



Manchester Branch

Newsletter January 2001

EDITORIAL

And so we move into another year. If your greenhouse looks like mine you will know why I am thinking of giving up growing cacti and moving to growing aquatic plants instead! Thankfully all the plants are on the staging as the floor is under two inches of water. For those of you who joined us at the December meeting and AGM you will recall we chose the genus *Mammillaria* as our genus of the year for 2001. Each month I will try and include articles relating to all aspects of this Genus. I hope lots of you will contribute something to this over the forthcoming months.

THE GENUS MAMMILLARIA

by Peter Bint

At the last Committee meeting it was suggested that it might be a good idea to take a genus of plants and produce articles about them for each issue of the Manchester Branch Newsletter. Each year a new genus would be selected. Anybody at all can offer an article. It could be about your favourite plant in that genus, or about related plants, where the plants grow, why you enjoy growing them, or anything else connected with that genus. It does not have to be a researched article, but rather one from your personal interest. I now propose to set the ball rolling.

Editor - Ivor Crook. Phone or fax

Plants of this genus had been known for a great many years before Haworth erected the name *Mammillaria* for them in 1812. He took the name from their appearance. The tubercles reminded him of *mammilla* meaning nipple. The first plant he named in this newly erected genus was *Mammillaria simplex* (closely comparable with *M. mammillaris*). The name was very nearly not accepted by the taxonomists of the period because the name had earlier been suggested for a genus of Algae. As a result of this Britton and Rose proposed a new name *Neomammillaria*. However the naming of the Algae never materialised so *Mammillaria* became the accepted name by most authorities. Confusion was caused by the continued use of *Neomammillaria* until it was finally dropped from general usage many years later.

Many people have produced books and major articles about these plants, e.g. Dr. Alwin Berger, Robert T. Craig, Dr. David Hunt, John Pilbeam, Werner Reppenhagen to name a few. Many more have used the information from these authors/explorers to write their more general books about cacti.

Mammillaria is a huge genus of plants ranging through North America and Mexico, on through Central America and just into South America where the plants are few in number. Representatives are also to be found through the Caribbean Islands. They have been known for many centuries as a result of the journeys of the intrepid explorers following in the footsteps of Columbus.

or e-mail

Plants of *M. mammillaris* and *M. prolifera* feature in early writings bearing long names that described their appearance. Later on they all became known as *Cactus something*. Then along came Haworth.

As well as being widespread, it is also a diverse genus ranging from single headed, globose plants, through loosely offsetting specimens to really huge clumps well over a metre across. There are short columnar plants, in addition to the globular specimens, and those that literally grow upside down as they cling to the sides of steep canyons in habitat. Such plants will eventually become prostrate with age in cultivation e.g. *M. pilcayensis*. Generally speaking, but not completely, the plants that prove more difficult to grow are found in Mexico, especially Baja California.

The plants are broadly split into three groups according to the sap. This characteristic is heavily underlined by the seed characteristics and broadly correlates with the presence or absence of hooked spines.

1. SECTION HYDROCHYLUS... with watery sap.
2. SECTION SUBHYDROCHYLUS... with watery sap when at rest and milky when in active growth.
3. SECTION MAMMILLARIA (ex *Galactochylus*)... with milky sap.

These three sections are further subdivided into major groups of species. Within these series the plants similar characteristics and are geographically associated.

In section *Hydrochylus* the series are:

Longifloriae *Ancistrocanthae* *Stylothele*

Proliferae *Lasiacanthae*

Sphacelatae *Leptociadodae* *Decipientes*

In section *Subhydrochylus* the series are:

Heterochlorae *Polyacanthae* *Supertextae*

In section *Mammillaria* the series are:

Leucocephalae *Macrothelae* *Polyedrae*

Each series is then further split into groups of plants that bear very similar characteristics.

There are also plants which are very close, but may not be truly *Mammillarias*, even though

they bear characteristics of the wider concept of the genus. These are:

Bartschella, *Phellosperma*, *Porfiria*, *Chilita*, *Oehmea*, *Mammilloidia*, *Solisia*, *Dolichothele*, *Krainzia* and then two that are not accepted as *Mammillarias* by all authorities, *Mammillopsis* and *Cochemia*. This grouping warrants an article of its own.

Cultivation of *Mammillarias* broadly depends on where they grow in habitat. Most are very easy and will tolerate most conditions and soils, even to the point (not really advocated) of having no grit content in the soil. Some are shallow rooted and need shallow pots or bowls as size increases, the series *Ancistrocanthae* for example, and grit to one third the soil bulk should be used. There are truly difficult species such as, *M. wrightii*, *M. guelzowiana*, *M. herrerae* which need at least half the soil bulk to be grit so that the soil is never more than moist and well aerated. Then there is the truly, almost impossible on its own roots *M. tetrancistra* which lasts but a year or two unless it is grafted. Of course there will always be people who can say, "That plant gives me know trouble!" about a so called difficult plant but every law is there to be shattered.

Recently I have come to the conclusion that a good loamy soil with the addition of lime chippings suits my plants very well, but that is my preference. Use what you find successful for you. Only a few *Mammillarias*, from hot climes, require extra heat in winter. Three such are *M. beneckii*, *M. guerreronis*, *M. nivosa*. Most will tolerate 5 degrees Celsius, if dry, (and even lower for short spells). To grow them well pot them on each year in the early stage of their life. Use shallow pots rather than deep for most species. Water frequently in warm weather when they are growing actively; be more prudent in dull and cool spells when neither light intensity nor temperature encourages growth. Ventilate well, shade only if exposed to extreme sunlight when scorching might occur. Give as much light in the winter months as possible.

BRIAN BATES DIARY

Greetings from Sucre,

Tim Marshall and I have just returned from a very successful trip, plan C, to identify the *Cleistocactus* which I saw 18 months ago on the return from Brazil/Paraguay.

Plan A was to find Lau's localities for *Sulcorebutia breviflora*, this was thwarted by the unrest caused in the Cochabamba area by the eradication of coca.

Plan B was to visit and look for further sites of *Cintia knizei*. This was thwarted by further blockades, this time between Sucre and Potosí. I'll have to trade my car in for a bulldozer!

The plan was to drive to Lagunillas and then search on the return leg. This was shortened to drive to Monteagudo and then go south sufficiently to find the plants. The 2 names in contention were *Cleistocactus winteri* (the former *Hildewinteria aureispina*) and *Cleistocactus vulpis-cauda*. The latter as far as I know never recollected since Ritter collected the type some 40 years ago.

Before setting off, I checked the 1st description of *C. vulpis-cauda*, making a mental note of the black & white photo. We encountered this plant at the type locality, Punte Azero, with one flower, which was sufficient for a positive I.D.

We drove onto Monteagudo, arriving after dark. We had our customary beers and chicken and went to bed, where we were eaten alive by mosquitos. Tim's repellent was back at the Bates' Motel.

I decided that we would go as far south as necessary to find a further population of *C. vulpis-cauda* or *C. winteri*. This we found after little more than 25 km, in an "angostura", this is a narrow but steep gorge, usually with vertical sides. On the other side of the gorge were several large plants in full flower, which allowed a positive I.D. This locality was 130 km

+/- south of the T.L. and far enough away for me to decide that what I saw, a further 75 km south was the same thing, so we turned round and headed for home.

We stopped 10 km north of Monteagudo to observe a *Lepismium* with lots of red berries and then 2 km further, we saw the same thing growing with a 2nd *Lepismium* which had black berries. The red berried plants were spiny and the black ones spineless, so I assume they are different species although they will probably get lumped in with *rebutia canigueralii* like everything else in Chuquisaca, or am I being a little cynical. These were growing with a *Rhipsalis*, probably *baccifera* ssp. *tucumanensis*. I'll be able to be more positive when I get my library from Santa Cruz. Also here were 3 quite different *Peperomias*, a *Begonia* with pointed leaves and red flowers, *Sinningia*, *Cereus* and *Opuntia brasiliensis*. Just south of Punte Azero, we again encountered *Cleistocactus samaipatanus* (the former *Bolivocereus*), growing with *Cereus* sp., *Begonia* with red rotate flowers and a *Sinningia*. We drove on to Padilla where we had several beers and chicken again.

We drove west heading for Sucre, and took a GPS reading for a site from the return trip from Brazil/Paraguay and then went to one of Tim's sites for *Sulcorebutia crispata* which they called "senilis" due to it's long hairy spines. We found many plants, but I was very disappointed that they were not "senilis" as I would expect. We went on to Zudan~ez where we had a beer and chicken. I then drove home. The total trip was 715 km and 3 days.

A couple of hours later we had chicken yet again. I think I'll turn vegetarian if I get chicken again this week.

Best wishes.

Brian Bates