

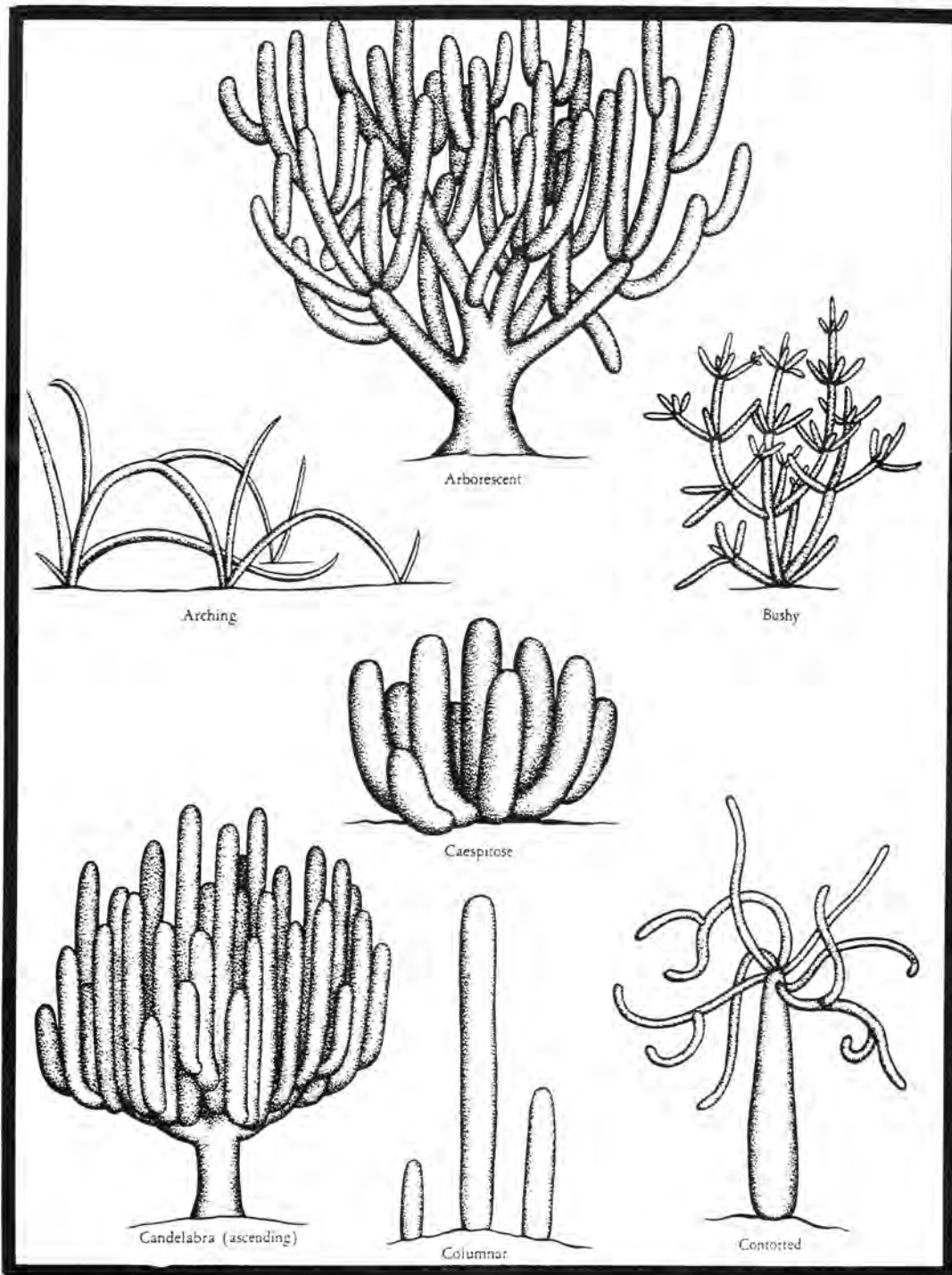
MAMMILLARIA THORNERI

Espinas y Flores

NEWSLETTER OF THE SAN DIEGO CACTUS & SUCCULENT SOCIETY

Affiliate of the Cactus and Succulent Society of America, Inc.

VOLUME XXXI NUMBER FOUR, SATURDAY, APRIL 13, 1996 @ 1:00PM



Arching

Arboresecent

Bushy

Caespitose

Candelabra (ascending)

Columnar

Contorted

APRIL PROGRAM: INGA HOFFMANN PRESENTS THE CACTI OF BRAZIL

For those of you who have read the numerous chronicles of South American adventures published in the *Cactus & Succulent Journal of America* by Inga, this will be an opportunity to meet her personally and view her artistic and educational slides. Inga has traveled throughout South America with Werner Rauh, Ingo Horst, Walter Jung, Ed & Betty Gay and other noted cactiphiles. She will take us on an exciting journey through Brazilian cactus terrain. Join us for this quality entertaining program.

Presently, Inga Hoffmann resides in San Leandro (the San Francisco Bay area), where she owns and operates a professional wholesale palm seed business. With world-wide distribution, this is the largest palm seed business in the world.

Please Bring in Some Goodies to Share for our Refreshment Table: Cookies, Crackers, Fruit, Veggies, Salsa, Dips, Nuts, Brownies, Cheese, Chocolate!



OUR COVER:

Some of the forms of cactus growth illustrated by Thor Methven Bock and published in 1941 by Abbey Garden Press, Pasadena, CA.



Espinas y Flores is the newsletter for the San Diego Cactus & Succulent Society, a non-profit corporation. It is published monthly with the exception of a combined May-June issue (11 issues per year). All material in the *Espinas y Flores* may be reprinted by non-profit organizations (unless such permission is expressly denied in a note accompanying the material) provided that proper credit is given to the *SDC&SS Espinas y Flores* and the author — and that one copy of the publication containing the reprinted material be sent to the editors. Reproduction in whole or part by any other organization or publication without the permission of the editors is prohibited.

Please send articles, notices, letters, compliments & complaints for *Espinas y Flores* to:

Michael & Joyce Buckner, Editors SDC&SS
4822 Santa Monica Avenue #103
San Diego, CA 92107
Phone: (619) 222-3216

The San Diego Cactus & Succulent Society Annual Show & Sale is just around the corner! Show is held in Room 101 Casa del Prado, Balboa Park; set-up is Friday, May 31st; the sale (held outdoors at Casa del Prado, Balboa Park) begins @ 9am on **Saturday, June 1st** with the show opening on Saturday immediately after judging — usually around noon. The show and sale open @ 10am on **Sunday, June 2nd**. Show and sale continue through 5pm on both days.

It is Fun to Volunteer — SDC&SS needs your help!!!

The **May-June** issue of *Espinas y Flores* will include the **SDC&SS Annual Show Schedule**, show & sale information, and cactus & succulent-of-the-month articles by Tom Knapik and Phyllis Flechsig. Deadline for May-June Show Issue is May 20th. *Thanks!*

Upcoming shows & events: **The San Diego Epiphyllum Show & Sale** on Saturday, **May 11th** and Sunday, **May 12th**, Casa del Prado, Balboa Park, San Diego; Don Francis, show chairman, @ (619) 273-5544. **May 4 - 5, Sunset Succulent Society Show & Sale**, Garden Room - Veteran's Memorial Bldg., 4117 Overland (at Culver), Culver City; information: **(310) 822-1783**. **The Santa Barbara Exhibit & Sale** on **April 27-28** at the Recreation Center, McKenzie Park on State and Los Positas; Cory Wells @ (805) 965-1875. **The Festival of Flowers — The 71st Coronado Flower Show** on **Saturday, April 20 & Sunday, April 21**, Spreckels Park, Coronado. **Section "L" } Succulents & Cacti, John Blocker (435-8397)**. A wonderful Wildflower display, Children's Sections, live music & entertainment, are all part of the fun. Admission is \$2.00 for adults & \$1.00 for children over 12. Randomly selected Flower Show Chairpersons: Linda Stanton (437-8332), and Phil Needham (435-4823). **April 10, Moorten Botanical Gardens**, 1701 S. Canyon Drive, Palm Springs. **Hans Britsch**, "The IOS Field Trip in Central Mexico."

WANTED ALIVE

This *Bursera microphylla* sat in a wooden planter on a rock, greeting Grigsby visitors. Dave Grigsby collected (with permission/permit in Mexico) this incredibly-shaped tree on his final trip to Mexico. Should be easily recognizable: trunk is 10" - 12" wide, total height with branches is 16" - 18", with a branching "wingspan" of 3 to 4 feet; white lichen grew on the undersides of the branches. This was a very special "breeding" tree — its seed providing many propagations. The plant apparently fell when the thief initially attempted to get it over the gate, as there were branches, soil mix, and the broken tub left behind. Irreplaceable old memorial tree to Grigsby's. Should you recognize the *Bursera*, please call Madelyn Lee at (619) 727-1323.

PLEASE LEAVE AT THE GATE — NO QUESTIONS ASKED.

Desert Wildflower Hotlines: Anza-Borrego Desert State Park (619) 767-5311, *(619) 767-4684; Joshua Tree National Park (619) 367-7511; The Living Desert, Palm Springs (619) 346-5694 — Wildflower hotline *(619) 340-0435. **The Desert Botanical Garden (Phoenix, Arizona) Wildflower Hotline — (602) 481-8134**. The Desert Botanical Garden also has a Plant Questions Hotline 10am - 11:30am, Monday through Friday: (602) 941-1225. What a great idea!

We hope all of you Out-of-Town SDC&SS Members have answered question #12 in last month's survey! **(The correct answer is, of course, The Espinas y Flores!)** Your opinions do matter! Please! Send in your **SDCSS ROSTER / MEMBER SURVEY**. Do it now! And please remember all you members out there, this roster created for sharing hobby interests with other members only. Please no mail solicitations, telemarketing, or chain letters!

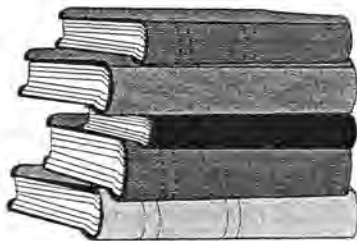
The Good, The Bug, and The Ugly (officially named "Biological Control: Good Bugs and Other Natural Enemies in the Garden"), a highly informative program presented by **Lili Singer** (*Manny Singer's daughter*) at the San Diego Horticultural Society's March Meeting was by far one of the most interesting presentations that we (*Michael & Joyce*) have seen in a long time! Hoping that Lili can present this excellent slide show and lecture on the biological control of garden pests to the SDC&SS sometime in 1997. There are so many safe and responsible alternatives to using chemical pesticides; we all need to become more aware of these choices and practice effective pest management more often.

Additionally, Lili Singer, a nationally recognized horticultural consultant, writer, and lecturer, publishes a wonderful award winning newsletter: **The Southern California Gardener**. Each issue features a planting guide specific to Southern California's climate, advice on tree care, native plants, new plants & products, resource-conserving landscape designs, etc., etc. Published bimonthly, a one year subscription costs \$20.00. The address is: The Southern California Gardener, 610 Twentieth Street, Santa Monica, CA 90402-3030 — Please include your full address and a daytime telephone number with your request.

We are sorry to hear about SDC&SS member **Kevin Coniff's** accident. We understand he broke both legs and is now recuperating at Valle Vista or is it Golden Palms Rehab Center? Anyway, hope you are feeling better and back on your feet again soon, Kevin!

Harold & Mildred Richter will soon be moving into their retirement home (a motorhome!). Over the years Harold has accumulated many cacti & succulents as well as various garden/greenhouse supplies, and all sorts of strange & interesting metal junk for all you detritus connoisseurs. All this good stuff available for very little \$\$ — perhaps even free for the asking. The Richter's address is 3136 Main Street, Chula Vista (*directly across the street from Smart & Final*). Their phone number is 422-2588.

Art Alive, Thursday, April 24 through Sunday, April 28 @ San Diego Museum of Art, Balboa Park, San Diego. Treasures from the museum's permanent collection are highlighted by 150 floral interpretations created by professional designers and award-winning amateur exhibitors.



A NOTICE FROM THE LIBRARIAN:

Beginning in April, the fine for overdue books from the San Diego Cactus & Succulent Society will be 50¢ per book, per month.

I would like to thank Carol Jean Wolcott, Judy Hanula, and Tom & Laura DeMerritt for their donations to the library. The books from Judy Hanula and the DeMerritts were donated in memory of Rick Latimer. Thank you, as well, to Michael & Joyce Buckner for covering the library's books with protective plastic covers.

Thank you, Betty Athy

CACTUS OF THE MONTH: MAMMILLARIAS

BY KELLY GRIFFIN

In writing about Mammillarias, the whole point of an article like this is to convey something new that will hopefully enlighten you. Now, if I can also manage to make this article factual, all the better.

In 1812, Adrian Hardy Haworth described the genus Mammillaria. The genus name is quite an interesting one. Unlike many plant species that have been named to honor someone (*i.e. Haworthia or Dudleya*) Mammillarias are named for their likeness to human body nipples and/or mammary glands — not some bloke named Mammill.

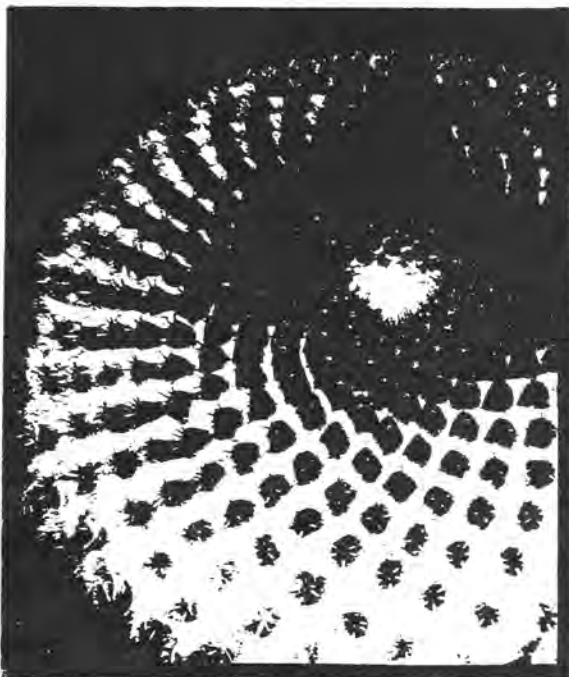
I often select plants for my collection with which I have had some degree of success in growing. Mammillarias present few problems and a vast selection of sizes, shapes and spination. The genus is a perplexing one to divide into species, equaled only, perhaps, by the opuntias, which possess few of the fine characteristics of the Mammillarias. (My own opinion and my apology to opuntia lovers.)

The size of Mammillaria flowers in many species is extremely small. Although these flowers often make up for their slight size by producing a large number of them. A few species are quite conspicuous in flower size and color of bloom. *M. wrightii* and *M. wilcoxii* from Arizona and New Mexico and *M. beneckii* and *M. zephyranthoides* from southern Mexico are good examples of large bright blooms.

The Mammillarias with fantastic spination include *M. plumosa* with spines that actually feel like feathers. Also of interest is the *M. pectinifera*, whose spines remind me of an upside down sow bug — although this description doesn't conjure up a pleasing image, it is an interesting form.

Those of you with a taste for small plants will find the diminutive *M. theresae* an impressive cactus. A mature plant is about $\frac{3}{4}$ of an inch across by an inch or so high and has flowers that are as large as the plant itself.

The large clumping mounds that are so much associated with the desert garden area of the Huntington Botanical Gardens are what I always think of as "classic Mammillarias". These mounds consist of large mature clumps of *M. geminispinia*, *M. parkinsonii* and *M. compressa*.



Mammillaria semperviva

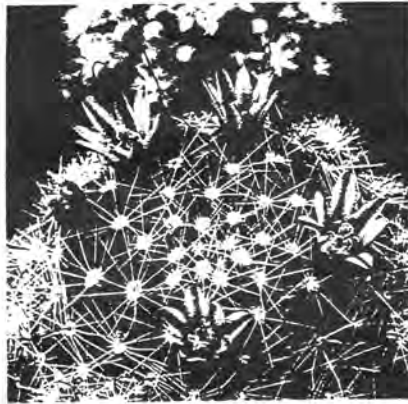


Mammillaria tayloriorum

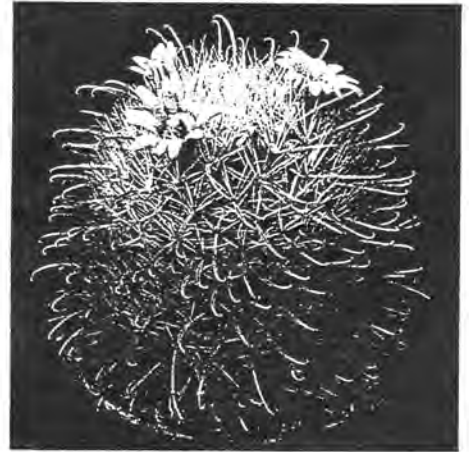
Cactus of the Month: *Mammillaria* by Kelly Griffin continued



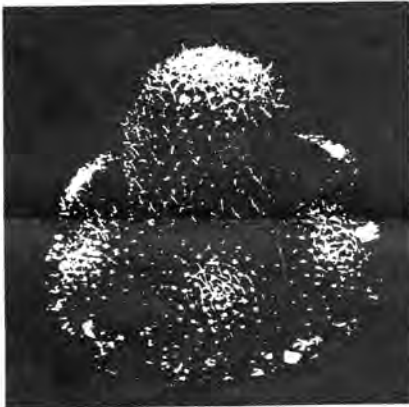
MAMMILLARIA PECTINIFERA Weber
Syn: *Solisia pectinata* (Stein) Br. & R.



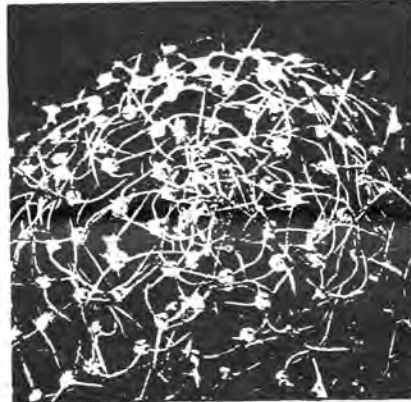
MAMMILLARIA OTEROI Glass & Foster



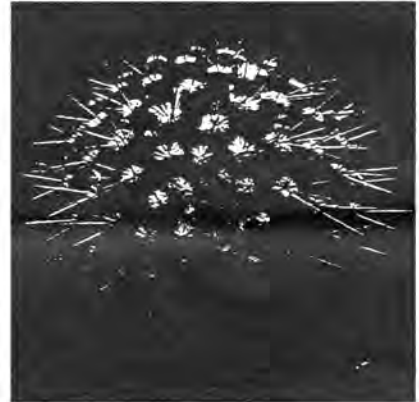
MAMMILLARIA PENNISPINOSA var.
NAZASENSIS Glass & Foster



MAMMILLARIA CAMPTOTRICHA Dams.
Syn: *Dolichothele camptotricha* (Dams.)
Tiegel



MAMMILLARIA CAMPTOTRICHA var.
SUBINERMIS hort.



MAMMILLARIA NIVOSA Link
Syn: *Mammillaria flavescens* (DC.) Haw.

Should you ever encounter a *Mammillaria* growing in the open areas of San Diego, most likely it will be *M. dioica* which occurs in coastal areas as well as in the shady areas of the Anza Borrego. *Mammillaria dioica* is a clustering plant with hooked central spines and cream colored flowers.

I am sure there are many more "Mamms" worthy of attention, but none more than the *Mammillaria* from San Pedro Nolasco Island, Sonora, Mexico: *Mammillaria tayloriorum*. Named in honor of two of the San Diego Cactus & Succulent Society's founding members **Bob & Suzanne Taylor**, *M. tayloriorum* grows to four inches wide and about ten inches tall. *Mammillaria tayloriorum* has brilliant red cerise flowers and unlike humans, it is very woolly when young with less woolly spinations as it matures.

References:

Pilbeam, John, c. 1981. *MAMMILLARIA — A Collector's Guide*.

Craig, R. T., c. 1945. *The Mammillaria Handbook*.

Preston-Mafham, Rod & Ken, c. 1991. *CACTI — The Illustrated Dictionary*.

The Taste of Agave

by Alex C. Murphy

The food source within Agaves is mainly the soft starchy-white meristem in the short stem and leaf bases, excluding the green portion. The young, turgid and tender flowering shoots and the flowers of most species are also edible. Indians cook the softer parts by direct fire or with hot water. The charring of Agave flowering shoots by laying them in a fire or in hot coals or ashes overnight was practiced by backcountry Mexicans in the 1970s, particularly to appease hunger on long journeys. With the availability of pots in modern times, flowering shoots were commonly boiled in Mexican homes.

Pit baking, a more sophisticated and communal cooking method, arose north of mesoamerica. This was generally a family or group effort. Men and boys collected wild mescal heads (cabezas); women and girls collected fire wood and did the cooking. A pit large enough to hold many cabezas was dug and lined sides and bottom with stones. A large fire in the pit heated the rocks and formed coals. After the fire burned down, the cabezas were pitched in either directly on the stones or on an intervening layer of green such as leaves, palm fronds, or grass. The heads were covered with greenery and sufficient earth on top to prevent steam from escaping. The necessary cooking time was one or two days, depending on the amount to be cooked, cabeza size, and associated tribal customs and ceremonies. The cooked heads were separated from the leaf butts and cut into chunks. Both could be eaten at once, stored indefinitely for future use, or turned into many other products.

The cooked cabezas could be pressed into easily carried flat cakes that were often bartered between tribes. The expressed juice from the cooked chunks was rendered into syrup. Candies were prepared from this syrup.

Boiled flowers, often eaten with scrambled eggs, is a dish favored in Tehuacan. The Mixe Indians in the mountains of Oaxaca have a singular culinary use for the cuticle from the leaf of agaves such as *Agave atrovirens*. The peeled cuticle is used as a wrapper for tortilla sandwiches and as a lunch bag for other foods carried to the field. It is translucent, resembling an archaic form of polyethylene. In Saltillo, Coahuila, bread is still made with pulque, giving it a distinctive flavor. Vinegar is made from the aquamiel and alcohol can be distilled from the pulque ferment.

In San Luis Potosi, *Agave salmiana* is an important animal food. In Baja California, the flowering panicles of *Agave shawii* and *A. shawii galmaniana* are cut and trucked to range cattle (Boo!). On open cattle ranges, the flowering shoots of all species of the smaller agaves are commonly cropped by the animals. However, the sharp terminal spines of larger agaves are effective at distancing the cattle from the flowering shoots. Agave as cattle forage is a recent development, reflecting the pressure of human population on plant resources. The exploitation of endemic agaves by local industry is extending milk production into desert regions.

San Diego Cactus & Succulent Society Membership

The San Diego Cactus & Succulent Society is a non-profit, hobby organization created to stimulate interest in succulent plants. This society brings together people (and plants) with a common interest for the purpose of educating the public about the beauty and uniqueness of these remarkable plants, encouraging proper collecting and maintenance of the plants through preservation of native habitats and horticultural propagation, and to foster good fellowship. You are invited to join our society, whether you are an expert, amateur, or beginner with an interest in unusual plants and flowers. VISITORS ARE ALWAYS WELCOME. BRING AN INTERESTED FRIEND.

Regular meetings are held on the second Saturday of each month in Room 101, Casa del Prado, Balboa Park at 1:00 p.m. (One may come as early as noon to socialize.) Annual dues are \$10.00 for a single membership plus \$5.00 for each additional member at the same mailing address. Dues are payable at time of joining, and in January of each succeeding year; for new members that join during our June show or at other times during the year, prorated membership dues can be paid in November/December to complete the succeeding year. Members receive our monthly publication *Espinas y Flores*, are entitled to library check-out privileges, and may partake in activities. We offer knowledgeable speakers who present educational & entertaining programs; many are world renowned scholars, botanists, explorers and authors. The San Diego Cactus & Succulent Society's Annual Show and Plant Sale occurs the first weekend of June in Room 101, Casa del Prado, Balboa Park. A wide range of succulent plants, ceramic pots, and growing supplies are available at favorable costs during most meetings. There is also a plant exchange table and a seed library /exchange. All members will be consistently encouraged to contribute and participate in our many functions.

For more information regarding membership, please call Elizabeth Glover @ (619) 264-6769.

- Yes, I (we) wish to become 1996 member(s) of the San Diego Cactus & Succulent Society. (Membership will be active for one full year. Prorated dues can be paid at end of 1996 to complete 1997.)
- Yes, I (we) wish to renew our San Diego Cactus & Succulent Society membership (1996 - 1997).

NAME: _____

NAMES OF ADDITIONAL MEMBERS: _____

ADDRESS: _____

CITY, STATE & ZIP: _____

PHONE: _____

DO YOU KNOW THAT FOR AN ADDITIONAL \$5.00 PAID ON YOUR MEMBERSHIP DUES — YOU CAN HAVE *Espinas y Flores* DELIVERED BY FIRST CLASS MAIL INSTEAD OF BULK MAIL??

- Yes, I (we) wish to pay an additional \$5.00 for First Class Mail .

SEND THIS FORM TO:

SDC&SS - Treasurer, P.O.Box 33181, San Diego, CA 92163-3181

ABOUT THE MONTHLY BENEFIT DRAWING

(Hay, that's the way we like it, uh huh....!)

Our March benefit drawing was a great success! We had approximately 18 items for the drawing, ranging from rare plants, to show-worthy ceramic pots, to a one-year subscription to the **Cactus & Succulent Journal of America**. Our benefit procurer, Betty Athy, did a super job of rounding up an exciting table. Many great big **THANK YOUS** to all who helped "decorate" the table by donating:

<i>Cephalocereus senilis</i>	—	Alex Murphy
<i>Rhipsalis species</i>	—	Carol Jean Wolcott
<i>Echinocactus grusonii albspina</i>	—	Michael Buckner
<i>Mammillaria pringlei</i>	—	Shirley Berry
<i>Mammillaria senilis</i>	—	Betty Athy
<i>Lithops optic f.rubra fasciate</i>	—	Betty Athy
<i>Adromischus marianae v.antidorcatum</i>		
<i>forma multicolor</i>	—	Betty Athy
A book: <u>Baja California</u>	—	Carol Jean Wolcott
And one-year CSSA Membership	—	Myron Kimnach

Many thanks to **Jim Kempworth of C & J Cactus Nursery**, for parting with the beautiful *Mammillaria canelensis* specimen from his private collection — a real show stopper!

Now for a tiny peek at April's benefit drawing table . . . Betty has captured two special Echevarias from the collection of hybridizer, Denise Manley; *Echevaria "Etna"* and *Echevaria "Blue Coral"*, both are absolute knockouts. Betty has also found us an eight inch *Notocactus buiningii* in bloom and in perfect condition.

Please contact Betty Athy @ (619) 469-7647, if you have an outstanding plant or other item you would like to donate.

Kay Quijada - April 1996

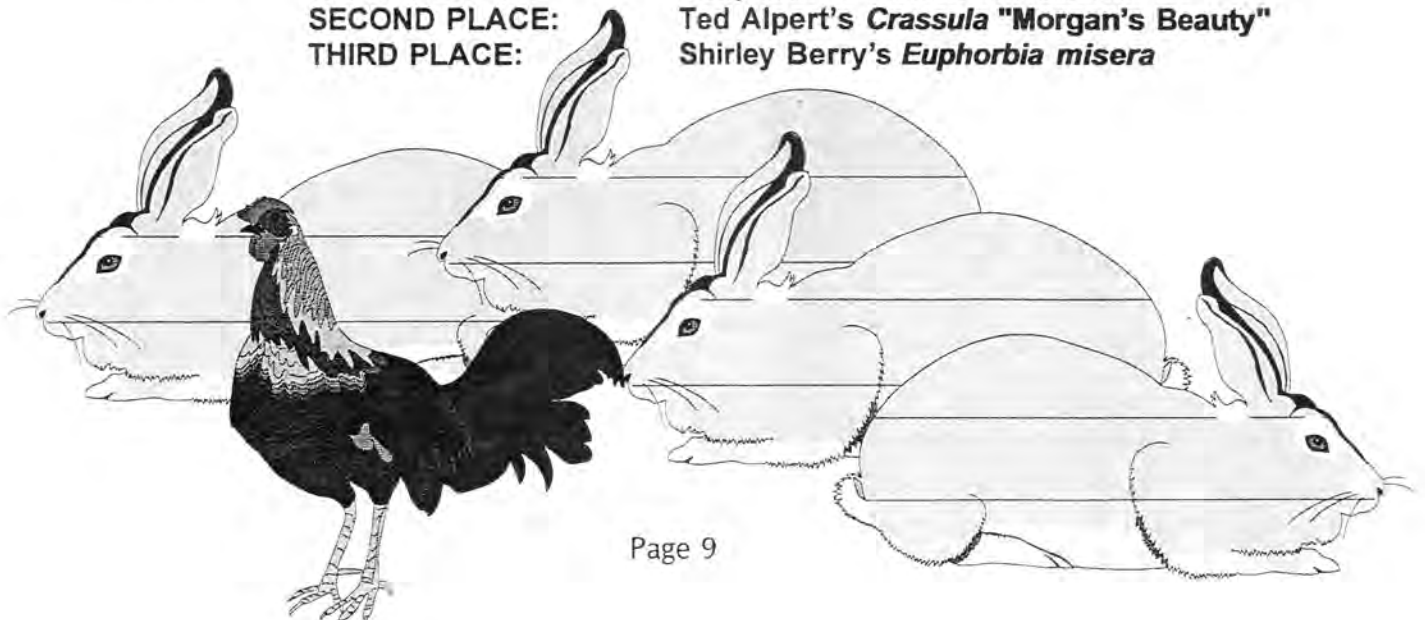
BRAG TABLE WINNERS FOR MARCH 1996: JUDGED BY MYRON KIMNACH

CACTUS:

FIRST PLACE:	Shirley Berry's <i>Cochemeia maritima</i>
SECOND PLACE:	Don Patterson's <i>Copiapoa tenuissima</i>
THIRD PLACE:	Rick Newcomer's <i>Neoporteria nidus senilis</i>

SUCCULENT:

FIRST PLACE:	Rudy Lime's <i>Boweia volubilous</i>
SECOND PLACE:	Ted Alpert's <i>Crassula "Morgan's Beauty"</i>
THIRD PLACE:	Shirley Berry's <i>Euphorbia misera</i>



Succulent of the Month: The Somewhat Inconspicuous Crassulas

by Tom Birt

Winter growing species make up the bulk of what may arbitrarily be termed 'mini and mimicry' crassulas. The mimicry types more or less mimic the quartz stones they often grow near. These fields of quartz stones and pebbles (which contain many plant families that include mimicry types) are primarily found in the South African areas of the Little Karroo, Namaqualand, the Bushmanland, and from north to south Namibia. The miniature types without the light leaf color usually grow under the protection of shrubs, in the shade of rocks, or limit their exposure from the intense sun by growing on the southern slopes of hills.

CRASSULAS IN CULTIVATION by Vera Higgins, is the best illustrated and one of the most informative sources for the grower or collector; it contains information on those species most often found in collections. Some example species:

alstonii - The leaf pairs form at an oblique angle, rather than the typical right angle divergence. Outline of a single rosette, when viewed from above, is circular to oval.

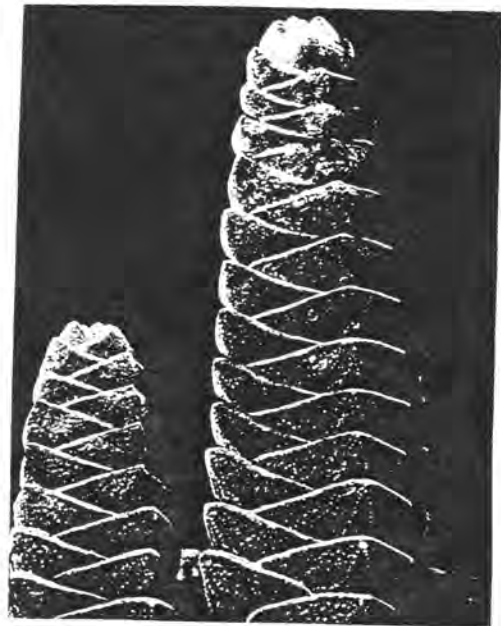
ausensis - Paul Hutchinson described this attractive species. H. Tolken named this *Crassula ausensis subspecies ausensis*. His subspecies *geissii* have long marginal cilia. Most of the plants I have seen in cultivation as *C. ausensis* are not the same as either of these; they have longer red hirsute leaves.

barbata - Hans Herre described how Professor M. Marloth tested the remarkable water absorbing abilities of the long white leaf margin hairs on this small species. It seemed as if they could absorb more water in one misty night than they would evaporate in one sunny week. This absorption is done through organs called hydathodes, which many crassulas have.

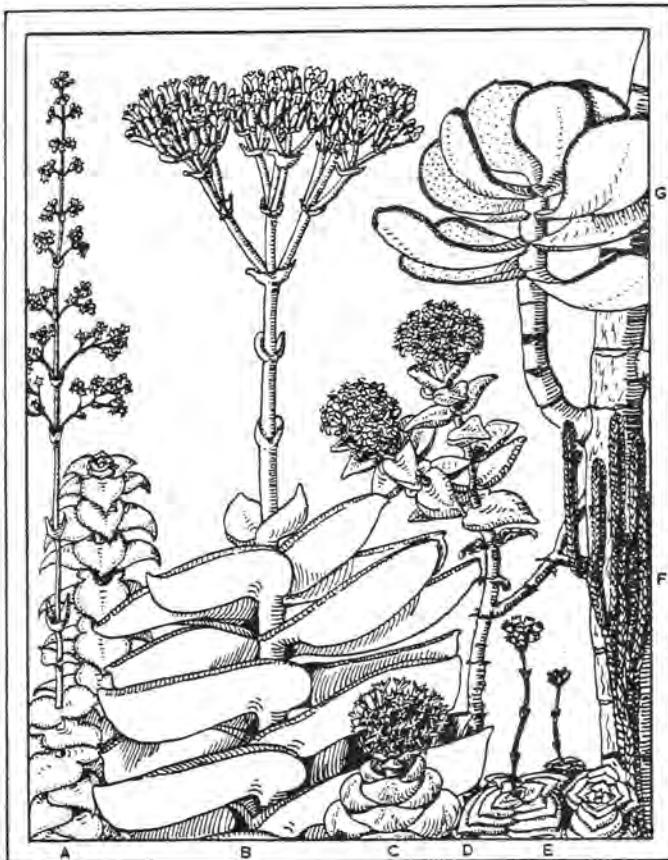
columella - The photograph on page 95 of Doreen Court's book of this species is incorrect. The photograph in Jacobsen's Handbook is more typical. The velvet-like texture of the leaves appears best if they are grown in the shade.



Crassula alstonii



Crassula columella



- (A) *Crassula perforata*
- (B) *Crassula falcata*
- (C) *Crassula columnaris*
- (D) *Crassula rupestris*
- (E) *Crassula quadrangularis*
- (F) *Crassula lycopodiodes*
- (G) *Crassula arborescens*

Illustrations from SUCCULENT PLANTS
ILLUSTRATED by Vera Higgins, V.M.H.,
c. 1949, Blandford Press Ltd, London.

corallina - A tiny species with leaves only a few millimeters long. Leaves have a waxy coating with green to red spots. The two subspecies are separated mainly by their root type.

deceptor - Court's page 95 photograph of *Crassula columella* is probably one of the many forms of this species. It has gone by the name of *C. arta*, *C. cornuta*, and *C. deceptorix*.

elegans - Ernst van Jaarsveld's 'mini book' of an article in the Aloe Journal entitled "The Succulent Riches of South Africa and Namibia" features a photo of this jewel of a plant set in the Knersvlakte.

marchandii - Fairly common in cultivation, but apparently a natural hybrid. The possible parents are thought by Tolken to be *Crassula grisea* and *Crassula plegmatoides*.

mesembrianthemopsis - The leaves growing in a spiral arrangement with the truncate leaf tips set flush with the soil surface make this species instantly recognizable. Dr. Morgan's 'Morgan's Beauty', a cross with *Crassula falcata*, is far more common.

suzannae - Jacobsen's Succulent Lexicon shows the only habitat photograph of this mostly underground species that I have seen. Most plants in cultivation look nothing like that photo. Who will be the first person to grow and display it correctly?

References:

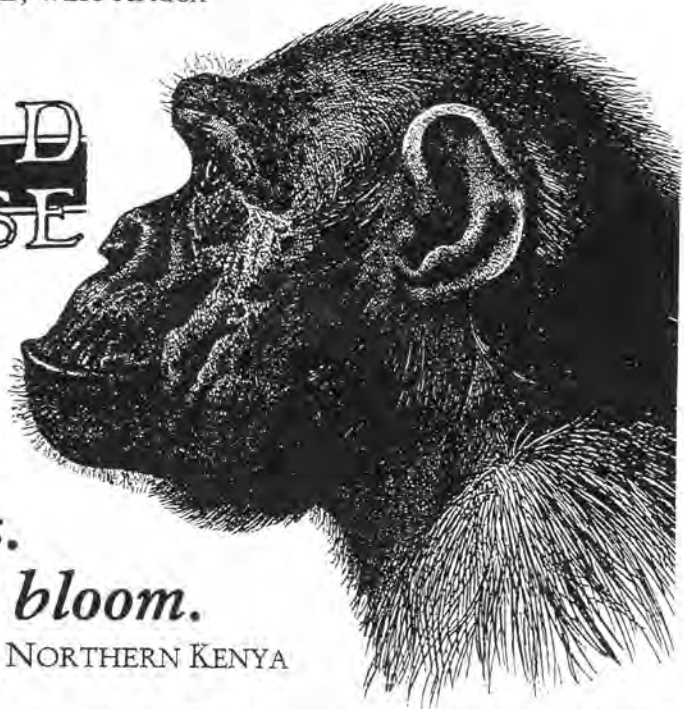
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- Jacobsen, H. 1960. *A Handbook of Succulent Plants*
- Jacobsen, H. 1974. *Lexicon of Succulent Plants*
- Van Jaarsveld, E. 1987. *Aloe*, p.68

"Humor governs the world well."

DAHOMEAN PROVERB, WEST AFRICA

WISE AND OTHERWISE

by Michael Buckner



*The past teaches us.
It makes the desert bloom.*

GABRA PROVERB, NORTHERN KENYA

Be careful about what you throw into the "pond of life" because of the waves it is bound to create! (If you throw in a little pebble, the wave will not go far; but if you throw in a big piece of wood, the wave will not stop until they have crossed the pond and reached its banks. Not only will the waves do damage to the banks, but they will also return to the starting point and meet the waves going in the opposite direction, which could produce a shock with disastrous and unforeseeable consequences.) *BAMBRA PROVERB, (MALI)*

The whole earth is sacred . . . And since the whole earth is sacred, every part therefore is sacred in a general way and is treated as such. So literally the people lived in the midst of the sacred. *COSMAS OKECHUKWU OBIEGO, NIGERIAN SCHOLAR*

"Whenever a person breaks a stick in the forest, let him consider what it would feel like, if it were himself that was broken." *NIGERIAN PROVERB*

To us, each object is imbued with invisible fibers of light that reach out into the universe and are connected and related to all things and all times, and the song that the maker sang when making the object still hangs in the air. *ALEX JACOBS, IROQUOIS ARTIST*

Because of the high fat content the seed [of *Welwitschia*] eventually becomes rancid and remains viable for about three years at most. It is believed to contain a natural inhibitor which must first be leached out before the embryo will germinate. Indeed, seeds that have not been adequately leached emanate an unpleasant smell, reminiscent of a mouse burrow. This smell is presumably caused by an amide, a chemical substance that can inhibit growth and consequently prevent or arrest germination. An unusual fall of about 25mm of rain, either all at once or, per chance, at intervals over a period of two or three days, seems sufficient to free the seed of this germination inhibitor. This is an adaptive physiological mechanism that ensures that the seed will germinate only under conditions suitable for growth. Seedlings, to my knowledge, have not been found in the immediate vicinity of the parent plant.

WELWITSCHIA, Paradox of a Parched Paradise by Chris H. Bornman, C.Struik Publishers, Cape Town, Johannesburg, c.1978.

Faults are like a hill: You stand on your own and talk about those of other people.

Hausa proverb

WISE AND OTHERWISE

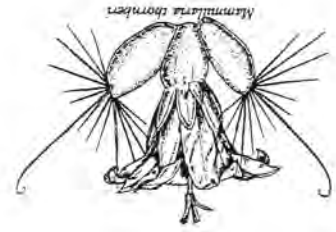
A specialized agave cultivation became habitual to both rural and urban societies among the various tribes in Mesoamerica. In addition to fiber, food, and the sweet-juice drink aguamiel, a fermented drink was developed in the product now called pulque (*octli* to the Aztecs). Its mild alcoholic effects were extended with infusions of drug plants and incorporated into religious and mystical ceremonies. Such liquors were used in the rites of human sacrifice, for example. Associated with maguey were several gods, but the ascendant one seems to have been *Mayahuel*, the Aztec goddess of pulque. She is depicted in various ways in the codices but is identifiable by the leaves, by the stylized inflorescence of the maguey, and by foaming pulque in her hair or by pots of pulque in her hand or nearby. . . .

. . . . The Puritans bedeviled alcohol, the Mexicans deified it, but both practiced rigid moral standards. Peterson (1961) informs us about the Aztecs: "Sale of pulque, an intoxicant, was allowed only under certain restrictions. To the sick, especially privileged, and to people who had passed their fifty-second birthday three cups were allowed daily. But there were festivals when everyone might drink. If a person became drunk illegally, his hair was cut off the first time, on the second occasion his house was demolished and he lost his employment; and the third time brought death to him as an incorrigible offender" This was in the disciplined state of the city. . . . (ed.note: *That's some substance abuse program! And now for the ancient roots of the Singles Bar:*)

Among the Tarahumara and Wariho Indians of Chihuahua, sexual contacts are seldom made by the shy youths unless they are under the influence of their brew "tesquino." Carl Lumholtz (1973, vol. 1:352) in his famous study of the Tarahumara made a social judgement: "Incredible as it may sound, yet after prolonged and careful research into this interesting psychological problem, I do not hesitate to state that in the ordinary course of his existence the uncivilized Tarahumara is too bashful and modest to enforce his matrimonial rights and privileges; and that by means of tesquino chiefly the race is kept alive and increasing." Most likely pulque functions as a breeding stimulant among Mesoamericans also. Had not those thousands of Aztec codices been destroyed by the horrified Spanish priests, we might have found among them not only the maguey gods but also an agave cupid.

. . . . One of the more famous mescals of Mexico is "mescal bacanora" of Sonora, which takes its name from the locality where it is produced. Bacanora is no more than a rancho in eastern Sonora, not far from Sahuaripa. The principal species employed by the earthy still there is [a] wild variety of *Agave angustifolia*, earlier accounted as *Agave pacifica* Trel. (Gentry, 1972: 147). Most of the heads are still carried in from the surrounding mountainous slopes by mules and burros. Whether owing to this particular variety, or to the minerals in the soil in which it grows, or to the particular bacteria of fermentation, or to other unknown factors, this mescal has an outstanding flavor, even when tasted fresh from the still.

AGAVES OF CONTINENTAL NORTH AMERICA by Howard Scott Gentry, c.1982, Univ. of AZ Press, Tucson, AZ..



ADDRESS CORRECTION REQUESTED

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