of which the



expanded *Eriosyce* was born, although it must be said that Kattermann's broad brushstroke attempt to bring order did, in itself, result in scores of new combinations in that genus.

Latterly, the '*New Cactus Lexicon*' (NCL) edited by David Hunt, Nigel Taylor and Graham Charles, published in 2006, retains Kattermann's 1994 generic concept while, at species level, taking on board revisions by Kattermann himself and Roger Ferryman. There have also been new descriptions at both specific and subspecific level within the amplified *Eriosyce*. It may be fair to say however, that not all post-1994 combinations therein have reflected the genuine views of their authors, as I believe many people remained unconvinced of the correctness of Kattermann's expansion, but still felt compelled to work within it.

Time, of course, marches on and with its progress comes new technologies and methodologies. Most modern attempts at systematic classification revolve around DNA and molecular analyses, sometimes confirming morphological concepts and sometimes confounding them. The emerging findings in relation to *Eriosyce* seem to clearly show the genus *sensu lato* is not monophyletic and therefore should not stand. However, there also appears to be no consensus on exactly how to reaggregate it, the most recent survey by Reto Nyffeler and Urs Eggli being somewhat inconclusive in this respect.

Eriosyce, etc: A symphony of synonyms continued

The latest published systematic opus is the 2015 '*Taxonomy of the Cactaceae*' by Joël Lodé, in which *Eriosyce* is reduced back to the original Philippi concept with three species recognised. Lodé additionally recognises *Neoporteria*, *Islaya* and *Rimacactus* but not *Pyrrhocactus*, *Horridocactus*, *Neochilenia* or *Thelocephala*. In his (proposed) '*CITES Cactaceae Checklist Third Edition (2016)*', Hunt continues to accept *Eriosyce sensu lato* and ignores all the other generic names, not even recognising them as being in current use!

So, what is my view on all this? 'Irrelevant' is the short answer. As a grower, however, I like my plants to be laid out according to their relationships and I also like my labels to be meaningful, otherwise I may as well have 'Sylvester' on *Lobivia silvestrii* or 'Graham's Beard' on *Ayloster muscula* (apparently it feels the same), as my wife likes to call them.

Being fairly tidy-minded and a simple soul at heart, if that's not a mixed metaphor, I happily accepted Kattermann's broad *Eriosyce* because it was simple, unambiguous and made recognition and labelling very much easier, removing all the confusion over Ritter's and Backeberg's bickering. Deep down, I really knew it was all too convenient and probably just plain wrong but I was never happy with the previous arrangement either because there were too many genera, that were virtually impossible to tell apart when presented in a pot in front of you, or it was easy to defend deferring to the experts, as one ought. Prior to NCL I had, of course, accepted *Eriosyce sensu stricto* but had reduced the others to *Neoporteria* (hummingbird-pollinated flowers), plus *Islaya*, *Pyrrhocactus* (reddish and brownish flowers) and *Neochilenia* (everything else).

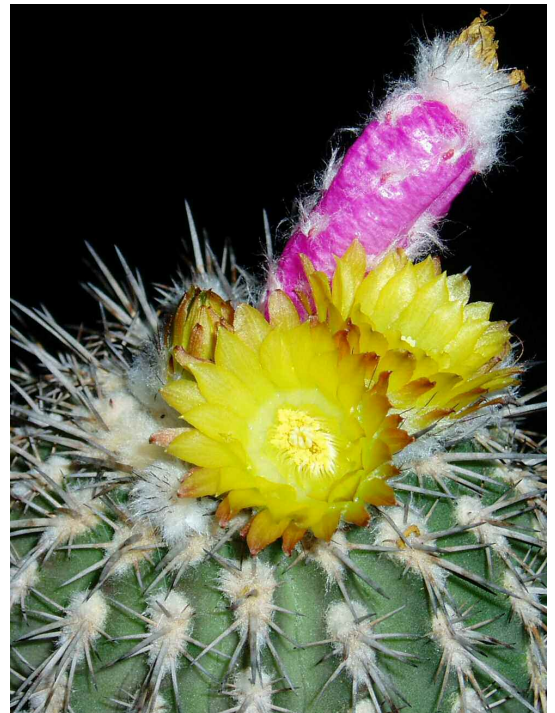
Thinking about it again now for this article, *Eriosyce* is a given. In cultivation, they are distinctive, larger growing and do not flower until attaining some size. The problem is with the rest. I am unsure over *Islaya*, although the large balloon-like fruits with few seeds are distinctive; but is there one species, one species with several subspecies/varieties or several species? Certainly, the plants are very uniform but do vary within narrow limits. *Rimacactus* is a genuine oddity with a unique appearance and very different flowers from the rest of

the group; and its habitat, growth pattern and now DNA analysis further support its separation.

Pragmatically, everything else, perhaps including *Islaya*, is a *Neoporteria*. The Andes are younger than Backeberg believed and, with multiple pollination syndromes and root morphologies occurring in other genera, I see little reason to retain additional names for what are, in my

opinion, minor variations. It will be interesting to see what the future holds for these taxa.

Whatever name you choose for your label, in cultivation, most species are reasonably well behaved. They grow well given open drainage, good light to encourage strong spination and plenty of ventilation, especially during the winter months when they like to be cool and dry. Providing the potting mix drains freely, I would recommend a standard volume of water but starting a little later in the year, around late March or even early April. This seems to assist good flowering and reduce the risk of rot, as these plants seem to be slow to wake up in the spring. Flowers on most species appear in mid to late spring. The



***Eriosyce (Islaya) islayensis* in flower and fruit. The latter have few seeds which are hollow and balloon-like for dispersal by the wind**

***Eriosyce (Horridocactus) curvispina*. Flower colour and spination varies considerably within the current concept of this species**





Eriosyce
(*Neochilenia*)
chilensis.
A species with
delightfully bright
spines and pretty
flowers, which can
vary from rose-pink
to almost carmine

hummingbird-pollinated species, however can flower any time from late autumn to early spring and I have had plants of *E. subgibbosa* in flower on Christmas day!

One or two species are temperamental and I find *E. megliolii*, *E. villicumensis* and *E. aspillagae*, all of which flower later in the year, prone to rot and/or red spider mite. *E. umadeave* needs very little water and a shallow pot, as it has very few roots (it grows on virtually solid rock in habitat), while the *Thelocephala* group is also best under watered and underfed if you want to

preserve their naturally tiny, compact nature, although conversely one sees some very attractive and healthy larger plants, sometimes as sizeable clumps, receiving prize cards on the show bench.

Rimacactus seems only to grow on a graft and, so far, I have not encountered anyone who has retained one on its own roots beyond the early seedling stage.

Going back to the title of this article, I may have been wrong. 'A symphony of synonyms' suggests a well orchestrated, graceful movement, perhaps resembling a nomenclatural rendering of Gordon Rowley's 'Cactus polonaise'. A better title might have been 'A cactophony of chaos'. (I hereby present 'cactophony' as a new compound

noun meaning confusing taxonomic state or debate!)

But do not let mere names on labels be a deterrent from growing these South American gems. They are hugely attractive, wonderfully charismatic, free flowering and mainly fairly straightforward to grow. ■

Photos: Graham Evans

To accompany this article Graham has prepared a checklist of Eriosyce names which is available to download from the [Essex Succulent Review website](#).

Rimacactus laui - a genuine oddity

by Sheila Cude

Rimacactus laui was first discovered by Alfred Lau in 1971 and collected by him in 1989. It was described by Lüthy in 1994, as *Eriosyce laui*, in Katterman's book '*Eriosyce: The genus revised and amplified*'. Roy Mottram erected the genus *Rimacactus* in 2001 and more recent DNA studies seem to suggest that it is related to *Yavia* and *Neowerdemannia*.

In habitat it is confined to a small area (possibly no more than 10sq km) of coastal desert south of

Tocopilla in northern Chile. Here it grows in cracks in the rocks where it depends on the coastal fogs for survival.



Rimacactus laui Photo: Michael Wolf
Used under licence by [Creative Commons](#)

In cultivation it has a reputation for being difficult, if not impossible to grow on its own roots. It is usually grafted therefore, when it will offset quite readily, growing into far larger clumps than would ever be found in habitat. It will also produce generous amounts of white wool and flower quite freely, with long-lasting yellow flowers. ■