

SIGN UP FOR BUS TRIP "BEHIND THE SCENES"

AT THE HUNTINGTON BOTANICAL GARDENS

A VERY SPECIAL EVENT

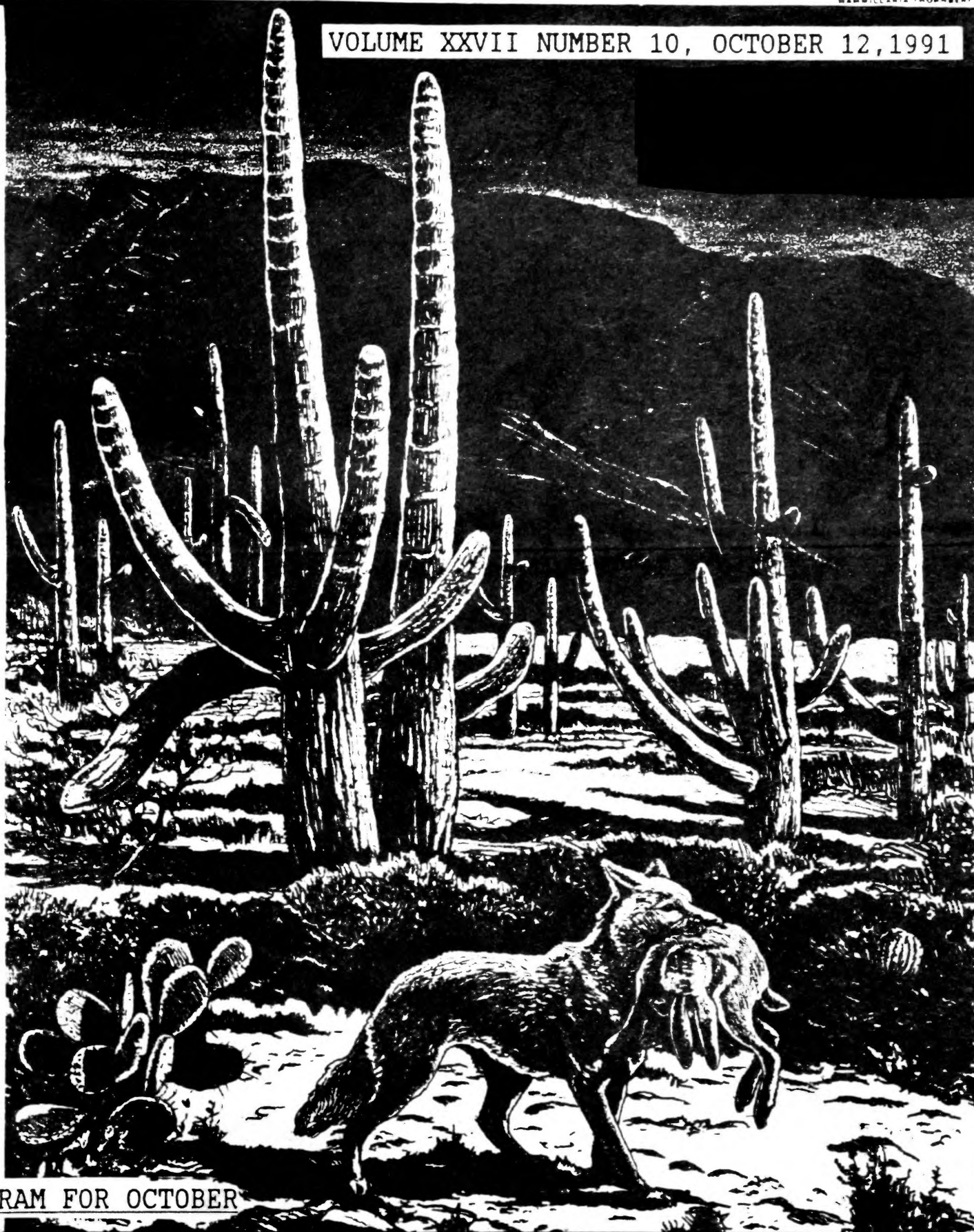
Espinas y Flores

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



MAMMILLARIA THORBERI

VOLUME XXVII NUMBER 10, OCTOBER 12, 1991



PROGRAM FOR OCTOBER

SHIRLEY BERRY WILL PRESENT "A CALENDAR OF FLOWERS". THERE IS NOT A MONTH THAT GOES BY THAT SOME SUCCULENT IS NOT IN GLORIOUS BLOOM. SHIRLEY HAS DOCUMENTED THEM IN A BEAUTIFUL COLOR SLIDE PROGRAM THAT WILL WET YOUR APPETITE OR REKINDLE YOUR INTEREST IN GROWING CACTI AND SUCCULENTS FOR THEIR BEAUTIFUL FLOWERS.

OCTOBER MEETING

Saturday October 12, 1991

1:30 pm

Casa Del Prado, Room 101, Balboa Park

PROGRAM

"A Calendar of Flowers"

by Shirley Berry



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Bud and I will not be able to put out the newsletter for November, so please send all articles to address on back.

DEADLINE OCTOBER 25

Thanks Mary



SIGN UP FOR BUS TRIP:
"BEHIND THE SCENES AT THE HUNTINGTON BOTANICAL GARDENS"
A VERY SPECIAL EVENT

COMING

SEE YOU THERE!!

FOR AN EXTRAORDINARY EXPERIENCE

More Than An Adventure

EVENT

EXPERIENCE FULFILLMENT

A SAN DIEGO CACTUS & SUCCULENT SOCIETY SPECIAL EVENT IN CONJUNCTION WITH THE PALOMAR CACTUS & SUCCULENT SOCIETY:

OCTOBER 19th BUS TRIP TO HUNTINGTON BOTANICAL GARDENS AND PERSONAL TOUR "BEHIND THE SCENES" WITH DESERT GARDEN CURATOR, JOSEPH CLEMENTS. THIS IS AN OPPORTUNITY FOR YOU TO RIDE IN A COMFORTABLE AIR-CONDITIONED SCENIC CRUISER TO SAN MARINO. YOU WILL GET TO PREVIEW THE CACTUS AND SUCCULENT GARDENS AND OTHER AREAS AT YOUR LEISURE AFTER THE PRIVATE TOUR THROUGH THE HUNTINGTON'S MAGNIFICENT SUCCULENT COLLECTION GLASS HOUSES AND PROPAGATIONAL AREAS (WHICH ARE OFF-LIMITS TO THE GENERAL PUBLIC). ENJOY THEIR GIFT SHOP /BOOK STORE, ART MUSEUM AND LIBRARY COLLECTIONS!

WE WILL LEAVE SAN DIEGO FROM THE PARKING LOT BEHIND THE ORGAN PAVILION IN BALBOA PARK PROMPTLY AT 9:00 (BUS WILL LOAD AT ABOUT 8:30). BUS WILL STOP AT LA COSTA EXIT OFF OF HWY 5 (CAL-TRANS PARKING LOT) AT 9:30 TO PICK-UP OUR NORTH COUNTY PASSENGERS. WE SHALL ARRIVE AT HUNTINGTON BETWEEN 11:30 AND NOON; BUS WILL LEAVE HUNTINGTON PROMPTLY AT 4:00.

YOU MAY BRING YOUR OWN LUNCH IF YOU WISH - THERE IS NO "PICNICKING ON GROUNDS", HOWEVER, THERE IS EATING AREA AT THE CAFE. THE HUNTINGTON RESTAURANT /CAFETERIA OFFERS MANY DELICIOUS LUNCHESES AND SNACKS.

FIRST CHECKS RECEIVED ARE THE FIRST PEOPLE TO BE SEATED ON BUS, SO GET YOUR CHECKS IN EARLY! SPACE LIMITED TO THE FIRST FORTY-SEVEN INDIVIDUALS, COST PER PERSON \$16.00. PLEASE MAKE CHECKS PAYABLE TO: SDC&SS

CALL FOR PAPERS, IOS CONGRESS
April 5-10, 1992

Desert Botanical Garden
Phoenix, Arizona

We are seeking oral presentations of 20-25 minutes based on original research on succulent plant systematics, morphology, anatomy, ecology, phytogeography, economic or ethnic uses, horticulture, micro-propagation and conservation. These abstracts should be written in English or Spanish, be 250 words or less, and typed with double-spacing. We will not accept abstracts by FAX or telegraph. Abstracts must be post-marked by December 15, 1991. A mailing address as well as phone numbers should be included with the abstract.

Submission deadline:

December 15, 1991

Send abstracts to:

IOS Congress
c/o G.P. Nabhan
Desert Botanical Garden
1201 North Galvin Parkway
Phoenix, Arizona 85008

The local committee will make abstract selections, with suggestions from IOS Section leaders. You will be notified by correspondence in late January, 1992 if selected. The full program will be sent out to all potential participants in February. If you are submitting an abstract on the pollination ecology of threatened succulents for the Species Survival Commission Symposium on April 6, partial coverage of travel may be available; please indicate your interest in being included in this symposium and note your financial needs.

LET US KNOW WHAT'S HAPPENING!

Odds and Evens to Beginnings and Ends

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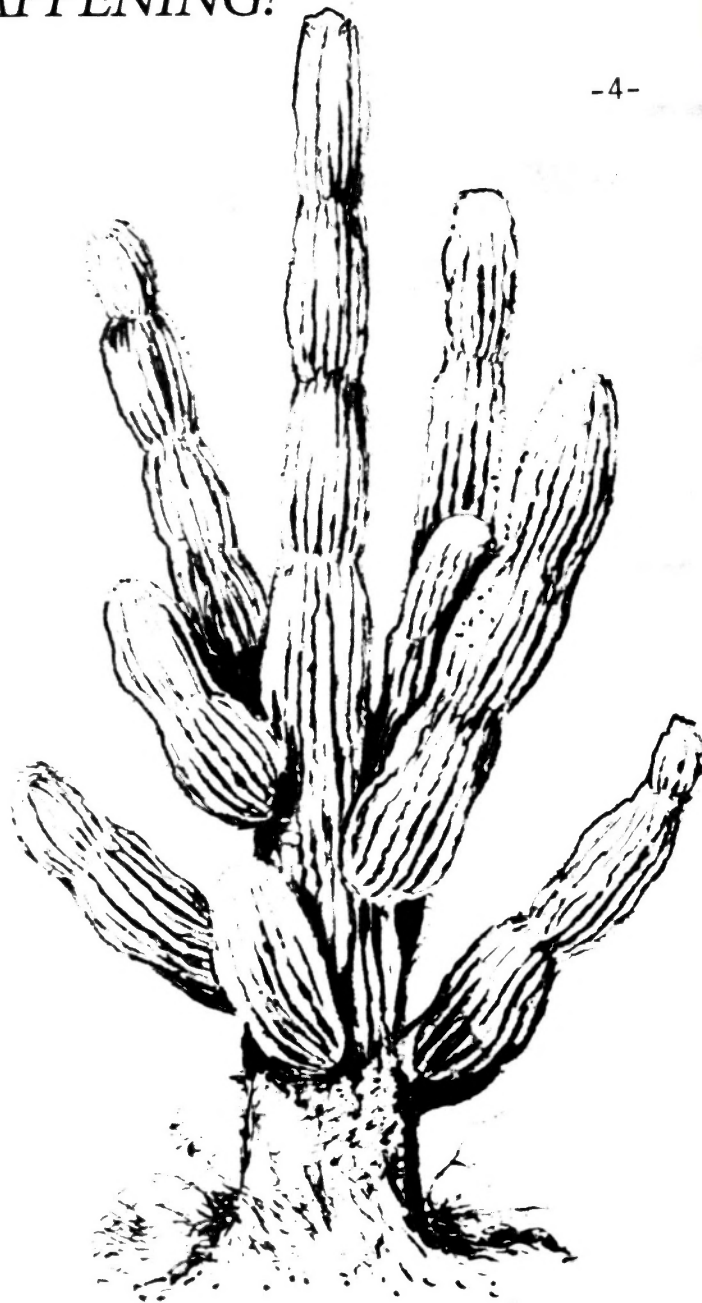
WE ARE VERY SORRY TO HEAR THAT ELINOR LATIMER WAS RECENTLY HOSPITALIZED, HOWEVER, WE ARE HAPPY TO HEAR THAT SHE IS NOW HOME CONVALESCING. HOPE YOU ARE FEELING BETTER ELINOR!! WE MISS YOU! PLEASE SEND CARDS TO: ELINOR LATIMER, 5990 LAKE MURRAY BLVD, LA MESA, 91942

Russel Evans is out of the hospital and receiving cards and calls at 3115 Nile Street, S.D. 92104. Phone 284-5859 (daytime only please) Russel says he's seen all the re-runs on TV and 'bout had enuff of WAGON TRAIN! Get well, sir, we miss you and wish you the best.

"A BIT OF BAD NEWS. FRED HUTFLESZ DIED OVER THE WEEKEND. FRED WAS A MEMBER OF THE SDC&SS, LIVED IN LOS ANGELES AND CAME DOWN FOR MEETINGS FOR MANY YEARS. HE WAS RAISED IN CARLSBAD, WORKED AT POINDEXTER'S CACTUS NURSERY IN HIGH SCHOOL, THEN FOLLOWED DR.POINDEXTER TO OCCIDENTAL COLLEGE WHERE DR.POINDEXTER WAS A TEACHER AFTER HE CLOSED HIS NURSERY. FRED MAJORED AND GOT A DEGREE IN BOTANY. HIS LOVE WAS ALWAYS CACTUS.

HE DIED OF CANCER. I BELIEVE HE WAS AROUND 57. HIS MOTHER IS STILL ALIVE AND LIVES IN CARLSBAD.

HE WAS MY FRIEND AND I WILL MISS HIM VERY MUCH." Chuck Everson



FIRST AWAY, THANKS TO TWO VERY SPECIAL PEOPLE WHO PRESENTED "THE SOCIETY" WITH TWO SUBSEQUENT MONTHS OF "VSOP" (VERY SPECIAL OUTSTANDING PROGRAMS): CARL VOLKERS OF C & J CACTUS AND PAUL HUTCHINSON OF TROPIC WORLD NURSERY. WE WERE VERY LUCKY TO HAVE CARL PRESENT HIS PROGRAM WHICH WAS FRESH FROM THE C.S.S.A. NATIONAL CONVENTION, AS WELL AS PAUL WHO, IN SPITE OF OUR VARIED SOUND PROBLEMS, WAS ABLE TO REFLECTATATE ON HIS MANY YEARS OF EXPLORING, GROWING, HYBRIDIZING, SELECTING, NAMING, AND PUBLISHING CACTUS AND SUCCULENTS.

SECONDLY, THANKS TO JOEY BETZLER FOR ARRANGING AND PRODUCING OUR AUGUST PROGRAM. JOEY PICKED PAUL UP AT THE NURSERY IN ESCONDIDO AND CARTED HIS PLANTS AND PERSONAGE TO OUR MEETING AND THEN RETURNED HIM TO ESCONDIDO, MISSING THE LATER PART OF OUR MEETING AND THE EXECUTIVE BOARD MEETING. THANK YOU FOR YOUR DEDICATION!!

THE REFRESHMENT TABLE LOOKED ALOT BETTER LAST MONTH; PLEASE BRING A TREAT FOR ALL TO ENJOY IF YOU CAN. IT IS MUCH APPRECIATED AND MAKES THE MEETING A DELIGHT. ALSO IT HELPS DIANE AND BILL CROWLEY WITH REGALEMENT CHORES. BILL CROWLEY, BY THE WAY, HAS AGREED TO BE ON THE BOARD OF DIRECTORS UNTIL JANUARY, SO WE NOW HAVE A "FULL HOUSE".

IF YOU WOULD LIKE TO BE ON THE REGALEMENT COMMITTEE IN 1992 PLEASE LET DIANE CROWLEY OR JOYCE BUCKNER KNOW --- WE NEED YOUR PARTICIPATION!!!!!!

REFRESHMENT VOLUNTEERS FOR OCTOBER?

REPORT ON THE FOURTH
I.O.S. INTERNATIONAL CONGRESS

By Rick Latimer

The fourth IOS (Internationale Organisation fur Sukkelentenforschung) Inter-Congress in Bonn, Germany started Thursday, July 18, 1991. However, due to some misinformation at Heathrow Airport, I missed my connecting flight and was late two hours in Frankfurt. Our April speaker Eckhard Meier rescued me and we went down the autobahn at 200 km/hr. Alas too late for the first speaker Dr. Robert Wallace of Iowa State University. His program was titled: "Molecular systematic studies of genera *Astrophytum* and *Echinocactus*: Chloroplast DNAs restriction site variation". When I asked him later to give me some insights into what I had missed, he said that they had been comparing the DNA of these genera to see how similar and different they really were. As it turns out, the results have confirmed most of the traditional classifications. One noted exception was that *Echinocactus grusonii* may actually be a primitive ferocactus!

The second day was devoted to two symposia. The first one was the "Other Succulents". Susan Carter-Holmes gave two programs - one on Aloes and the other on Euphorbias. Dr. Heidi Hartman of Hamburg gave a program titled: "Phytogeography of *Mesembryanthema*". In a nutshell, there is a very definite split in the family between the winter and summer rainfall genera. The exceptions are probably due to recent invasions (relatively speaking) of some species in some cases and/or climate changes (i.e. the line that separates the winter and summer rainfall seasons was different in the geologic past). The last speaker Dr. Ihlenfeldt (also of Hamburg) stepped aside for Mr. Jurgens, who spoke on the Richtersveldt National Park which was scheduled to have come into being that very day.

The second symposium that day covered the critically important issue titled "Problems in Trade and Conservation". Most of the programs were concerned with the island of Madagascar. The last such program (in German) was given by Dr. Werner Rauh. One of the members of the audience (evidently a

European nurseryman) stated that the paperwork was just too discouraging and that as a result many of the European nurserymen had given up growing endangered succulents. This was discouraging to me and many members of the audience, but I can think of several nurseries in this county and elsewhere in the southwestern USA whom are doing very well in this field.

Saturday, July 20th was "Cacti and Epiphytes" day, with emphasis on the latter. The cacti were first with Jonas Luthy of Bern, Switzerland talking on *Mammillaria*; Fred Katterman of Wantage, New Jersey covering *Eriosyce* (as he did at the recent CSSA Convention in San Antonio, Texas); and Barbara Burr of Bonn, who gave the program titled "Ultraviolet Reflection of Flowers of Cactaceae and other Centrosperms". One picture showed a yellow pea flower under visible light, which one would expect to be a solid color under ultraviolet light. The next picture showed a black and white photograph of the same flower under UV light. The center was black and the flower wings were white. Also some cacti flowers were shown with again black centers and white edges, the areas of each color varied depending upon the angle the flowers were viewed from. Since insects can see ultraviolet light, the question is asked, "What effect does all of this have on pollination?"

The "epiphyte subdivision" was not limited to just cacti. The first program was given by Dr. Karlheinz Senghas of Heidelberg and was titled *Sukkulente Orchideen*. The orchid family is the largest plant family. Even though the number of succulents in this family is a small minority, one came away with the idea that if the cactus and succulent societies around the world showed any interest in them - due to their nonetheless large number of species - the societies should be re-titled "Succulent Orchid and other Succulent Society of _____"! I gave the next program, which was on the hylocereoid genera and their hybrids, with emphasis on southern California hybridizers. I included pictures

JOIN US!

of such San Diego County hybridizers as Phyllis Flechsig, Bob and Lois Burks, George French, and my late father, and a few of their hybrids, of course. The morning session ended with Dr. Beat Leuenberger of Berlin talking on the epiphytic cacti in the Guianas.

The afternoon session began with A.J.S. McMillan's program on Schlumbergeras. I had awaited to see this program and meet the speaker for many years and as it turns out this was my favorite program overall. I finally got to see pictures of these plants in habitat. The next program was a favorite to many of the European members of the audience, as they in turn waited years to meet and hear the speaker Myron Kimmach discuss his views on "Generic Criteria for Epiphytic Cacti". It was like those old E.F.Hutton commercials, only this time it was 'when Myron Kimmach speaks, epipholics listen!'. Then Dr. Wilhelm Barthlott of Bonn gave his celebrated Rhipsalideae program. The last program was introduced by Kurt Petersen of Osterholz-Scharmbeck (near Bremen) and undertaken by Edi Day (the John Trager of Europe) of Kusnacht, Switzerland. Titled "Epiphytische Kakteen in Foto" it was a nice summary and wrapped up the day.

The rest of the trip involved traveling about Germany. I visited Hamburg and the family of Ernst Ewald. One day he and I visited his plants at the Herrenhausen gardens in Hanover. The next visit was to Eckhard Meier and his family in Simmern. He and I revisited the Palmengarten in Frankfurt (the highlight here was finding their huge Epiphyllum chypocardums plant) and the private gardens of Herr and Frau Rippe and Herr and Frau Neumann ed. Kaktusblute, both near Wiesbaden. From there I went to Wurzburg and met Dr. Rudolf Troster of Bad Mergentheim and stayed with his family. Near there is the town of Osterburken, where we verified one of my father's ancestors did indeed come from. Another family name that was often encountered there was Gehrig. After that I was on my own and visited Munich and briefly

Berlin. All in all a very worthwhile experience. I again thank all those, especially my hosts, who made this all possible and Fred Katterman, who came and rescued me at the right time.

Books of help to collectors

A NEW CACTI BOOK BY BRIAN LAMB "A Guide to the Cacti of the World"

Hardback, high quality production with some 212 pages, large page format (11.25" X 8.5"), 272 color photographs, detailed descriptions of each genus and species, with location maps and climate key. Chapters on pollination, reproduction, conservation and cultural information for all climates, including seed-raising (with step-by-step illustrations), in different climates. (publication date late October 1991) Send checks payable to Brian Lamb (payable on a New York Bank, otherwise there are very high Bank Charges!), Bank Draft in U.S. Dollars, or U.S. Currency sent by registered mail. PRICE BY POST \$45.00 FOR SPECIALLY AUTHOR SIGNED COPIES.

THE POCKET ENCYCLOPEDIA OF CACTI IN COLOUR

Another superbly illustrated hard back edition with 218 pages and 326 color photographs. In depth description re: cultivation and under artificial light. Easy to understand descriptions of each species found following the central color illustration section of the book.

Signed copies by post: \$18.00
ALL ORDERS WITH PAYMENT SHOULD BE
ADDRESSED TO: BRIAN LAMB, P.O. BOX 561,
PMB 6152, GIBRALTAR

POPULAR EXOTIC CACTI IN COLOR

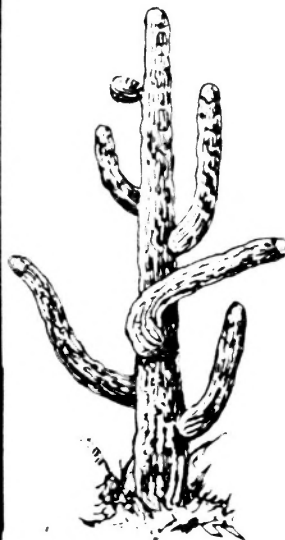
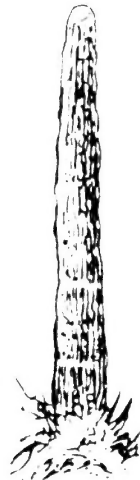
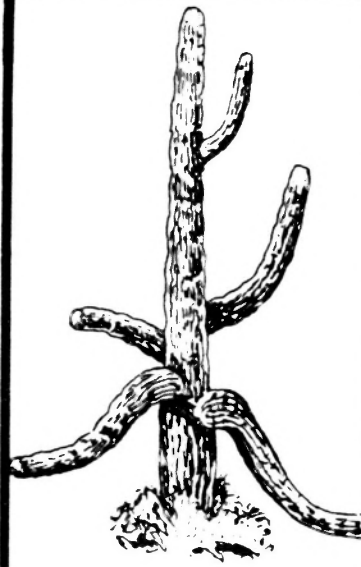
This superbly illustrated hard back edition with 60 full page and 40 half page color photographs covers 100 different genera with detailed description of each genus, habitat data, general cultural information, etc.

Signed Copies by post \$15.00

COLORFUL CACTI AND OTHER SUCCULENTS OF THE DESERTS

A convenient 236 page book. Pocket size, soft cover with 140 color photographs depicting plants in habitat. It gives readers an insight into how these plants grow in the wild and that many spiny species still seek some shade. This will help you understand their cultural requirements far better. A good field guide for South-western U.S.A.

Signed copies - \$15.00



KILLING CACTUS AND OTHER SUCCULENTS

Haworthia heidelbergensis and *Haworthia serrata*

This is one of a series comparing Bruce Bayer's, John Pilbeam's, and Charles Scott's taxonomic treatment of the genus *Haworthia*.

H. heidelbergensis, described by G.G. Smith in 1948, and *H. serrata*, described by Bruce Bayer in 1973, are small to medium sized plants of the Southwest Cape region. *H. heidelbergensis* slowly offsets, while *H. serrata* may occasionally subdivide but prefers to remain solitary. Both species deserve to be seed-propagated. The minute variations in markings and the shades and tints of green which color the plants, underscoring and enhancing their quiet beauty, are best appreciated when the plants exist in the numbers which seed will produce. To balance this gush of enthusiasm, let it also be noted that in California there are also several *H. heidelbergensis* clones which surface from time to time and which are dull and plain enough to make one question one's enthusiasm over haworthias.

Although Bayer refers to difficulties in cultivation of *H. heidelbergensis* and Scott comments similarly about *H. serrata*, there are no special problems in California, if the species are treated as the winter growers they are and also given good drainage. Bayer suggests that *H. heidelbergensis* requires more shade than most haworthias. It tolerates and perhaps even welcomes stronger light, however, than, for example, *H. arachnoidea*. In habitat, it finds protection by growing on south-facing surfaces and/or in the shade of rocks or low brush.

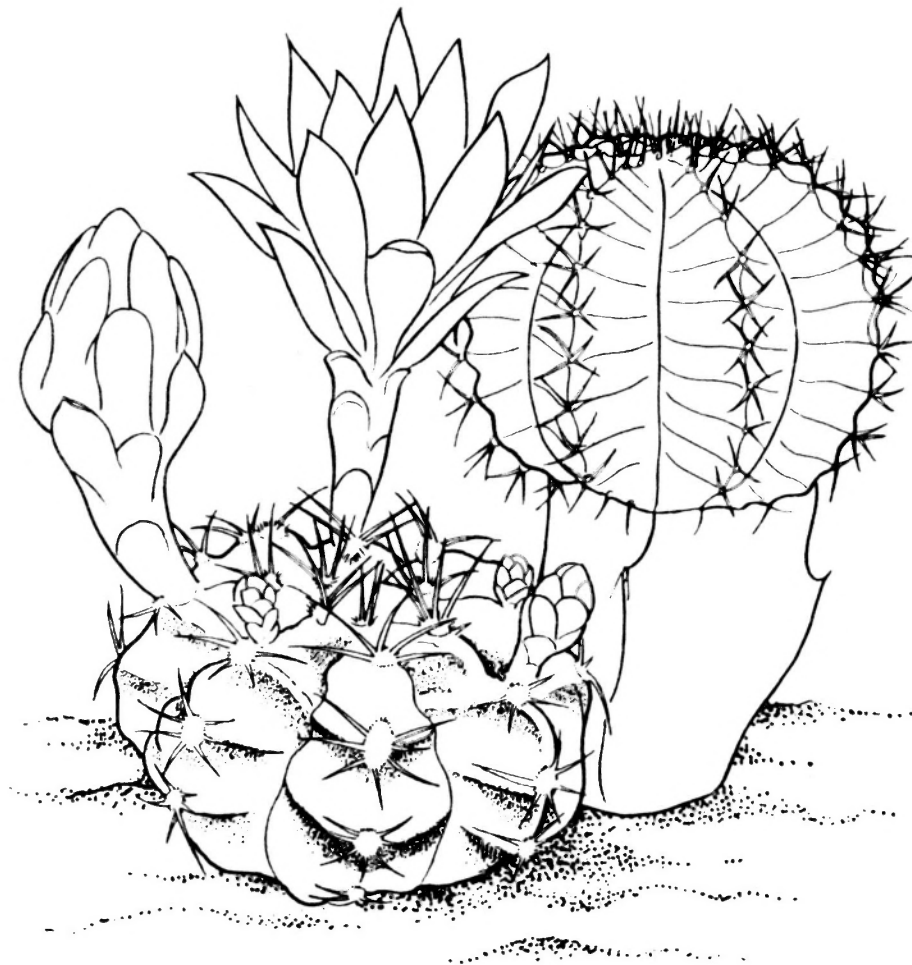
The descriptions of the two species note a resemblance to some *mirabilis* forms. In my experience, difficulties with identification have been largely with *H. heidelbergensis* and its occasional confusion with either *H. mirabilis* or *H. retusa*. Much of this problem arises out of incorrectly labeled plants distributed from the J.R. Brown collection. In two instances, his accession book shows that he was puzzled himself over the identity of *H. heidelbergensis*. Today's hobbyist knows, however, that the window in the leaf end area of *H. heidelbergensis* and the species's smaller size, relative to the *mirabilis* or *retusa* forms which it resembles, greatly assist in identifying it.

Bayer, Pilbeam, and Scott agree on the validity of *H. heidelbergensis* and *H. serrata*, their appearance, and their names. At the same time, there are significant differences between Bayer and Scott over the geographic area that *H. heidelbergensis* and *H. serrata* cover. In his discussion of *H. heidelbergensis*, Bayer

places the type locality "immediately east of Heidelberg" and then notes two "related" populations at Matjestoon and Bredasdorp, not giving them a name. He does not mention other similar populations in the area (which may not have been known when his Handbook appeared.) Scott and Pilbeam refer only to the Heidelberg locality.

With regard to *H. serrata*, Bayer and Pilbeam place this species south of the Langeberg mountains. Scott, on the other hand, writes that *H. serrata* is found both south and north of the Langeberg mountains, and his "selected species" includes a plant from an area west of Barrydale in the Little Karoo. This represents such a remarkable extension of the range of the taxon that one would expect some discussion, but there is none.

-Robert Kent Sept. 1991



GYMNOCALYCIUM MIHANOVICHII (*Plaid chin cactus*) and **GYMNOCALYCIUM MIHANOVICHII** V. **FRIEDRICHIAE "HIBOTAN"** (*Red cup*). Paraguay. Probably the easiest cactus to grow and flower as a house plant. In a half-sunny location, it will bloom all summer, and should be watered generously. In winter, keep slightly warm and water occasionally to keep plants from shrivelling. Flowers

are combinations of white, pink and green. The color of the plant bodies also varies considerably. Highly colored yellow, orange or pink plants, deficient in chlorophyll, must be grown as grafts on other types of cacti. These grafted plants seldom flower and must be kept warmer and given more water in winter than the plant grown on its own roots.

Cactus-of-the-Month

GYMNOCALYCIUM

by Amna Cornett

Gymnocalycium denudatum was the first Gymnocalycium to be described, by Link and Otto in 1828, and named Echinocactus denudatus. Some 20 years later Karl Pfeiffer, a German physician, proposed the new genus Gymnocalycium, meaning "naked bud", but this was ignored for almost 80 years, when Britton and Rose published it in **The Cactaceae**. At present there are around 90 named species.

This makes Gymnocalycium one of the largest genera of South American cacti, exceeded only by Rhipsalis and Opuntia. They have a distribution, chiefly Argentina and the bordering areas of Bolivia, Paraguay, Uruguay, and Brazil.

As a Genus, Gymnocalyciums are easily recognized by their flowers, whose ovaries and tubes have large, blunt, membranous scales with naked axils. Only Weingartias and Neowerdermannias have similar scales, and they may some day be combined with Gymnocalycium. Even out of flower it is fairly easy to tell Gymnocalyciums from other cacti, thanks to the horizontal cleft just below the tubercle in almost all species giving the effect of "chins", and the common name of "Chin Cactus".

Identifying species within the genus, however, is a different matter. Since even the same plant may have varying numbers of spines on different areoles, can change shape if dessicated, and may even have different colored flowers at times, plant descriptions have to be accommodating. Take for example Backeberg's description of G.mazanense in **Die Cactaceae**. "For the majority of the plants the following can be formulated: very variable; body brownish to grey-toned dull green, mostly semi-globose, the body color fairly changeable; ribs 10-12, low rounded, divided into more or less prominent tubercles with sharp transverse cleft: areoles about 2.5 cm apart, strongly white-felted; radial spines about 7, more or less curved, cream to pink colored, becoming grey, up to 3 cm long. Central spines mostly absent, sometimes one: flower whitish to pink in all intermediate shades. Throat of flower somewhat darker. Petals often pointed." Talk about equivocation! And his most positive statement about "strongly felted areoles" is not evidenced in his own photograph. This example of vague description is not unique, so precise identification is almost impossible. Also there are many hybrids out there, so buy your Gymnos from reputable sources and don't lose their labels!

The Czechoslovakian collector A.V. Fric noted that there are several consistent seed types and divided the genus in five sub-genera. This has proved to be a valid means of separation since species from the same seed groups are similar in other ways and usually come from nearby areas. It does seem that seed character should carry more weight than merely external appearance since they are not affected as much by changes in environment. More recently Drs. Bohumil Schutz and Buxbaum have expanded on Fric's ideas as follows:

1. Gymnocalycium : Seeds large(1-3 mm) , round, and black. Ripe fruits greenish. This group would be called "Macrosemineum", but it contains the type of the genus, G.denudatum, and according to the rules of nomenclature a sub-genus containing the type must be named for the whole genus. Other included species are G.uruguayense, G.leanum, and G.fleischerianum.

2. Ovatisemineum: Seeds black and oval(about 1 mm) , fruits greyish or blue-ish. .Examples are G. gibbosum G. baldianum G. bruchi and G.striglianum.

3. Microsemineum: Very small(0.1-0.5 mm) seed, fruits green , blue, or grey This very large group ended up with all the small-seeded species that didn't fit elsewhere and was further sub-divided by Schutz into 5 sections:

Section **Microsemineum**: G.saglioni, G.pflanzi et al

Section **Hybopleura**: G.hybopleurum, G.multiflorum, et al.

Section **Calochlora**:

G.calochlorum, G. capillaense, et al.

Section **Loricata**: G.spegazzini, G.bayrianum, G.cardenasium et al.

Section **Mazanensia**: G.hossei, G.mazanense, et al.

4. Trichoseminum: Seeds small (up to 1mm), brown, shiny, and shell-shaped. The fruits are blue-grey. Examples are G.ragonesi, G.stellatum, and G.quehlianum.

5: Muscosemineum: Seeds small (up to 1 mm), light brown, and spherical. Fruits are usually red. Members of this group are often pigmented, showing red or red brown patterns. It is sometimes further divided into Section **Muscosemineum**, with flowers produced from new areoles in the crown, and Section **Periferalia**, which produces flowers from older, lateral areoles, such as G.schickendatzi. Other members are G.anisitsi and G.damsi.

For those who are really interested in all this, the CACTUS AND SUCCULENT JOURNAL volumes XLVIII through XLIX contain a series of articles by Gerhard Frank with photos of all the seed types. A x10 magnifier is said to be sufficient to examine them. I would anticipate some difficulty in obtaining seed as they are not self-fertile.

Gymnos are rewarding cacti to grow, with their large, long-lasting flowers and varied spines. In general, they prefer a semi-shaded location, permeable, fairly rich soil, preferably acid. If excessively alkaline, they may become chlorotic, which may be corrected by standing in acidified water for an hour. They have few pests, aside from root mealy bugs and very rare scale. Except for a very few, such as G. mihanovichi, they are hard to kill and will stand for incredible abuse. For reasons which be clear when my plants are exposed to public view, I am titling my talk "Cactus Abuse - Should this Person be Allowed to Own Plants ?

Gymnocalycium References

Cacti for the Connoisseur, John Pilbeam 1987, Timber Press, Portland Or
Cactus and Succulent Journal, Vol.43, 48, and 49. 1971, 1976, 1977.

Abbey Garden Press, Santa Barbara CA

The Encyclopedia of Cacti, Cullman Gotz and Groner.1986 Alphabooks.
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Cactus and Succulent Society, Oxford, England.

FROM ALL CORNERS

By Shirley Berry

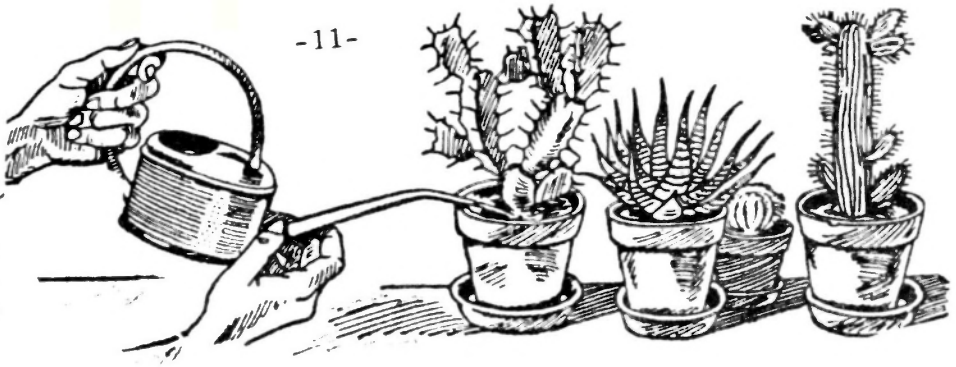
How often have you discarded a plant which became so disfigured with "corkiness" or insect damage that you could no longer bear to look at it?

An article in the British National Cactus and Succulent Journal from September 1953 gives one renewed hope for salvaging your mismanagement.

"Rehabilitation" by A.G. Donaldson states: "A *Euphorbia caput-medusa* came into my possession with a head showing between forty and fifty "snakes". The oldest of these tails were 36 inches long, brown in color, and corky, with perhaps an inch of live green at the tip. You can well appreciate that such a plant was not, and never could be a show specimen. Realizing that half measures would be useless, I took a razor blade and cut off all but the new growth at the top, leaving a quarter of an inch of the old tails on the head. I applied dried lime to the cut ends and hoped. In three weeks I found that new snakes were growing from the bases of those I had cut off, and, to my surprise the whole lower slope of the head right down to the soil level was sending out new growth.

As the new growths strengthened the old shriveled stumps dropped off and the new tails soon developed the characteristic head. Today it has well over some 150 snakes - some over 18 inches long. And the side shoots have provided me with new stock.

Isn't it wonderful what you can do if only you have the nerve to risk losing a plant?"



Ortho recalls insecticidal soap

Ortho Consumer Products, a division of Chevron Chemical Co., is recalling Orthoganic Insecticidal Soap, which is used to control garden insects on plants. Although there is negligible health risk to humans, the company has found a small amount of herbicide in the product and has decided to remove the product from the market pending further testing.

"We apologize to our customers for this unfortunate incident," said Jim Lieto, vice president and general manager of Chevron's Ortho Consumer Products Division.

"We are in the process of conducting a detailed review of our operations to ensure that a recurrence of this event does not happen," he said. "During the last year, consumers purchased more than 50 million individual items from the Ortho product line, and our customers can be assured that this is an isolated incident in our 80-plus years of supplying consumers with quality products."

R.D. Cavalli, manager of Chevron's environmental health center, said,

"Those concerned about toxicity of the product or about having eaten sprayed plants, fruits or vegetables can be reassured that there are no health hazards to humans due to the low level of contamination and the relatively low toxicity of the contaminant."

Customers are encouraged to call (415) 842-2334, collect, Monday through Friday from 8 a.m. to 4 p.m. to arrange for the return of contaminated products and for claims information.

A single batch (or about 67,000 bottles) of soap, produced at the company's Fort Madison, Iowa, plant was contaminated with the herbicide Oxyfluorfen during manufacturing. The affected lot numbers are 123650 and 120701 and can be found on the neck of the bottle.

Oxyfluorfen is used by home gardeners to prevent weeds and grass. Since Oxyfluorfen is not to be sprayed directly on food plants, the produce from plants treated with the contaminated insecticidal soap should not be eaten.

Appropriate government agencies, including the Environmental Protection Agency, have been notified and retailers have been asked to remove Orthoganic Insecticidal Soap from shelves.

EXPANSION PROPOSED FOR SAGUARO

The discovery of a hidden stand of healthy saguaro cactus by NPCA's Pacific Southwest regional director may result in a 3,500-acre expansion for Saguaro National Monument

While touring the Rocking K Ranch in the spring of 1988, Russ Butcher came upon a small hidden valley up against the southern boundary of the monument that was slated for housing development. Known as Deer Camp Creek valley, it contains a dense stand of healthy, multi-aged saguaros. Because the monument's saguaros are inexplicably declining, Butcher immediately recognized the need to preserve this stand. The monument's Rincon saguaro stand has been reduced by more than 50 percent since the late 1930s, and scientists predict that

the remaining mature saguaros will all be gone by the year 2000

In addition, the monument does not have a complete age representation of the cactus. According to Saguaro Superintendent Bill Paleck, the Deer Camp stand equals or exceeds any stand in the monument today.

Butcher subsequently met with the president of Rocking K Development, and discussions began on acquisition.

In a series of negotiating sessions including landowners, county and state officials, local environmentalists, NPCA, and other conservation groups, proposed acquisition boundaries were drawn. The approximately 3,500 acres of Sonoran Desert proposed for addition is comprised of about 1,800 acres of Rocking K land plus the adjoining X9 Ranch and some state and other private land. All parties have expressed willingness to sell, Butcher said

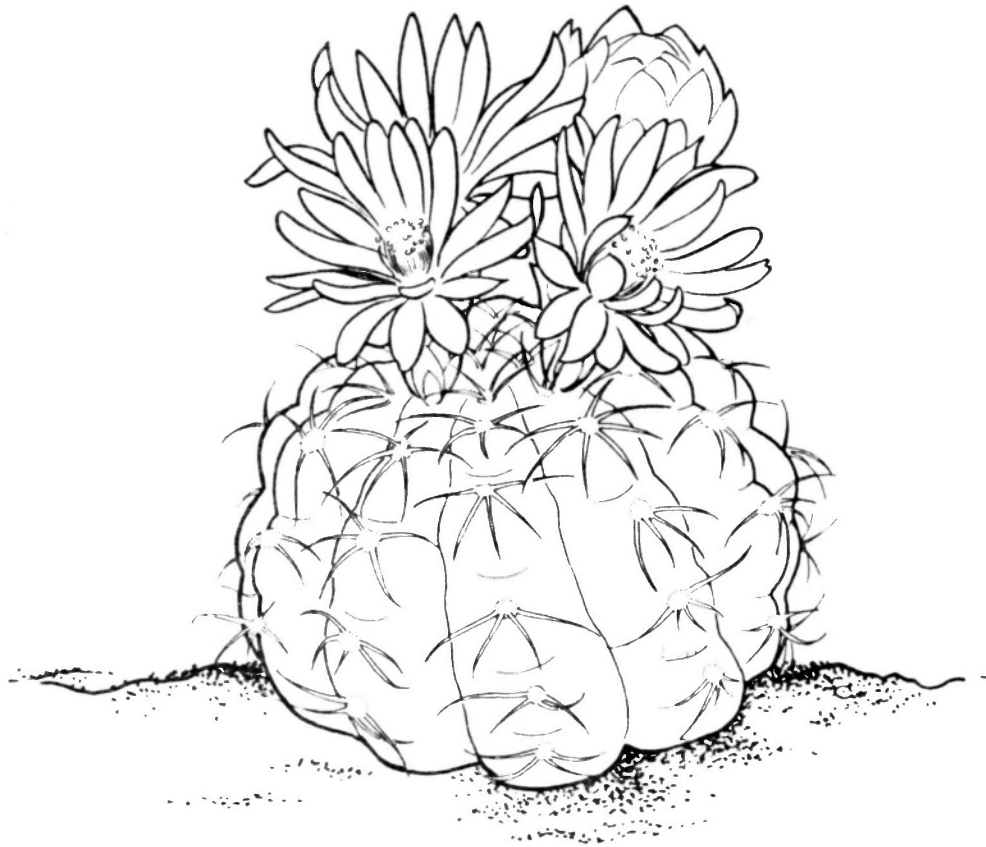
The Pima County Board of Supervisors endorsed the proposal this summer, and representatives Morris K. Udall (D-Ariz.) and Jim Kolbe (R-Ariz.) and Senator John McCain (R-Ariz.) introduced legislation in late September.

The Department of the Interior has said the proposal "affords an opportunity to explore this option" but has asked for a study first.

"There's already been a highly credible study done by an environmental consulting firm," Butcher said. "It is fiscally irresponsible to spend taxpayers' money on a redundant study."

From: National parks magazine

Nov./Dec. 1990



GYMNOCALYCIUM VENTURIANUM or GYMNO-CALYCIUM BALDIANUM (*Rainbow chin cactus*). Argentina and Uruguay. An excellent house plant. Provide a rich soil and ample summer water. During the winter, keep above 50° F. and water about once a month. All

Gymnocalyciums are highly recommended for indoor growing. They will flower throughout the summer in a half-sunny location. The deep-red flower color is unusual in this genus.

show schedule

Oct.	5 & 6	Balboa Park African Violet Soc. Fall Show	Sat: 10am-4:00pm	Sun: 10am-4:00pm
Oct.	19 & 20	San Diego Co. Orchid Soc. Fall "Mini" Show	Sat: 12pm-5:00pm	Sun: 10am-4:30pm
Nov.	2 & 3	San Diego Tropical Fish Soc. 34th Show	Sat: 12pm-6:00pm	Sun: 9am-4:30pm
Nov.	17	Sumi-e Painting & Ikebana 16th Annual Show		Sun: 11am-4:00pm
Dec.	6 & 7	San Diego Floral Assoc. Christmas Show (Christmas on the Prado)	Fri: 5pm-9:00pm	

WISE AND OTHERWISE

by Michael Buckner

THIS MONTH'S COLUMN DEDICATED TO LARRY MITICH FOR HIS ENCOURAGEMENT AND SUPPORT: SALUTE!!!!!!!

"Imagine a plant that can attain an age of 1000 years and more, with strap-like leaves that are continuously perpetuated in conveyor-belt fashion; a plant with a turnip-shaped, headless body and a relatively shallow root system.

Visualize a plant that lacks many of the xeromorphic features of drought-tolerating species yet seems able to utilize directly the Namib fog; that is neither ephemeral nor drought-evading; a plant that from its appearance ought to be better adapted to tropical rain forest conditions; a plant with a built-in rain gauge, thermometer and a light meter; and finally a plant that has selected as its habitat a desert quite unlike any other in the world in the diversity and adaptations of its faunal life. Such a plant is pure Martian science fiction. Such a plant is Welwitschia mirabilis: it is poetry and drama, painting and sculpture and, above all, architectural paradox."

from WELWITSCHIA - PARADOX OF PARCHED PARADISE by Chris Bornman, 1978

THREE GENERA WHICH ARE FOUND VIRTUALLY EVERYWHERE IN SOUTHERN AFRICA ARE ALOE, EUPHORBIA, AND STAPELIA. ALOES OF COURSE PRESENT NO PROBLEM IN CULTIVATION AND WILL GROW SUCCESSFULLY UNDER ALMOST ANY CONDITIONS. AN EXCEPTION PERHAPS IS THE RARE, SMALL ALOE KRAHPOHLIANA, AND NINETY PERCENT OF THE DIFFICULTIES EXPERIENCED WHEN CULTIVATING THIS PLANT ARE DUE TO THE FACT THAT IT IS ENDEMIC TO THE WINTER RAINFALL AREA ONLY AND REFUSES TO BE TRAINED INTO A SUMMER GROWER, A PECULIARITY WHICH APPLIES TO MANY MORE SUCCULENTS THAN IS GENERALLY REALIZED.

from SUCCULENTS IN THE VELD by Rolf Rawe', 1968

Another of Linnaeus' (Carl Linnaeus 1707-1778) was to popularize the custom of referring to each species by a double name: that of the genus to which it belonged, followed by the name of the species itself. This system has been followed ever since, as has Linnaeus' habit of using only Latin names for this purpose. (Latin having long been the language of scholarship in Western Europe).

This principle of binomial nomenclature is exactly that used by the telephone directory in distinguishing Anderson, Walter from Anderson, William.

In many cases, the original name suggested by Linnaeus is still in use. For instance, the species to which man belongs was named by him Homo sapiens (which in Latin means "Man, wise"). It is still used, for all that it may just possible be a misnomer.

from THE WELLSPRINGS OF LIFE by Isaac Asimov, 1961



IT ALL BEGINS WITH YOU...

WISE AND

John Muir's first encounter with the idea that nature had rights came as a consequence of draft-dodging. President Abraham Lincoln asked for 500,000 more men to defend the Union on March 10, 1864. Muir, who was twenty-six and single, felt certain he would be called, and he apparently had no interest in fighting to save the Union or free the slaves. However, he was learning to care greatly about nature. So Muir left his Wisconsin home in June and vanished into the Canadian wilderness north of Lake Huron. He followed a lonely trail into a wet and darkening swamp, where he suddenly came upon a cluster of rare white orchids, miles from anywhere and so beautiful that he "sat down beside them and wept for joy". Reflecting latter on the experience, Muir realized his emotion sprang from the fact that the wilderness orchids did not have the slightest relevance to human beings. Were it not for Muir's chance encounter, they would have lived, bloomed, and died unseen. Nature, he generalized, must first and foremost be for itself and for its creator. Everything had value. "Would not the world suffer," he concluded, "by the banishment of a single weed?"

from IDEOLOGICAL ORIGINS OF AMERICAN ENVIRONMENTALISM by R.F.Nash, 1989

"IT IS IMPOSSIBLE TO REFLECT ON THE CHANGED STATE OF THE AMERICAN CONTINENT WITHOUT ASTONISHMENT. FORMERLY IT MUST HAVE SWARMED WITH GREAT MONSTERS."

Charles Darwin, 1833

OTHERWISE

"Pitaya Dulce (Stenocereus thurberi, s'n. Lemaireocereus thurberi - Organ Pipe Cactus) has a sweet, crimson, globular, spinney fruit about the size of a tennis ball. They ripen in late summer and fall, and are prized by man and animal because of their flavor, which is somewhat like watermelon. Missionaries' records indicate the peninsular natives were generally hungry except during the "Pitaya" season when the delicious fruit was ripening. Then they actually became well fed on these fruit and the entire season was spent in a state of euphoria with everyone contented. This was, however, a dangerous period for young girls because the braves would try to catch them out gathering the fruit. During the feasting the tribes were able to travel, mixing together in general orgies, thereby reinforcing the social and religious structure of their society, while maintaining and increasing the Indian population.

This period lasted about two months. If the fruit was not eaten fresh, the pulp could be dried for future use. When the "Pitaya" fruit was gone the Indians would gather their dried feces to collect the tiny black seeds that had passed through their intestinal tracts undigested, then grind these into a meal to be eaten in another form. This was called the "Second Pitaya Harvest". When fresh the oily seeds make a paste-like butter when mashed. A sort of wine can be made by fermenting the fresh fruit."

from PLANTS OF BAJA CALIFORNIA by Coyle & Norman Roberts, 1975



AREA DESERT PARKS, NATIONAL MONUMENTS, SCENIC AREAS, ETC.

ANZA-BORREGO STATE PARK 619-767-5311

East of San Diego

Peak bloom April

Lower desert - (the Colorado Desert, part of the Sonoran)

Visitor's Center in Borrego Springs

Camping permitted throughout the park -- consult rules (especially as regards fires & water) Call above number.

EAST MOJAVE NATIONAL SCENIC AREA

Administered by the BLM, Needles, CA 619-326-3896

East of LA area - west of Las Vegas -

Upper desert - (Mojave Desert)

Administered by the Bureau of Land Management of the U.S. Dept. of the Interior Needles Resource Area, 101 Spikes Road, P.O. Box 888, Needles, CA 92363

Camping permitted throughout region -- follow rules (especially as regards fires & water). Call above number.

JOSHUA TREE NATIONAL MONUMENT 619-367-7511

East of LA & Inland Empire (Riverside) region

Peak bloom April for lower or southern portion (Colorado Desert section) --

Peak bloom May for upper or northern section (Mojave Desert section)

Visitor's center in Twentynine Palms and at south entrance. Pamphlet on the cacti of the park available.

Camping in designated areas. Call for reservation and rules.

THE LIVING DESERT 619-346-5694

Combination interpretive zoo/botanical garden/nature center

Closed during the summer heat

East of LA, next to Palm Springs

P.O. Box 1775

Palm Desert CA 92261

No camping

NOTE: CALL AND ASK TO SPEAK TO A RANGER (NOT A VOLUNTEER) TO ASK ABOUT WHERE TO SEE SPECIFIC GENERA. ALSO ALWAYS CALL AHEAD TO INQUIRE ABOUT WEATHER CONDITIONS. WEATHER CAN BE UNPREDICTABLE, WITH POSSIBLE FLASH FLOODS. USUALLY THOSE DESERT REGIONS IN THE HIGHER ELEVATIONS WILL BE COOLER. FOLLOW ALL DESERT-GOING PRECAUTIONS, INCLUDING TELLING SOMEONE YOUR TRAVEL PLANS, AND BRINGING ALONG THE APPROPRIATE AMOUNT OF WATER.

FOR CALIFORNIA DESERT FLORISTIC ASSOCIATIONS, SEE BENSON'S *The Cacti of the United States and Canada*, pp. 192 -- 200.

WILDFLOWER HOTLINE FOR SOUTHERN CALIF.: Call 818-768-3533 (March through May only)



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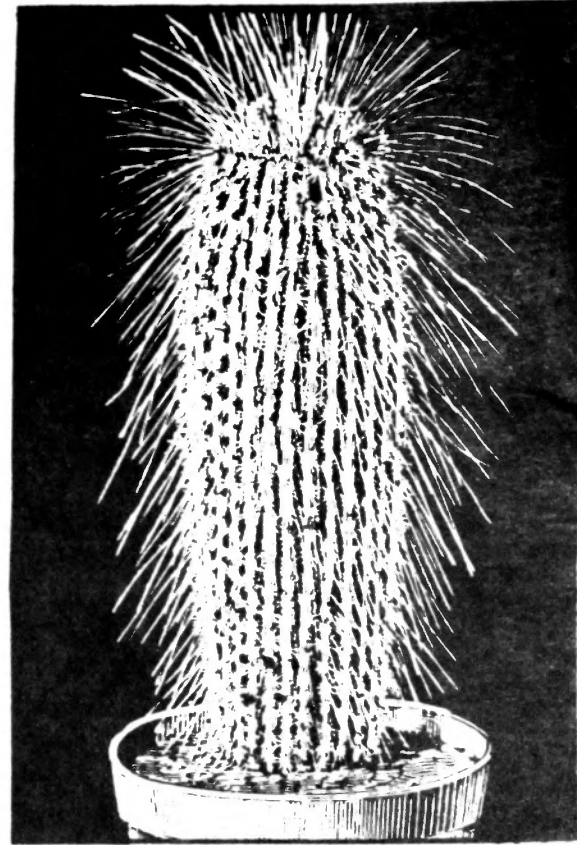
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Rare Succulents

The San Diego Cactus & Succulent Society, Inc. 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¢. Affiliated with the Cactus & Succulent Society of America, Inc.

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