



# Espinas y Flores

BULLETIN OF THE SAN DIEGO CACTUS AND SUCCULENT SOCIETY  
Affiliate of the Cactus and Succulent Society of America, Inc.

Volume XXIV, Number 2

February 11, 1989

FEBRUARY MEETING  
Saturday February 11, 1989

1:30 P.M.

Casa Del Prado, Room 101, Balboa Park

## PROGRAM

The Huntington-Hunt Mammillaria Hunt  
by John Trager

Curator of the Desert collection-Huntington Botanical Gardens

The February program will feature an illustrated account of a September 1986 botanical exposition to the North Western Mexican states of Sonora and Sinaloa. The exposition was a joint venture, staffed by Dr. Daryl Koutnik and John Trager from Huntington Botanical Garden and David Hunt of the Royal Botanical Garden, Kew, London, England, with the primary purpose to examine Mammalaria species inhabitat. However, other aspects of the region ,vegetation will be illustrated as well.

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Deadline for E y F is February 25 -

Thanks

Mary

## SUCCULENT-OF-THE-MONTH

### SUCCULENTS OF THE CANARY ISLANDS

(Aeoniums, Aichrysons, Greenovias, Monanthes)

Dorothy Dunn

The Canary Islands consist of a group of seven main islands located off the northwest coast of Africa, in the vicinity of southern Morocco. All are of volcanic origin and on one (Lanzarote) there is still some live volcanic action in the Montanas del Fuego (Mountains of Fire). The islands are Gran Canaria, Teneriffe, La Palma, Gomero, Hierro, Lanzarote, and Fuerteventura.

The Canaries are actually the tops of volcanic mountains protruding from the sea, with altitudes ranging from 4,000 to over 12,000 feet. They are subtropical in appearance and have a vernal climate all year around, with virtually no difference between the seasons. These conditions are conducive to a great wealth and variety of plant life, much of which is native to these islands and not occurring naturally anywhere else in the world. While the succulent flora comprises only a small percentage of this amazing abundance, the number of genera represented is surprisingly diverse. These include: Aeonium, Aichryson, Greenovia, Monanthes, Sedum, Ceropogia, Caralluma, Euphorbia, Senecio, and Aloe. However, since the first four above-mentioned genera contain most of the succulent species found in the Canaries (only eight species are not native), this article will be limited to them.

Aeoniums, Aichrysons, Greenovias, and Monanthes all belong to the Sempervivoideae section of the huge Crassulaceae family, and are often referred to as the "Canary Island Sempervivums". They are more tender than the hardy European Sempervivums, but the species usually found in cultivation in this country are among the easiest plants to grow, requiring only ordinary garden soil, good drainage, and some shade and protection from frost for most of them. They do exceptionally well in mild climates located close to the coast.

Aeoniums are closely related to Sempervivums and at one time were generally included in that genus. There are about 40 species and numerous hybrids. They are mostly succulent shrubs or sub-shrubs with woody, branching stems which often produce aerial roots. They range in size from the tiny, bushy A. sedifolium to the very large A. percarneum, A. canariense, A. urbicum, and A. nobile. They grow rapidly during the winter and are dormant in the summer, when they should be kept fairly dry. Most prefer some shade, although some - notably A. percarneum, A. sedifolium, and A. castello-paive - will take full sun. A few, such as A. arboreum var. atropurpureum and A. sedifolium, require full sun to enhance their distinctive colorations. Their habitats in the Canaries range from hot cliffs at sea level and clinker-type lava flows where it almost never rains (A. nobile, A. tabulaeforme, A. lindleyi) to moist, gloomy, densely-wooded mountainous areas (A. goochiae).

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They are, with very few exceptions, easy to grow although all are frost-tender. They are susceptible to nematodes on their roots and mealy-bugs between their leaves. Propagation is simple from cuttings with most species, exceptions being A. nobile, which is slow-growing even under ideal cultivation conditions, rarely branches, and dies upon flowering, whereupon it produces millions of seeds, and A. tabulaeforme, which seldom branches (unless beheaded), and whose flowering signals its approaching demise. However, A. tabulaeforme, given some specialized care, can be reproduced from leaves, a feature unique in the genus.

Aeonium flowers are mostly yellow or straw-colored, although A. percarneum, A. decorum, and A. goochiae have pink flowers. However, A. nobile has a distinctive, much-branched inflorescence of dark red flowers, which is also a peculiarity in this genus. A few Aeoniums have decidedly sticky leaves, and one of these species, A. lindleyi, is widely-accepted as a reliable antidote for the irritation caused by Euphorbia sap.

Aichrysons are now routinely included in the genus Aeonium, although they do have some characteristics which set them apart. There are 12 species, all small plants, and all with yellow flowers. The generic name derives from two Greek words meaning "always gold". They have a habit of disappearing in cultivation as they usually die after flowering, and are usually considered to be biennials. They all prefer shade, and are a little more difficult to grow than Aeoniums. Like Aeoniums, they are winter-growing, summer-dormant, and frost-tender. Propagation is generally by cuttings.

Greenovias are named for G.B. Greenough, a geologist. There are only four species, all native to the mountainous regions of the Canary Islands where they grow in pine forests, and all have yellow flowers. They have a very definite summer resting period, when they close up into tight little "rosebuds" covered by a brown, papery skin, and appear all but dead. This peculiar characteristic gave rise to the common names "Irish Rose" or "Green Rosebuds". During this time they should be watered very sparingly, if at all. They start growing in the fall and flower in the early spring, and during this period they require more water and warmth. They like a porous, loamy soil and light shade. They are susceptible to mealy-bugs between the leaves (and snails all over the leaves!). They are profusely-clustering plants (except for G. diplocycla which never offsets) and therefore are usually propagated by cuttings.

There are about eighteen species and nine hybrids of Monanthes. Their name comes from the Greek, and means "one-flowered" or "single-flowered", although this has proved to be botanically incorrect. They are small, Sedum-like, clump-forming plants, with tiny fleshy leaves crowded into rosettes at the ends of extremely tenuous branches. In the Canaries they are found in a variety of habitats, including hot lower elevations near sea level, sheer cliffs at 8,000 foot altitudes, and on banks among thick grass, ferns, and mosses. In cultivation they seem to prefer shade. They are all tiny, delicate,

mat-forming plants with somewhat inconsequential flowers of dull yellow. However, each flower contains a ring of conspicuous spoon-shaped nectar glands. Monanthes is probably the most poorly-represented genus in cultivation of this particular group of plants.

Other interesting succulents indigenous to the Canary Islands include: Dracaena draco ("Dragon Tree"; the largest and oldest specimen grows on Teneriffe and is reputed to be at least 1,400 years old); Senecio kleinia, which is commonplace there, and several Euphorbias, the most prolific being E. canariensis. Other Euphorbias include E. obtusifolia var. regis-jubae, E. atropurpurea, and E. aphylla. There are also a few Ceropegias, including the "stick types" C. fusca and C. dichotoma, and Teneriffe is believed to be a natural habitat of Aloe barbadensis (A. vera).

There are no true cacti in the Canaries other than a few Opuntias which include O. dillenii and O. ficus-indica.

#### Literature cited:

- |  |  |
|--|--|
| Brown, J.R.                                  | <u>Succulents for the Amateur</u> , pp. 119-125  |
| Lamb, Brian:                                 | <u>Canary Island Succulents</u> (Cactus and Succulent<br>Journal: May-June, 1967; July-August, 1967)     |
| Lamb, Edgar:                                 | <u>Hunting Succulents in the Canary Islands</u> (Cactus<br>and Succulent Journal: May, June, July, 1946) |
| Martin, Margaret J. and<br>Chapman, Peter R. | <u>Succulents and their Cultivation</u>  |
| Rowley, Gordon:                              | <u>The Illustrated Encyclopedia of Succulents</u>  |



(Note: Please bring any appropriate plants from this group, as I have very few. Thank you! I.I.I.)



## CACTUS OF THE MONTH

### PENIOCEREUS AND PTEROCACTUS

By Phyllis Flechsig

Two interesting genera, small in number of species, are this month's subject. Although they resemble each other somewhat in having large, tuberous roots and narrow stems, they are not related to each other except in belonging to the cactus family. Peniocereus is strictly North American, while Pterocactus comes from Argentina.

Peniocereus is native to the southwestern United States, Baja California, and mainland Mexico. Lyman Benson has placed the genus back in a large catch-all group, Cereus, along with Wilcoxia, Carnegiea, Pachycereus, Espostoa, and many others that we are not going to deal with at this time. Peniocereus in the narrow sense is a cactus of sprawling, narrow stems that grow up through bushes and that grow out of a very large underground tuber. The stems are so inconspicuous that unless there are flowers or fruit on them, even a botanist hot on the plant's trail is likely to pass it by. But on the night when some or all of the flowers open, the strong, sweet scent can be detected for some distance. The long-tubed flowers are usually large, nocturnal, white or pinkish, with recurved petals and a mass of stamens in the center. In the literature several writers mention a tendency for all the plants in a given locality to bloom on the same night; one writer has even asserted that that night is June 20! Whatever the truth of the matter (I would not be in a hurry to believe it), the flowers are followed by large red fruits.

Peniocerei are not very common in collections; most often seen are two: P. greggii, from Texas, New Mexico, Arizona and adjacent Mexico is one; the other is P. johnstonii of southern Baja California.

Pterocactus, from Argentina, is not a cereus, though it looks like one, but is instead in the opuntia group. Like opuntias, pterocacti have glochids. The underground root is large and swollen, giving rise to a long stem that projects just a short distance above the ground. The above-ground stems are annual, lasting about a year before dropping off. The seeds are unique to this genus, being large and winged ("ptero" means wing) with a thin, white aril. The seeds are stacked horizontally inside a dry fruit, another unique character. Flowers are odd, too, as they grow out of the tips of the stems with the ovary sunk into the end of the stem, and it is hard to say where stem ends and flower begins. The flowers are similar to Opuntia flowers, an inch or two across and surprisingly attractive.

The best-known species in this genus is P. tuberosus; it has narrow reddish-brown stems, hairlike spines, and yellow flowers. Another species is P. fischeri, with white flowers.

Both these genera are usually grown in pots with part of the root on display; needless to say, drainage must be excellent! Both are hardy to light frosts, but neither would be happy in the hot sun. Propagation of Peniocereus is from seed or cuttings; propagation of Pterocactus is generally from cuttings, which will produce the large root very readily. When the old branches fall off after flowering, they may be cut into short pieces, dried a few days, then inserted about 1/2" deep into a rooting medium.

#### LITERATURE CONSULTED

- Backeberg, C. 1977. Cactus Lexicon. Blandford, England.  
Benson, L. 1982. The Cacti of the United States and Canada. Stanford Univ. Press, CA.  
Cullmann, W., Goetz, E., and Groener, G. 1986. The Encyclopedia of Cacti. Alphabooks, England.  
Cactus and succulent journal. Various issues.  
Martin, J. 1977. "Pterocactus tuberosus." National cactus and succulent journal (G. B.), vol. 32, p. 11.  
Shreve, F., and Wiggins, I. 1964. Vegetation and Flora of the Sonoran Desert. Stanford Univ. Press, CA.

NEWS NEWS NEWS - - - - -

WELCOME to new member Jenny Radua - San Diego

\* \* \* \* \*

#### Bragging Plant Winners for January

- |           |  |
|-----------|--|
| 1st Place | Rudy Lime for his Jade Plant             |
| 2nd Place | Elibet Marshall for her Tacitus bellus   |
| 3rd Place | Carl McCleod for his Mammillaria Crothel |

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Those who have volunteered to bring refreshments for the February Meeting are:

Robyn Natwick	Virginia Natwick	Amna Cornett
Doris Cheng	David Cheng	Ellen Low
Marylyn Harms		

This is a short list so it would be appreciated if more would bring something.

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#### BEFORE THE MEETING - - - - -

Don't miss you chance to learn more about the art of bonsaii-ing caudiciform plants. Rudy Lime will be showing you how....atnoon....before our regular meeting. So bring a plant for him to work on or discuss with you.



NEW BOOKS IN THE LIBRARY

Barbara J. Barton, Gardening by Mail V. I  
Barbara J. Barton, Gardening by Mail V. II  
P. I Forster, Hoya in Australia  
Hans Herre, The Genera of the Mesembryanthemaceae  
Irene & Walter Jacob, Gardens of North America and Hawaii  
Peter Loewer, American Gardens  
A. J. S. McMillan, Christmas Cacti (2)  
Victoria Padilla, The Colorful Bromeliads  
John Pilbeam, Mammillaria  
Elizabeth Toothill & Stephen Blackmore, The Facts on File/Dictionary of Botany  
J. J. A. van der Walt & P. J. Vorster, Pelargoniums of Southern Africa V. III  
Jack Williams, The Magnificent Peninsula/The only Absolutely Essential Guide to Mexico's Baja California  
Topography International, Inc., Baja/Topographic Atlas Directory

Donated by Beverly Kirkegaard:

James E. Gick, Cacti & Succulents from Mother Nature

Donated by Hazel Scott (Walter Scott estate):

Edward Abbey, Cactus Country/The American Wilderness (Time-Life)  
Dr. Robert E. Atkinson, Cactus and Succulents in Your Home  
Curt Backeberg, Das Kakteen Lexicon  
R. Mitchel Beauchamp, A Flora of San Diego County California  
Lyman Benson, Cacti of Arizona  
Lyman Benson, The Native Cacti of California  
August J. Breitung, The Agaves (CSSA Journal 1968 Yearbook)  
J. Borg, Cacti  
J. R. Brown, Alain White, & Boyd L. Sloane, Succulents for the Amateur  
Clark Champie, Clark Champie's Cactilog for 61  
Claude Chidamian, The Book of Cacti and other Succulents  
E. Yale Dawson, Cacti of California  
Natt N. Dodge, Organ Pipe Cactus National Monument Arizona  
Hubert Earle, Cacti of the Southwest (2 - 1 old, 1 new ed.)  
Hubert Earle, The Southwestern Desert in Bloom  
Xenia Field, Indoor Plants  
Zdenek Fleischer & Dr. Bohumil Schuetz, Pestovani Kaktusu  
Charles Glass and Robert Foster, Cacti and Succulents for the Amateur  
Walther Haage, Cacti and Succulents  
Scott Haselton, Cacti for the Amateur  
Scott Haselton, Cactus and Succulents and How to Grow Them  
Scott Haselton, Epiphyllum Handbook  
George Engelmann, United States and Mexican Boundary Survey/Cacti of the Boundary  
Vera Higgins, The Cactus Grower's Guide  
Vera Higgins, Our Native Cacti  
Vera Higgins, Study of Cacti  
Vera Higgins, Succulents in Cultivation  
Edmund C. Jaeger & Arthur C. Smith, Introduction to the Natural History of Southern California

Barbara Jeppe, South African Aloes  
 Jack Kramer, Cacti as Decorative Plants  
 Walter Kupper & Pia Roshardt, Cacti  
 Edgar & Brian Lamb, Colorful Cacti of the American Deserts  
 Edgar & Brian Lamb, Illustrated Reference on Cacti and the Other Succu-  
lents Vs. I-IV  
 Edgar & Brian Lamb, Pocket Encyclopedia of Cacti in Color  
 H. C. Lawson, Book of Cacti (2)  
 Sir Oliver Leese, Cacti (2)  
 George Lindsay, Cacti of San Diego County  
 Reg Manning, What Kinda Cactus Izzat?  
 C. Marsden, Grow Cacti (V.I)  
 C. Marsden & H. S. Jackson, Rebutia  
 W. Taylor Marshall, Glossary of Succulent Plant Terms  
 Margaret Martin, P. R. Chapman, & H. A. Auger, Cacti and their Cultiva-  
tion  
 Elvin McDonald, The World Book of House Plants  
 Patricia Moorten & Rex Nevins, Desert Plants for Desert Gardens  
 Horace Parker, Anza/Borrego Desert Guide Book  
 E. Checheley Plowden, A Manual of Plant Names  
 E. W. Putnam, A Synonymy of the Genus Gymnocalycium (1945-1967)  
 Werner Rauh, Schoene Kakteen und andere Sukkulenten  
 Rolf Rawe, Cacti in Southern Africa  
 H. M. Roan, Cactus and other Succulent Plants  
 Robert Rodale, The Best Gardening Ideas I Know  
 H. Rose, Flowering Cacti and other Flowering Plants  
 Gordon Rowley, Flowering Succulents  
 Forrest Shreve, The Cactus and Its Home  
 S. H. Scott, The Observer's Book of Cacti and other Succulents  
 Jeanette Coyle & Norman C. Roberts, A Field Guide to the Common and In-  
teresting Plants of Baja California  
 Edmund W. Sinnott & Katherine S. Wilson, Botany  
 Rudolf Subik, Cacti and Succulents (2)  
 Rudolf Subik, Decorative Cacti (2)  
 Joyce Tate, Cactus Cook Book  
 John James Thornber & Frances Bonker, The Fantastic Clan-The Cactus Fam-  
ily  
 Frank D. Venning, Cacti  
 Lewis Wayne Walker, Survival under the Sun  
New Pronouncing Dictionary of Plant Names  
Silly Saguaros  
Sunset Desert Gardening  
Sunset Visual Garden Manual

various issues of:

CSSA Journal  
California Gardens  
Euphorbia Journal (1935-36)  
Environment Southwest  
Exotic Collection  
Gates C & S S  
Los Angeles C & SS  
San Gabriel C & S S  
New Zealand C & S Journal



Organic Gardening  
Saguaroland Bulletin

The Asklepion (66:2) [has an article on Stapeliads by Dr. P. Corliss]

The American Horticulture Magazine (47:1) 1968

Kakti u Sukkulenti Ohra (1977, #20) [CSS of Malta]

Economic Botany (25:3) 1971

Excelsa II

nursery catalogues:

Abbey Gardens (1981)

Beahm Gardens

Harry Johnson ('65 (2), '67(2), '68)

McCabe Cactus Gardens (1930)

Zink's Greenhouse 1968

also:

9 black and white photos by Fred S. Heywood (1973)

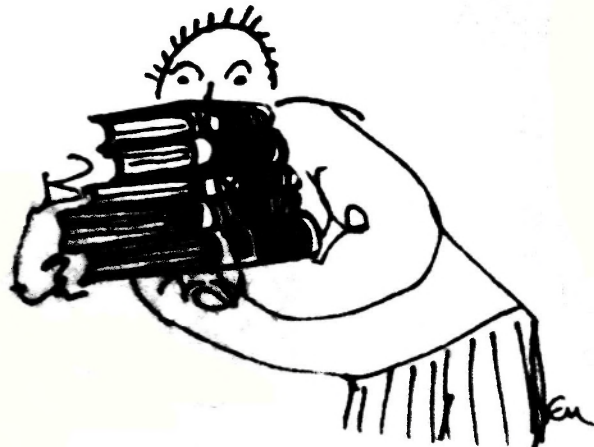
The Beautiful Desert ll Scenic Views

Arlette Davids, Rock Plants (unbound)

THE HUNTINGTON (A REPORT)

So far this Society has donated its collection (originally in Reid Moran's collection at the San Diego Natural History Museum) of Japanese C & S Journals (1953-1969: Journal of the Cactus and Succulent Club of Tokyo, Succulentarium Japonica, The Study of Cacti, and Shaboten) to The Huntington Library. As I stated in the recent December issue of Espinas y Flores, they are interested in obtaining a set of Espinas y Flores. So far I have the years 1973-74 & 1978-82 complete for them. The years 1972, 1975-76, 1983-88 are incomplete. The other years I have no issues. These issues are from the set given to me over the years from Ruth Nelson, Hazel Scott, Paul Schraer, Edith Werner, and Harriet K. Sopp. So far the San Diego Epiphyllum Society has given them a complete set of its newsletter EpiNews (1976 to present). I will keep you posted on my future progress.

---Rick Latimer, SDCSS Librarian



# SAN DIEGO CACTUS & SUCCULENT SOCIETY

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The San Diego Cactus & Succulent Society is open to all persons interested in growing cacti or other succulent and exotic plants. Meetings are held the second Saturday of each month at 1:30 p.m. in Room 101, Casa del Prado, Balboa Park. Board of Directors meetings are held after the general meetings. Annual dues are \$8.00 per single member per year, and \$2.00 for each additional member of a household within the family. Single copies of Espinas y Flores are 60¢.

Editor  
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