

The Cactus Explorer

The first free on-line Journal for Cactus and Succulent Enthusiasts



Number 9

ISSN 2048-0482

August 2013

1 White Sands Monument

2 Uebelmannia buiningii

3 Chorrillos

4 Echinocactus parryi

5 Arthrocerus spinosissimus

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The No.1 source for on-line information about cacti and succulents is <http://www.cactus-mall.com>

Cover Picture White Sands National Monument, New Mexico. Picture by Mark Fencil.
See his article on page 38.

Invitation to Contributors

Please consider the Cactus Explorer as the place to publish your articles. We welcome contributions for any of the regular features or a longer article with pictures on any aspect of cacti and succulents. The editorial team is happy to help you with preparing your work. Please send your submissions as plain text in a 'Word' document together with jpeg or tiff images with the maximum resolution available.

A major advantage of this on-line format is the possibility of publishing contributions quickly and any issue is never full! We aim to publish your article within 3 months and the copy deadline is just a few days before the publication date which is planned for the 10th of February, May, August and November. Please note that **advertising and links are free** and provided for the benefit of readers. Adverts are placed at the discretion of the editorial team, based on their relevance to the readership.

Publisher: The Cactus Explorers Club, Briars Bank, Fosters Bridge, Ketton, Stamford, PE9 3BF U.K.

The Cactus Explorer is available as a PDF file downloadable from www.cactusexplorers.org.uk

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This issue published on
August 29th 2013

INTRODUCTION

Time flies!

As the nights start to feel cooler and the days get shorter, I reflect on the unfinished glasshouse jobs I hoped to get done this year. The growing season started late and I never found the time to do all the potting I had hoped to get done. The season has certainly been good for growing and flowering of the plants, much better than last year. I am pleased to have been able to collect seeds of unusual plants which will give me the chance to make these available as seedlings in the years ahead.

My first year as the editor of *Bradleya* has certainly been a pleasure, although more time-consuming than I had anticipated. *Bradleya* 31 is currently at the printer and is scheduled for publication on August 31st. You do not have to be a member of the BCSS to buy a copy after publication, so please visit the [website](#) and support this valuable yearbook. More details of the contents are on [page 13](#).

It is amazing how sensational new plants continue to be found, even in areas you would think have been well explored. The news of a new *Aztekium* species has been publicized on the web and now it has been formally named as *Aztekium valdezii*. Its description appears in the [special issue no.2](#) of the Romanian on-line journal *Xerophilia*, a real coup for them. The text is in English so you can read it, and, of course, it is free!

For various reasons, it has been some time since I have been able to travel to South America to look for cacti. So, you can imagine that I am excited at the prospect of a trip to Peru later this year. I have been fortunate to have been able to visit Peru on five previous occasions but there are still many places to explore.

My trip will have two objectives. One is to visit the type localities of species which are not well known, and the other is to explore likely places that I have never visited. You can be sure that I shall share my adventures with you

through the pages of the **Cactus Explorer**.

I am often questioned by people who are considering making a trip to cactus country. They wonder what it is like and how difficult it is to find the plants. There are no simple answers to these question although I usually advise prospective travellers to go the first time with an experienced person, such as by taking an organised trip with a professional guide like [Guillermo Rivera](#).

There are also a couple more things to understand. One is that you cannot go just the once. It gets into your soul, so that you come back with questions to answer, places you didn't find time to visit, and a yearning for the wild places. And, as for the plants, well they never look the same in a pot again.

If you have been to habitat and enjoyed the experience, please write a short article for the **Cactus Explorer**. It could be a day you particularly enjoyed, or general observations of your adventure and what you saw.

This busy year has meant that I am a little later than usual publishing the Cactus Explorer this time. I hope you will think it is worth waiting for. Please understand that it may sometimes be delayed. I am not sure exactly when the next issue will appear since I shall be exploring in November, so please be patient. Remember that if you want to be told when each issue is ready to download, please send [me](#) your email address and I will send you a notification.

Graham Charles

The next issue of the **Cactus Explorer** is planned for November 2013. If you have not already told me and would like to be advised when it is available for download, please send [me](#) your E-mail address to be added to the distribution list.

Thank you for your interest and support!

NEWS AND EVENTS

Another free on-line treat

Number 3 of the Cactician, an on-line publication for serious students of succulents, is now available for download from

<http://www.crassulaceae.ch/index.php?TPL=10398>

The subject is the Linnaean cactus legacy by Roy Mottram. Privately published online, in association with the International Crassulaceae Network. Text-figs 1-117 (29 photos, 109 graphics, 1 table) Review of the life and times of Carl Linnaeus (1707-1778), and notes on the 22 species of cacti validated at the start of botanical nomenclature in 1753.

You can also access earlier issues:

Cactician 1:

Typification and application of the name *Aloe perfoliata* L.

Cactician 2:

Notes on *Desmidorchis retrospiciens* Ehrenb. With particular reference to the validity of the name

CPT News

The [first issue](#) of Cultivated Plant Taxonomy News (CPT News), the newsletter of Hortax (The Horticultural Taxonomy Group) has just been published.

To begin with, it is hoped to produce two copies a year of CPT News but its long term success as a venture will rely on the participation of its recipients. Do you have news or research you would like to publicise?

For more information on Hortax, its work and the resources it offers, visit the Hortax [website](#).

cactusinhabitat

The latest publication from Giovanna Anceschi and Alberto Magli is now available for you to [download](#) free. The authors have travelled extensively in habitat and you can enjoy their pictures by visiting <http://www.cactusinhabitat.org>

The website is very professional and the excellent pictures give a real insight into the places they have visited. Their views on nomenclature are certainly controversial but here you have the chance to read the reasons for their approach.

John Pilbeam is looking for good habitat photos, preferably with flowers, of island species of cacti and succulents around Baja California, as well as *Dudleya* (in bloom and not) and blooming *Cochemiea* on the peninsula itself, with publication in mind. email to: jpilbeam@tiscali.co.uk, or snailmail to 51 Chelsfield Lane, Orpington, Kent, BR5 4HG, United Kingdom.

Cathy Darbon

8th May 1948 -1st August 2013

It is with great sadness that we have to report the passing of Cathy Darbon, well known to British enthusiasts as an active member of the British Cactus and Succulent Society.

Cathy was very interested in competitive shows and served on the Shows Committee of the Society. She helped organise many events in the Oxford area and will be remembered for her enthusiastic participation in debates about our hobby.

We extend our condolences to her husband Bill and son Gareth, both of whom shared her interest in our plants.

The BCSS Annual General Meeting

The Hampshire/Dunn Memorial Lecture

12th April 2014

Winstanley High School and Community College, Braunstone, Leicester, LE3 3BD

Plan Ahead!

The BCSS National Show

19-20th August 2016

Wood Green Animal Shelter,
London Road, Godmanchester PE29 2NH

**Now is the time to book your place at
The BCSS International Convention.
11 - 13th July 2014.**

Stamford Court, University of Leicester, UK.

The venue is a new purpose-built state of the art facility adjacent to high quality single room accommodation. It is conveniently situated near to junction 21 of the M1 about 90 miles north of London and is part of the pleasantly landscaped halls of residence of Leicester University.

Speakers are *Woody Minnich* from the USA;

Dr Olwen Grace from RBGK;

Ernst Van Jaarsveld from Kirstenbosch B.G., S.A.;

Guillermo Rivera from Argentina; and

Roger Ferryman UK

In addition, there will be mini-talks given by Pete Arthurs, Dr Gillian Evison, Dr Olwen Grace, Dr Terry Smale & Dr Colin Walker.

The Convention will commence on Friday afternoon and conclude with afternoon tea on Sunday. All the main lectures will be held in the spacious new lecture theatre with comfortable seats, a cinema-sized screen and state of the art technology. The mini-talks will also be held in additional new facilities

There will be large sales areas where both nurserymen and amateurs can offer plants and associated items. Everyone is encouraged to participate and full-time delegates (whether residential or non-residential) can request a free sales table.

There will be a number of special exhibits and displays staged by members on various topics associated with our hobby. It is also planned to display the winners of the latest Photographic Competition organised by the Society.

On Saturday evening the charity auction of plants, books and associated items will be held in the dining room which is immediately opposite the bar. The proceeds of the sale will be used to boost the BCSS Conservation and Research Fund. Delegates are invited to donate plants or other saleable items to this worthy cause.

Full Delegate Package [£260] includes two nights in an en-suite single room, full breakfasts, buffet lunches and evening meals and refreshments during the day. It also includes use of the facilities, access to all lectures, plant sales and special exhibits.

Non-Residential Package [£160] includes buffet lunches and evening meals and refreshments during the day. It also includes use of the facilities, access to all lectures, plant sales and special exhibits.

For on-line booking, visit the [website](#).



The Stone Eaters

The first Special Issue of the on-line journal Xerophilia is called 'The Stone Eaters' and the English text version is online and ready for you to download from

<http://xerophilia.ro>

This 112 page book, written by Dag Panco, is a detailed account of his theories concerning the cultivation of cacti and is profusely illustrated with plants in habitat and cultivation.

Kulturamt Knittelfeld & die Gesellschaft der Österreichischen Kakteenfreunde
präsentieren:



10. Internationale Knittelfelder Kakteenstage - KUAS '13

Fr., 27. bis So., 29. Sept. 2013

Kulturhaus Knittelfeld

Öffnungszeiten: Freitag: ab 17 Uhr;
Samstag: von 9 Uhr bis 21 Uhr
Sonntag : von 9 Uhr bis 12 Uhr

DAS PROGRAMM:

Freitag, 27. Sept. 2013, 19.30 Uhr

Anton Hofer, (Worben - Schweiz)
**Bedrohungssyndrome sukkulenter
Pflanzen am Beispiel Mexikos**

Samstag, 28. Sept. 2013, 10.30 Uhr

Graham Charles, (Stamford – UK)
**The large an small Cerei of
South Amerika**

Samstag, 28. Sept. 2013, 19.30 Uhr

Rolli Stuber, (Basel – Schweiz)
Natur pur zwischen Pazifik und Anden

Sonntag, 29. Sept. 2013, 10.00 Uhr

Volker Schädlich, (Spremberg – Deutschland)
**Unterwegs im Chaco von Brasilien,
Bolivien und Paraguay**

- FOTOAUSSTELLUNG
- PFLANZENBÖRSE



**Gesellschaft Österreichischer
Kakteenfreunde**
ZV Landesgruppe Steiermark



Chihuahuan Desert video for sale



A trailer of the full size-full quality blue-ray disk titled Chihuahuan Desert is available from Youtube (<http://youtu.be/KbM72VI6vUg>). The documentary covers several samples of the desert - in the south, from where it merges into Sierra Madre Oriental, Mexico, all the way to the Tularosa Basin in southern New Mexico. It is a portrait of the land-scapes and ecology with emphasis on the most diverse plant family, the cactus family.

Duration of the entire video is 57 minutes plus additional 38 minutes of slide show. Subtitles of scientific names and audio with English or Czech languages are available both on the DVD and BD versions of this program.

The disks can be ordered at this e-mail: sharloch@gmail.com for \$15 DVD/\$20 BD plus shipping (ca.\$5.00). TV standard NTSC or PAL and the type of disk needs to be specified when ordering.

Please provide your e-mail and shipping address. Payments are made through PayPal. Upon your order, invoice is generated by Paypal service with your order number. Please allow 5 to 10 working days for delivery once Paypal payment is made.

German Society Calendar 2014



The German Cactus Society (DKG) are again publishing their calendar this year and, as usual, it has twelve high quality images of plants in cultivation and in habitat.

For 2014, the pictures include *Arrojadoa marylandae*, *Leuchtenbergia hybrid with red flowers*, *Pachypodium mikea*, *Echinocereus polyacanthus*, *Copiapoa laui*, *Stephanocereus leucostele*, *Harrisia adscendens* and *Oreocereus doelzianus*.

There is a brief description of each plant in German, French, Italian and English.

The 2014 calendar is available for DKG members at 7.00€. See the [DKG website](#) for details.

AJEM les Amis du Jardin Exotique de Monaco

Notre Association réunit autour du Jardin Exotique de Monaco un groupe d'amis amateurs de cactus et autres plantes succulentes, de voyages, de rencontres et de lectures.

Nous nous proposons de partager avec vous, et avec des spécialistes réputés de tous horizons, notre passion et nos expériences sous la forme d'une toute nouvelle revue: "Cactus & Succulentes".

Sous un format attrayant, cette revue abordera à la fois des thèmes relatifs à la découverte de nos plantes favorites dans leur milieu naturel, mais aussi les aspects propres à leur culture, à la vulgarisation des connaissances botaniques, à la gestion des collections ou encore aux actions de conservation.

<http://www.amisjem.com/accueil.htm>



The German Echinocereus Society Photo Competition

We are looking to improve our society activities! This is a call to all cactus connoisseurs and hobby photographers to take part in our photo competition. Please send your best digital images, any species of *Echinocereus* is wanted.

We shall award 3 first prizes ("Chihuahua-book" 409 pages German/English ca. 550 colour pictures) for the 3 pictures considered to be the best and 10 consolation prizes. The winning pictures qualify to be used as the front cover of our magazine "Echinocereenfreund" and/or on our homepage. All the winners will be honoured in the magazine to.

Please email at maximum three of your best shots (>300 dpi, >1.5MB) including title and your complete address to:

haberkorn.martin@gmx.de

As a reference, please use "snapshot"; closing date for entries is April 30th 2014. The participants at our 27th Spring Meeting (17/18 of May 2014 in Hasselt, Belgium) will act as the panel of judges. By taking part you automatically agree to the free of charge use of your pictures as described above by 'AG



Echinocereus'; granting permission for the 'German Echinocereus Society' to publish your pictures.

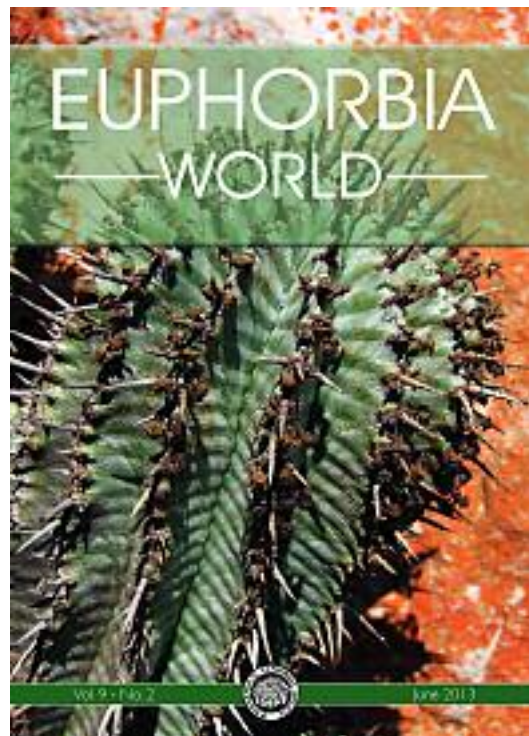
Thank you for your interest,
Martin Haberkorn, Chairman

The International Euphorbia Society

The society produces a full colour A4 size journal three times a year, with fully illustrated articles on all aspects of this fascinating plant family, to appeal to beginners as well as specialists. The journal is refereed by well known botanists including Susan Carter Holmes, who is also our President. The language is English.

The International Euphorbia Society (IES) already has members from 29 countries around the world, and articles in the journal also reflect the international cooperation which goes into the publication. The committee members themselves are spread over four European countries, so the society from top to bottom is truly international.

<http://www.euphorbia-international.org>



IN THE GLASSHOUSE

Kamiel Neirinck, the well-known specialist in the cacti of Brazil tells us about *Arthroocereus spinosissimus* (Buining & Brederoo) Ritter. The species is very rare in habitat with only a few specimens known to exist. It is also rare in cultivation so it is to be hoped that those collectors lucky enough to own a plant will try to propagate it.

Photographs by the author



Arthroocereus spinosissimus is without doubt the largest species of the genus *Arthroocereus*. This cereus was originally described as *Eriocactus spinosissimus* by Buining and Brederoo in 1977. The genus *Arthroocereus* has two subgenera: *Arthroocereus* subgenus *Arthroocereus* and *Arthroocereus* subgenus *Chapadocereus*.

To subgenus *Arthroocereus* belong *A. glaziovii** (syn. *A. campos-portoi* and *A. damazioi*), *A. itabiriticola* (syn. *A. ferrugineuspinus* nom. prov.), *A. odoratus*, *A. rondonianus*, *A. melanurus* ssp. *melanurus*, ssp. *estesvesii*, ssp. *magnus* and ssp. *mello-barretoii*. According to some authors, *A. melanurus* ssp. *magnus* differs too little from *A. melanurus* ssp. *mello-barretoii* to justify a different designation. In some collections *A. rondonianus* is also known as *A. aureispinus*.

So far *Arthroocereus* subgenus *Chapadocereus* includes only one species, *A. spinosissimus*. Whereas all species from subgenus *Arthroocereus* occur all in central Minas Gerais, *A. spinosissimus* grows in the Brazilian state of Mato Grosso, north of Cuiaba (type locality), on steep sandstone slopes, at a height of 1000 meter.

In nature *A. spinosissimus* reaches a height of 1 meter, with a diameter of 4 to 6cm. The plant is green and heavily spined. The white flowers are funnel-shaped and open during the night. They are 6cm long and at least 5.5cm wide when fully opened. They give out a light sharp scent. Field numbers are HU328, *Estesves* 31 and *Braun* 289. *A. spinosissimus* loves a warm place and should not be kept below 10°C in winter. To encourage



flowering, the plant can be grafted. I bought the oldest plant in my collection more than 30 years ago from Werner Uebelmann in Sarmenstorf, Switzerland. At that time it was labelled *Zehntnerella matoana* nom. prov. It took 20 years before it flowered for the first time. The white nocturnal flower is a pleasure for the eye.

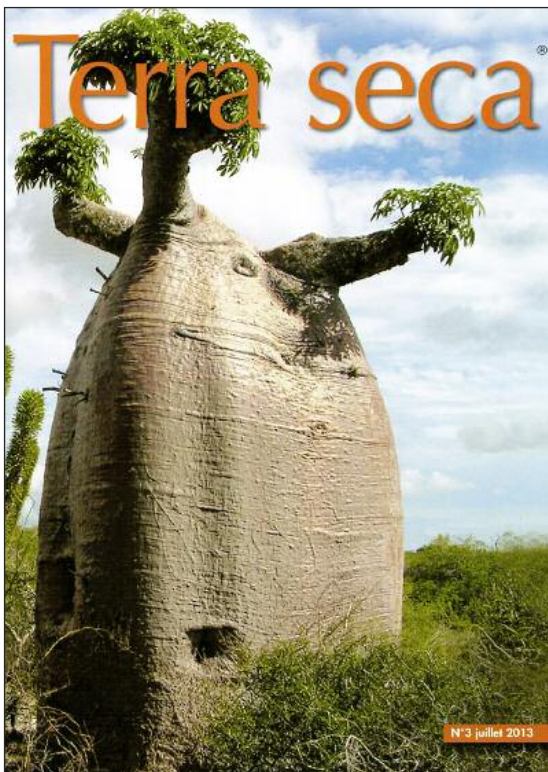
Alwin Berger described the genus *Arthroocereus* in 1929. He chose *Cereus microsphaericus*, already published in 1890, as the type species. At present this *Cereus* belongs to the genus *Schlumbergera*. The current type species of *Arthroocereus* is *A. glaziovii*.

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[K.J. Neirinck](#), Loppem, Belgium
English translation by R. Fonteyne

JOURNAL ROUNDUP



Terra Seca No.3, July 2013

The latest issue of this French language journal has an article about the 'Land of the Baobabs' which is illustrated with spectacular pictures of these amazing plants. These bottle trees are not suitable as glasshouse subjects but are dramatic plants in their natural habitat.

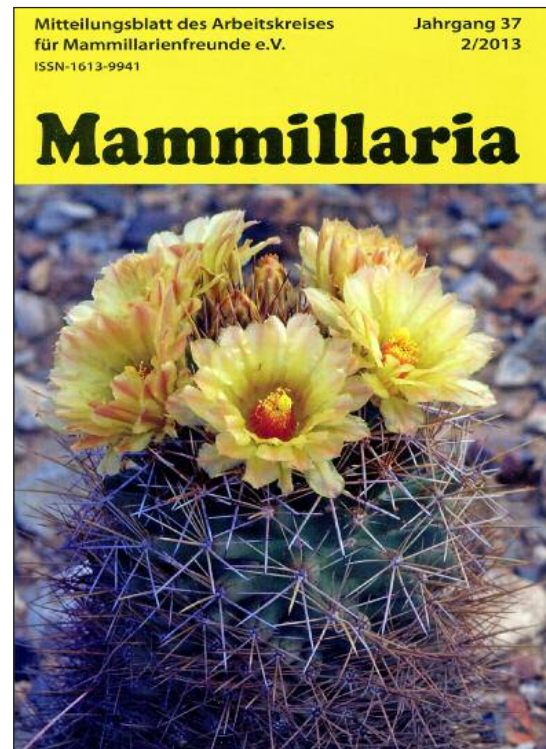
Anton Hofer concludes his series of articles about the ever-popular genus *Ariocarpus*. This time he discusses *A. scaphirostris* and *A. trigonus* with wonderful habitat pictures. He also tells us about hybrids of *Ariocarpus*, both natural and artificially created. The article continues with a list of problematic or excluded names of the genus *Ariocarpus*; notes on their conservation status and cultivation; then finally a list of synonyms and an extensive bibliography.

The issue also has articles about *Yucca filifera* and 'Flowering *Ferocactus* in culture'.

Information about this excellent publication can be found at

<http://www.terraseca.org/revue/revue.html>

GC



Mammillaria Vol.37, No.2 2013

Here we have another well-filled, quality production of this German language treat for *Mammillaria* enthusiasts. Some of the articles also have English text, very welcome!

The first article (also in English) describes visits to various *Mammillaria haageana* locations, an entertaining account of this beautiful species and the plants that grow with it.

We are then taken to see *Mammillaria bocasana* in its natural habitat (also in English). This plant, familiar from our early days in the hobby when the 'powder puff' cactus was in all our collections, is now rarely cultivated perhaps because it is considered by many to be too 'easy' or too 'common'.

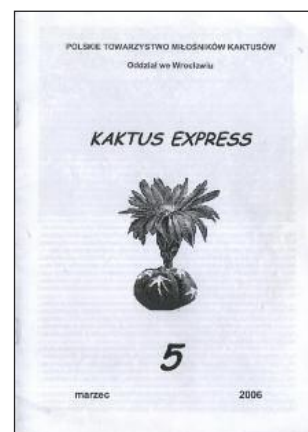
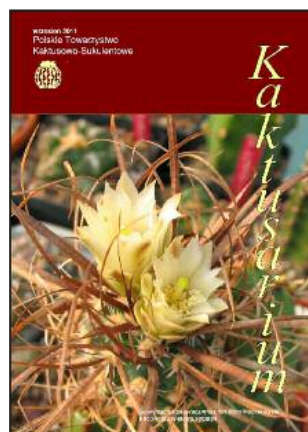
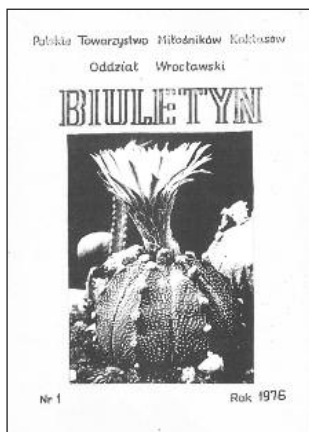
Further articles concern *Mammillaria* history; *Bradleya* articles; *M. sheinvoariana*; *Mammillarias* of Oaxaca (by our own Rick Gillman) and *Coryphantha* section *Robustispina*. Mysteriously, on page 106, there are B&W images and description of a wierd-looking plant said to have been found in Oaxaca

GC

http://www.mammillaria.eu/en_index.html

Polish Cactus Journals

Cactus journals published in Poland are little known outside the country so we are grateful to Tomasz Romulski for giving us a brief history of them.



People. It all comes down to people. People make journals and people buy and read them. When other things become more important, the more publishing a cactus journal turns into a real struggle, which in the past was the case in Poland and other countries under a communist regime. Apart from restrictions of various kinds and national dramatic events, people just usually had in mind more important things in everyday life to care for than growing cacti and reading about them.

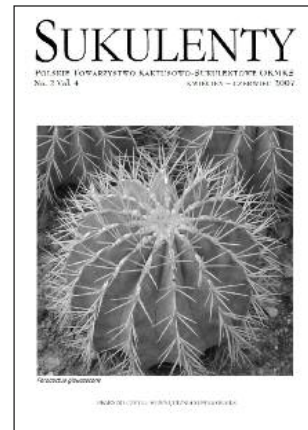
The period of transition to social and economic normality again was not an easy time for cactus fanciers - not only for economical reasons but mainly just for the small number of cactus enthusiasts, resulting from the fortunately bygone period. These were the reasons why publishing a cactus journal was a real feat. These issues were also responsible for relatively infrequent issuing and delays in publication - but interesting contents made up for that! In order not to forget about the cactophiles' history, below are briefly mentioned cactus journals published in Poland over the years.

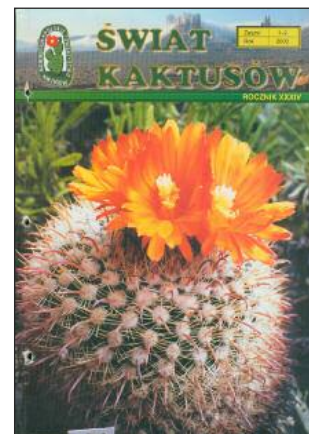
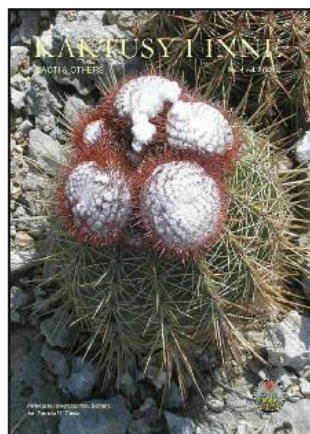
The first Polish cactus journal was *Świat Kaktusów* published in the years 1935-1939, by the Towarzystwo Przyjaciół Kaktusów formed in 1932. Not much is known about this publication. It was issued once a year, as far as I know, and the World War II put an end to it. Unfortunately, I know almost nothing about its contents, only except that it was typical for

'a society journal'.

In 1966 Polskie Towarzystwo Miłośników Kaktusów was formed, which started publishing its bulletin, resuming the same title, *Świat Kaktusów*. It was published once or twice a year. There were many troubles with publishing the journal, for example, for some time in 70s the journal had to change names continuously, in order to neutralize the lack of permission for publishing it as a periodical. The journal contained much, various, interesting and comprehensive material, with international authors, and for most of the time it was the only cactus journal in Poland, presenting to cactophiles news from the world of cacti and succulents. The journal is published till this day and is the longest running cactus publication in Poland.

A third one was a bulletin of a cactus club in Wrocław called *Biuletyn*, published in the years 1970-1977, twice a year, resumed for a short period in 1989-1990. Although of poor





layout - there were no photos, this very valuable publication presented very good and really interesting material, with emphasis on growing cacti.

In 2004 the journal *Kaktusy i Inne* appeared. The journal was published 4 times a year, by the Polskie Towarzystwo Kaktusowo-Sukulentowe. Even with that in recent times there have been delays in publication, it is the most comprehensive and popular cactus journal that has been published in Poland, with much very interesting material on really a very wide spectrum of cactus topics, and with international authors. An interesting feature is that some articles are also in English. Three special issues were published.

In 2005 cactus club in Wrocław started publishing its another bulletin titled *Kaktus Express*, black and white and issued 4 times a year. But this was not all, as soon there

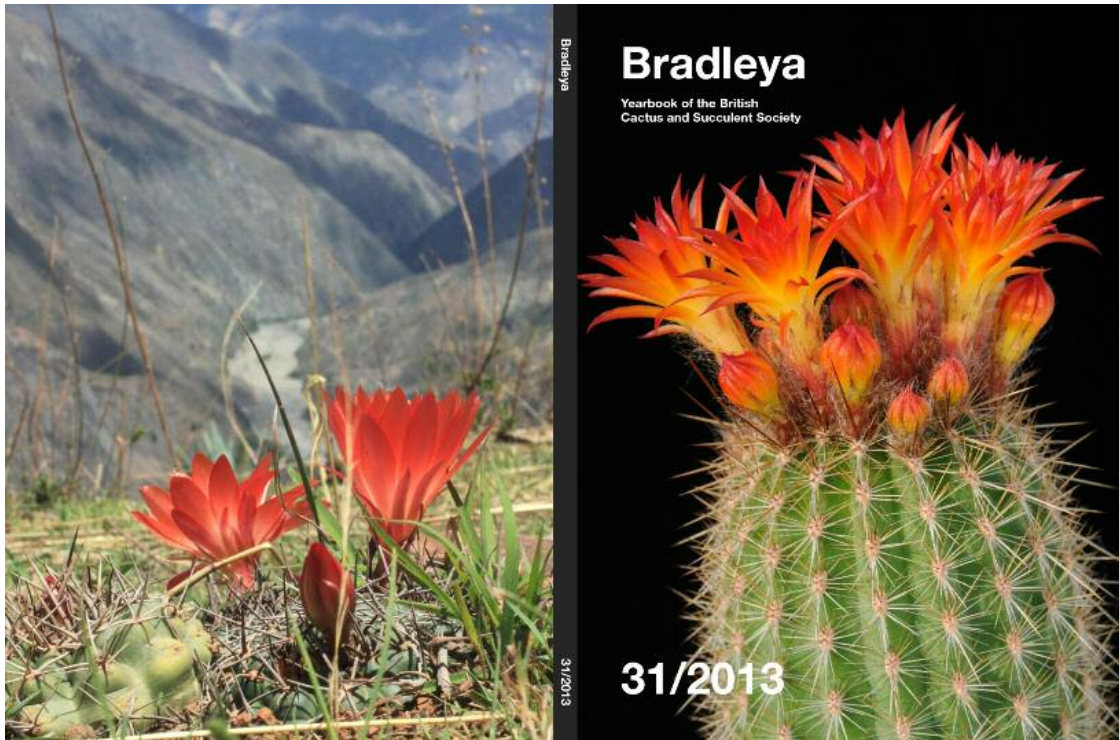
appeared another publication under the same title *Kaktus Express* (!) - published annually and presenting in colour material from the quarterly *Kaktus Express*. The contents are interesting, very good and well balanced.

Also in 2005 a quarterly *Sukulenty* began to be published. This small black and white publication, partly of a newsletter type, was meant as a supplement to *Kaktusy i Inne*. It had really a very confused 'issuing history' and ended in 2008.

There were also two ephemeral publications by cactus clubs from: Łódź (*Między cierniami kaktusów*, 2 issues in 1988) and Bydgoszcz (*Cudowny Świat Kaktusów i Innych Sukulentów*, 3 issues in 2000). Also in the internet era there were three electronic publications of newsletter type, of which *Kaktusarium* was the nicest.

[Tomasz Romulski](#)

Bradleya 31



The 2013 edition of Bradleya is now on sale.
20 well-illustrated articles to enjoy including 8 about cacti.

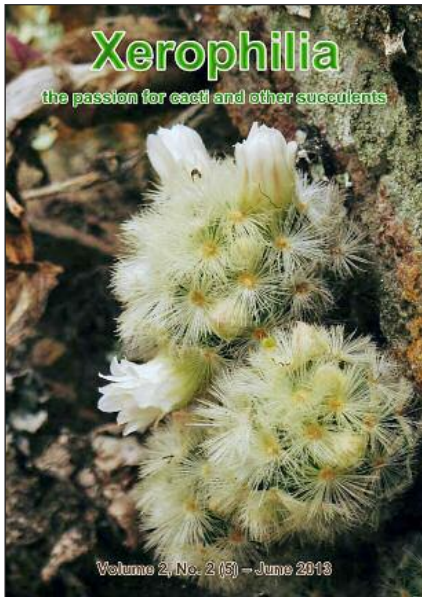
- *Matucana rebutiiflora*, a new cactus species.
- *Ferocactus wislizeni* subsp. *ajoensis*, A new subspecies.
- The genus *Aloe* in Djibouti.
- A new miniature species of *Borzicactus*.
- A putative *Oreocereus* x *Echinopsis* hybrid from southern Bolivia.
- Vivipary in *Ferocactus herrerae*.
- Notes on the nomenclature of species of *Agave*.
- A new morphological study of the genus *Trichodiadema* and a new subgenus *Gemicausa*.
- The family Crassulaceae in continental Portugal.
- *Lobivia minutiflora*: a cryptic species finally recognised.
- The *Gymnocalycium mostii* aggregate.
- Corrections for the validity of two Madagascan taxa in the genus *Aloe*.
- *Kniersia* gen. nov., an emigrant from *Drosanthemum*.
- A note on four historical names recorded in *Aloe*.
- *Ectotropis* now with a second species.
- Names associated with *Aloe speciosa*.
- Examples of a cephalium and a pseudocephalium.
- Are nurse plants always necessary for succulent plants?
- The correct name of *Aloe plicatilis*.
- *Orbea* – an overview.

Available from the BCSS on-line shop <http://www.bcsc.org.uk/brad.php> where you can pay by PayPal and to see all back issues available.

ON-LINE JOURNALS

On-line Journals for you to download

Publishing journals on the web is becoming more popular and the number is increasing. Here are the links for you to download and enjoy.



Xerophilia

The fifth issue of Xerophilia appeared in June 2013. It is published in Romania but much of the content is in English as well as Romanian. It is intended to focus on cultivation with articles about growing and propagating our plants.

The contents include articles about the golden *Mammillarias* of Tamaulipas, Mexico; *Digitostigma*; What is new in *Aloe* names? by Bruce Bayer; The search for *Mammillaria tezontle*; Southern Matto Grosso by Alexander Arzberger; *Echinocereus reichenbachii* - the northern group; Profile of Terry Smale; *Ariocarpus kotschoubeyanus* ssp. *elephantidens*; Xero-Arts and crested cacti in habitat.

The next issue is due in September 2013. The issues may be downloaded as pdf's from:

<http://xerophilia.ro>

Contact: xerophilia@xerophilia.ro

ECHINOCEREUS Online-Journal

The German language free on-line journal for *Echinocereus* lovers.

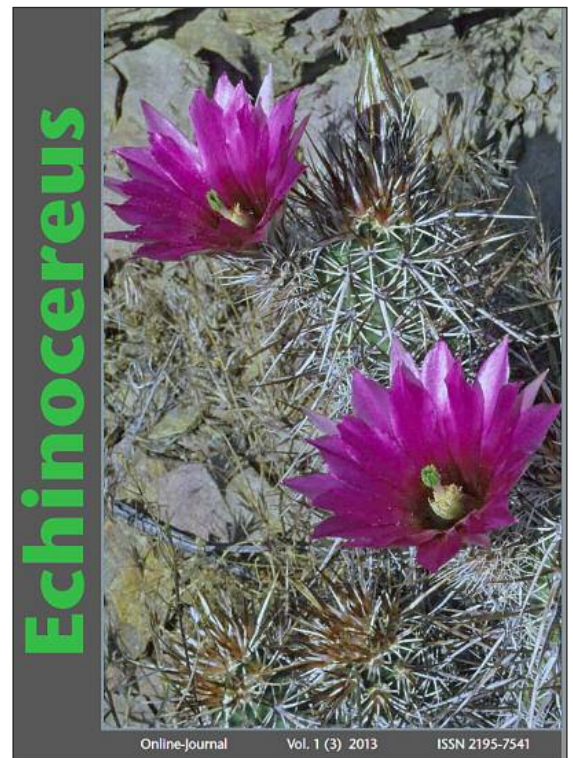
The goals of the journal are to study the genus *Echinocereus*, to publish articles about the continuous research on these plants (classification, morphology, evolution) as well as to protect the genus *Echinocereus* by reproduction from seeds and distribution of the seedlings.

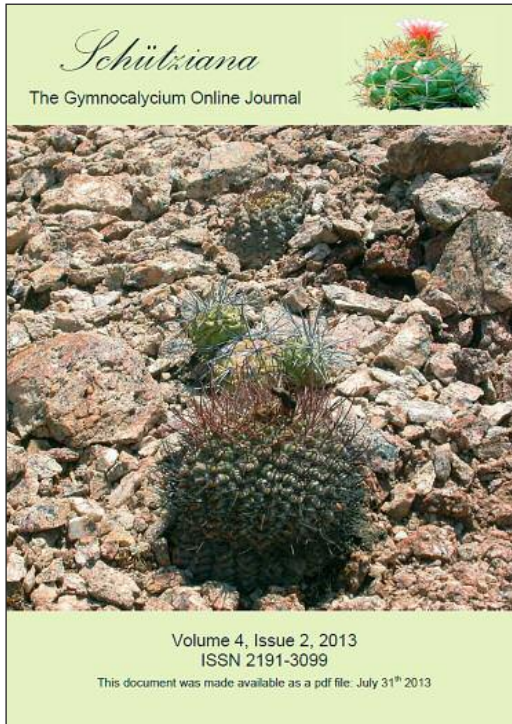
In this third issue, there are articles about various aspects of cultivation; *E. engelmannii* var. *purpureus*; and *E. chaletii*. There are many large pictures of good quality making this a very attractive publication.

The downloaded pdf file allows printing but not copying of text so, unfortunately, translation programs cannot easily be used. The page numbering remains unconventional with odd numbers on the left of spreads.

See website: www.echinocereus.eu

GC





Schütziana

The latest issue of Schütziana is Volume 4, Issue 2, the specialist on-line journal for *Gymnocalycium* enthusiasts. It deals exclusively with *G. ferrarii*, a detailed article by Massimo Merregalli which analyses the description and distribution of this species. It has been confused with other similar-looking gymnos which grow sympatrically.

The text of this valuable publication is in English and the pictures and distribution maps give a clear insight into the plants found in habitat and culture.

You can download free any of the back issues from:

www.schuetziana.org

GC

Avonia-News

Free German language on-line newsletter of "Avonia", the quarterly journal of the German Society for other Succulents.

See website: www.fgas-sukkulenten.de

Annual seed list for members and much more.

Special interest groups for Aloe (incl. Haworthia etc.), Ascleps, Euphorbia, Mesembs and Yucca/winter-hardy Succulents.

For membership and further information contact:

Dr. Jörg Ettelt: Morgenstr. 72, D-59423 Unna,
praesident@fgas.sukkulenten.de or

Wilfried Burwitz: Postfach 100206, D-03002 Cottbus,
geschaefsstelle@fgas.sukkulenten.de



Succulentopi@

The sixth issue of this free online journal was published in July. This is the first online journal published in French and it is called **Succulentopi@**

There is an impressive variety of articles as usual. The quality is excellent as you would expect from Yann Cochard and his very active team. It is available as a free download from:

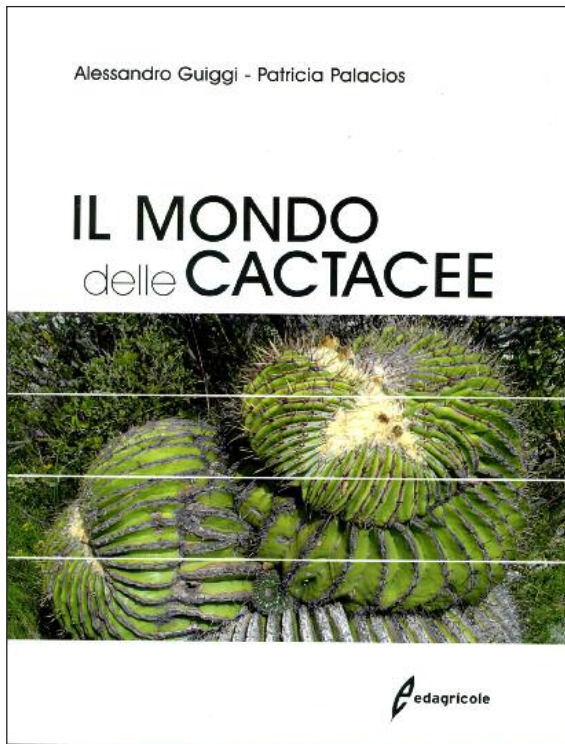
<http://www.cactuspro.com/succulentopia>

Succulentopi@ is a magazine in PDF format published by 'Le Cactus Francophone' and its team. Their goal is to publish it every three months, and to include articles, information, photos, etc. on the theme of cacti and other succulents.

THE LOVE OF BOOKS

News of Recent Publications. A Reminder of Old Favourites.

Many cactophiles enjoy reading about their plants, particularly in the winter when our collections are less demanding. This feature aims to provide you with inspiration.



Il Mondo delle Cactacee

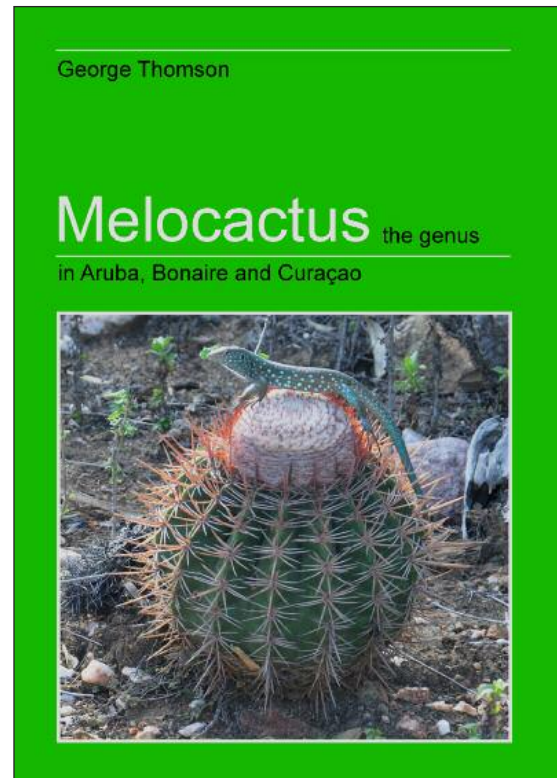
It is not often that I review a book about cacti in Italian but here is a recently published volume that should prove to be popular.

This is a pleasingly designed and well illustrated book with hundreds of high quality pictures including many of species rarely illustrated. The pictures, many of which are whole page size, are taken in habitat and in cultivation, particularly in the Mediterranean region.

One of the authors, Alessandro Guiggi, has recently created many new generic names for well known plants which have not been generally accepted and will be unfamiliar to readers.

Comprising over 400 pages, 260 x 195mm, it is good value at about 35€ including shipping from [Amazon](#).

GC



A New Book from Dr. George Thomson

MELOCACTUS

the genus in Aruba, Bonaire and Curaçao

This book is more than just a catalogue of the *Melocactus* species found in the Netherlands Antilles (the ABC Islands). These tropical islands are a holiday paradise, situated just north of the Venezuelan coast. The book outlines history, topography, geology and climate as well as information on the flora, including all the cacti, and fauna.

There are details to help identification of the *Melocactus* species on the islands. George was instrumental in sorting out how many species there actually are on the islands. Several plants and the type specimens of each species are illustrated to show variation. This is a book for anyone interested in *Melocactus*, and an excellent guide for anyone intending to visit these islands



Photo: Graham Charles

Melocactus macracanthos in the evening sunlight on the holiday paradise island of Aruba.

or a souvenir for those who have been.

The quality of the pictures and production is good, a great help in identification if you visit the islands, particularly Aruba where there are three species that can also produce confusing hybrids!

My only criticism of the book is the lack of a bibliography. In case you are inspired to read George's valuable scientific articles in *Bradleya*, here are the references:

Thomson, G. (2002) A re-evaluation of the taxonomic status of the genus *Melocactus* in Aruba, Netherlands Antilles. *Bradleya* 20: 29-44

Thomson, G. (2005) A revision of the genus *Melocactus* in Curaçao and Bonaire, Netherlands Antilles, with an illustration of the neotype of *M. macracanthos*. *Bradleya* 23: 79-96.

A5, 72 pages, softback, colour throughout.
 £15 + £2.50 p. & p. ISBN 978 09540891 8 4
 Available directly from the author:
 email georgethompsonbooks@gmail.com

Books expected in 2013

(Contributed by Chuck Everson)

Bradleya 31 – Publication: 31st August 2013

Haseltonia 19 – CSSA publication

Duke Benadom. Superb Succulents. November

Gideon Smith. Succulent Paradise. December

Ernst van Jaarsveld. *Welwitschia mirabilis*. December

Jason Eslamiah. The Cultivation of *Bursera*. December

Hoped for in 2014

Harald Jainta. Wild Lithops

John Pilbeam. Cacti and Succulents of Baja California

Rob Romero, Vonn Watkins, Greg Starr, & Peter Breslin. A Field Guide to the Cacti and Succulents of Arizona (Tucson C&S Society)

Woody Minnich. The Great American South West, featuring Cacti and Succulents

THE ELUSIVE ECHEVERIA JUAREZENSIS

John Pilbeam recalls his experiences trying to find Walther's plant at its original finding place. Like many who have tried to do this kind of detective work in habitat, he discovered that you do not always achieved the desired result.



Figure 1. Illustration of *Echeveria juarezensis* from the first description by Eric Walther in the Cactus and Succulent Journal of the CSSA XXXI (2):52 - 53 (1959).

I have long been disturbed by the complete failure of successive visits to the Sierra Juarez near the city of Oaxaca in the state of that name in the deep south of Mexico, to discover the *Echeveria* species synonymously named *E. juarezensis*.

I with companion Brits and resident ex-pat Canadians have spent many happy days exploring this most *Echeveria*-blessed state, and finally in frustration we decided to follow in Tom MacDougall's footsteps in the mid 20th century when he apparently discovered this species. It was described by Eric Walther after receiving plants from this explorer of the highways of Oaxaca, "said to have been from Ixtepeji, Sierra Juarez, Oaxaca, Mexico (CAS, no. 409864; isotypes, UC, US)."

On turning up MacDougall's notes produced by the Cactus and Succulent Society of America, the only reference to this species under its field number B.172 gave no clue as to its place of discovery, merely listing it among others sent to Walther in 1956.

Plants referred to as *Echeveria* sp. aff. *juarezensis* were distributed by the ISI in 1989 (ISI 89-50) with the note 'A rather large, still unidentified plant with wavy-edged green leaves and orange flowers. Although most similar to *E. juarezensis*, it was found a considerable distance from the type locality of that species. HBG 53344, rooted cuts of plants collected 22 Jan. 1985, by Folsom (#11211), Brown, Dice, and Wier at 470m, along Highway 125m 3.7km S of La Cumbre, Oaxaca,

Photo: John Pilbeam



Figure 2. *Echeveria* 'Cumbre', near La Cumbre, Sierra Juarez, Oaxaca, Mexico.

Mexico'.

The description clearly fits plants discovered on our first expeditions into this Sierra, which bear no resemblance to that pictured by Walther in his classic book on the genus published posthumously in 1972, as indicated in Figs. 78 and 79, the photo from the original description in the *Cactus & Succulent Journal of America* being reproduced therein and here also. And in Walther's key on page 150 of his book, he states in respect of *E. juarezensis* "Leaf-margins not undulate" - the clincher for me. I therefore named this plant in my book on this genus (2006) with the name of the place nearest to its occurrence in Sierra Juarez, i.e. *Echeveria* 'Cumbre', the word in Spanish meaning the highest place, and a highly beautiful plant it is.

The plant pictured by Walther as *E. juarezensis* is clearly the same as that taken by the contemporary photographer and acquaintance of Walther, Jack Napton, which I was fortunate enough to be able to borrow from his collection of slides in the care of Brian

Photo: Bill Weightman



Figure 3. *Echeveria* 'Cumbre' Sierra Juarez, Oaxaca, Mexico - note the curly leaf margins.

Kemble, and include in my book.

And so it came to pass, as they say in books of more significance than any I ever penned, that in 2010 we found ourselves at Ixtlan de Juarez (the specified site of collection as recorded on the herbarium sheet of this species) high in the Sierra Juarez, having scanned the vegetation on its approach to no avail, where a local man told us of the route which Tom MacDougall would have followed to get from there to his next recorded port of call, during which it seemed likely that he found the plant numbered B-172, the main roads now used having been non-existent in Tom's time of journeying there.

In spite of five pairs of good spotters' eyes being focused throughout this route as we drove very slowly along, there was no sign of any *Echeveria*, or indeed any likely looking spot for it to occur, and as we descended the likelihood of finding it diminished. So, with no precise indication in MacDougall's notes of its habitat I am forced to conclude that it is not (now) where it appears he found it, or maybe



Photo: Bill Weightman

Figure 4. *Echeveria* 'Cumbre' flowers.



Photo: John Pilbeam

Figure 6. *Echeveria* 'Cumbre' in habitat - note again the curly leaf margins.



Photo: Derek Bowdery

Figure 7. *Echeveria* 'Cumbre' seedlings in habitat

named in my book in the interim as *Echeveria* 'Cumbre', since it is high in the mountains of the Sierra Juarez and high in its desirability as a beautiful plant, worthy of recognition. *E. juarezensis* it is not.

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[John Pilbeam](#)



Photo: John Pilbeam

Figure 5. *Echeveria* 'Cumbre' flowers, Sierra Juarez, Oaxaca, Mexico.

Walther misinterpreted his notes when he received the plant from him.

Are there any plants bearing the name *E. juarezensis* lurking in collections from long ago in the middle of the last century, or photos other than Jack Napton's I wonder. And meanwhile it is time that someone gave a more permanent name to the delightful plant collected by Jim Fulsom and co. nearly a quarter of a century ago, and pictured and

MEET ECHINOCACTUS PARRYI (ENGELMANN)

Aldo Delladdio recounts his eventful search for *Echinocactus parryi*, an interesting plant with a reputation for being difficult to cultivate.

Photos by the author except where stated.



Figure 1. Rancho Los Muertos.

Some years ago I added this species to the seed order I placed with a famous North-American nursery, mainly moved by curiosity really, since I couldn't find any literature about this plant.

Only two seeds managed to germinate, but I was very pleased by their very strong red spines, maybe even stronger than *Echinocactus polycephalus*.

When an article on *Echinocactus parryi* appeared in *Cactus & Co* of 2004, I decided I would visit it in habitat some day, but unfortunately my first attempt in January 2006 was aborted due to the fact that, despite México having a land area of 2.1 million km² in size (7 times larger than Italy), we incredibly met some friends from home, living almost next door, at General Cepeda, Coahuila, and

they informed us that they had come from Chihuahua and had experienced some sand storms.

At that time we were still a bit cautious about México, so we that was enough to make



Figure 2. Hill above Rancho Los Muertos with *Echinocactus parryi*.



Figure 3. *Echinocactus parryi*.

Figure 4. *Echinocactus parryi*.

us change our route.

However, in March 2010 we were at it again. The group had changed, I was the only survivor of the 2006 failure, but this time I was armed with an enormous determination.

After spending a couple of weeks together in Coahuila and Durango, after a quick lunch at a roadside restaurant, we left Daina at Bermejillo, Durango, where she took a taxi to Torreón and then a bus to Austin, Texas, all alone, since she definitely wanted to see the South by Southwest Music and Film Festival in Austin.

I suggested to my single remaining companion to drive as far north along the Mex 45D as we could, since I wanted to have as much time as possible the following day to look for *Echinocactus parryi*.

The road was quite good, so we managed to cover almost 700km, arriving at Villa Ahumada, in northern Chihuahua, at dusk. We had quick dinner and then went straight to bed.

The following day we needed no alarm clock, so much was the excitement. Well, mine at least.



Figure 5. View of Rancho Los Muertos from above.



Figure 6. *Coryphantha macromeris* ssp. *macromeris*

We drove still further north and then, at a point where a good soul indicated to me, we turned west, crossed the railway, and continued west on an unpaved road.

Not even 200 metres on this unpaved road, after a bend, an armored vehicle with many policemen with masks and machine guns, was blocking the road.

Their officer politely asked whether they could search the car, and then the usual questions: where are you coming from and where are you going?

While they were searching the car, I told him that we were looking for a cactus. Luckily I had brought with me the photocopies of the Cactus & Co article.

This was enough for them to understand we were just a couple of turistas locos and to stop searching the car. They even confirmed that the plant was living nearby. To my precise question: "Is this place dangerous?", the officer's stern reply was: "Yes". However, that wasn't enough to deter us!

The information I had was that we should keep driving west until we found some hills, near a ranch, aptly named *Rancho Los Muertos*

(Ranch of the dead), and so that was what we did, occasionally changing track when the road was apparently heading north.

After about 30km, we saw the hills, and the three huts of *Rancho Los Muertos* underneath.

Finding the plants proved very easy, firstly over the rocky hill, but also all around it. Pity that they weren't in flower. However, they were in company of some other cactus species, like *Echinocereus dasyacanthus* and *Coryphantha macromeris* ssp. *macromeris*, plus some opuntias, that we absolutely ignored.

The Rancho was abandoned, but a small



Figure 7. *Echinocactus parryi*.



Figure 8. *Echinocactus parryi*, detail of spines.

dam, a small artificial lake and quite a few cows behind it proved that there was some activity going on at this place.

Apparently, these cows didn't have any negative impact on this population of *Echinocactus parryi*, since we found several very young plants, although they weren't exactly seedlings.

After taking a lot of pictures, including a few of ourselves (with a tripod). We started our return to the main road. We didn't quite manage to follow the very same track on which we got in, and on one occasion, we



Figure 9. *Echinocereus dasyacanthus*.

ended up at a dead end, a fence was blocking the track, and we had to backtrack. This didn't worry us, since we knew that all we had to do was to drive east, so after a few km we were back on the right track.

However, exactly at the point where the police had stopped us in the morning, a surprise was waiting for us: several pick up trucks were blocking the road and the nearby hills were full of policemen and TV crews, . We had to wait for quite a while before the people that were blocking the road obliged and moved their vehicles.



Figure 10. *Echinocactus parryi* and its surroundings.



Figure 11. Mexican police say that this is a dangerous place!

Once back in Italy, I checked the local newspapers on the Internet, and all the fuss was due to the fact that the Police found 3 skeletons (not corpses), after being tipped off.

Since the search for *Echinocactus parryi* took less than expected after all, we had plenty of time for another adventure: crossing Ciudad Juarez, which is depicted as México’s most dangerous city. Perhaps it’s a bit chaotic, but not more than any other large city.

Crossing the border presented some difficulties too, since we missed the exit to the International Bridge, but fortunately a kind policeman gave us some directions.

The border itself was also rather chaotic, but not more than the Motorway Barrier of Milano East on Monday mornings. On the US side, I couldn’t help but feel some embarrassment; the Customs were divided in two, one side for US Citizens and other passports, and the other side for Mexican passports. As I’m sure you’ll have guessed, the Mexican side was incredibly crowded, while we were the only two people on the other side.

In no time, we finished the formalities, and

then drove east of El Paso, stopping at Van Hoorn for sleeping. The following day we would start our week-long visit of the Big Bend National Park, and Daina was due to rejoin us. But that is another story.

Cultivation notes: Believe it or not, the two seedlings that prompted me to visit *Echinocereus parryi* in habitat are still alive, although I won’t reveal their age. It is too embarrassing!

The fact is that I grow my plants very, very hard, out of necessity, rather than for a real choice, but apparently this keeps them alive.



Figure 12. *Echinocactus parryi*.

Photo: Annalisa Losa



Figure 13. Lots of excitement in the bushes..what's going on?



Figure 14. *Echinocactus parryi* seedling in cultivation.

Photo: Graham Charles



Figure 15. *Echinocactus parryi* flowering in cultivation.

By the way, I don't have just those two, but many others, from different sources, and all from seed. I don't recall any casualties.

Maybe these plants, that have to sustain very harsh conditions in their habitat, with very high and very low temperatures, just don't like to be pampered.

I keep them outside, sun-facing, all year long, but during winter they are protected from humidity by a transparent plastic sheet. I live in north-east Italy, with the minimum temperatures going some 4-8°C below zero, and 30-35°C maximum summer temperatures.

[Aldo Delladdio](#)

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A DAY OUT AT CHORRILLOS

Graham Charles shares his experiences walking up a mountain alongside the famous cactus habitat of the Quebrada del Toro in Salta Province, Argentina. When one sets out on a climb like this, you hope you will find interesting plants.

Photos by the author.



Figure 1. Looking down into the Quebrada del Toro above Chorrillos

The Quebrada del Toro is a wonderful valley to see cacti. It is easily reached from Salta in northern Argentina, a busy city with plenty of places to stay and eat. I visited the valley during my first trip to South America in 1992. At that time, the graded gravel road was reasonable but subject to damage from rain.

The famous 'Train to the Clouds', with its spectacular bridges and tunnels, can be seen in the valley. Once providing a passenger service to Antofagasta in Chile, it is now mainly used for mineral trains going to the mining town of San Antonio de los Cobres. Recently, however, a sight-seeing train does a day trip from Salta as far as the La Polvorilla Viaduct at 4220m

altitude. This is an impressive structure built in 1932, 224m long and 63m above the valley below. The sign in Chorrillos station [Fig. 7] reminds us of what an amazing train journey to Chile this must once have been. One of the original steam engines can be seen at Campo Quijano [Fig.8].

The pleasant town of Campo Quijano is situated at the entrance to the valley. This part of Argentina is a joy to visit with an agreeable climate, spectacular landscapes and a varied cactus flora. The vegetation noticeably changes with altitude and the Quebrada del Toro is an easy way to see how.

The bottom of the valley near Campo



Figure 2. *Echinopsis (Trichocereus) pasacana*



Figure 3. *Rebutia senilis* with its typical white spines



Figure 4. *Lobivia chorillosensis*



Figure 5. *Lobivia chorillosensis*



Figure 6. The densely- spined form of *Gymnocalycium spegazzinii* that is typical of this locality

Quijano is at about 1500m and here, in early December, the first rains of the summer have already made the environment green and filled out the cacti which will be flowering. As you climb up the valley, heading almost north, the

rain shadow, created by the mountains to the east, makes the valley drier. By the time you reach the pass before the town of San Antonio de los Cobres (3775m), the plants still have a few weeks to wait for the first rains. To learn about this place after rain see Aldo Delladdio's article in the **Cactus Explorer** 2 (2011).

I will return to the joys of the valley on another occasion but the subject of this article is the day in December 2000 when Martin Lowry and I walked up the mountain behind the town of Chorrillos. The town lies at 2100m and the top of the mountain at 2800m. I called this Habitat GC432 so you may have plants from seed I collected on this trip.

We stayed the night before in Campo Quijani and drove up the valley to the small town of Chorrillos [Fig.1]. Mats Winberg had told us about this walk but warned us about the steepness of the climb and the slopes of loose rock, especially near the base of the



Figure 7. The sign in the railway station at Chorrillos showing that the 'Train to the Clouds' would originally have gone across the Andes to Antofagasta on the Chilean coast, some 814km away.

mountain. He was right and it took us about three hours to make the ascent along a ridge which we chose as the least steep approach to the summit. The slope lessened near the top and the ground became more stable, with low shrubs and grass helping to bind the gravel and stones together.

We saw plenty of cacti during the climb, but only where there were rock outcrops or stable ground. It was still early enough in the day for some flowers of *Echinopsis (Trichocereus) pasacana* to still be open [Fig.1]. There were also some plants of *Rebutia senilis* [Fig.3] and it was treat to see this plant in habitat, so familiar from my early years of cactus growing. The long white spines and bright red flowers make this one of the best of all *Rebutia* species. I hope this genus will become more popular again soon, it certainly deserves it.

There is a second species of *Rebutia* on the mountain, also a good plant to grow in our collections. It is called *R. aureiflora*, and has pretty yellow flowers, although we did not see them on the day since the plants had finished flowering. We were, however, rewarded with some seeds which grew into fine plants which are easy to grow and flower [Fig.13].

Martin was particularly please to see *Lobivia chorrillosensis*, now usually thought to be a form of *L. haematantha*. It was quite common higher up on the mountain and exhibited a range of flower colour from red through to yellow. The seedlings proved to be similarly variable [Figs. 11 & 12].

We saw many mats of a low-growing *Opuntia* called *Tunilla corrugata*. The plants



Figure 8. One of the original steam engines from the 'Train to the Clouds' preserved at Campo Quijano. This illustration is especially for Chris who asked to see more steam engines in the Cactus Explorer!



Figure 9. *Tunilla corrugata*. Plants had various flower colours from cream to red.

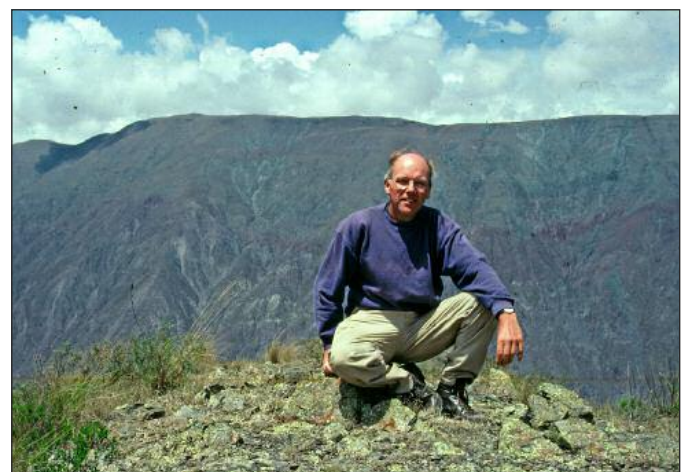


Figure 10. I am on top of the world!



Figure 11. *Lobivia chorrillosensis* in culture



Figure 12. *Lobivia chorrillosensis* in culture



Figure 13. *Rebutia aureiflora* in culture

showed a great diversity in flower colour, from deep pink [482.3 in the New Cactus Lexicon atlas] to a pale cream [Fig.9]. These low-growing *Opuntia* relatives soon grow into pot fulls of small joints and will flower in culture if given good light and not too much water.

Gymnocalycium spegazzinii makes really spectacular plants at this high altitude in the Quebrada del Toro [Fig.6]. The thick and dense interlacing spines give the plants a dramatic appearance. Cultivated seedlings from here are also easily recognised by their long spines but cannot rival those in habitat. Isolated from the main distribution of the species, where plants look rather different, these plants are probably the type form.

While I was resting on the top of the mountain in sunshine [Fig.10], I could hear distant thunder. At this time of year, the rain storms are becoming more frequent in the afternoons and they can produce intense downpours of rain. Little did I realise what

was to happen later that day.

Descending the mountain took much less time than the ascent so we soon found ourselves in a café in Chorrillos, waiting for Chris and Roger to return from their trip further up the valley. When we were reunited, we started back down the valley to return to our accommodation in Campo Quijano.

We encountered a queue of vehicles stopped in the road and on walking to the front we saw a deep torrent of water crossing the road which had come from a side valley where there had been a rain storm. It took sometime for the water to subside but eventually we were able to pass. However, a short distance further, there was another queue and this time the water had cut a 5 metre deep trench across the road so that was as far as we could go.

So, parking the car in a safe place, we walked across the railway bridge, actually on the tracks themselves, whilst between the sleepers we could just see the raging torrent far below us in the darkness. A truck waiting on the other side gave us a lift back to town after an eventful day. Never was cold beer more welcome! The following morning, Roger and Chris took a taxi to where we had left the car and the road had already been repaired.

When I see the seedlings in my glasshouse, the memories of the day return and I look forward to more adventures in the habitats of cacti.

GC

***UEBELMANNIA BUININGII* – THE MOST INDIVIDUAL,
THE MOST DIFFICULT, THE SMALLEST,
THE SLOWEST GROWING, THE EARLIEST TO FLOWER.**

Rudy Krajca tells us all about *Uebelmannia buiningii* in his own unique way. The plant is among the rarest in habitat and is under threat of extinction.

Photographs by the author



Figure 1. *Uebelmannia buiningii*, form 1.

The first attempt to overcome my inborn laziness ...

After a long time of not writing and with my antipathy to scribbling something about plants I am returning, not surprisingly, with a series about *Uebelmannia* from Brazil (state Minas Gerais). Don't expect systematic writing or plain piffle that you can read everywhere. Sure, I swear before my buddies! As for opinions on taxonomy: it's mostly amateur (even with ten semesters at University), it's still 'Do it yourself' and I don't really mean to bother someone with it. However, I'm pretty sure that to understand the system just theoretically, without seeing the plants in their homeland, is plain arrogance and a belief in self-importance.

Of course, I faced both of these too. After three visits to Brazil, it means six months spent in nature among plants, I have an opinion... each further trip makes a bigger mess in my head.

The only thing that seems to be clear is that DNA analysis should help understand the genus (or shouldn't it?).

I use nomenclature like cocaine during our parties, I use Marlon Machado's and Rudolf Schulze's ones. According to my non-professional opinion, it seems to me the most rational, in no case egocentric as it is with botanical 'ES' Esteves and Pierrebraun.

If I am not forced to quit my writing for the hotshot magazine like The **Cactus Explorer**



Figure 2. *Uebelmannia buiningii*, form 1.



Figure 3. *Uebelmannia buiningii*, form 1.



Figure 4. *Uebelmannia buiningii*, form 2.



Figure 5. *Uebelmannia buiningii*, form 2.



Figure 6. *Uebelmannia buiningii*, form 2.



Figure 7. *Uebelmannia buiningii*, form 3a.

because of censorship or other comments, I will go on with writing the series for some time. My vision is to write till 2019!!! I will introduce the particular species, I won't write a book of travels. Which species will get the chance to be put on the map? It depends only on my mood or the amount of alcohol in my blood which can help me to overcome my



Figure 8. *Uebelmannia buiningii*, form 3a, with a dead plant on the right.

laziness or disgust to do everything connected with work or writing. The series have no system, cause 'punk is not dead', HOWGH!

Maybe some of the readers are now discouraged by the long introduction. Those who will not refuse to read my 'specific' English, welcome and let's start!



Figure 9. The habitat of *Uebelmannia buiningii*, form 3a.

Uebelmannia buiningii is often seen in collections, it regularly flowers, however, there is one problem – in most cases it's grafted.

Occasionally, you can bump into a seedling in plant offers, sometimes grower Ota Potyka (Czech Republic) offers rooted stock. So what? It can grow to 1.5cm in 4-5 years, in case the beauty doesn't snuff. However, even the plant



Figure 10. The habitat of *Uebelmannia buiningii*, form 3a.



Figure 11. *Uebelmannia buiningii*, form 3b.



Figure 14. *Uebelmannia buiningii*, form 3b.



Figure 12. *Uebelmannia buiningii*, form 3b.



Figure 15. *Uebelmannia buiningii*, form 3b, no signs of growth after 3 years!



Figure 13. *Uebelmannia buiningii*, form 3b.



Figure 16. *Uebelmannia buiningii*, form 3b, very old plant.

at 1.5cm is not a triumph. You can make one bad watering in the season and game is over ... so, good luck to all growers. *Uebelmannia buiningii* is considered to be one of the rarest cacti of South America, that's also one of the reasons why I'm going to start with this special taxon. There are according to my opinion 4 forms:

Form 1

Type. It is an extremely rare plant in nature today but also at the time of its discovery by Leopold Horst – one of the best of Uebelmann's workers, searchers and diggers. At that time, according to the testimony of my Brazilian buddy 'E', there were about 50 adult plants in this place. In 2009 my buddy Václav



Figure 17. The habitat of *Uebelmannia buiningii*, form 3b.

counted 8 plants and I counted 25 plants a few hours later. The site is a few hundred metres from the road, which means a really endangered locality because of possible harvesting of the plants or due to destruction by the hooves of grazing cattle. Juvenile and smaller plants are red, the epidermis of the adult plants turns into a red-green colour from the growing centre. Most of the plants grow in the direct sun.

Form 2

It occurs only a few kilometres from the



Figure 18. *Uebelmannia buiningii*, form 4.

form 1, in the direction to Itamarandiba, nowadays it's quite well reachable. In 2006, I counted tens of plants. It was the richest



Figure 19. *Uebelmannia buiningii*, form 4.



Figure 20. *Uebelmannia buiningii*, form 4.



Figure 21. *Uebelmannia buiningii*, form 4.

locality. In 2009, the number of the plants was significantly reduced. On the contrary, the number of other succulents, e.g. plants of the genera *Dyckia* or *Encholirium*, grew in large numbers. That's probably one of the reasons leading to a smaller number of *Uebelmannias*!

Cacti in these subtropical areas can probably only hardly compete with other plants. As there was apparently no fire for several years, it brought me to an idea that natural fires can have some significance for the plants too. Succulents can burn, most of the adult or single cacti still are able to reproduce and survive ... that is next of my amateur observations after my third visit to Brazil.

The plants are red, both juveniles and adults. They are definitely more spiny than the southern type. In the past, people used to pick up between twenty to thirty individuals of the cacti. Recently, 'E' claimed that the fans of *Uebelmannias* take 'maximally' ten examples.



Figure 22. *Uebelmannia buiningii*, form 4.



Figure 23. *Uebelmannia buiningii*, form 4, adult plant.

Even this seems to me big business since the plants which grow-up from the seedlings after grafting on *Selenicereus* cv. are in bloom in the second year. And germination is between 90-100%. You can write me and I will reveal to you the magic month for sowing of *Uebelmannia* seeds.

Forms 3a+3b

The distance between these two places is about 1.5 GPS km and we consider them actually to be only one form. The first (3a) is, together with the type, the best-known location and thus, there were never a lot of plants there. The recent state is indeed alarming; eight plants only! Four above the road and four below the road ... My searching for the plants and their counting differs from the approach of other travellers (not only Czech) who are chasing the places in rented cars. Those travellers claim after 'a detailed' one-and-half-hour search that there are no

plants there. Our relatively detailed search took us (me and Václav) about two and half hour. We marked clearly the searched locality (it is quite clearly arranged naturally, in the rocks). Each of us was searching a place about 80m x 200m. Not counting one coral snake which I missed by a nose, that means a minimum number of plants for their possible reproduction. Machado with Schulz even pollinated plants between each other (they had found only three plants below the road). But some of the plants looked ill and infected by mealy bugs.

One more attack of cactus lovers and the game is over ... we didn't see any small seedlings. To find some would mean to rake over about one or two centimetres under the surface, because the seedlings of the cacti of the subgenus *Meninensis* (i.e. *U. meninensis*, *gummifera*, and *buiningii*) are growing several millimetres or even centimetres under the surface, hidden in the siliceous (translucent) substrate. They can get above the surface only after two or three years of growth.

Speaking about this form, I think that the only possibility is reintroduction from culture, in other case it is gonna count down to extinction. If either young or adult plants are able to adjust to the local conditions, it knows only Jumper from Rio ...

It is difficult to find the second locality (3b), but if you take some time ... the plants of *U. buiningii* always occur in the rocky places, you can't find them in other places. They don't grow like *U. meninensis* and *U. gummifera* on the 'terras blancas'.

This form is relatively large in number and some of the plants are sheltered by bushes. Their colour is red; the biggest plants are 8 centimetres in diameter. As for their spines, this form leads the league and other forms can't hardly compete with it. You can find all possible sizes there. This locality was probably never radically harvested. The photos from 2006 and 2009 prove that these plants grow very slowly. The adult plants on the rocks had very small or almost no sign of growth. *U. buiningii*, together with *U. gummifera*, are the slowest growing cacti among *Uebelmannias*.



Figure 24. My luxury hotel room where I stayed for 6 days.

Form 4

The locality is for trained travellers only. It is the worst reachable one and the latest to flower. The plants are about 3-4km from the type form (I will speak about it only in person ...). This green form is very rare in collections. I saw one plant at Werner Uebelmann's and the second at the Pepa Bušek collection (in München, Germany). Young plants are typically red, but later they turn green. It's not caused by any sheltering of the plants. The plants are green even in direct sun. Some of the plants remind me of *U. meninensis* by their spines. Can we claim that this form is a transition form towards *U. meninensis*?

If you want to see the last beauty, I recommend a very good, better longer machete that can help you to reach the target much faster. Even if you know the direction, it will take you some time to get there. It took me about three hours in 2006 (1.5km!) but in 2009 it took me only one hour. By the way getting back is not for free too. Super GPS is useless. My buddy Václav is my witness ...

Next time we are going to move some 30km westwards to speak about *Uebelmannia gummifera* – my sweetheart ...

With all the respect to the authors of cactus literature: Rudy Ka, Brno city, Czech Republic.

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ECHINOCEREUS TRIGLOCHIDIATUS OF THE WHITE SANDS NATIONAL MONUMENT, NEW MEXICO

Rick Fencil tells us about the origins of White Sands National Monument and the cacti to be found there.

Photographs by the author



White Sands, entirely made of the mineral gypsum, are a truly unique geologic feature. The gypsum crystals originate by water evaporation in Lucero Lake, where underground water comes to the surface. Prevailing westerly winds carry these crystals out of the dry lake area and the crystals gradually accumulate in white sand dunes.

The mountains that surround the Tularosa Basin contain large amounts of gypsum, exposed in the light-coloured layers of rock near the top of the San Andres Mountains to the west and the Sacramento Mountains to the east. During the last ice age, about 24,000 to 12,000 years ago, the climate was much cooler and wetter than today. Large amounts of rain and snow fell on the surrounding mountains. Rain and snowmelt from the mountains dissolved gypsum, salt, and other soluble minerals from the rocks and carried them into the basin.

About 4,000 years ago, water in the basin had completely evaporated, leaving behind a dry lake bed, or playa, now called the Alkali

Flats. Beneath the clay and silt surface of the Alkali flat, the gypsum, now in crystal form, was waiting for the wind to carry it to the white sand dunes.

Tularosa Basin has harsh climate, which is subject to frequent temperature fluctuations. Summers are hot and the daytime temperature exceeds 35°C. Winters are cold due to the high altitude of the basin. At night the temperature regularly drops below freezing. The lowest daytime temperature measured here was minus 30°C. The average annual precipitation is about 200mm, and rainfall occurs mostly in the summer months in the form of thunderstorms.

The area is shaped by strong winds. In winter and spring, the cold northern air masses coming from Canada along the main ridge of the Rocky Mountains clash with hot air from the gulf of Mexico. Fast fluctuations in temperature during the day are caused by high altitude and the southern sun whose rays quickly warm the surface and cause air turbulence. The sun shines here almost every



day. The strongest winds occur in the period from the end of January to late May, when the masses of warm and cold air equilibrate.

Botanically, White Sands fall under the Chihuahuan Desert ecoregion, which is the largest desert in North America and reaches deep into Mexico. Tularosa Basin soils have a high salt content, and therefore the only plants that can thrive under these conditions must tolerate it.

Hardly any vegetation can establish itself on the moving dunes. Most of the plants that you can see growing out of the sand are kept alive only by rapid growth. They germinate in the soil between the dunes where conditions are at least temporarily stable. Gradually, as the sand

is blown to these areas, these plants keep their leaves above the sand by rapid growth. But for most of the plant species, it is nearly impossible to establish themselves in the loose sand, and even when they succeed, it is only a matter of time before they are swallowed by







the never resting dunes.

Among the most common plants belong *Yucca elata* of the family Liliaceae, and *Poliomintha incana* of the family Lamiaceae. *Yucca elata* is able to grow up to 30cm per year, which in this dry climate is a respectable performance. Botanists have counted 60 species growing and surviving in the dunes. In the area adjacent to dunes there are about 240 botanical species.

Echinocereus triglochidiatus var. *triglochidiatus* is the most popular cactus species here, displaying its beautiful red flowers every April. Some cactus collectors consider these plants as of the variety *gonacanthus* by mistake. The variety *gonacanthus* was described by Engelmann and Bigelow in 1857, and the type locality was given near the Arizona border west from Zuni, New Mexico.

Echinocereus triglochidiatus var. *triglochidiatus* was described by Engelmann in 1848 based on the "Memoir of a Tour to Northern Mexico" by Dr. Wislizenus. The type locality was given near Santa Fe, New Mexico. Dr. Lyman Benson provided a comparative table of these two varieties in his 1982 publication "The Cacti of the United States and Canada", where the

variety *gonacanthus* is shown as smaller (stems to 12.5cm) and a more restricted taxon.

On the other hand variety *triglochidiatus* occurs throughout New Mexico and can reach up to 30cm in height. Here in the White Sands National Monument some plants reach even 40cm in height. *Echinocereus triglochidiatus* var. *triglochidiatus* is not the only cactus species that can be found in the Tularosa Basin. Among others, we can encounter also *Toumeyia papyracantha*, *Peniocereus greggii*, *Coryphantha macromeris*, *Coryphantha sheeri*, *Coryphantha vivipara*, *Echinocereus fendleri*, *Echinocereus ennaecanthus*, *Opuntia clavata*, *Opuntia imbricata*, *Opuntia leptocaulis*, *Opuntia macrorhiza*, *Opuntia phaeacantha* var. *discata* and *Opuntia violacea* var. *macrocentra*. The only tree that can survive in the dunes is a cottonwood tree of the family Salicaceae - *Populus fremontii* var. *wislizenii*.

[Rick Fencil](#)

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TRAVEL WITH THE CACTUS EXPERT (8)

Zlatko Janeba continues his journey around the cactus habitats of the USA. There is clearly a lot to see and enjoy with lots of flowers and spectacular scenery.

Photos: Zlatko Janeba



Figure 1. Balanced Rock, Lee's Ferry, Arizona.

In the morning we were very eager to check a locality of one very popular cactus species, *Pediocactus bradyi*. Also known as Brady's pincushion cactus, Brady's hedgehog cactus or Marble Canyon cactus, *P. bradyi* is a narrow endemic growing along the Colorado river near Marble Canyon in Coconino County, Arizona. This species was originally collected in July 1958 by Major L.F. Brady and named after him as *Pediocactus bradyi* by L. D. Benson in 1962. Even nowadays, it is still considered by most cactus experts to be a taxon of the genus *Pediocactus*, although it was moved to other genera as well, e.g. into genus *Toumeyia* (by W. Earle) or *Pediocactella* (by Doweld). It was also combined by Halda as a subspecies

under *Pediocactus simpsonii*.

I have studied this attractive cactus at several locations along the Colorado river between 2002 and 2006. It grows exclusively on clay soils derived from Moenkopi shale often covered by Kaibab limestone gravel and is found on flat or gently sloping benches and terraces or on the tops of low hills at elevations of 1100-1200m. It can be found on both sides (both rims) of the canyon of the Colorado river at fully exposed places. It is believed that a type of mycorrhiza are associated with the roots of this highly specialized cactus.

Pediocactus bradyi forms small globular or semi-globose stems up to 6cm in diameter (but



Figure 2. A large clump of *Opuntia basilaris* loaded with flower buds, Lee's Ferry, Arizona.



Figure 3. Flowering *Opuntia basilaris*, Lee's Ferry, Arizona.

in habitat often smaller) with white to yellowish, densely felted (woolly) elliptic areoles. There are usually 12 to 15 short spreading radial spines, almost pectinate, white to yellowish, 2 to 6mm long and generally without any centrals. Flowers are straw-yellow in colour, up to 3cm in diameter,



Figure 4. A group of *Pediocactus bradyi* among limestone gravel, Lee's Ferry, Arizona.



Figure 5. *Pediocactus bradyi* with a typical pediocactus fruit, Lee's Ferry, Arizona.



Figure 6. *Opuntia nicholii* with joints decorated with long attractive spines, Lee's Ferry, Arizona.

and the fruit green and top-shaped, turning brown at maturity.

These cacti are not easy to grow in cultivation on their own roots. They may at first grow easily from seeds for several years without any problem and then, suddenly, they



Figure 7. Detail of the *Opuntia nicholii* flower, Lee's Ferry, Arizona.



Figure 9. *Argemone* sp., south of Lee's Ferry, Arizona.



Figure 8. Flowering *Yucca* sp., south of Lee's Ferry, Arizona.



Figure 10. Young specimen of *Agave utahensis* ssp. *kaibabensis*, south of The Gap, Cedar Ridge, Arizona.

Echinocereus sp.

With Josef, we visited (May 4th, 2006) only one population of *P. bradyi* growing near the Balanced Rock, Lee's Ferry, Arizona [Fig.1] (this is not the famous Balanced Rock in the Arches National Park in Utah, of course). As it was a dry winter (2005-2006) and spring in the SW of the USA, the pediocacti we saw were quite nicely depressed, almost buried in the gravel [Fig. 4]. We saw some 25-30 plants but I found only a single fruit [Fig. 5]. There were probably not many flowers that year.

There are also two beautiful opuntias growing there; the well-known and wide-spread, spineless *O. basilaris* with nice bluish segments and brownish glochids, and very spiny *O. nicholii* (or *O. polyacantha* var. *nicholii* if you prefer). *Opuntia basilaris* in this area

are gone for any apparent reason. Compared to other pediocacti, *P. bradyi* grows in a relatively dry and hot desert habitat which makes it more prone to a badly timed supply of water and the plant usually rots afterwards. Thus, it is best cultivated grafted, especially on a winter hardy stock such as *Opuntia* sp. or



Figure 11. Flowering *Echinocereus triglochidiatus* ssp. *mojavensis*, south of The Gap, Cedar Ridge, Arizona.

makes really huge and low clumps (up to 2 meters in diameter and usually 1-2 segments tall)[Fig. 2]. Although the first flowers [Fig. 3] had just started to open, the plants were fully loaded with copious buds and in a couple of days one would be able to take pictures of plants with dozens of gorgeous magenta flowers on a single plant. Those would be great photos!

The second opuntia, *O. nicholii* [Fig. 6] has similarly beautiful flowers (slightly more reddish in colour) and it was already in full bloom [Fig 7]. *O. nicholii* is reported from several isolated locations of northern Arizona and adjacent southern Utah. It varies a lot in spination and especially in spine length. The most spiny specimens look like double-sized *O. hystricina* (*O. polyacantha* var. *hystricina*). More typical *O. nicholii* has relatively few spines but with one or two really long ones (up to 12cm). Some plants may have short spines. The plants look overly spiny because the spines are long.

At the same location, *Echinocereus engelmannii* (var. *variegatus*) was about to flower as well. And yet another cactus highly valued by cactus collectors, *Echinocactus polycephalus* ssp. *xeranthemoides*, can be found on the canyon rims above the Colorado River. This was, unfortunately, my last visit to this interesting area so far.

We did a short stop just south of Lee's Ferry, south of the bridge along the U.S. 89A (or Hwy 89A), as we saw flowering *Yucca* sp. [Fig. 8]. I suppose it could be *Y. glauca* because of its very narrow long leaf blades, but this species is usually reported more eastwards (Colorado, New Mexico etc.) or northwards (Montana, Wyoming etc.). In this area (Arizona, Nevada, Utah, but Colorado and New Mexico as well) the beautiful *Y. harrimaniae* is quite common which should have broader (and often more bluish) leaf blades and thus more compact rosettes. There was also *O. nicholii* again, and a species of *Argemone* (Papaveraceae) with numerous snow white flowers decorated with red stigma and yellow anthers with pollen



Figure 12. *Pediocactus peeblesianus* ssp. *fickeiseniorum* with a fruit, near Little Colorado River Overlook, W of Cameron, Arizona.

[Fig. 9].

Some 18 miles south of The Gap (milestone 516 on U.S. 89, Cedar Ridge) we observed a population of beautiful *Agave utahensis* ssp. *kaibabensis*, growing in a slightly hilly area on the rocky outcrops of reddish sediments (elevation of some 1600-1650 m). The habitat there seemed to be quite hot and dry so the agaves were not evidently able to reach the size of their relatives growing at the higher elevation on the Grand Canyon rims, where it should be cooler and more humid climate.

Furthermore, we saw several opuntias (*O. nicholii*, *O. polyacantha*, *O. phaeacantha*), red flowering castillejas (Indian paintbrush), *Echinocereus engelmannii* with buds, and again flowering *Echinocereus triglochidiatus* ssp. *mojavensis*.

Our next goal was to visit an area along the Little Colorado River, located southeast of the Grand Canyon National Park, W of Cameron (AZ). Josef had seen “navajoas” at several spots there many years ago, but as he was not able to tell for sure where it should be, I took him to “my” spot near the Little Colorado River Overlook, some 10 miles W of Cameron. We saw about 10 specimens of *Pediocactus peeblesianus* ssp. *fickeiseniorum* with four of them bearing fruits, probably not yet mature. [Fig. 12]. Clearly, it was unfortunately too late for flowers at that location. Again, the spination of these tiny attractive cacti within the micropopulation was quite variable [Figs.



Figure 13. Another specimen of *Pediocactus peeblesianus* ssp. *fickeiseniorum* with shorter, stouter, and more adjacent spines, growing among pebbles near Little Colorado River Overlook, Arizona.

12 & 13]. The plants from this place are often grown under other name, as *Navajoa peeblesiana* f. *maia* Hochstätter, coming from the Cowper’s name *Navajoa maia* (*nomen nudum*). Cowper discovered these tiny cacti near Cameron (AZ) in the fifties. At our location, one can also encounter *Echinocereus engelmannii*, *Opuntia polyacantha* (*hystricina*) and magnificent *Echinocactus polycephalus* ssp. *xeranthemoides*, which prefers exposed places on the rims above the Little Colorado River.

Later, we also tried to search for navajoas just south of Cameron since they had been reported from an area near a local hotel, but the habitat seemed to be too dry to succeed, so we gave up after a while and headed back to the north along U.S. 89 and later we took U.S. 160 towards Tuba City and Kayenta (AZ).

We made another quick stop just as we passed Tuba City, about ½ mile east of the junction of U.S. 160 and SR 264, where we observed a small population of *Sclerocactus whipplei*. The plants grow there in reddish soils, well hidden among dry tufts of grass. We saw some 10 plants, almost all in flower (N 36.07.018 W 111.13.645, 1480m). The flowers were white or white-yellowish and they were still open at about 5 pm. These sclerocacti seem to be quite similar in appearance to *Sclerocactus sileri* and both Josef Busek and Gerhard Häslinger believe that the scleros from the Tuba City area are more related to *S. sileri* than to typical *S. whipplei*. It was difficult to take



Figure 14. A group of flowering *Sclerocactus whipplei*, Tuba City, Arizona.

pictures as it was very windy and there was a lot of sand in the air. Nearby, we also observed *Opuntia polyacantha* with buds and small *Yucca* sp.

We continued along the Hwy 160 eastwards and our last stop of that day was near the milestone 368 on this road. We tried to look for more *Sclerocactus* plants among the scarcely scattered junipers and pine trees but with all the effort we were able to discover only *Coryphantha vivipara*, *Echinocereus triglochidiatus*, *Opuntia polyacantha*, *Opuntia whipplei*, *Yucca* sp., and a couple of mummies with hooked spines, probably mummies of *S. parviflorus*. There was a herd of sheep grazing around us and later one indigenous man came to tell us that we were on his property and we could not continue further on the dirt road so finally, we had to leave.

As the sun was already setting down when we reached Kayenta, we decided to stay in a

hotel again, this time in an expensive Best Western Inn (100\$US per night).

[Zlatko Janeba](#)

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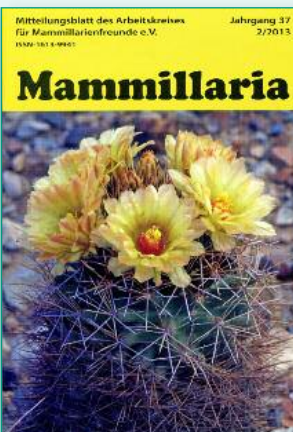
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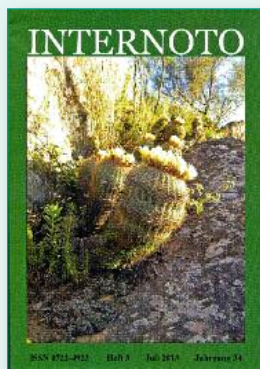
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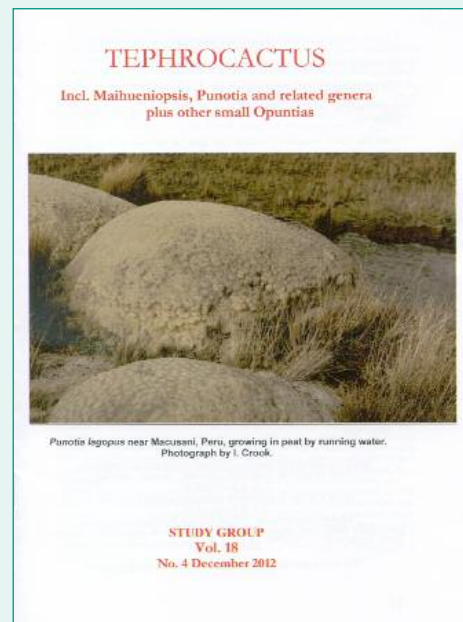
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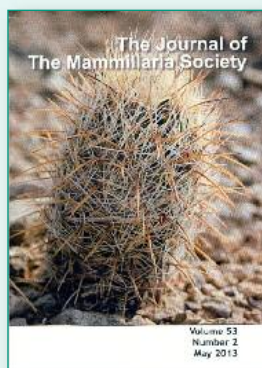
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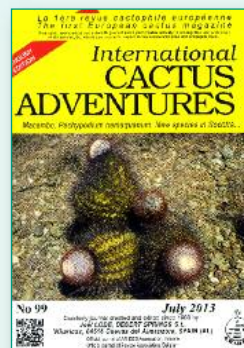
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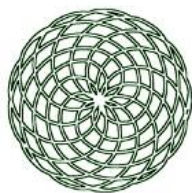
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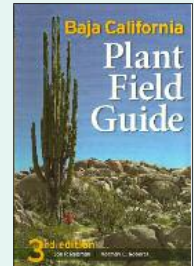
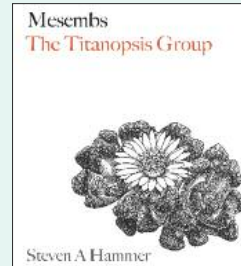
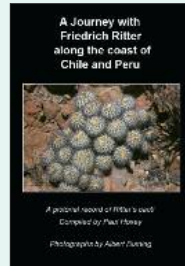
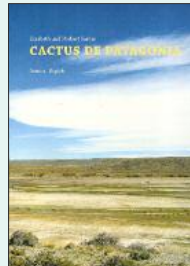
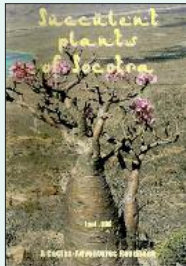
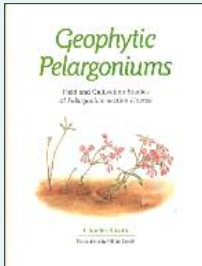
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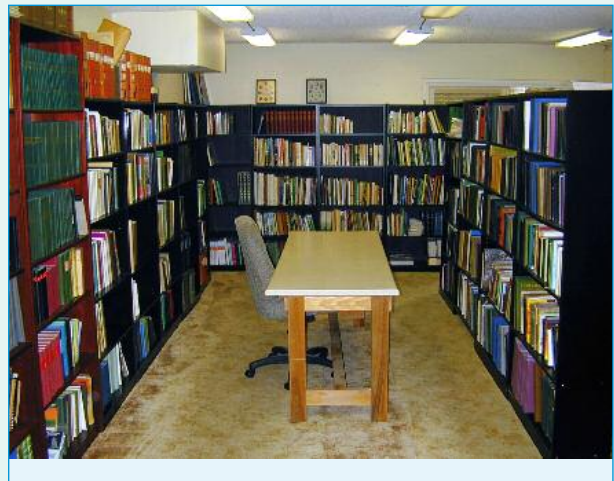
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