

# The Cactus Explorer

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



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**Cover Picture:** *Borzicactus longiserpens* ssp. *longiserpens*, Hutchison 1589, distributed as ISI 89-3, collected between Sondor and Sondorillo, Huancabamba, Piura, Peru.

The No.1 source for on-line information about cacti and succulents is <http://www.cactus-mall.com>  
 The best on-line library of cactus and succulent literature can be found at:  
<https://www.cactuspro.com/biblio/en:accueil>

## 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 quickly and the copy deadline is just a few days before the publication date. There will usually be three issues per year, published when sufficient material is available. 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.

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Opinions expressed in the articles are those of the authors, and not necessarily those of the editorial team.

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# INTRODUCTION

## Time to Catch Up

After another busy year, it was good to have a holiday. I spent three weeks in Peru with Chris Pugh and Philippe Corman, two experienced plant hunters. My main objective was to get pictures of flowering matucanas and oroyas for my book about these beautiful plants that I plan to publish next year. I went earlier than I have in the past because I knew that oroyas flower in September and early October. The flowering period for matucanas is less predictable and varies by species but I was lucky to find many in bloom.

People often ask my advice about travelling to cactus habitats. For me, it has become one of my favourite activities since I first went in 1992. It is a good idea to go the first time with someone who has been before since there is a lot to know in order to get the most out of it. My feelings towards plants in pots have been changed by visiting habitats where the plants look so much more 'at home'. I also maintain that you will not be satisfied to go just once. There is always something you did not find or a hill you did not explore!

This time of year is also a chance to catch up with all the published material concerning succulents. There have been a number of new books appearing lately and you will find information about these on pages [14 – 16](#). I am particularly impressed by the reasonably priced series of books published by the German Cactus Society (DKG) which are only available to their members. The latest one concerns *Agave*, a genus which is very popular at the moment.

Now is the time to look through seed lists and decide what to grow next year. You will find general and specialist seed dealers advertising on pages [49 – 51](#). Seed raising is a really pleasing part of our hobby and is the

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

only way to get some species which are rarely offered as plants. For popular genera like *Mammillaria*, *Echinocereus* and *Notocactus*, the specialist Societies offer their members impressive lists of seeds at very reasonable prices. It is worth being a member just to get access to these lists. Societies such as the BCSS, CSSA, Succulenta and DKG also offer inexpensive seed to their members every year.

One of the benefits of growing seedlings is that you usually end up with spare plants that you can either sell or exchange with other growers. For the more difficult cactus species, it is quite easy to graft the young seedlings onto cuttings of *Pereskia* which results in rapid growth of even the most tricky species. The picture (right) shows a two year old seedling of *Cremnocereus* grafted on *Pereskia*.



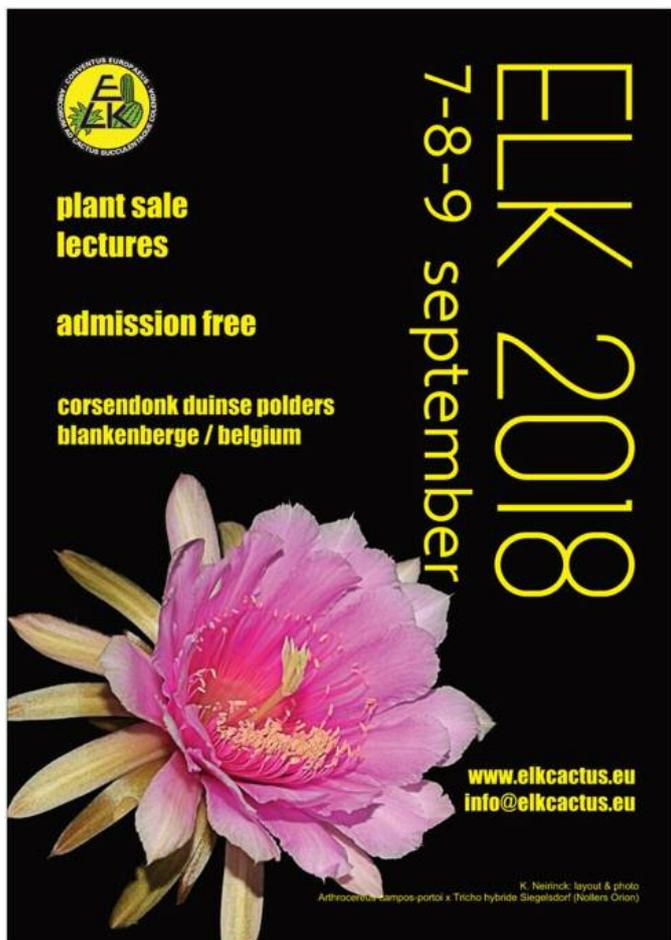
When large enough, you can graft the scion onto a more permanent stock or root it. If you leave part of the plant, including some areoles, on the *Pereskia*, it will grow offsets for further propagation.

I am grateful to all our readers who have emailed me to tell me how much they enjoy the **Cactus Explorer**. It is encouraging to know that all the effort is bringing pleasure to people, many of whom I have never met. Of course, I depend on generous authors who send me their articles for publication and to them I am very thankful.

Looking forward to 2018, I wish you a healthy year and lots of enjoyment from your succulent hobby.

*Graham Charles*

# NEWS AND EVENTS



The poster for ELK 2018 features a large, vibrant pink cactus flower in the lower-left corner. The text is arranged vertically on the right side, with 'ELK 2018' in large yellow letters and '7-8-9 september' below it. On the left side, there is a circular logo for 'CONVENTUS EUROPAEUS SOCIETAS CACTI' and text in yellow: 'plant sale lectures', 'admission free', and 'corsendonk duinse polders blankenberge / belgium'. At the bottom right, the website 'www.elkcactus.eu' and email 'info@elkcactus.eu' are listed. A small credit line at the bottom right reads: 'K. Neetnick: layout & photo Anthrocentrum campos-porto x Tricho hybride Siegeladorf (Nollens Orion)'.

## A. Castellanos & H. Lelong Publications devoted to cacti

This, the second e-book (416 pages) published by Au Cactus Francophone is devoted to articles by Castellanos and Lelong. The introduction presents the life of both authors who were husband and wife. After the series of articles, some original pictures by Castellanos are reproduced.

This very useful reference for Argentinian cacti can be downloaded (76Mbyte) from [https://www.cactuspro.com/biblio\\_fichiers/pdf/KieslingRoberto/CastellanosLelong.pdf](https://www.cactuspro.com/biblio_fichiers/pdf/KieslingRoberto/CastellanosLelong.pdf)

## Friedrich Ritter's Diaries

The German Cactus Society, the DKG, has scanned Ritter's diaries and made them available for download from:

[http://www.dkg.eu/cs/index.pl?navid=Ritter\\_Tagebuecher\\_1322&sid=c](http://www.dkg.eu/cs/index.pl?navid=Ritter_Tagebuecher_1322&sid=c)

They are full of fascinating information but reading his hand writing in German is a challenge so the DKG hopes to eventually publish transcripts.

## The Naturalist's Travel Page

<https://thetravelingnaturalist.org>

Our website has free-to-use online talks for your succulent society's meetings - from many locations around the world. We also have illustrated trip reports and summaries of South African succulent-rich guest farms. Also, a short course on field photography. We are available to help in natural history travel and tour planning.



### Cactus Marts in 2018

We all like nothing better than buying plants so why not visit the plant sales being held in the UK. In date order:

#### Saturday April 7th 2018

*South East Cactus Mart*

Swalecliffe and Chestfield Community Centre

19, St Johns Rd, Swalecliffe, Kent CT5 2QU

Open 10am till 3 pm

Admission £1 (children free)

More info from [davejappleton@hotmail.com](mailto:davejappleton@hotmail.com)

#### Saturday 12th May 2018

*19th Havering Cactus Mart*

Open 10am to 3pm

North Romford Community Centre,  
Clockhouse Lane, Romford, Essex, RM5 3QJ

At least 14 Leading Nurseries, Large Hall,

Refreshments and Snacks all day

Admission 50p (children free)

#### Sunday October 14th 2018

*Autumn South East Cactus Mart*

Crockham Hill Village Hall ,

Church Lane, Edenbridge TN8 6RP.

Open 10am till 3 pm

Admission £1 (children free)

More info from [davejappleton@hotmail.com](mailto:davejappleton@hotmail.com)

### Oxford Branch

### 60th Anniversary Show

(with the Mammillaria Society Show)

28th July 2018 10.00 a.m to 3.30 p.m.

FREE ENTRY

Old Mill Hall, Grove, Wantage OX12 7LB

Plants for sale by Craig Barber - William's Cactus; Stuart Riley - Plant Life; V Davies - Branch Plant Sales

Refreshments (Bacon rolls and salad lunch available on request)

Ample free car parking

Contact Bill Darbon:

01993 881926/ 07760 119983

### The Event of 2018

You have had to wait 4 years for the **BCSS International Convention**

so to be sure, book it now.

Friday 13th – Sunday 15th July 2018



**Stamford Court Conference Suite  
at the University of Leicester, UK**

### SPEAKERS

**Aymeric de Barmon** (France)

"Cultivation of Cacti"

**Philippe Corman** (France)

"Cacti of Mendoza and San Juan, Argentina" & "The Habitats of Cacti"

**John Ellis** (UK)

"Photography of Succulents"

**Adam Harrower** (South Africa)

"The new cliff-dwelling succulent house at Kirstenbosch Gardens" &

"The Knersvlakte, S. Africa"

**Wolter ten Hoeve** (Netherlands)

"Mexico with Mammillaria"

**Joël Lodé** (Spain)

"Taxonomy of the Cactaceae" &

"Socotra"

**Ricarda Riina** (Venezuela/Spain)

"Succulent Euphorbias of the New World"

& "New findings on the semi-succulent

*Euphorbia balsamifera* group: from the

Sahel to the borders of Africa and

Macronesia."

Plant Sales and Displays

Full Residential Package **£260**

Non-Residential Package **£160**

Book on-line at

[www.bcsc.org.uk/convention.php](http://www.bcsc.org.uk/convention.php)

# Bradleya 35



Yearbook of the British Cactus & Succulent Society

The 2017 issue of **Bradleya** is now on sale.

27 well-illustrated articles to enjoy including 3 about cacti. 256 pages.

For your copy of **Bradleya 35**, please send payment of £21 (£23 overseas) including post & packing (payable to BCSS) to the BCSS Publications Manager, Brenfield, Bolney Road, Ansty, West Sussex, RH17 5AW, UK. Payment accepted by:

- £ sterling cheques drawn on a UK bank,
- PayPal (paypal@BCSS.org.uk) or
- credit/debit card (Visa, Mastercard or Maestro only).

**Bradleya 35 includes:**

- The taxonomy of *Kalanchoe brachyloba*
- Producing organic alcohol and a tequila-like liquor from *Agave americana* in South Africa (SA)
- Notes on *Agave panamana* from Panama, with reference to morphological variation in *Agave angustifolia*
- Notes on morphological variation in, and the biogeography of, *Tulista kingiana* from SA
- New records of naturalised and invasive cacti from Gran Canaria and Tenerife
- *Kalanchoe fedtschenkoi* is spreading in South Africa's Klein Karoo
- Taxonomy of the three arborescent SA crassulas
- Notes on the discovery and type of *Kalanchoe rotundifolia*
- Hypothesis on evolutionary origin and adaptive value of polymorphism in *Lithops*
- The taxonomy of *Kalanchoe longiflora*, an endemic of Maputaland-Pondoland, SA
- New records for the flora of Mount Mulanje, Malawi: *Sansevieria sinus-simiorum*, *Crassula swaziensis* and *Crassula setulosa*
- *Astroloba tenax*, a new species from the Groot Swartberg Mountain, SA
- *Roosia*: a new genus in the Aizoaceae from the Western Cape, SA
- A new pubescent variety of *Conophytum* from the southern Richtersveld: *Conophytum flavum* subsp. *novicium* var. *kosiesense*
- *Kalanchoe waterbergensis*, a new *Kalanchoe* species from Limpopo Province, SA
- *Tylecodon celatus*, a new cryptic succulent from Nuwerus, Namaqualand
- *Sempervivum gurgendizeae* – an overlooked name from the Great Caucasus of Georgia
- *Cotyledon egglii*, a new species from the Barberton region, Mpumalanga, SA
- Notes on António de Figueiredo Gomes e Sousa, succulent plant collector in Mozambique
- ×*Astrolista*: a new name for the SA endemic nothogenus ×*Astroworthia*
- *Astroloba robusta*, a new species from SA
- *Crassula zombensis* – a hardly known species from Malawi and Mozambique
- Leaf epidermal structure in the dwarf succulent genus *Conophytum*
- *Astroloba tenax* var. *moltenoi*, a new variety in *Astroloba tenax* from Groot Karoo, SA
- Feeding by *Leucaloe eugraphica* (Walker, 1865) on cultivated *Agave* in South Africa
- *Rhipsalis agudoensis* – a mystery solved
- *Cremnocereus albipilosus*: an incredible new columnar cactus from Bolivia

Want to buy *Bradleya* on-line? Visit the [BCSS website](#).

## Cumulative Bradleya Index

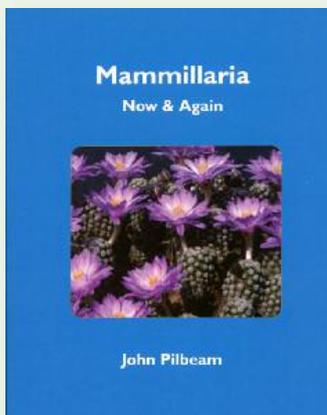
*Bradleya* is a valuable source of information but now that there are 35 editions, it can be difficult to find what you are looking for. So, many thanks to **Roy Mottram** who has created and maintained a cumulative index which you can [download](#) from the **Cactus Explorer** server.

## BCSS email newsletter list

Alan Bromley is to be congratulated on the email newsletters he writes and sends to BCSS members and others. They are a topical reminder of aspects of our hobby which affect us all. The latest one is about mammillarias, selling plants on eBay and preparing for winter.

There is a link to the e-newsletters on the Home page of the [BCSS website](#). To subscribe, follow one of the links and click on the button top left. You don't have to be a BCSS member to be on the list. G.C.

## New Mammillaria Book



John Pilbeam has recently published his latest book about *Mammillaria*. The appeal of the genus remains undiminished, stimulated by the discovery and description of new species, some of which are highly sought after by collectors.

This book gave John the chance to include the species described since his last book in 1999. The conversational style text and large pictures make this an appealing volume. Hardbound, 242 pages.

It is available from the [author](#) or [Keith Larkin](#). Price: £37 plus carriage.

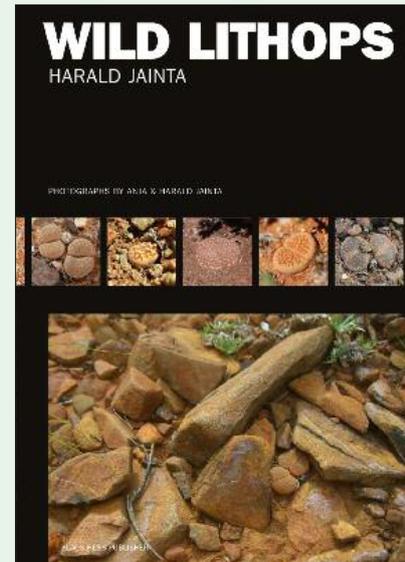
## CSSA Archives

The Cactus and Succulent Society of America has a long and distinguished history.

Chuck Staples, CSSA Historian, tells us about the valuable contents of the Society's archives on page [44](#).

Particularly useful are the comprehensive lists of contents of the journal and *Haseltonia*.

## Wild Lithops by Harald Jainta



The production quality of this book is exceptionally good with excellent realistic colour pictures and a pleasing layout, printed on high quality coated paper. It has 488 pages, A4 (210 x 297mm), hardbound with printed cover. There are 2000 colour and 60 b/w photographs, 13 clear maps, 14 tables and 10 diagrams.

I consider this to be the best book on succulents reviewed in the **Cactus Explorer** this year. This is not a book about cultivation, nor about lithops cultivars but it comprehensively covers every aspect of the genus in habitat.

You can [buy it](#) from Keith Larkin Books for £75 or from the publisher [Klaus Hess](#) for 85€ plus carriage. G.C.

# IN THE GLASSHOUSE

## Borzicactus longiserpens erectus

Easy to grow and easy to flower. A really pleasing addition to any collection, flowering when only about 50cm tall.

Photographs by the author

You can read the full story about this plant in *Bradleya* 28 (2010) where I described it as a new subspecies of *B. longiserpens*. I had seen the type form, which for a long time had been known as *Borzicactus serpens*, growing in the Huancabamba river valley, Cajamarca, Peru. The thin stems sprawl over the ground and any upright ones soon lie down (Fig.3). Since the application of the specific name *serpens* is uncertain, Leuenberger (2002) gave it the new species name *longiserpens*. It is uncommon in collections, the ISI distribution of 89-3 in 1989 being the most frequently seen clone (Fig.1).

When I saw a similar-looking plant growing near Balsas, Amazonas (Fig.4), but remaining upright to more than a metre tall, I decided to name it as a separate subspecies. It is quite widespread in this part of the Marañon river valley, growing amongst trees and shrubs. It has been confused with a similar-looking *Corryocactus* sp. which grows in the same area. I found a fruit and the seedlings proved easy to grow and soon started to flower when about 50cm tall (Fig.2).

G.C.



Fig.1 *B. longiserpens longiserpens* is also a free-flowering plant. This is the clone most often seen in cultivation, distributed as ISI 89-3, *Hutchison* 1589, collected between Sondor and Sondorillo, Huancabamba, Piura.



Fig.2 *Borzicactus longiserpens erectus* flowering in cul-  
culture at about 50cm tall.



Fig.3 *B. longiserpens longiserpens* is a sprawling plant, here growing at 1200m in the Chamaya river valley east of Abra Porculla, Cajamarca, Peru, near its type locality.



Fig.4 *B. longiserpens erectus* in habitat above Balsas on the eastern side of the Marañón river valley, Amazonas, Peru. Here, in October, it shows its free-flowering habit. Other cacti growing nearby are *Calymmanthium substerile* (fertile), *Matucana weberbaueri flammea*, *Espositoa lanata*, *E. calva* and *Lasiocereus fulvus*.

# JOURNAL ROUNDUP

I like to draw your attention to high quality journals which you may not know. This time, I want to tell you about two long-running German regional publications.

## Kaktusblüte



Published annually, this is a high quality German language publication with many well-illustrated articles.

In the 2017 edition:

Searching for cacti on the island of Aruba.

Experimental report on the culture of *Rhytidocaulon*.

*Astrophytum capricorne* - results of recent trips.

Succulents and plants of rocky locations in Snowdonia National Park, Wales.

*Agave pelona* - a precious gem from the Agavaceae in the Sierra del Viejo.

The indestructible (Epiphyllums).

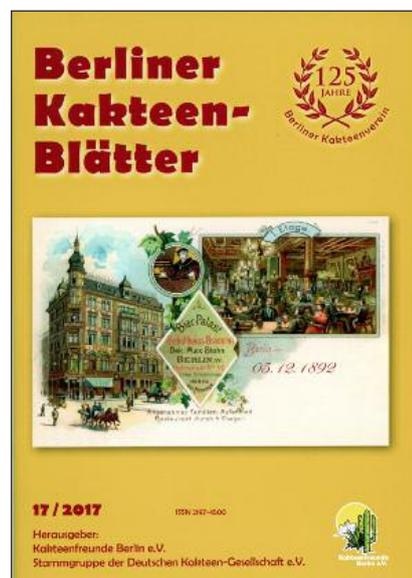
The genus *Nolina* (Nolinaceae) Michaux -Part IV.

The genus *Buiningia*.

It is published by the DKG Rhein-Main-Taunus group.

G.C.

## Berliner Kakteen-Blätter



Also published annually, this is another high quality German language publication with well-illustrated articles. The 2017 edition celebrates 125 years of the Berlin Cactus Club:

Foreword to the 17th Berliner Kakteen-Blätter.

Greetings from the President of the DKG.

Greetings from the Municipal Succulent Collection Zurich.

In the historical footsteps of Berlin cactus friends - 125 years across Berlin.

The cactus special cultures of Georg Viedt in Berlin-Biesdorf.

Hugo Baum: From Berlin to the most successful expedition to western Central Africa.

The Nacapule Canyon, an oasis in the Sonoran Desert Northern Mexico - Habitat of

*Agave chrysoglossa* and *Agave aff. fortiflora*.

On biological excursion in the south of Mexico - Selva el Ocote in Chiapas.

Book review.

*Echinopsis*: flower or sprout?

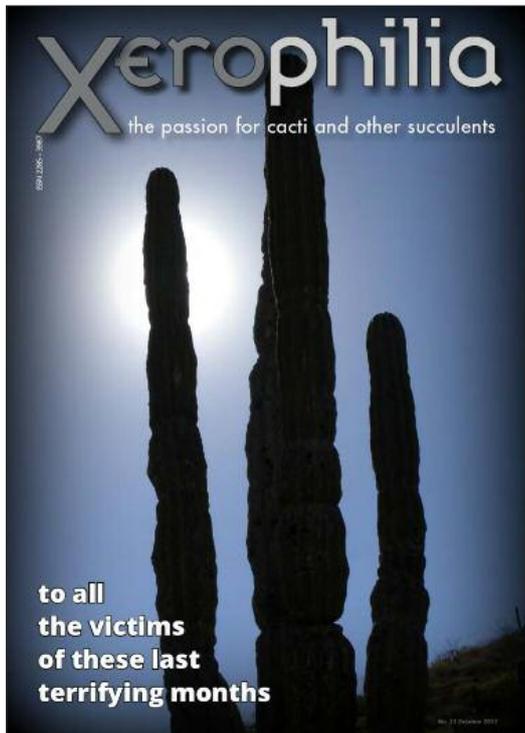
Published by the Berlin Cactus Club.

G.C.

# ON-LINE JOURNALS

## On-line Journals for you to download free

Publishing journals on the web is now very popular. Creating them is a lot of work so perhaps that is why some have ceased publication. Here are some links for you to download and enjoy.



### Xerophilia

Issue 22 of *Xerophilia* appeared in October 2017. It is published in English as well as the language of the original article. The quality contents are impressive and varies. There is lots to read in its 138 pages.

Contents include: · Editorial; · Xerophilia 22's Favourite Quote ; *Aeonium cuneatum* Webb & Berthelot, the succulent which comes from the clouds; Visiting Copiapoaland, Costa Esmeralda, Antofagasta, Chile; *Encholirium*: the rare bromeliads of Cadeia do Espinhaço; *Echinocactus platyacanthus* Link & Otto, biznaga de dulce; Notes on *M. egregia* Backeb. ex Rogoz. & Appenz & *M. zephyranthoides* Scheidw; Cacti, flowers, landscapes and... elusive snakes; In memoriam for a friend: Juan Manuel Sotomayor is gone.

The magazine may be downloaded free as a pdf from <http://xerophilia.ro>

Contact: [xerophilia@xerophilia.ro](mailto:xerophilia@xerophilia.ro)

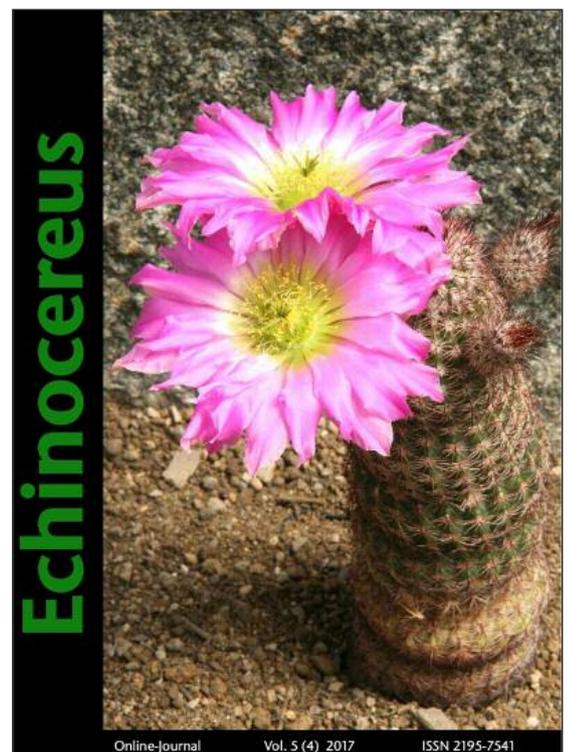
### **ECHINOCEREUS** Online-Journal

The German language on-line journal for Echinocereus lovers. The goals of this 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.

This issue, published in October 2017 includes: A whim of nature? Blooming surprise in September 2016; 40 year obsession with cacti; Observations in the greenhouse; Memories ... *Echinocereus ortegae* near San Miguel, Sinaloa.

The downloaded pdf file allows printing, but does not permit copying of the content. For those of us who do not understand German very well, the publishers also provide a downloadable MS Word document of the text making it possible to copy and paste it into a translation program. This is a major benefit of online journals and I thank them for this useful feature.

See website: [www.echinocereus.eu](http://www.echinocereus.eu)



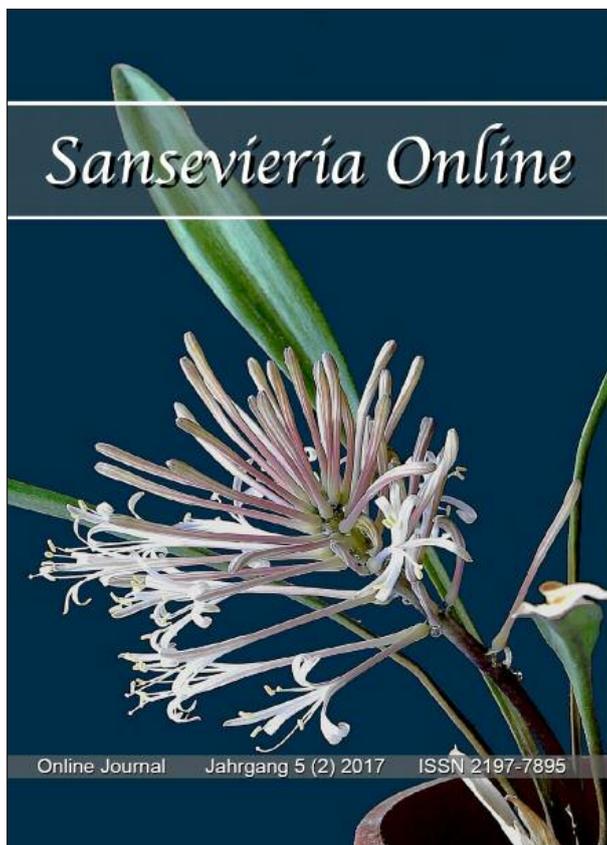
## Sansevieria Online

The online journal for the growing number of enthusiasts for this genus. A small group of *Sansevieria* enthusiasts publish the first *Sansevieria* online journal in German. They welcome contributions on systematics, morphology, physiology, evolution etc.

This issue includes: *Sansevieria concinna* not only known from Mozambique; Observed in culture: *Sansevieria concinna*; *Sansevieria concinna* - a microscopic portrait; Sansevierias also at the Berlin Cactus Days 2017; Sansevierias in front of the camera; Cherished Sansevierias presented.

The next issue will be available on May 1st 2017 and there is a cumulative index already published.

Download the PDF from [www.sansevieria-online.de](http://www.sansevieria-online.de) where you can also find a special issue containing field number lists and an index to the journal.



## Schütziana

The latest issue of Schütziana, the specialist on-line journal for *Gymnocalycium* enthusiasts, was published in August 2017 and features:

Franz Strigl – 80 years and still young at heart.

On the Distribution of *Gymnocalycium platense* (Spegazzini) Britton & Rose (Cactaceae).

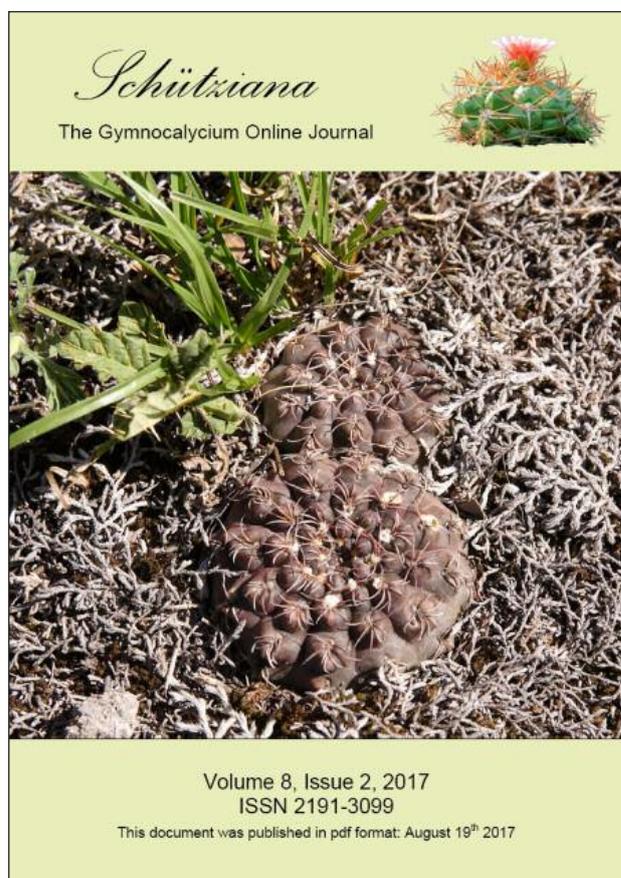
*Gymnocalycium alenae* Kulhánek, a new species from the northern part of province Córdoba.

The text of this valuable publication is available in English, German, Russian and Japanese.

The pictures and distribution maps give a clear insight into the plants found in habitat and culture.

You can download free all the issues from:

[www.schuetziana.org](http://www.schuetziana.org)



## Sukkulenten (formerly Avonia News)

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

From 2015, the monthly on-line newsletter has been called "Sukkulenten"

This issue, Sept/Oct 2017, discusses *Cistanthe guadalupensis*; Annual Meeting of Euphorbia Friends; In my aloe and succulent garden; *Hoya mindorensis*. It is very well produced with excellent pictures.

See website: [www.fgas-sukkulenten.de](http://www.fgas-sukkulenten.de)

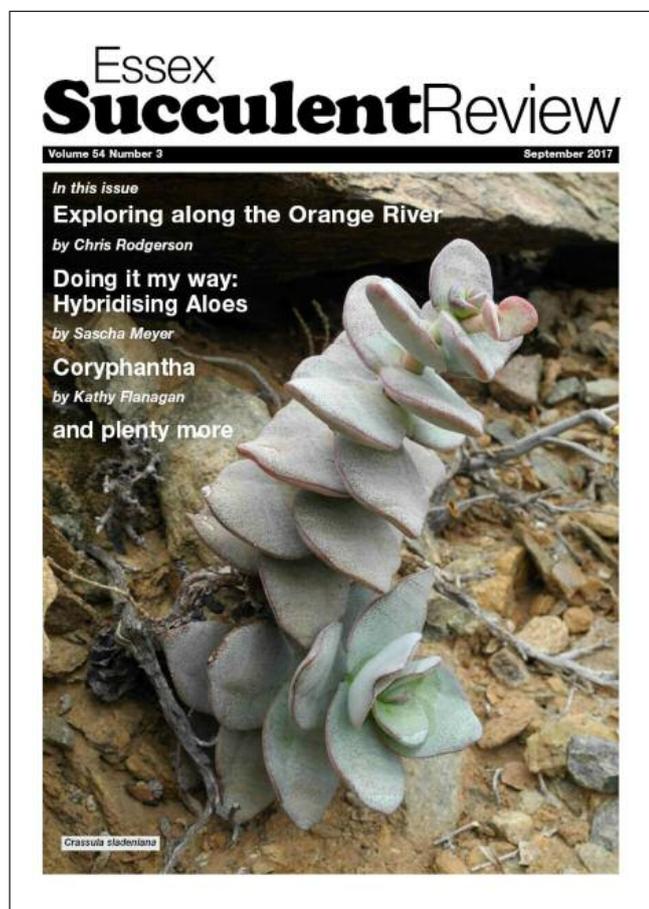
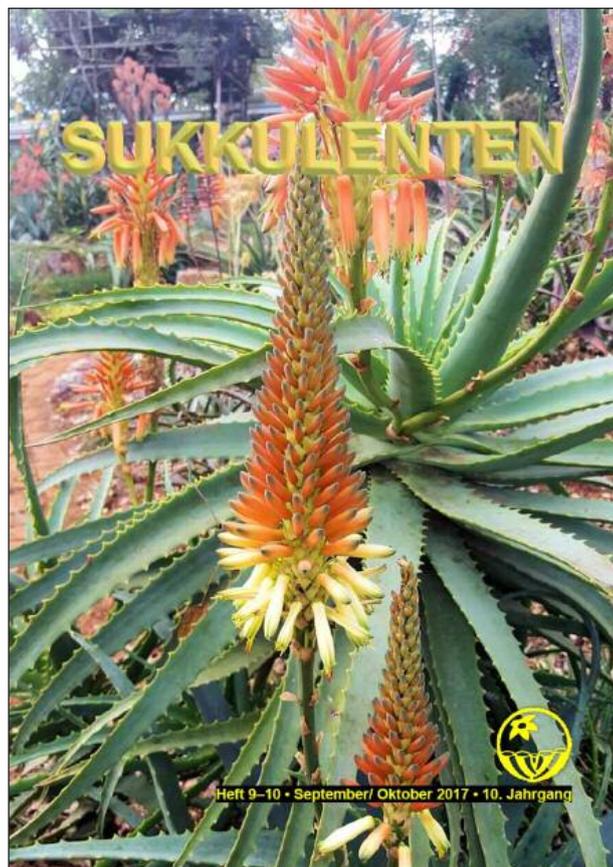
Annual seed list for members and much more.

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](mailto:praesident@fgas.sukkulenten.de) or

Wilfried Burwitz: Postfach 100206, D-03002 Cottbus, [geschaeftsstelle@fgas.sukkulenten.de](mailto:geschaeftsstelle@fgas.sukkulenten.de)



## Essex Succulent Review

Written by growers for other growers

The Essex Succulent Review is a high quality quarterly on-line UK newsletter featuring non-technical articles on all aspects of cacti and succulents.

Volume 54(3), published September 2017, has articles about *Coryphantha*; hybrid aloes; Two interesting Euphorbias –Madagascar; *Werckleocereus tonduzii*; Melocactus and the lizard; Exploring along the Orange River; More sleuthing in Central Mexico.

You can subscribe to the mailing list to be notified by email when each issue is ready to download. Subscription is completely free and you can unsubscribe at any time.

Further details and back issues are available on the website:

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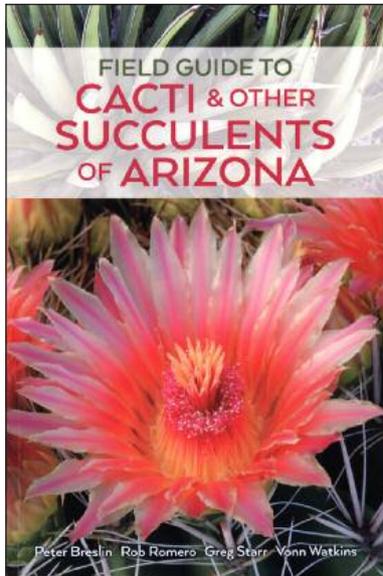
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# THE LOVE OF BOOKS

News of Recent Publications and there are quite a few to bring to your attention this time, ideal as gifts with Christmas in mind.

## Field Guide to Cacti & other Succulents of Arizona



by Peter Breslin, Rob Romero, Greg Starr & Vonn Watkins

The second edition of this useful book has just been published. Arizona has a rich succulent flora including many cacti. Whilst some species are widespread and easy to find, there are others which require some seeking out. This guide sets out to help the reader to find and identify the plants in habitat.

After chapters called History; Preface; Arizona Maps; Introduction and Plant Morphology, there are accounts of the genera covered by the book. This is followed by the Species Accounts which occupy the majority of the pages.

Each account comprises a selection of consistent headings: Etymology; Size; Shape; Stem; Spines; Flower; Fruit; Seeds; Distribution; Habitat and Notes. There is a distribution map and good quality pictures showing the species in habitat, including the flowers.

There is also a Glossary, Bibliography, a note about Native Plant Protection and an

Index.

302 pages 229 x 153mm, softbound with gloss laminated picture covers, 132 maps, 418 colour pictures and 10 line drawings showing morphological characters.

This is a well produced book with excellent pictures, pleasantly designed and printed on high quality coated paper. The information is logically organised so that the book is easy to use. I particularly appreciated being told when I would be likely to find the plants in flower, a vital piece of information when planning a trip. It must have been a lot of work to assemble the text and pictures and the authors should be complimented on doing such a good job.

[Available](#) to buy for about US\$50 including shipping worldwide. G.C.

## The World of Agaves

by Thomas Boeuf, Michael Greulich & Michael Bechtold.

144 pages 170 x 240mm softbound with laminated picture covers, 364 colour illustrations. German text.

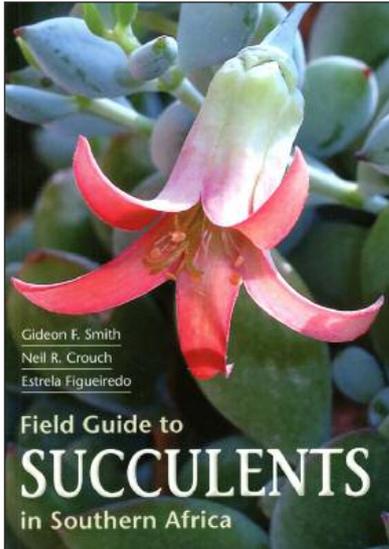
This latest special publication from the [German Cactus Society](#) (DKG) is only available for sale to its members.

The authors provide information on the culture of these plants and present details of more than 100 species. There are illustrations of a number of hybrids and cultivars.

This is a very well produced book with excellent colour pictures. It is remarkably good value at just 10€ (Germany) or 12€ (Rest of Europe), including carriage. G.C.



## Field Guide to Succulents in Southern Africa



by Gideon F. Smith, Neil R. Crouch  
& Estrela Figueiredo

Here is another revised edition of a successful field guide, first published in 2009. This extensively revised and enlarged edition deals with over 700 succulents that can be found in southern Africa, including some which are little known and others which have been introduced from elsewhere in the world.

The authors are well-known botanists who frequently publish their work in the BCSS yearbook *Bradleya*. This book presents technically accurate information in an easy to read format, all illustrated with plenty of good quality pictures.

The book starts with a Foreword by Prof. Dr Sigrid Liede-Schumann that is followed by the Preface and an Introduction which includes an explanation of what succulent plants are, conservation, distribution and horticulture. There is also a useful description of the key features of the 47 plant families that feature in the book, each with a common name.

The main body of the book is the detailed information about each species covered, organised by plant family. For every species there is a distribution map, a description of its distinguishing features and one or more clear pictures.

The book concludes with a glossary and a comprehensive index. 464 pages, 210 x 149mm

(A5), softbound with gloss laminated picture covers. You can buy this book from [Keith's Plant Books](#) for £15.00 or dealers around the world. The price represents excellent value.

G.C.

## Jatropha



Albert & Daphne Pritchard

The authors' work has been completed and published posthumously by the editor Pjotr Lawant. He endeavoured to follow the original approach of the authors, limiting the content to 71 species considered to be more or less succulent.

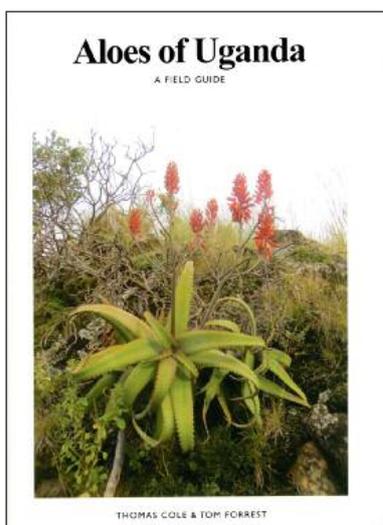
Although not popular in cultivation, the genus *Jatropha* has many attractive species. I often see them growing in habitat with cacti in South America so I bought the book in the hope that it would help me to name the species I was seeing. Unfortunately, only a few species from South America are listed and the book lacks illustrations from that region.

I know how much work it is to produce a book, however in this case, I feel it could easily have been made more useful. For instance, the picture captions lack information about where the pictures were taken, or the source of the illustration if it is a drawing.

98 pages, 297 x 210mm (A4), softbound with laminated picture covers, 54 colour pictures, 18 drawings. You can [purchase](#) this book from the International Euphorbia Society for £20 plus £3 postage for UK, £7 for Europe and £12 for rest of world.

G.C.

## Aloes of Uganda



Thomas Cole & Tom Forrest

This book is the first comprehensive account of all known aloe species in Uganda, and the first based on extensive fieldwork. There are currently 24 aloe taxa recognized in Uganda. Each plant is introduced with a description of the species, highlighting its distinguishing features and relationship to other aloe species. One new subspecies is described. Information is also given on the geographical distribution, habitat and ecology of the plants.

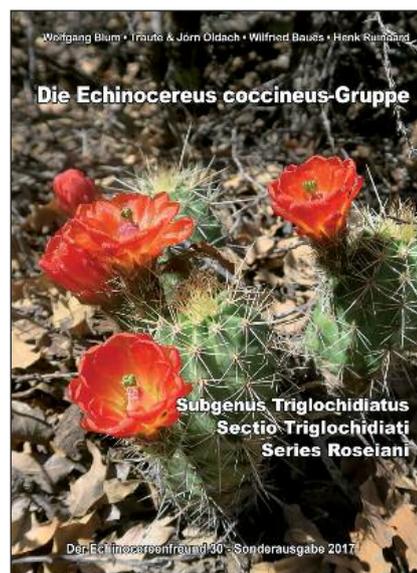
This is a well produced book with good quality pictures printed on heavy paper. It starts with a Forward (sic) by The Ugandan minister of Tourism and Wildlife, an Introduction followed by notes on Conservation and Cultural/medical practices.

The main body of the book comprises detailed accounts of the 24 taxa, each with a good map and clear pictures of the plant and flowers. There is also a bibliography and Glossary.

176 pages, 211 x 147mm, 151 colour pictures, 24 maps, hardbound with laminated dust cover. Also available softbound with picture covers. To buy the book, visit <https://aloesofuganda.com/store> where the softbound edition is **US\$25** and the hardbound **US\$40** plus postage from USA. I was charged **US\$35** for registered airmail to the UK.

G.C.

## The Echinocereus coccineus Group



Wolfgang Blum, Traute & Jörn Oldach,  
Wilfried Baues & Henk Ruinaard.

This, the latest and largest, specialist book published by AG Echinocereus deals with these species: *Echinocereus coccineus*; *E. polyacanthus*; *E. pacificus*; *E. bakeri*; *E. canyonensis*; *E. santaritensis*; *E. bacanorensis*; *E. yavapaiensis*, *E. gurneyi* & *E. xneomexicanus*.

560 pages 234 x 169mm, hardbound with picture covers, 774 colour pictures, distribution maps, 23 herbarium specimen images and 126 SEM images.

This is a substantial volume and produced to a very good standard on high quality paper. It has been thoroughly researched and the historical aspects are considered in depth. The comprehensive pictures of these impressive plants, many in flower, are excellent.

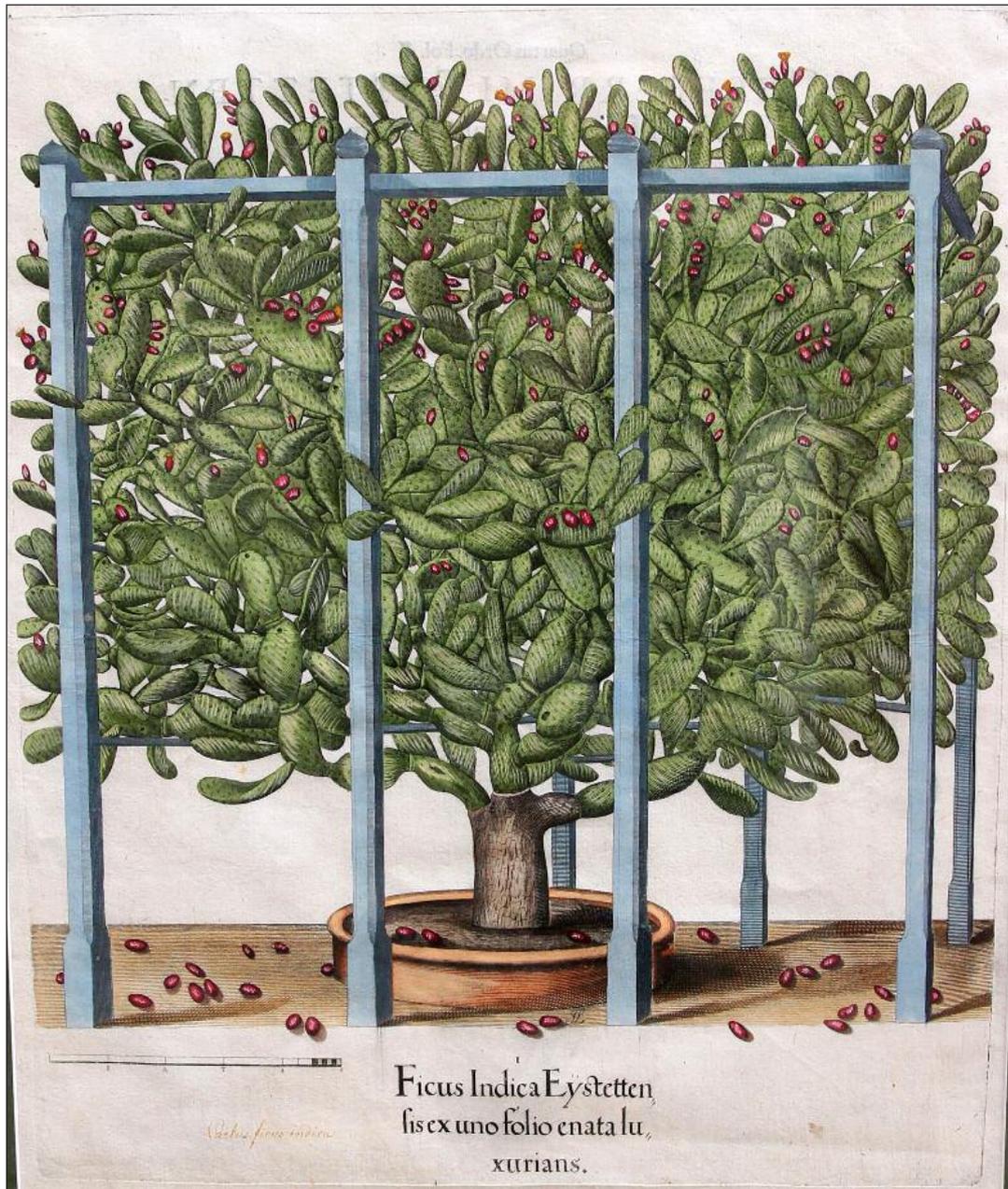
This book really tells you everything you would ever want to know about these popular plants and is heartily recommended! For those of us whose understanding of German is limited, a PDF of the text is available on request when ordering the book.

The book is available for **43.50€**, reduced to **39.50€** for members of AG Echinocereus. Carriage is an extra cost, so please [email](mailto:Ulrich.Dosedal) Ulrich Dosedal to order the book and find out the total price.

G.C.

## SUCCULENTS ON A PLATE

Graham Charles tells us about one of his favourite antiquarian prints which is from Basilius Besler (1561-1629), *Hortus Eystettensis* [Nuremberg] 1613.



As I have said before, finely illustrated books are often too expensive to consider buying as is certainly the case here, but it is often possible to buy a single plate from such books or even a reproduction. I bought my Besler plate of *Opuntia tomentosa* in a cage from the London Book Fair. It was uncoloured when I got it but the price (which I thought at the time was rather high!) included hand colouring, so I had it done to match the colours of an early coloured example.

The cage was coloured blue, like Gordon Rowley's copy, but you sometimes see examples with red or cream cages. Although I thought that I had paid a high price for my print, it is one of the most iconic in the book and I have never seen another one for sale since. My print of *O. tomentosa* shows a giant plant said to be 5.5m tall with a circumference of 19m with an estimated 3,000 pads. I see it every day and it never fails to please me. I feel lucky to own something that is 400 years old!

The *Hortus Eystettensis* is a pictorial record of the flowers grown in the greatest German garden of its time, that of the Prince Bishop of Eichstätt, Johann Conrad von Gemmingen. As part of a radical building programme at his seat, the Willibaldsburg castle overlooking the river Altmühl, the Prince Bishop created an extensive pleasure garden comprising eight separate gardens, each staffed with its own gardeners and each filled with flowers from a different country, imported through the international centres of Amsterdam, Antwerp and Brussels.

Painted halls and pleasure rooms further adorned the gardens. The great German botanist, Joachim Camerarius the Younger, advised the Prince Bishop on the garden's early design, and it may have been Camerarius's own manuscript florilegium which first suggested the creation of a pictorial record of the Eichstätt gardens to the Prince Bishop.

After Camerarius's death, a Nuremberg apothecary, Basilius Besler, advised on the gardens, and it was he who undertook immortalising the garden in detailed and delicate engravings for the year-round enjoyment of his patron and for posterity in the *Hortus Eystettensis*. Flowers were drawn from life with flower boxes sent to Nuremberg so that artists there could work from fresh specimens, with the result that these plant portraits serve both as documentation and pleasure.

The first edition was published in two issues: one with descriptive text printed on the verso of each plate and one without the text; in a few copies of the latter issue the text was printed on separate sheets and interleaved with the plates. The issue without text backing the plates was undoubtedly intended to be coloured by hand; the versos were left blank, to ensure that no shadow of the printed text could detract from the botanical image. It is significant that many of the deluxe copies have no descriptive text at all.

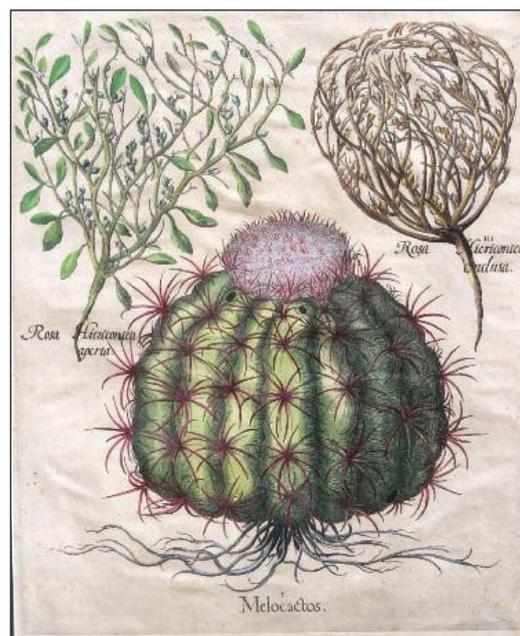
The first edition was limited to 300 copies, each of which carried a premium price. While uncoloured copies were available for 35 florins

(rising to 48), coloured copies cost 500 florins. The page size is Royal broadsheet (540 x 415mm). Letterpress: dedication to Johann Christoph, Prince Bishop of Eichstätt. Engraved title by Wolfgang Kilian. There are 367 engraved plates, just three illustrating cacti, two showing *Opuntia* and the other a *Melocactus*.

Despite much interest in the work and numerous documentary sources, much mystery still surrounds its publication. Neither the printer of the engraved plates nor of the letterpress text has been identified.

The original drawings used in preparing the plates for publication still survive at the University of Erlangen, and 328 of the copperplates, long thought to have been melted at the Munich mint c.1820, were rediscovered in the Albertina Graphische Sammlung at Vienna in 1998.

A fine copy of the complete book of 367 plates with contemporary Italian colouring of c.1618–20 has recently been discovered in a private library. It is believed to have belonged to Dr Giovanni Faber (Bamberg 1574–1629 Rome), professor of medicine, director of the papal botanical garden and member of the Accademia dei Lincei. In July 2016, it was auctioned by Christie's, London, and sold for £1,930,500!



However, the *Melocactus* print has been offered for sale recently for about £1000. G.C.

# THE DESERTS OF THE SOUTHWESTERN UNITED STATES: AN EASY CACTUS PARADISE

Denis Diagre-Vanderpelen, from the Botanic Garden Meise (Belgium)/ Université Libre de Bruxelles, describes a visit to the southwest of the USA. This is a trip that anyone could easily make. If you are looking for a place to go and look at cacti in habitat that has good roads, places to stay and the locals speak English, then this would be a good choice. Photographs by the author

Some twenty years ago, I was so fond of South American Cacti that I planned to move to Chile and make my PhD in this country. *Copiapoa* and *Erioseyca* (sensu Fred Kattermann) were my favourite genera. Do I need to mention that when I was a teenager, like many other cactus amateurs, I spent hours walking the 3LK – later ELK – congresses in search of big plants of *Copiapoa cinerea*?

Then, after a four consecutive trips in the Chilean fog zone to take pictures of these beauties in the field, I targeted Bolivia. This time again, good ol' genera had spurred me. *Lobivias*, *Neowerdermannias* and some other

rewarding plants were on my to-see list. But life is made of turns, twists and changes of focus. I guess my first encounter with *Echinocereus triglochidiatus* in Northern Arizona, is responsible for the 6 other trips I have made to the South-west since 1999. Each and every one was a thrill. It seems like there is always something new to find or to see... again. This is why.

## A patchwork of deserts

In the South-west, several deserts or, at least, arid/semi-arid regions meet – one must say that geography, like botany, has its share of nomenclatural and taxonomic discussions



Fig.1 A novaculite slope is a candy store for any cactus enthusiast (Tx).



**Fig.2** This undulating rocky snake is made of SiO<sub>2</sub>, aka novaculite (Tx).



**Fig.5** Also nested in novaculite, a nice form of the wide-spread and highly variable *Mammillaria heyderi* lets its presence be know.



**Fig.3** (above), **Fig.4** (above) Embedded in club mosses and novaculite, diminutive and endemic *Echinocereus viridiflorus* ssp. *davisii* are doing their spring effort.



**Fig.6** Growing along with *Echinocereus viridiflorus* ssp. *davisii*, *Escobaria tuberculosa* once known as "var. *varicolor*" is also an April bloomer.



about delimitation and definition of categories such as "desert". Anyway, in a single 2 weeks long trip, you can drive through what is called the Mojave Desert, the Great Basin Desert, the Sonoran Desert and the Chihuahuan Desert... Each one has a fascinating array of taxa, some of them endemic, to offer. Most of the time, all you have to do to encounter those beauties is to stretch your legs. That simple. There is another advantage to mention: comfort. Traveling in the US is very safe and easy and, if you do it with kids, there is always a nice hotel with a pool around. While they can swim and



**Fig.7** *Lupinus havardii* covers vast areas of Texas with a blue blanket.

have fun, you have plenty of time to go back to that special place you spotted along the road...

### To the Big Bend

April 2015, Phoenix, Arizona. We had a tough time in Phoenix. After a 13 hours long flight – having had to stop in Philadelphia for a couple of hours – we landed in the capital of Arizona at dusk. The kids – 7 and 10 years old, back then – were exhausted and so were we, my wife Cécile and me. Picking up the car at the rental should have been an easy job, this time again. But it all turned to a jam: the name of the car rental company was nowhere to be seen and no one had ever heard of it! After a good one and a half hour horsing around the building, we finally took a shuttle to our hotel for the night. It took us more than another half day to solve the problem. Anyhow, we left Phoenix around 14.00 and headed to the Southwest for a 1,000km ride through Arizona, New Mexico and eastern Texas.

We went through Safford, El Paso, Van Horn, then to Marathon, which is a mere dot on the roadmap. Yet the name of this small town – it is also the name of a County – sounds familiar to cactus enthusiasts. Not because it reminds them of Ancient Greek classes. No historical or linguistic reasons had brought us there. In fact, what we really wanted to see is novaculite (SiO<sub>2</sub>)(Figs.1 & 2). This very pecu-



**Fig.8** On flat areas around Terlingua (Tx) one could easily step on some Devil's Chollas, *Corynopuntia aggeria*. An unforgettable experience, I assume.

liar kind of mineral appears like a pale snake undulating in the hills south of Marathon. Novaculite is very hard and it varies in colour from almost white to grey-black. It is, say, "glassy" and for that reason it is unable to provide plants with nutriment. It is why cacti that grow on it are so special.

We first made a short stop on what appeared to be limestone berms on the 385, a few kilometers south of the town. It is a bit uneasy to admit, but the mammillarias, the echinocerei, opuntiods, thelocacti, glandulicacti and even ariocarpus we found there did not make my day. It took us some more minutes to finally locate a tantalizing ridge of novaculite, along the road... and another 15 minutes on my knees to spot *Echinocereus viridiflorus* ssp. *davisii* (Figs.3 & 4), some of them in flower, nested in selaginellas. This is a real gem. Once you have found one, others seem to pop out like mushrooms after a good late summer rain. Growing with them were *Mammillaria heyderi* (Fig.5), endemic *Escobaria hesteri*, *Escobaria tuberculosa* (Fig.6) (sometimes regarded as var. *varicolor*), *Thelocactus bicolor* ssp. *flavidispinus*. Not too bad for a first couple of



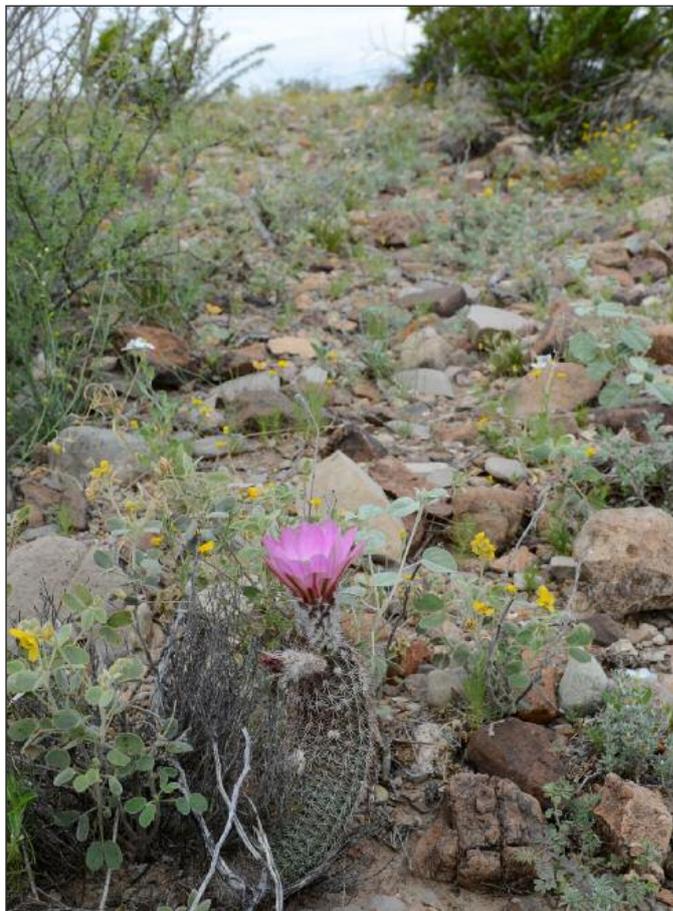
**Fig.9** Not an uncommon plant: *Opuntia macrocentra* grows by the hundreds around Terlingua (Tx). This time again, one must admit that the too often disregarded Opuntiods are masters when it comes to a flower exhibition.



**Fig.10** In the gentle clayish slopes around Terlingua (Tx), one will encounter lovely examples of *Echinocactus horizontalis*. Some were showing early flower buds, in the beginning of April.



**Fig.11** Quite inconspicuous in this rocky chaos, *Echinomastus warnockii* is not uncommon in this area of Texas. It is certainly not an easy plant to grow in Europe.



**Fig.12** (above), **Fig.13** (below) A couple of hundred yards away from the road that leads to the Rio Grande, one can encounter this awesome Big Bend endemic: *Echinocereus chisosensis*. By the way, despite its name, it is nowhere to be found in the nearby Chisos Mountains.





**Fig.14** (above), **Fig.15** (right) Once you know the kind of soil and places it favours, *Ariocarpus fissuratus* is not that difficult to find in the Big Bend and around Marathon. These examples are impressive (about 15cm wide). It is the only *Ariocarpus* species that grows outside Mexico.

hours in Marathon, indeed. Yet, we were not lucky enough to find *Escobaria minima* or *Echinocereus viridiflorus* ssp. *correllii*. So, you know why we shall most probably return to Marathon.

Our next stop was in Terlingua, a small town right next to the Big Bend National Park entrance to the west. We managed to find an affordable room in a local motel and began to explore the greyish hills that surrounded it.

Plants were in full bloom and it did not take too long before pollen covered our trousers up to the knees. Bluebonnets – *Lupinus havardii* (Fig.7) – that grew by the billions alongside some parts of the roads we had driven before were also present here. They mixed with some Borraginaceae, Asteraceae and... Cactaceae, of course. Small mats of *Corynopuntia aggeria* (Fig.8) – this genus contains a bunch of species most of us would usually overlook or, at least, bypass – were in glorious flower. Some are called the Devil's Chollas and they quite deserve it. Their spines are so fierce that they could easily (and diabolically, indeed) penetrate leather shoes and hitch anything that would unluckily be inside them.

A blueish *Opuntia* – *O. macrocentra* (Fig.9), I assume – that grew nearby also displayed wonderful bouquets of yellow flowers with a scarlet throat. On the top of small clayish bumps, in pebbles, big *Echinocactus horizontalonius* (Fig.10) were about to flower, while some *Coryphantha ramillosa* did not show



flower buds yet. On some rocky ridges around, reddish touselled barrels betrayed the presence of *Ferocactus hamatacanthus*. Yet the most exciting inhabitant of the area surrounding the hotel may be *Echinomastus warnockii* (Fig.11), a plant we would encounter on many areas in the Big Bend. This small “spiny breast” – this is what the name of the genus means – is a temperamental fellow to grow, and we all should be thankful to CITES and other nature conservation laws that have banned such sad things as wild-collected echinomasti sent to a quick death overseas.

### A geologist's dream come true: the Big Bend

The wonderful Big Bend National Park is nested in a bend of the Rio Grande. It was created in 1944 and it covers more than 40,000 acres. Types of soils and rocks are so plentiful and altitude varies so much within the park (from 500m up to 2,500m+, in the Chisos Mountains) that no naturalist could leave this place without deep regrets. Cactus lovers do not make an exception: this small patch of the Chihuahuan Desert will provide them with many fine encounters – including occasional mountain lions, bears and rattlesnakes. Driving eastwards to Rio Grande Village, one can expect to encounter – GPS data will definitely help, that said – the uncommon *Echinocereus*



**Fig.16** A most common plant in this part of Texas and in New Mexico; *Echinocereus dasyacanthus* is somewhat reluctant to flower in Europe. In the field, though, it is relatively easy to locate populations of this species thanks to its tremendous flower.

*chisosensis* (Figs.12 & 13) on flats, right next to the road. Once again, once you have seen one, more appear between the intertwined branches of small bushes or in mats of the Mounded Dwarf Cholla (*Corynopuntia grahamii*) that nursed the plant when it was just a seedling. The plant body itself is far from attractive compared to most echinocerei, but the flower is awesome. The Big Bend is the only place on



**Fig.17** Often seen growing under the protection of big opuntoids – some of them are natural occurring hybrids, by the way – old examples of *Escobaria tuberculosa* do their best to open their flower buds enclosed in tight spination. Big Bend (Tx).

earth were one can find this plant (there is a subspecies in Mexico, though). It grows with *Corynopuntia grahamii* – that happened to be in flower, too – lovely *Coryphanta echinus* and *Opuntia macrocentra*.

Opuntia species are most everywhere in the Big Bend. Another nice inhabitant of this area, found mostly on top of small bumps is *Ariocarpus fissuratus* (Figs.14 & 15). Once you know



**Fig.18** The Rio Grande as it is. Mexico is just 300 yards away from the place the picture was taken. Our kids could not resist jumping into the water...



**Fig.19** Early morning light on the volcanic Chisos Mountains. At this time of the day, snakes are often encountered. Our kids enjoyed the big rattlesnake and the *Phrynosoma*'s we met a couple of miles further south.



**Fig.20** Way bigger than the form we had previously encountered on the novaculite slopes outside near Marathon, the *Mammillaria heyderi* we met in the Chisos Mountains also bore creamy flowers crowns instead of light pink ones.

how to find them, you notice that it is not as uncommon as is often told. This sought-after genus was established by Michel Scheidweiler in 1838. A superb engraving represents the type (*Ariocarpus retusus*) in the *Bulletin de l'Académie de Bruxelles* as well as in *L'Horticulteur Belge*.

Still driving to the south-eastern edge of the Park, on rocky ridges, we also met big examples of *Echinocereus dasyacanthus* (Fig.16) with their tremendous "all-shades-of-yellow" flow-



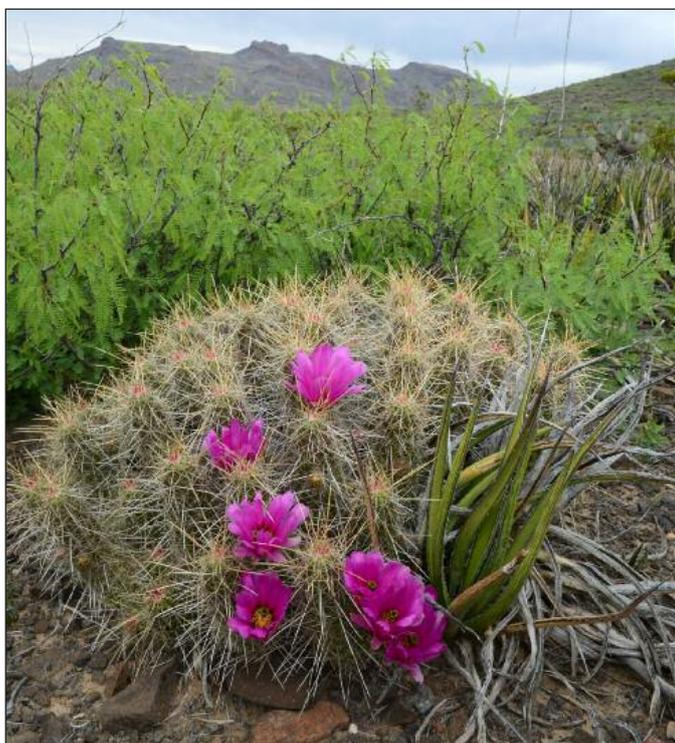
**Fig.21** As far as we can tell, this should be a natural occurring Hedgehog hybrid between *Echinocereus dasyacanthus* and *Echinocereus coccineus*: *Echinocereus xroetteri*



**Fig.22** This taxon is under protection of the US law. *Glandulicactus* (aka *Sclerocactus*) *uncinatus* ssp. *wrightii*'s distribution is quite vast. Yet, it is made up of isolated populations. A marvelous plant, indeed.



**Fig.23** In the Chisos Mountains and even in flat areas surrounding them, one will find *Echinocereus russanthus* without too much difficulty. Once regarded as a member of the *Echinocereus viridiflorus* complex, it is now a species in its own right. They both belong to the same group of tiny-flowering echinocerei, anyway.



**Fig.24** On a pavement of igneous rocks, the common *Echinocereus stramineus* illuminates the landscape with a bouquet of its awesome purple flowers.

ers. They grew with small clumps of *Escobaria tuberculosa* (Fig.17), big *Ferocactus hamatacanthus* and various *Opuntia* species. Soon, we faced the Rio Grande. The air was so hot that the kids could not help dropping their clothes and jumping into the water (Fig.18). Mexico was just a few meters away...

### Higher Ground

On our way back to Terlingua we decided to stop for a while to follow the Lost Man Trail, in the Chisos Mountains (Fig.19). Those mountains are of volcanic origin. The trail climbs through pine forests and more or less open slopes, where a famous *Echinocereus* hybrid can be found: *Echinocereus ×roetteri* (Fig.21). You have to be quite familiar with both the genus itself and to the parents – *E. dasyacanthus* and *E. coccineus* – to notice the plant's strangeness. In cracks in the rock, one can also find the rare and almost inconspicuous *Escobaria duncanii*, while big *Mammillaria heyderi* (Fig.20) shy away



**Fig.25** Near the Carlsbad Caverns in New Mexico, some *Epithelantha micromeris* managed to survive the fire that burned the place to ashes.



**Fig.26** The hills surrounding Carlsbad Caverns looked gloomy after the fire had consumed them. One doubted if plants would have survived it. Yet...

in open, grassy places and even under trees. Some bore the typical red fruits that look like small peppers, whilst others had a crown of creamy flowers. Near Marathon, the flowers of this species used to be light pink with a darker midstripe. A decade ago, I also had the chance to find a superb two-headed *Glandulicactus uncinatus* ssp. *wrightii* (Fig.22) in the Chisos Mountains. Not this time, though. The Chisos Mountains are also home of the fine *Echinocereus rusanthus* (Fig.23), with its bronze flowers. This species can be quite robust and branching. It used to belong to *E. chloranthus* (Nigel Taylor, 1985), but it is now regarded as a 'good' species (NCL, 2006). The famous English specialist had placed it in a section of the genus called *Echinocereus* along with *E. viridiflorus* and a bunch of other species. As strange as it may seem – it would not to a taxonomist, though – *E. viridiflorus*, despite rather small and greenish flowers that could be considered untypical of echinocerei, is the type of the genus.



**Fig.27** A shy *Langloisia* sp. emerges from a crack in the rock, under the remnants of a dead plant.

After the two or three hours long trail that led us to wonderful views over the Rio Grande Valley below, we headed back to our car and drove to Terlingua. We only stopped for big clumps of *Echinocereus stramineus* (Fig.24) in full flower. They grew with *Agave lechuguilla* and small Mimosaceae (as far as I could tell) out of a cracked cap of lava that seemed like thin black fudge on a cake made of dust.

### To the caves

Although Texas had by far not delivered all of its "cactologic wonders" to us, time was calling and, after a palatable dinner in a restaurant and a short night in Marathon – railways were a bit too close to the motel – we headed to New Mexico. We had targeted a small town – basically, a main street less than a half mile long – called Whites City. Only a few people live there, but tourists must flock in the local hotels during the US holidays. The reason is it is only a few miles away from wonderful Carlsbad Caverns National Monument.

The caves are well worth visiting – we did – but, above all, I wanted to have a look on some slopes I knew from two earlier visits, in 2004 and 2012. In 2004, the vegetation on the aforementioned slopes was lush. Besides *Opuntioids* and some *Agave* species, several species of *Echinocereus*, *Escobaria*, *Mammillaria*, plus *Epithelantha micromeris* and *Glandulicactus uncinatus* ssp. *wrightii* were thriving there. In 2012, when I first came back with my daughter, Flore, not only the white-nose syndrome had reached the bat populations of the caverns, but also fire had burned the slopes to ashes (Fig.26)! Plants that were growing on rocky spots had survived, while those that were



**Fig.28** *Echinocereus viridiflorus* has a huge distribution that includes New Mexico. Although some ssp. seem to deserve recognition, they are sometimes difficult to tell apart.



**Fig.29** Near Whites City, *Echinocereus dasyacanthus* does what it is known to do best: flowering.

growing among bushes and grasses were all but black, dead bodies (Fig. 27). Some big *Echinocereus stramineus* and *E. coccineus* had survived the fire, though, yet not undamaged. It was only by beachcombing the slopes that extended in front of the Caverns visitor centre



**Fig.30** The Whites City area is a very rich place when it comes to cacti – the city itself looked more or less like a ghost town, though. Among the beauties growing around, one must certainly mention the Strawberry Hedgehog, *Echinocereus stramineus*.

that we finally spotted small chocolate flowers: two young *Glandulicactus* perfectly camouflaged in dry grasses and nested in cracks were about to give another chance to the unfortunate slope vegetation.

Three years later, I was anxious to see how the place had recovered. Although it still looked pretty scorched, burned yuccas had new leaves, small ferns had grown, small wild flowers were popping out of dead mosses, and cacti, although still sparser than a decade before, were back in the saddle. We even managed to find a plumped *epithelantha* and some *Echinocereus viridiflorus* (Fig.28) and *E. coccineus* in flower. I stopped at the visitor centre to know more about the fire that devastated vast areas around the caverns and around Whites City. I was told that in a somewhat regular process, big fires happen when the vegetation becomes lush. Then, when lightning strikes the dense covering of shrubs and bushes that covers the slopes, fire consume most everything in a blink of an eye.

Behind our hotel, in Whites City, there was another promising spot. In the early 2000's dozens of huge *Glandulicactus uncinatus* ssp. *wrightii* were growing there, under the protection of thorny bushes and I was anxious to greet them after all these years. Now, the place

looked like a dump under the authority of blackberries or some sort of *Rosa* species. Here again, the fire had taken its share, apparently, and the fastest growing plant species had taken over the others. *Glandulicactus* was nowhere to be found. Yet, at some distance from the saddening scene, a small patch of the lost Eden had survived between barbed wire. There, *glandulicacti* bore buds, *mammillarias* were just cracking pockets of mud and *Escobaria tuberculosa* was at its best.

On the other side of the main street, on steep rocky areas, I chanced to encounter a whole lot of magnificent and untouched plants. Big clumps of *Echinocereus stramineus* (Fig.30), *E. dasyacanthus* (Fig.29) and *E. coccineus* offered their colourful corollas to pollinators (hummingbirds for the least of them), while *Escobaria tuberculosa* and *Epithelantha micromeris* had also found a home in the vicinity of massive hedgehogs. The scenery was nothing but magnificent.

### Alamogordo up to Carrizozo

Alamogordo, the very place where the first atomic bomb exploded, that is. We took the 82 through barren plains on our way to Cloudcroft, a ski resort that lies at 2,500m in altitude. By the road, medium-sized blue agaves and scarlet patches attracted us: these were, as far as I can tell, *Agave parryi* and wonderful clumps of *Echinocereus coccineus* (Fig.31). Their vibrant colours contrasted with the locally abundant, greyish and kind of gloomy *Cylindropuntia spinosior* and *C. whipplei*.

Then, from Cloudcroft you have to go all the way down to the Tularosa Basin and Alamogordo driving through the curves of the mountain road. Awe-inspiring scenery follows one after another and, while some tourists parked their car to stare at the flat basin in the distance, the four of us climbed a shoulder near a safety track designed for trucks in distress. No one – but a trucker with dead brakes, of course - would call it a good opportunity. This is a place where *Echinocactus horzonthalonius* grows by the hundreds in the company of some *Glandulicactus uncinatus* ssp. *wrightii*, *Echinocereus coccineus* and a lovely tall form of *Echinocereus viridiflorus* (Fig.32) with a long and upward curved central spine (*E. viridiflorus* ssp. *cylindricus*?). Not too bad for the shoulder of a parking lot, indeed.



**Fig.31** On our way to Cloudcroft (NM), on an almost barren plateau, red spots attracted our attention: big clumps of flowering *Echinocereus coccineus*. It belongs to the claret cup hedgehog complex, a group whose species are often difficult to tell apart.



**Fig.32** On a shoulder that dominated the Tularosa Basin (NM) we chanced to find this tremendous *Echinocereus viridiflorus*. It grew with hundreds of *Echinocactus horzonthalonius* and a couple of *Glandulicactus uncinatus*.



**Fig.33** White Sands is a huge area made of minerals. It is fair to say that you should better not try to visit it during the summer without ample water reserves.



**Fig.34** The White Sands National Monument is the home of a cactus for the connoisseurs: a somewhat huge form of *Echinocereus triglochidiatus*. Buds were just appearing when we visited this place.

Alamogordo is a place where beer and Bourbon lovers will not feel at home. A waitress once told us: "It is cheaper to take a cab to Albuquerque than to drink, drive and get caught by the police, in this city!" We decided to have dinner some 100 yards away from our hotel room...

The next morning, we set our mind on White Sands National Monument (Fig.33).

Grey and white clouds punctuated the sky above this amazing sea of white gypsum. It is told that a small population of *Sclerocactus (Toumeyia) papyracantha* grows there, but we did not even search for it despite the fact someone had given me the exact location of the plants. All I hoped to see for my fourth, or so, visit to this place, were the biggest *Echinocereus triglochidiatus* (Fig.34) on earth in full bloom. I had no success: buds were only just bursting through the epidermis...

The best way to wipe away my frustration was to get to an unexpected cactus spot along the 70, some kilometers away from the White Sands visitor centre. Believe it or not, when I first stopped there a decade ago, I was lucky enough to encounter *Coryphanta robustispina*, *Echinocereus fendleri* ssp. *rectispinus*, puffy *Echinomastus intertextus* and even what looked pretty much like a hybrid between *Echinocereus fendleri* and a member of the *Triglochidiatus* section (possibly *E. triglochidiatus* itself)! But that was then, and this time again, we failed in our attempt to save the day.

(to be continued)

## TRAVEL WITH THE CACTUS EXPERT (19)

Zlatko Janeba continues his popular series of articles about exploring the American South West. Photographs by the author.

We were in the realm of *Sclerocactus spinosior*. Immediately after the breakfast, we went directly from our hotel to check Josef's location which he had visited in 1980. But as he said it had changed completely since then. During our visit (5th May 2006), there was only one last hill left on this site; everything around was fenced, destroyed, being used for agriculture or construction (Fig. 1). It was a low grassy hill just behind (east of) Phillips 66 gas station and Motel 8 (Salinas, Utah), just across the large parking lot for trucks. We found only seven large *S. spinosior* specimens and some *Opuntia polyacantha* there. The cacti were growing on moderate slopes as well as on the hilltop. We could not find any seedlings nor younger plants. The grass (probably an introduced species, it looked like a kind of wild oat to me) was in some places so dense and tall that it was probably impossible for the seedlings to grow there and survive. Even some of the larger scleros were almost completely hidden in the tall grass with only

their upper parts reaching above the grass and enjoying the sunshine. There were remains of recent flowers on the cacti so the small population still looked to be able to reproduce. Anyway, the population seemed to have no future there and the question is whether the last hill is still there. Probably not, I guess. Luckily, the scleros are common in the larger area around Salinas.

We also went back to check the population from the day before (on the other side of the road, behind the Luxury Inn) as the light was better in the morning. We took some more pictures of the large old *S. spinosior* specimens there (Figs. 3 & 4).

Later, we drove southwest along Interstate 70 (I-70) and then we took SR-24 towards Sigurd. We tried to look for scleros in yet another place Josef had visited in 1980. It was just south of Sigurd, next to a cement factory. We did not see a single sclerocactus there. We only observed one large clump of *Echinocereus*



**Fig.1** A low hill just East of Salinas, Utah. A habitat of *Sclerocactus spinosior* with only a few large specimens left.



**Fig.2** An old flowering clump of *Echinocereus triglochidiatus* ssp. *mojavensis* found at 1560m elevation south of Sigurd, Utah.



**Fig.3** An old specimen of *Sclerocactus spinosior* behind the Luxury Inn in Salinas, Utah. The plant was growing (or surviving?) in quite a dense vegetation behind the fence. The habitat may be gone by now.

*triglochidiatus* ssp. *mojavensis* which was almost 1m in diameter and was in full flower (Fig. 2).

About one more mile farther, at an elevation over 1600m, we discovered a large population of *S. spinosior* (Fig. 5). The plants of various sizes were common on both sides of the road, growing in almost flat badlands or on moderate slopes among sagebrush. Although

mummies were quite numerous there too, the population seemed to be quite healthy. There were many seedlings, as well as older plants decorated with copious almost mature fruits (Fig. 6). In Richfield (Utah) we had a very rich lunch in a Chinese restaurant and we only paid US\$15 for both of us.

We made next stop on SR-118 between Monroe and Joseph (Utah). There, on the tops of low grassy hills at an elevation of some 1770m, we found sparsely scattered plants of *Sclerocactus spinosior* (Fig. 8) and *Opuntia polyacantha* growing among low bushes (mostly sagebrush). While the opuntias were only starting to produce small buds, some of the scleros were exhibiting their last open flowers (Fig. 7). That was a pleasant surprise for us. We could clearly see the influence of the elevation on the flowering time of the plants (although there might be some other factors involved too) – only a change of about 170m in elevation can make a big difference. At one place the scleros bore almost mature fruits (Fig. 6) while only 20 miles farther and 170m higher, the plants were still in flower (Fig. 7).



**Fig.4** View of the *Sclerocactus spinosior* habitat behind the Luxury Inn in Salinas, Utah. The habitat has quite probably been destroyed since our visit, but the species might be surviving in more remote places around Salinas.



Fig.5 A healthy population of *Sclerocactus spinosior* south of Sigurd, Utah.



**Fig.6** A younger specimen of *Sclerocactus spinosior* bearing almost mature fruits, south of Sigurd, Utah.

We made one more stop nearby, at a place I used to visit regularly and at different times of year. We saw the same plants there as at the previous stop, opuntias and scleros. That place had been recommended to Josef a long time ago by Stan L. Welsh of the Brigham Young University (BYU) in Provo, the author of the famous Utah Flora. Actually, I was really lucky to meet Stan personally several times during my post-doctoral stay at BYU between 2001 and 2004. He was a nice and very pleasant person. He also allowed me to spend as much time as I wanted in the Stanley L. Welsh Herbarium at BYU.

We drove through Joseph and then headed along I-70 to west. The landscape in this part of Utah is gorgeous and colourful and so we stopped several times just to shoot some photos. Later we took I-15 to south and, in Beaver (Utah), we took the exit and headed along SR-21 to the west. The land west of Beaver is heavily exploited for agriculture and is extensively irrigated. Many cactus habitats have probably been destroyed in that area.

Further west there are several mountain ranges with a north-south orientation. The whole area is a part of the larger Great Basin Desert. The first is San Francisco Mtns and we decided to stop when we passed the highest point and started to descend (about 1.5 miles west of the pass). There, at elevation between 1850–1880m we encountered nice *Yucca gilbertiana* (Fig. 9). It is an interesting, bluish (glaucous), low growing, acaulescent yucca, quite attractive to collectors of succulents, as it is also frost hardy. It is usually considered to be either synonymous with *Y. harrimaniae*, or



**Fig.7** A flowering specimen of *Sclerocactus spinosior* growing together with a small seedling between Monroe and Joseph, Utah, at an elevation of some 1770m.

its variety or subspecies (depending on the author). I am no expert in yuccas, but to me it seems to be different from *Y. harrimaniae*. *Y. gilbertiana* has broader leaves than *Y. harrimaniae* and grows isolated by mountain ranges from typical *Y. harrimaniae* (including *Y. nana*) which has its distribution range more to the east. It is a beautiful smaller yucca species but, unfortunately, not very common in cultivation. I believe, if freely available, it would become very popular in rock gardens with moderate climates around the world.

Alongside with *Y. gilbertiana* we found several plants of *Escobaria vivipara* (Fig. 10) and copious *Sclerocactus spinosior* specimens again (Fig. 11). The biggest sclerocactus was about 8cm wide and 10cm tall, while the youngest plant was only 3cm wide, flattened and bearing short and thin juvenile spines. There were flower remains on the sclerocacti, but not on the escobarias. I also noticed dehydrated *Opuntia polyacantha*, a species of *Ephedra* that was forming excellent tiny bonsai trees, and sparse juniperus trees.

Between the San Francisco Mtns and the Wah Wah Mtns, the next mountain range to the west, is located Wah Wah Valley. There we saw a big farm with an irrigation system that created a huge green circle in the middle of the desert, visible from a long distance. Then, the road started to ascend and we stopped again about 2 miles before the pass in the Wah Wah Mtns. There, at an elevation of some 1880m, we saw the same species as before, namely *Sclerocactus spinosior* (only 2 plants) and *Escobaria vivipara*, but no *Yucca gilbertiana*



**Fig.8** A habitat of *Sclerocactus spinosior* between Monroe and Joseph, Utah, at an elevation of some 1770m. Notice the snow cover on the top of the mountain range in the background.



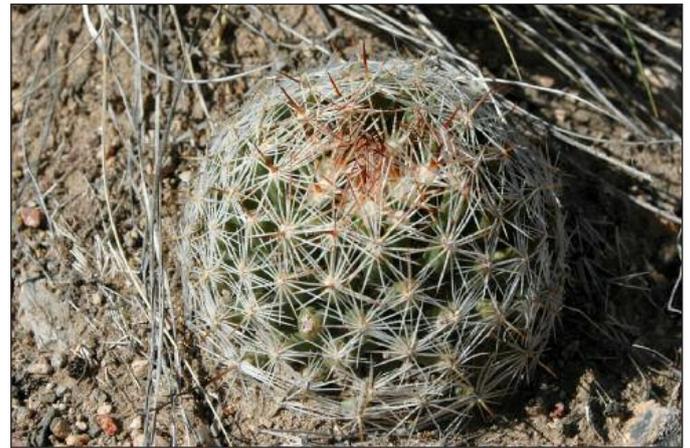
**Fig. 9** Beautiful small and compact *Yucca gilbertiana*, San Francisco Mtns, Utah.

anymore. Apart from juniperus, there were also quite rare dwarf pine trees.

We crossed the Pine Valley and arrived at the third mountain range called Mountain Home Range. We decided to search the area near the pass (still SR-21) at an elevation of some 1900m. Finally we saw some other scleros that day, *Sclerocactus pubispinus* (although it is a very close relative, by some authors considered barely a variety of *S. spinosior*). We found only four tiny plants growing on a small flat area covered with gravel and dry grass. They were less than 3cm wide, completely flat and almost hidden in the gravel. There was no sign of flowers nor fruits, but numerous perennials were in full flower there. From those, I recognized only *Lewisia rediviva* (Montiaceae).

The sun was already very low on the horizon and the light for taking photos was getting worse. We had to move on. But in a while we had to stop again as we saw several proghorns (*Antilocapra americana*) next to the road. It is a very interesting mammal that I used to meet sporadically during my adventurous expeditions through the Great Basin Desert. It is actually the only surviving member of the family Antilocapridae and its closest living relatives are probably giraffes and okapi in Africa. And although it is often called in North America either the American antelope, proghorn antelope or prairie antelope (because it closely resembles the true African antelopes), it is only a great example of parallel evolution.

We passed Garrison (Utah) and Baker (Nevada) and reached the Borden Inn at dusk.



**Fig. 10** *Escobaria vivipara* growing in San Francisco Mtns, Utah, at an elevation of some 1880m.



**Fig. 11** A younger specimen of *Sclerocactus spinosior* still with more or less pubescent spination, San Francisco Mtns, Utah.

The Borden Inn lies exactly on the Nevada-Utah border. We put ourselves up (for US\$42 for a double room) and entered the local bar. There we met two "sclero guys", Gerhard Häslinger (Austria) and Eric Binder (Germany), as we had planned during our previous accidental encounter on 2nd May (see the part 6 in the **Cactus Explorer** No.7, February 2013).. In the bar, it was a great finish to a long day. We discussed a lot about cacti and we emptied copious glasses of beer. As a matter of fact, the guys were quite crazy. They rented a car in Albuquerque (New Mexico) and planned to stay for the whole two months studying cacti in the SW of the USA. Unbelievable. And as it was Gerhard's eleventh trip to study cacti in the USA (the first one was in 1988, I believe), he must have a great knowledge of sclerocacti and pediocacti, his beloved plants.

[Zlatko Janeba](#)

# AEONIUM GOODII: A SUCCULENT WHICH NEVER EXISTED

Marco Cristini tells us about the mystery of *Aeonium goodii*.

Photographs by the author except where indicated.

In August 2010, while visiting Kew Gardens, I photographed an interesting succulent labelled *Aeonium goodii* (Figs.1–4). Upon returning home, however, I was quite puzzled, because I could find it nowhere in literature. It was not mentioned, neither as a species nor as a synonym, in Egli's *Illustrated Handbook of Succulent Plants* and also all other books about Crassulaceae had ignored it completely. So I labelled my images with a question mark and I forgot them for quite a while.

I met this intriguing plant again in September 2017, when I bought the *Field Guide to Succulents in Southern Africa* by Gideon F. Smith, Neil R. Crouch and Estrela Figueiredo. On pp.22–33 there are the key features of all succulent plant families and the authors, for unknown reasons, chose an image of *Aeonium goodii* to illustrate the Crassulaceae (Stonecrop Family, on p.27). Seeing the photos and the name I remembered both the plant I saw in Kew and another succulent, which I had bought – unlabelled – five years later.

After some quick research, I had identified the latter plant with *Aeonium 'Ballerina'* and I had labelled it accordingly (Fig.10), without recalling to mind the Kew succulent. This, however, I did in September 2017 and so I decided to inquire further into the question. A quick search on the Internet revealed that other people has also questioned the identity of the mysterious *Aeonium goodii*, pointing out the similarities with *Aeonium 'Ballerina'*.

I went through all books about aeoniums I had, but – again – I was not able to find *A. goodii* anywhere. On the other hand, I found two nice images of *A. 'Ballerina'* in Schulz's book. The second (on p.152) shows a plant with its normal look, but the first (on p.35) depicts an “unnamed cultivar [which] is the reversion from the variegated *A. 'Ballerina'*”.

The sticky leaves are much wider than the variegated cultivar”. In fact, the plants depicted in the image have leaves which are quite wider than those of the average *A. 'Ballerina'*. The point, however, is another. This “reversion” from *A. 'Ballerina'* looks very similar to *A. goochiae*. I immediately thought that this species could be the parent (or one parent, if it is an hybrid) of *A. 'Ballerina'*, but Rudolf Schulz, at the end of his book, writes that *A. 'Ballerina'* is “a form of *A. glutinosum* or its hybrid” and on the International Crassulaceae Network I found the suggestion that the other parent could be *A. canariense*.

Existing literature about *Aeonium 'Ballerina'* is not helpful. Harry Chi-King Mak writes only that the plant has “white variegated sticky leaves” and that it is “of hybrid origin”, but does not speculate further.

The first clue to solve this enigma is offered by the website of Kara Nursery (Portland, Oregon, USA), where I found an image of this plant with a very interesting label: *Aeonium goochiae 'Ballerina'* (*Aeonium 'White Fringe'*). The horticulturists wrote (in 2011) that they purchased the plant 40 years ago under the name *Aeonium 'White Fringe'*, but then found the correct identification in Gordon Rowley's *Teratopia* (p.233, where the plant, called only *Aeonium 'Ballerina'*, is said to be “an attractive vigorous and stable cv. with white upcurved leaf margins”).

Thanks to such information it is possible to conclude that *Aeonium 'Ballerina'* is in all likelihood a variegated form or a hybrid of *Aeonium goochiae*. So far, so good, but how does this help us in explaining the name *Aeonium goodii*?

The plants I saw in Kew, in the *Field Guide* and on the net with the label *Aeonium goodii*



Fig.1 *Aeonium goodii* at Kew.



Fig.2 *Aeonium goodii* at Kew



Fig.3 *Aeonium goodii* at Kew



Fig.4 Kew's label of *Aeonium goodii*.

are all very similar to *Aeonium* 'Ballerina', so similar that I feel quite confident in writing that they are the same succulent. The reason why we have different names is, in my opinion, a (paleo)graphic one (paleography, by the way, is the study of ancient and historical handwriting).

In fact, I suppose that someone, a few years ago, noticed a strange plant among their *Aeonium goochiae*, picked it out and started growing it in another pot or bed, under the label *Aeonium goochiae* cv., *Aeonium goochiae* form, *Aeonium goochiae* variegated or something like this. Some nurserymen obtained the plant and decided to give it a more elegant name, such as *Aeonium* 'White Fringe' and, perhaps later, *Aeonium* 'Ballerina'. In the meantime, however, the plant continued to be distributed with its old label, that is

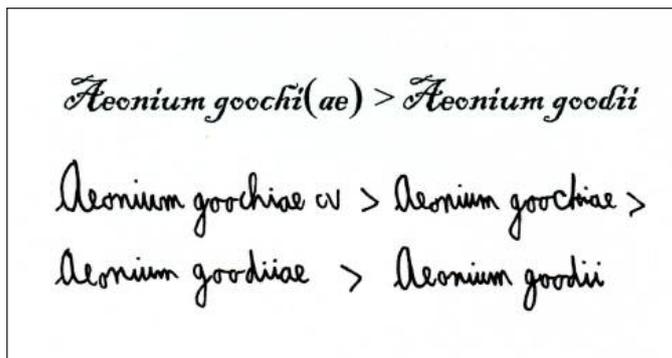


Fig.5 How names can change....

*Aeonium goochiae* cv/form.

Longer labels are always liable to losing the last words, so *Aeonium goochiae* cv became *Aeonium goochiae*, albeit a strange one. The name *goochiae* is not very common, so I think that someone transcribed it wrongly, transforming *goochiae* into *goodiae*. It is not easy to understand this passage when reading

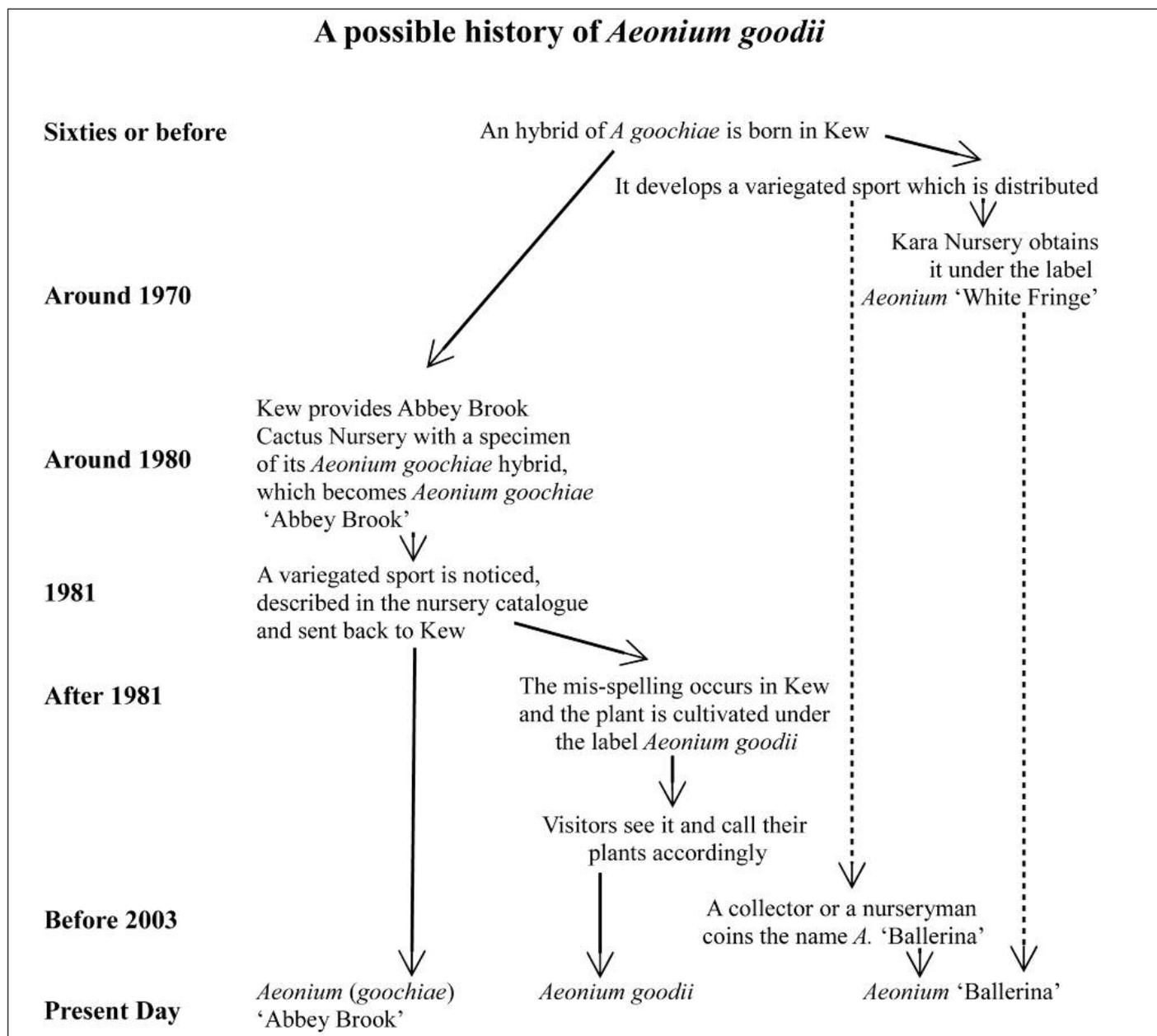


Fig.6 The possible history of *Aeonium goodii*.

the name written in Times New Roman or in a similar typeface, but a more cursive typeface can offer a better idea of this textual corruption. In fact when you write quickly, the letters “ch” are very similar to the letters “di” (Fig.5).

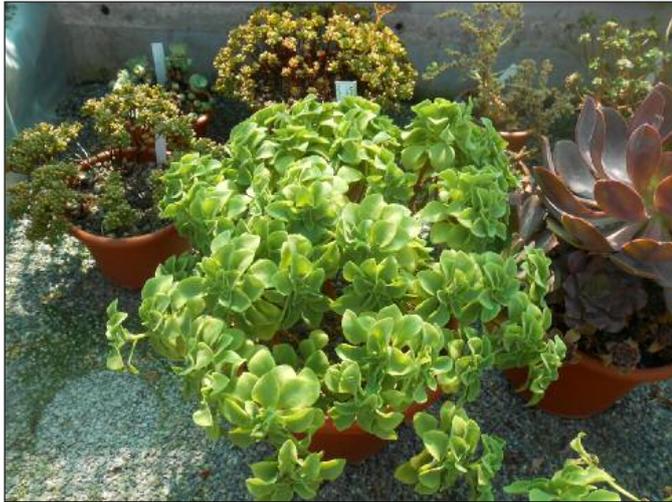
At this point our *Aeonium goodii* was seen by a learned collector or by someone who worked in a botanical garden, who remembered that there are a few species named *goodii*. On the International Plant Names Index I found eight:

- Cephalophyllum goodii* (Aizoaceae),
- Thismia goodii* (Burmanniaceae),
- Lobelia goodii* (Campanulaceae),

- Calycobolus goodii* (Convolvulaceae),
- Banksia goodii* (Proteaceae),
- Grevillea goodii* (Proteaceae),
- Sirmuelleria goodii* (Proteaceae),
- Psychotria goodii* (Rubiaceae).

The second and last species were described respectively in 1999 and in 2007, so they cannot have been confused with our plant, but all the other (especially the first) could have deceived a succulentophile, who in good faith “normalized” *Aeonium goodii* to *Aeonium goodii*. In this way he or she unconsciously gave birth to a new species, a species which never existed.

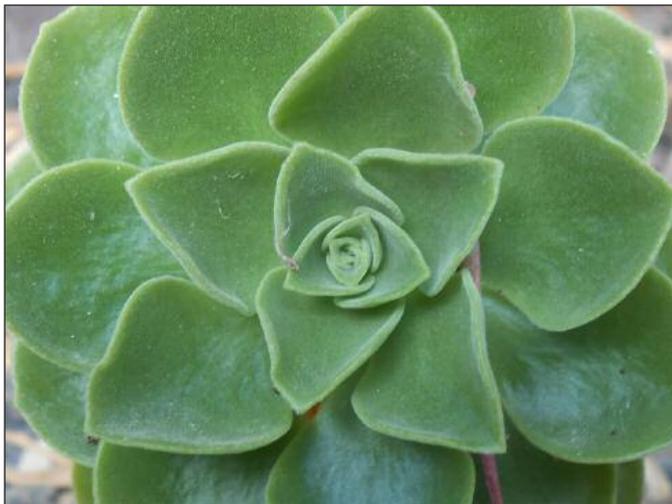
My arguments, however, have been only conjectural until now. Can some kind of proof



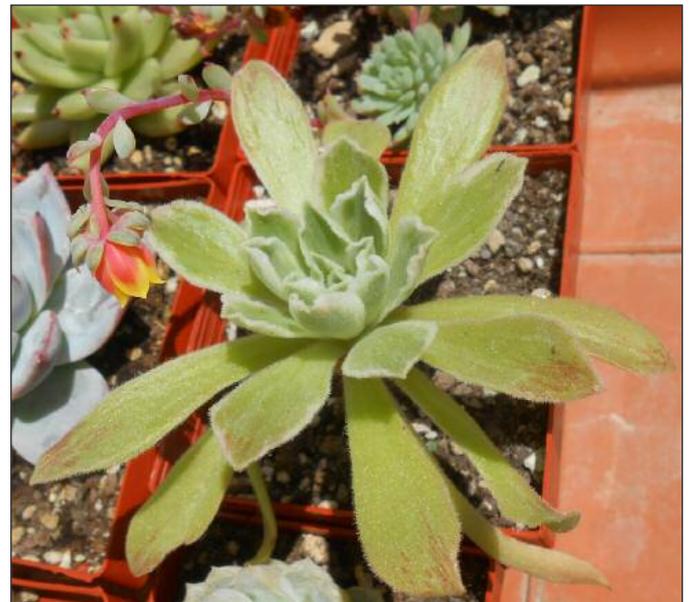
**Fig.7** Zurich, Sukkulentensammlung, a pot of *Aeonium goochiae*.



**Fig.8** Zurich, Sukkulentensammlung, *Aeonium goochiae*.



**Fig.9** Würzburg, Botanischer Garten, *Aeonium goochiae*.



**Fig.10** *Aeonium* 'Ballerina'.

be found? Fortunately, the answer is yes. While looking for information about *A. goodii* I wrote to Kew and after a few weeks they kindly replied that their plant was purchased from Abbey Brook Cactus Nursery in 1981. "Abbey Brook Cactus Nursery have confirmed that the plant's name is mis-spelt and should read *Aeonium goochiae*".

Upon knowing this I immediately wrote to the nursery and I again received a very kind and exhaustive answer. I was told that their plant *Aeonium goochiae* 1372 probably came from Kew. This plant is now usually called the 'Abbey Brook' form (Fig.12). It may be a cultivated hybrid, possibly between *Aeonium goochiae* and *A. lindleyi* var. *lindleyi* or *A. canariense* var. *canariense*, with softer and more hairy leaves than the true *Aeonium goochiae*. One of the plants cultivated at Abbey Brook

Cactus Nursery which came from Kew threw off a variegated narrow-leaved sport in the nursery around 1980. It first appeared in the 1981 catalogue as "1373 *Aeonium goochiae* cv Abbey Brook (Fig.13). Interesting narrow leaved form. Leaf edges have prominent white margins. Attractive".

Ten years ago the owners of Abbey Brook Cactus Nursery went to La Palma, Canary Islands, where *A. goochiae* grows, and understood that their *Aeonium* 'Abbey Brook' was not a simple cultivar, but more probably a hybrid. The variegated plant has been recently distributed under the name *A. 'Ballerina'*, but Abbey Brook Cactus Nursery did not give the name 'Ballerina' to the succulent.



**Fig.11** *Aeonium goochiae* (left) and *Aeonium* 'Abbey Brook' (right) Photograph: Abbey Brook Cactus Nursery



**Fig.12** *Aeonium* 'Abbey Brook' Photograph: Abbey Brook Cactus Nursery.



**Fig.13** *Aeonium goochiae* 'Abbey Brook variegated' Photograph: Abbey Brook Cactus Nursery.



**Fig.14** The true *Aeonium goochiae*. Photograph: Abbey Brook Cactus Nursery.

This confirms my conjectures about the origin of *A. goodii*. If we trust the website of Kara Nursery, which unfortunately did not answer my emails, the current *Aeonium* 'Ballerina' already existed around 1970, when the American nursery obtained it, under the name *Aeonium* 'White Fringe'. For this reason I think that this hybrid (not in its variegated form) was born in cultivation, possibly in Kew, a few years before and that it was distributed among horticulturists and collectors. During this phase it gave birth to a few variegated offshoots and it received the name 'White Fringe'. Around 1980 Kew provided Abbey Brook Cactus Nursery with a specimen of its *Aeonium goochiae* hybrid, which became *Aeonium goochiae* cv 'Abbey Brook' (Fig.12).

In 1981, however, a variegated sport was noticed which was described in the nursery

catalogue and sent back to Kew, since the Botanical Garden says that they received the plant from Abbey Brook Cactus Nursery in 1981, as confirmed also by the label of *A. goodii* which I photographed in Kew (Fig.4). In my opinion it was at that time that the mis-spelling occurred. *Aeonium goochiae* cv 'Abbey Brook' became, maybe after a few passages (Fig.5), *Aeonium goodii*. It was cultivated under this name, visitors saw it and called their look-alike plants accordingly. The name *Aeonium* 'Ballerina' came later and it was possibly coined by someone who desired to put an appealing label on a plant till then unidentified (Fig.6).

So this story, which began in Kew with a puzzling aeonium, ends in Kew with a hybrid whose only misfortune was to have a parent bearing an uncommon name.

**Appendix:****The etymology of *Aeonium goochiae***

Readers may wonder about the etymology of *Aeonium goochiae*. Literature is, again, deceptive. Liu (p.42) claims that the plant was “named after P.B. Webb’s mother, whose maiden name was Gooch”, but he merely transcribes Praeger (p.208: “named by Webb after his mother, whose maiden name was Gooch”), who, in turn, relies upon Webb’s description of *Aeonium goochiae* (p.190, note 1): *Matri carissimae, benemerentissimae, nec rerum naturalium ignarae, nec scientiae amoenae rudi, quae operis hujusce sumptus, facultatum nostrarum modum superantes, aere sustentare suo non dedignata est, speciem Canariensem suavem, perpuchramque, damus, dicamus, dedicamus* (that is: “We give, dedicate, devote this attractive and nice Canary species to our beloved and well-deserving mother, who is neither unacquainted with natural sciences nor ignorant of pleasant learning and who did not refuse to pay with her own money for the expenses of this work, which exceeded our means”). Webb, however, wrote nothing about having given his mother’s maiden name to the succulent.

Praeger probably came to this conclusion because he thought: the plant was named after Webb’s mother but since Gooch was neither her first name nor her married name, it must be her maiden name. I am sure that such a line of reasoning is correct 99 times out of 100, but this is the proverbial “a hundred to one” case. Webb’s mother, in fact, was Hannah Barker (hence the “B.” in the botanist’s name, which is actually the first letter of his mother’s maiden name), daughter of Sir Robert Barker (c.1732–1789), commander-in-chief in British India. She married Webb’s father, Philip Webb, and, after his death, Thomas Gooch (1773–1849), a lieutenant-colonel in the army. So Gooch was not her maiden name, but the surname of her second husband, which became her married name after her second marriage.

**Acknowledgments**

I would like to thank Margrit Bischofberger and Ray Stephenson, who helped me find books which are unobtainable in Italy. Special thanks are due also to Roxana Glenn (Kew Gardens) and Gillian Fearn (Abbey Brook

Cactus Nursery), who shed light on the origin of *A. goodii*.

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**Sitography**

- [http://www.karacactus.com/succulentImagepage\\_S\\_0115.htm](http://www.karacactus.com/succulentImagepage_S_0115.htm) (*Aeonium goochiae* ‘Ballerina’, alias *Aeonium* ‘White Fringe’, Kara Nursery)
- <http://www.ipni.org> (specific name *goodii*)
- <http://www.crassulaceae.ch/de/artikel?akID=22&aaID=3&aiID=B&aID=3357> (retrieved on the 1st October 2017; *Aeonium* ‘Ballerina’)
- <http://www.thepeerage.com/p42291.htm#i422901> (short biography of Webb’s mother)

## RESOURCES IN THE CSSA ARCHIVES

The Cactus and Succulent Society of America has a long and distinguished history. Chuck Staples, CSSA Historian, describes the valuable contents of the Society's archives.

The archives is a web page designed initially in 2012 by Gunnar Eisel, CSSA General Manager, for historical material compiled by Chuck Staples, CSSA Historian. The web page was updated with a new look in February 2017 with the help of computer guru Bob Jewett. To view the updated web page you need visit [www.cssainc.org](http://www.cssainc.org) then click on Archives which will take you to the home page of the archives. Here is an explanation of each item shown on the archives face page as you click your way through the item(s) you wish to look at.

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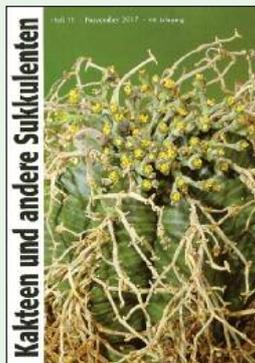
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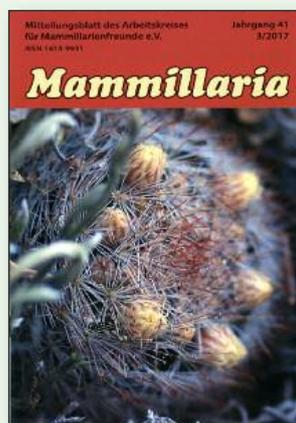
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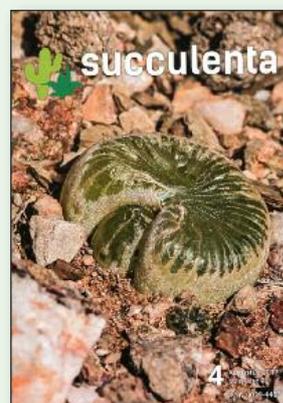
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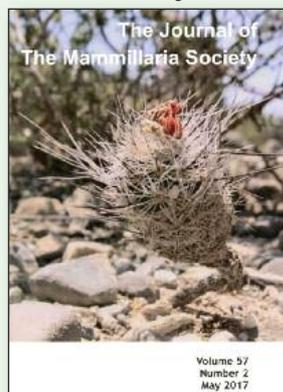
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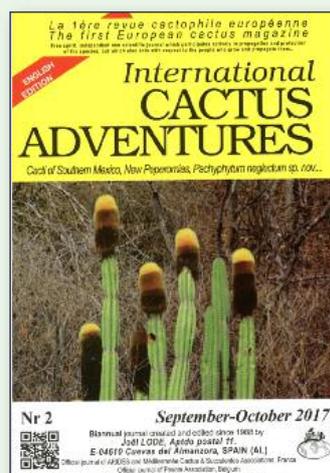
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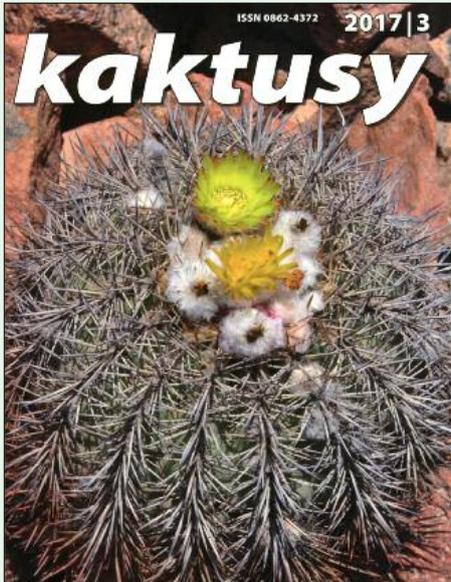


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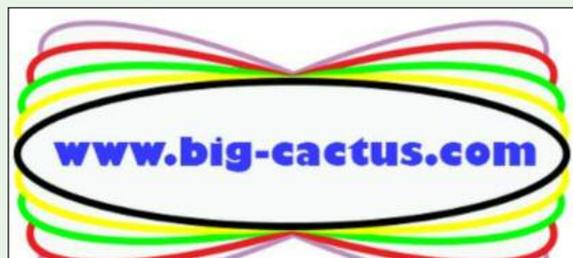
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×Chamaelobivia 'Lincoln Gem'



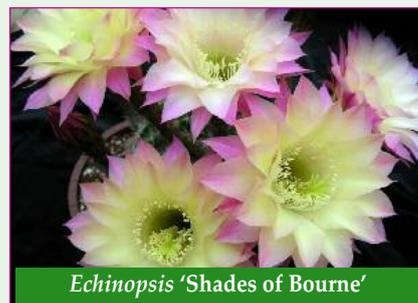
Echinopsis 'Bourne Razzle Dazzle'



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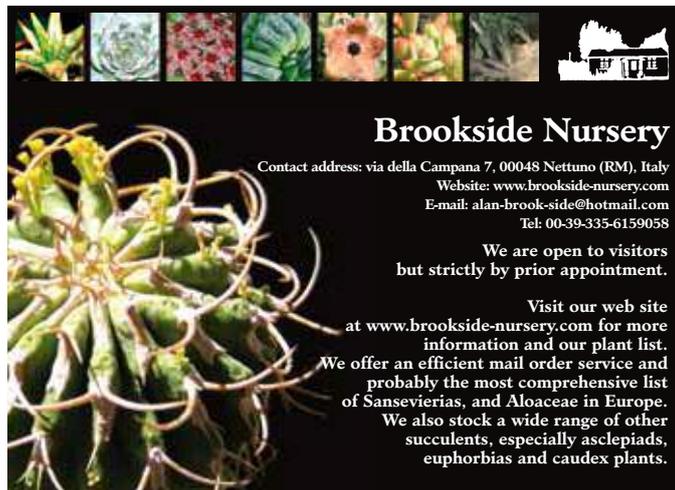
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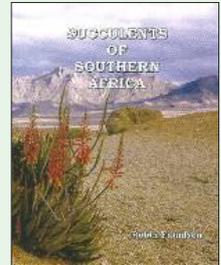
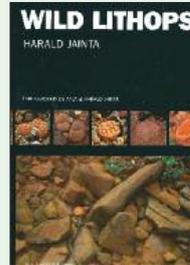
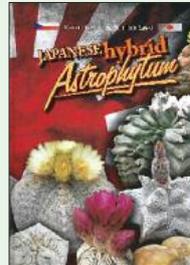
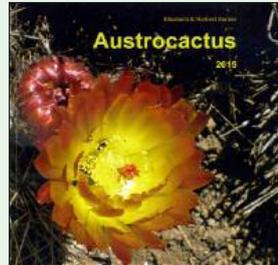
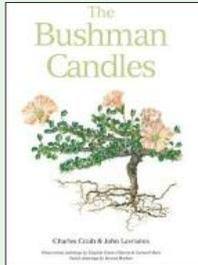
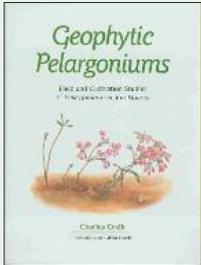
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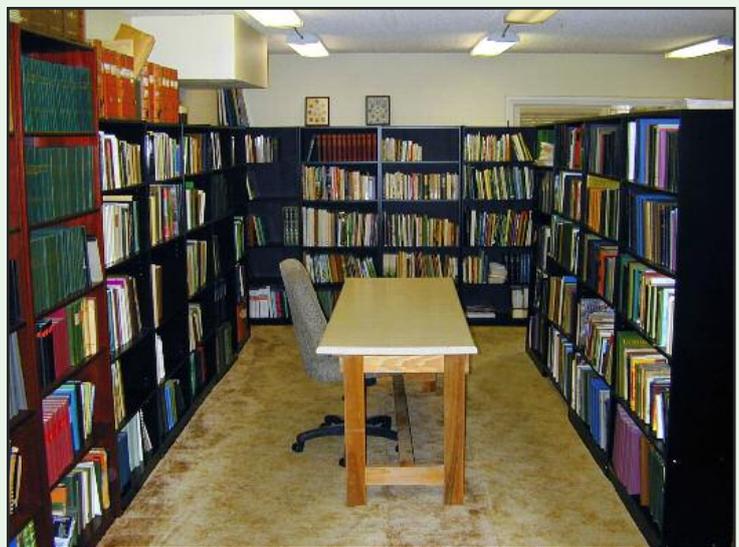
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