



MAMMILLARIA THORNERI

Vol. XV, No. 11

Espinas y Flores

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

November, 1980

November Meeting

Saturday, November 8, 1980

1:30 pm

Casa del Prado, Room 101, Balboa Park

"Aloe 75" Zimbabwe (Rhodesia)

by Steve Southwell

The featured program for this month is a presentation, with slides, by Steve Southwell on his trip to Zimbabwe (Rhodesia) to attend the "Aloe 75" Convention. It was at this time that he took a two week photographic safari into that country and an eight day sojourn throughout Cape Province in South Africa. Too, he has taken several trips into Mexico, and he especially likes succulents from South Africa and cacti and succulents from Mexico and South America. At the present time Steve teaches math at a high school in the San Jose area. He also makes stained glass windows and builds furniture. He is past President of the San Jose Cactus and Succulent Society and currently he is holding several different offices in that Society.

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Succulent-of-the-Month

"TREES"

by Rick Latimer

The largest succulent in the world is, as would be expected, a tree. The baobab (Adansonia digitata) is not exceptionally tall (never over 45 feet), but the circumference of the trunk is not infrequently over 75 feet (about a 24 foot diameter) and one giant is over 130 feet! The combined lateral spread of the branches is often greater than the height of the tree. Mature plants have 3-7 lobed leaves, whereas seedlings have undivided leaves. The solitary white flowers bloom only for a day. They have no scent, but when damaged, they give off an offensive odor. The fruits are large and pulpy with black seeds and both are edible. The huge trunk is supported within by a mass of fibrous tissue, but there is no wood in the popularly accepted sense. The rest of the bulk is composed of soft, water storage tissue. The baobab is native to tropical Africa. Several other species in this genus are native to the island of Madagascar, and another species is from Australia. The baobab is in the Bombacaceae, which includes other succulent trees, mostly from the Americas. From Brazil comes the kapok (Chorisia speciosa) with its green bark covered with rose-like thorns, beautiful reddish purple flowers, and large green fruit filled with silk floss. From Mexico come the Ceibas and the favored Bombax ellipticum, with its attractive dark green bark and shaving brush flower. A closely allied family is the Malvaceae which includes the cotton, hibiscus, hollyhock, and marsh mallow.

The baobab might be called the "elephant of the succulent world" due to its large size (and indeed elephants like to eat them as we saw at our August 1979 meeting!). However, even though they have no natural connection to elephants, there are two genera from North America that bear the common name "Elephant Trees" - Bursera and Pachycormus. The Burseras are native to Mexico with one species (B. microphylla) venturing into our own Anza-Borrego Desert. The bark of this species is easily carved and the red sap just beneath looks like the plant bleeds. The small leaves have a turpentine-like fragrance. The nomenclature of this genus is confusing, however the genus is divided into two parts: the "copales" with grayish, nonpeeling bark and the "cuajotes" with peeling, papery bark. The flowers are quite small. This genus is appealing due to the fact that some species have bases that are enlarged, so as to make excellent bonsais. Two African relatives in the same family Burseraceae are Commiphora abyssinica (Myrrh) and Boswellia carteri (Frankincense). The Boswellias are interesting in that they only grow in rock cracks on steep cliffs. Pachycormus discolor belongs to a completely different family - Anacardiaceae (Sumac or Cashew family) Some other members of this family are pistachio, mango, smoke tree (Cotinus), and the varnish tree (Toxicodendron). A closely related family is the Icacinaceae which includes the maple, but also the African succulent trees in the genera Trematosperma and Pyrenacantha. Since these plants are from Africa, they are not

yet commonly grown (if at all). Frank Horwood once described a Trematosperma species which had a Sansevieria growing inside it! Another African family with succulents in it is the Pedalinaceae. This is the sesame family which includes Sesamothamnus lugardii from East Africa. Branches are thick and thorny and caudexes can exceed 6½ feet in diameter. Another member of this family is the genus Pterodiscus. Its members are caudiciform, but not trees. Two popular plants are P. speciosa and aurantiacus. Other succulent trees exist such as Moringa, Brachychiton, and Opercularia, but the information on them has begun to wear thin.

The Fouquieriaceae is another family that hits close to home. Its widest ranging species (F. splendens - the ocotillo) is native to: from our own county, to northern Arizona, to western Texas, deep into Mexico, and much of Baja. The remaining species are all from Mexico. The most unusual and perhaps the favorite member of this genus is F. (Idria) columnaris. Its form is like that of a giant inverted green carrot. In old age, a tree of the boojum or cirio may reach a height of over 60 feet. Some unusual shaped plants of the boojum exist in the wilds of Baja. Two very succulent species are F. fasciculata and purpusii (perhaps the prettiest of this genus). The flowers of Fouquieria are usually either red or white.

REFERENCES:

R. Mitchel Beauchamp, "Fouquieriaceae", Espinas y Flores, Sept. 1972, p. 9-12.

R. A. Dyer, "The Boabab of Africa-Adansonia digitata", CSSA Journal, (24:3), p. 67-69.

Ed & Betty Gay, "Bursera and Pachycormus", (reprinted in E y F from the Los Angeles C & S Society).

Frank Horwood, "Succulent Safari to Africa", CSSA Journal, (46:5).

Hermann Jacobsen, A Handbook of Succulent Plants.

George H. M. Lawrence, Taxonomy of Vascular Plants.

Gordon Rowley, The Illustrated Encyclopedia of Succulents.

see also:

W. Taylor Marshall, "Colletia Crucata", CSSA Journal, (18:9), p. 133-4.

All the members of the San Diego Cactus and Succulent Society wish Russell Evans a speedy and early recovery from recent surgery.

Cactus-of-the-Month

Sulcorebutia

Dr. Ronald E. Monroe

The genus Sulcorebutia was erected by Backeberg (1951) for a group of rebutia-like plants found growing at rather high elevations on the eastern slopes of the Andes in the Departments of Cochabamba (north) and Chuquisaca (south), Bolivia. This was the beginning of controversial feelings and bitter arguments about these plants in regard to their proper place in botanical cactus nomenclature. Professor Martin Cardenas never did concede that these plants were different from rebutias and Backeberg himself appeared to be very confused over many of the species' status. Donald (1971) tried to put the issue to rest by presenting solid data in support of the existence of Sulcorebutia. Later, Brandt (1976) attempted to transfer all weingartias to Sulcorebutia but failed in that he did not obey the International Rules of Botanical Nomenclature. Brandt (1977) then attempted such a transfer again backed by minute differences in seed based upon scanning electron microscopy (minutae that are hardly universally accepted!). Donald (1979) patiently explains in great detail why the genus Weingartia is unique and why Sulebrebutia is best considered as a separate genus. Although the arguments are not over, it is hardly possible to transfer Sulcorebutia anywhere except into Lobivia which no one feels strong or brazen enough to do (yet). Backeberg (1977) considered about 34 species as proper to the genus. Sixty species were presented by Brinkmann (1976), but obviously, several of these species are in synonymy. Once the dust of confusion clears, there will probably be no more than 40-45 species, plus several varieties proper to the genus; recent introductions by Knize of Peru has turned up no new species despite the fact that these imports sport "new names".

Sulcorebutias grow at high altitudes (2000-3100 m) and do resemble rebutias in that the flowers are produced from areoles of old growth usually near the bottom of the plant. The stems are small, rounded and elongate in age; too, they are usually caespitose in culture, but single in habitat. The ribs are delineated by rows of podaria which are more or less rhomboid and possess the highly distinguishable elongate areoles which lie on top of the tubercle and then normally "wrap somewhat around it". The areole possesses a groove (or sulcus) which is usually felted and from which arise the highly variable beautiful spines (short or long, poret or appressed and often pectinate). The flowers are normally yellow or magenta in color, but some species do have orange or mixtures of yellow-orange flowers.

The sulcorebutias are extremely easy to grow and propagate. They do not like full sun and must be grown in bright light of a greenhouse or under shade cloth (ca. 50-73% Saran®). During the growing period (April to November in San Diego) they should be watered weekly and fed a low nitrogen fertilizer every month (2-5% nitrogen with ca. 20% phosphorus is advisable). Also advisable is a two to three month period of absolute rest sans water to encourage blooming (the yellow-flowering sulcorebutias are normally good bloomers; however, the purple or magenta-flowering plants are extremely shy bloomers). Potting soil preferred is builders sand-Super Soil® (1:1). Propagation is either via rooted cuttings or seed

(plants are normally self sterile), but seed must be sowed soon or it will not germinate; at best, germination is poor under best of circumstances.

Pests are the usual mealybugs and mites (sciara fly in the seedlings) and can be controlled by Cygon · 2E (or Sevin® for sciara fly).

Plant species normally found in cultivation is Sulcorebutia crispata (magenta flower), S. glomeriseta (yellow flower), S. rauschii (magenta flower), S. steinbachii (pink to purple flower), S. tiraquensis (purple flower) and S. tunariensis (orange flower). Several other species are available should one find the "right" nurseryman and watching your plants mature and flower will be a very rewarding experience and quickly demonstrate to you that they are unique and separable from Rebutia -- factly, you cannot even cross the two genera!

References

- Backeberg, Curt. 1977. Cactus Lexicon. Blanford Press, England. 838 pp.
- Brandt, Fred. 1976. Frankfurter Kakteenfreund: 8-9 (April).
- _____. 1977. Kakt. U. Orch. Rundsch. 5:68-70 (Nov.).
- Brinkmann, Karl-Heinz. 1976. Die Gattung Sulcorebutia. KUAS; Steinhart KG, 7820 Titisee-Neustadt, Germany. 79 pp.
- Donald, John D. 1971. In defense of Sulcorebutia Bkbg. J. Cact. Succ. Soc. (U.S.) 43:36-40.
- _____. 1979. Occasional generic review No. 6, Weingartia Werd. Part I. Ashingtonia 3:87-96.
- _____. 1979. Occasional generic review No. 6, The Sulcorebutia-Weingartia problem. Part II. Ashingtonia 3:97-124.

Special Announcements

- Green Thumb Shows - - - - - at the San Diego Wild Animal Park
- November 8 & 9 "Fall Harvest Festival"
- November 27-30 The African Blooming Violet Club of North County will sponsor a display in Nairobi Village.

New Publications

Flora of Baja California by Ira L. Wiggins. Published by Stanford University Press, Stanford, California, 1980. In one volume, 992 pages. This book includes an excellent introduction discussing physiography, stratigraphy, historical geology, minerals and mining, drainage systems, history of botanical exploration in the region, etc. In addition, the book contains an extensive glossary, maps, black and white drawings, bibliography and index. However, this volume is extremely disappointing in that it is barely more than a brief annotated check list of the Baja California flora. Several genera are completely ignored, several others masquerade under very ancient names and species and varieties are often confused. The serious student will find the work wanting and the neophyte to the study of Cactaceae will find it nearly worthless. Reviewed by Dr. Ron Monroe.

Occasional Generic Review No 6 (Weingartia Werd) by John D. Donald. Published by Ashingtonia, Holly Gate Nurseries Ltd., Ashington, Sussex, England, 1979. In one volume, 54 pages. Numerous black and white photographs and drawings. In this review, Dr. Donald takes free license to totally discuss the historical, the Sulcorebutia-Weingartia problem and the species as he currently sees them. Dr. Donald carefully and critically develops the rationale behind his philosophy for separating Weingartia from Sulcorebutia and why numerous species should be submerged as subspecies or varieties. This is by far his best critical effort and we would be lucky indeed if all genera were to be examined in this manner. This review is a must for the serious student of the Cactaceae. Reviewed by Dr. Ron Monroe.

A Very Special Auction

Two Los Angeles nurseries have donated a small number of succulents (a large Pachypodium horombense, Cyphostemma (Cissus) bainesii and euphorbias) to the San Diego Cactus & Succulent Society. These prize specimens will be put on the auction block at the November 8th meeting. A very special thanks to Cycadia and Singers' Growing Things for donating these lovely succulents to our Club.

Bus Trip to Grigsby Cactus Gardens

Grigsby's nursery has numerous mature plantings on the grounds plus one of the largest selections of potted cacti and succulents for sale in the Southern California area.

The trip is scheduled for November 22, 1980, and the price is \$5.00 per person. If we have 45 members signed up for the junket, the bus will be leaving at 8:00 am in the West parking lot near the Organ Pavilion in Balboa Park. A tour is planned and there will be time to shop for plants (4 hours); then the bus will travel to Palomar Desert Gardens for an excursion and lunch (bring one). In addition, we strongly suggest that members wear low heel shoes and bring appropriate clothing and check book. The bus will return at 4:00 pm.

Interested members should send their checks made payable to the San Diego Cactus & Succulent Society, to Warren Buckner, 1744 Englewood Drive, Lemon Grove, CA 92045 or you may pay him not later than the next meeting.

December Plant Exchange

Last year our December Plant Exchange pilot seemed to be a huge success in the sense that contributors put forth the effort to bring to the event good plants, of some maturity attractively potted and received for their efforts plants of the same caliber.

Here is how it will work: Each member who wishes to participate will bring in a good looking plant in an attractive (or at least, clean) container with the name of the plant on one side of the tag and the owner's name on the other. This plant will be put on the Christmas Plant Exchange table. If I am the one to start it off I shall choose a plant and call out the name of the donor. That donor will select a plant and also call out the name of that plant's donor. Hence, you see, the earlier your prize plant you brought is selected, the better the choice you will have for choosing a plant earlier in the game.

The plants brought in should be cleanly potted and of attractive quality. Good sized specimens would be appropriate for this table, unless of course the plant is miniature in nature, then the small size would be fine.

If you don't want to participate in this, come to our December meeting anyway and receive a free plant which is your annual gift for membership in our club.

Christmas Gift Plants

Plants will be given by lottery number system to each bona fide member of the SDCSS. An up-to-date membership list at the door will be checked to qualify recipients for tickets needed to receive a plant. The term family membership shall be construed to mean husband and wife, or a young adult if he is a contributing member to the club: attending regularly, showing plants or performing a service for the club.

Any member whose plant has been awarded first, second or third place on the bragging table during the current year will be entitled to receive one extra plant. Regardless of the numbers of times the individual has won awards at the bragging table, only one extra plant will be given to each winner.

Tickets will be distributed at the beginning of the December meeting to the eligible members and when those numbers are called the ticket must be presented before the plant is chosen.

Green Thumb Show Winners

The San Diego Cactus & Succulent Society was among the winners at the Wild Animal Park "Green Thumb Show" ("The Beauty and The Beast Show") October 13, 1980. The Society won a first place ribbon for their exhibit and a special award for 'Outstanding Achievement in Horticultural Display' for garden clubs and societies. Those who participated and their entries:

Rose & Anthony D' Attilo ("Hairy" cериods that the public liked so well).

Verna & John Pasek (two tables of euphorbias, two tables of echeverias and other succulents and one table of plants indigenous to Baja California, Mexico).

Marianne & Frank Thrombley (various species of cacti).

Member Interviews: Perlso Lewis

by Marcia Monroe

Perlso is originally from New York City, New York, where she attended local schools and college. At the age of 18 and during her first year of college, she married Alfred Lewis, and shortly thereafter, her husband was sent to Europe for two years with the U.S. Navy. At this time, Perlso did free lance commercial art for different newspapers. Her husband is retired from the service. Subsequently, he was employed for some years at Convair, and he is now retired from that company. At the present time they are living in the San Diego/La Mesa area (the front yard is in San Diego and the back yard is in La Mesa). Too, the Lewises have lawyers in the family (two sons and a son-in-law).



Before Allied Gardens was built, in the early 1950's, a friend took Perlso cacti hunting. From that time on, she became hooked on collecting succulent plants. Since then, she has collected throughout San Diego County before the lands were leveled for real estate developments: Old Mission Valley Road, Clairemont, Santee, Casa de Ora, Point Loma, Poway, Ramona and Alpine. In 1961, one month after it started, she joined our Club, and later, she went on that "wild and woolly" collection trip into Baja California for one day with the Club and Bob Taylor was leading the way.

During her membership in our Society she has held the following positions: Corresponding Secretary, Affiliate Director (Reporter), Hospitality Chairman, Reception Committee, and member of the Board, and she is a past member of CSSA. In addition, she is a charter member of the Geranium Society (her activities in this Club had to be curtailed when she took over her brother-in-law's tailor shop while he convalesces from a stroke).

Perlso is especially interested in San Diego County native flora: Dudleya brittonii, D. lanceolata, D. pulverulenta ssp. pulverulenta, Mammillaria dioica, Ferocactus viridescens, etc.. Perlso uses all types of containers from scenes in old gravy bowls to coconut shells; she once had a lovely tea set of genuine pewter, and now the set has been converted into tiny planters with holes in the bottoms!

Through the years Perlso has been very eager to step into numerous small jobs which no one else wanted such as activities chairman and helping at the break. She is "strictly a lover of people, plants and life".

News of Interest

Carl Mcleod reports that the following plants will be for sale at the "Plant Sales" table in November: Euphorbia crispa, E. decaryi, E. cylindrifolia, Cyphostemma (Cissus) cirrhosa, Fouquieria splendens, Sarcocoulon sp., Pachypodium bispinosum and P. succulentum.

At the November meeting Calendars (approx. 15 by 20 inches) printed in Japan, with a stunning color picture of a cactus or succulent on each page, will be offered for sale by our Club for \$3.00 - 4.00. Interested persons should contact Betty Athy (469-7647) to reserve their copy.

Martin Mooney and Lee Phelps will have a plant and excess pot sale November 9th, 10 am to 4 pm at 97 "K" Street, Chula Vista, California 92011.

Name tags (1 by 4 inches), with the San Diego Cactus & Succulent Society's logo on the upper left hand corner, will be on sale for \$2.00 at the reception desk. Please contact Perlso Lewis who will order your tag with your name printed on it.

We welcome this month the following new members:

Judy Mc Nulty, La Jolla
Curt Hammel, Lemon Grove
Florence Sakely, San Diego
Adele P. Stevens, San Diego
Cathryn Mangold, Rancho Santa Fe
Elliot & Kate Gewirtz, San Diego
Dr. J.K. & Eleanor Moen, Chula Vista
Anatole & Lily Minc, Rancho Santa Fe
Marcelle C. Thorner, Rancho Santa Fe
Lawrence S. Newmark, Chicago, Illinois

A reminder that the following members have signed up to provide refreshments for the November meeting:

Phyllis Flechsig, Rosemary Myers, Alberta Widen, Marcelle Barfield, Marianne Thrombly, Elizabeth Glover, Helen Brinkley, Beverly Kirkegaard, Eleanor Moen, Verna Pasek and Suzanne and Bob Taylor.

Thank you to those members who brought in all those extra delicious cakes and cookies at the October meeting when John Lavranos paid us that special visit.

Winners of the "Bragging Plant" competition for October were:

1st: Wilna Johnson - Monadenium montanum v. rubellum
2nd: Madelyn Lee - Drimiopsis kirkii
3rd: Donna Dixon - Euphorbia colliculina

The October "V.I.P. Table" featured a special display of succulents that John Lavranos described and/or discovered and introduced into cultivation. A few of the plants put on exhibit by Madelyn Lee, Martin Mooney and Marcia Monroe were: Monadenium reflexum, Euphorbia phillipsae, E. phillipsae v. planithe, E. mosaica, E. turbiniformis, Cotyledon ventricosa, Caralluma shadbhana and Echidnopsis bihendulensis.

-----Deadline for the December Newsletter is November 28-----

San Diego Cactus & Succulent Society

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John Pasek, Dr. Leroy Phelps

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Succulents - Richard Latimer and Dr. Leroy Phelps
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Bragging Table - Shirley Berry
V.I.P. (Very Important Plants) Table - Sandra Buck
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Membership: Joan Johnson
Open House: Martin Mooney
Plant Exchange Table: Doris Rake and John Roth
Plants & Supplies Table: Carl McLeod
Programs: Richard Latimer
Publication: Marcia Monroe (ph. 461-8444)
Reception: Rose D'Attilio and Veryl Snowhill
Regalement: Nancy Roth
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Balboa Park Desert Garden - John Pasek
Quail Botanical Gardens - Audrey Johnson
S.D. Botanical Garden Foundation -
S.D. Floral Association - Verna Pasek

The San Diego Cactus & Succulent Society is open to all persons interested in growing cacti, other succulents, and exotic plants. Meetings are held the second Saturday of each month at 1:30 pm in Room 101, Casa del Prado, Balboa Park. Board of Directors meetings are held after the general meetings. Annual dues are \$7.00 per family. Single copies of Espinas y Flores are 60¢.

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