



HAPPY HALLOWEEN!

# Espinas y Flores

BULLETIN OF THE SAN DIEGO CACTUS AND SUCCULENT SOCIETY, INC.

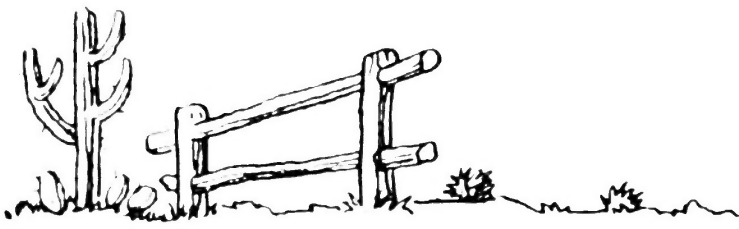
VOLUME XXV11 NUMBER TEN, SATURDAY OCTOBER 10, 1992



## OCTOBER PROGRAM:

SOMETHING VERY DIFFERENT, EXCITING AND WORTHWHILE! "CAUDICIFORMS". THIS IS A PREPARED SLIDE SHOW LOANED TO US FROM OUR PARENTAL ORGANIZATION, C.S.S.A., FEATURING THE RENOWNED ENGLISH BOTANIST, MR. GORDON ROWLEY. MR. ROWLEY IS AUTHOR OF THE STRAWBERRY PRESS BOOK OF THE SAME NAME!

*BOO!!*



**PLEASE RENEW YOUR MEMBERSHIP EARLY**

MEMBERSHIP: LAURA DE MERRITT, 619-571-5127. DUES ARE \$10.00 FOR SINGLE MEMBERSHIP AND \$5.00 FOR EACH ADDITIONAL MEMBER OF SAME HOUSEHOLD (ONE ESPINAS y FLORES MAILED). CHECKS SHOULD BE MADE OUT TO S.D.C.& S.S. AND MAILED TO P.O.BOX 33181, HILLCREST STATION-102, SAN DIEGO, CA. 92163-3181.

MEETING TIME: MEETINGS ARE HELD THE SECOND SATURDAY OF EACH MONTH (EXCEPT FOR JUNE & DECEMBER) AT 1:30 pm IN ROOM 101 - MAJORICA ROOM, CASA DEL PRADO, BALBOA PARK. COME EARLY FOR PLANT, CONTAINER & SUPPLY SALES AND SOCIALIZING. BOARD MEETINGS ARE HELD AT NOON PRIOR TO GENERAL MEETING.

**VOLUNTEERS NEEDED FOR THE BAJA COLLECTION  
AT THE SAN DIEGO WILD ANIMAL PARK**

*On November first volunteers will meet at the park to spend the morning looking over and familiarizing themselves with the Baja Collection at the park. The major emphasis will be on the control of weedy species relocating crowded plants and protecting smaller specimens. Be prepared to walk and work till 11 a.m. and then you will be free to visit the park for the rest of the day. For more information on this event please call Joey Betzler at 239-0804.*

**OCTOBER REFRESHMENTS**

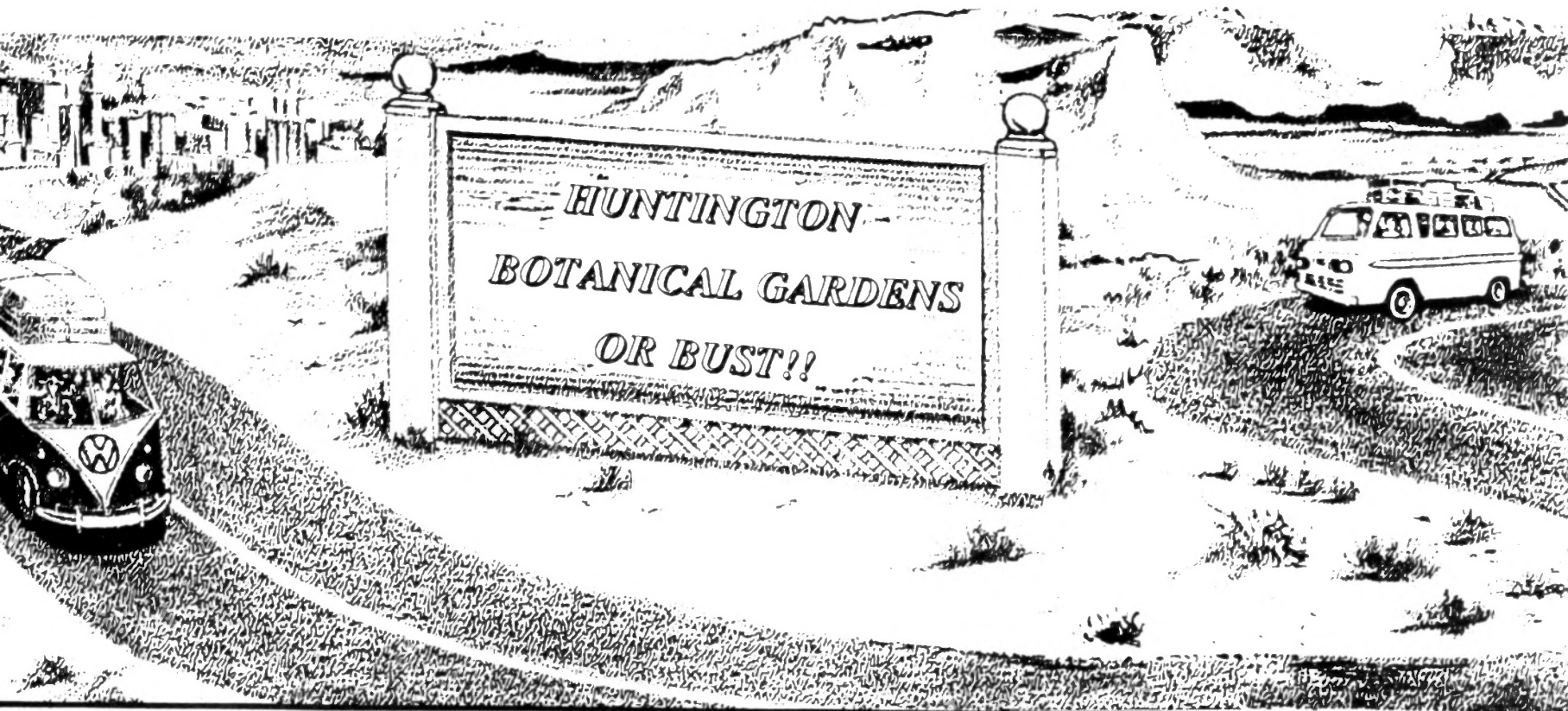
- VIRGINA INNIS
- DIEDRE SMOTHERS
- MARK PALANDRI
- JOAN FLEER
- FRANCES JOHNSON
- AMNA CORNETT
- LOIS ZARANKA
- ETHEL STANDISH
- HERB STERN
- MICHAEL BUCKNER

**PLANTS WANTED BY MEMBERS:**

- (1) Tetradenia hardyii
- (2) Ficus ilicina and Ficus Aurea
- (3) Cryptanthus warasii
- (4) Tillandsia bryoides
- (5) Cissus subaphylla
- (6) Pelargonium spinosum

**IF YOU CAN SUPPLY PLANTS OR SEEDS PLEASE CALL (619) 222-3216. IF YOU HAVE A WANT LIST - PLEASE SEND TO THE EDITOR - WE WILL PUBLISH!**

BOOKS ON SUCCULENT PLANTS: SDC&SS member Jim Dice is in the process of selling a substantial part of his collection of books on cacti and succulents. Books to be sold include many back volumes and issues of the Cactus and Succulent Journal (as far back as 1930), back volumes of Cactaceas y Succulentas from the early 1970's, a complete set of Ashingtonia, volumes 1-7 of Excelsa, volume 1 of the Euphorbia Journal, White and Sloane's three volume monograph - The Stapeliae, Schwantes' Flowering Stones and Mid-day Flowers, Nel's Lithops, Edgar & Brian Lamb's five volume Illustrated Reference on Cacti and Other Succulents and numerous others. For further information or a complete list, please contact Jim at 276-2589.



## HUNTINGTON BUS TRIP

Huntington Botanical Gardens, Museum, and Library bus trip will be on Sunday, October 18th. S.D.C. & S.S. sponsors this trip in conjunction with the Palomar C&S Society and the Quail Botanical Garden Docents. There will be two departure sites: Bus will leave promptly @ 9:00 am from parking lot behind Organ Pavilion in Balboa Park and arrives at North County pick-up stop located at the Cal Trans Car Pool parking lot (La Costa Exit of Interstate 5) @ approximately 9:30 am.

At the Huntington we will be treated to a behind-the-scenes tour of propagational areas, the exquisite succulent conservatory with new addition of the Tegelberg collection, and the botanical garden (well parts of it anyway - you couldn't see all the gardens in one afternoon!). Our hosts will be curators Joe Clements and John Traeger. There will also be plenty of time for a sumptuous lunch at the Huntington restaurant, a stroll through the gardens, the art museum, the Library and the excellent Huntington Book store & Gift Shop. Cost for this trip is \$18.00 per person; make checks payable to SDCSS and send to our P.O.Box on back cover. Seating is by earliest post date - this trip completely sold out last year so hurry and get your checks in!

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OUR COVER THIS MONTH IS A JOSHUA TREE, YUCCA BREVIFOLIA, IN THE MOJAVE DESERT, CALIFORNIA AT SUNSET. RE-PRINTED FROM DESSERT MAGAZINE 1962.

Anyone wishing to run for office or become a committee member please contact Joyce Buckner, Betty Athy, Beverly Kirkegaard, Shirley Berry or Tom DeMerritt (our phone numbers on back page). Election of new officers is in December along with our annual catered Holiday party.

Please bring your donations of small plants for the November Veterans Hospital Bazaar. All proceeds go to haircuts, personal items, reading material and craft kits for those Veterans who have been hospitalized a long time. Please let them know they are not forgotten by donating a little plant! Ruth Richardson will pick up donations at the October Meeting. For more information her number is 281-9267.

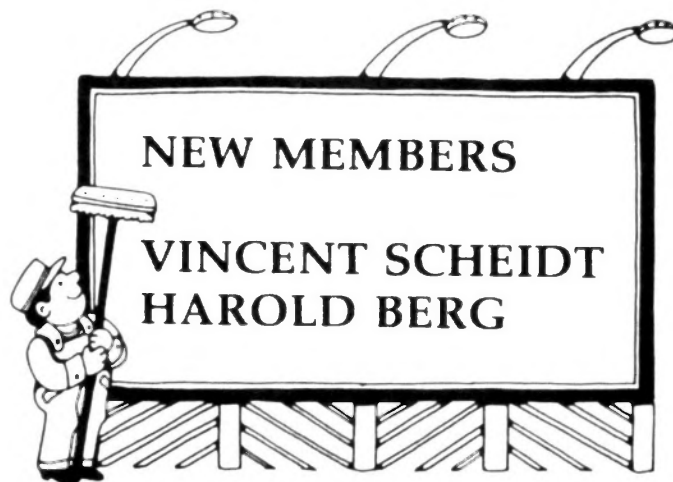
## HAVE NO FEAR - VOLUNTEER!

### NEW REGALEMENT COMMITTEE STILL SEEKS ADDITIONAL VOLUNTEERS

#### MARK YOUR CALENDAR:

Special treats coming up: Chuck Hansen (Arid Lands Greenhouses in Tucson) will be our guest speaker in November. He will be showing excellent slides of his numerous trips to Africa with an emphasis on rare succulents of the Richtersveldt and Namib. Chuck will also have many rare succulents for sale at the November meeting.

In January we will be honored by having a slide show lecturer emphasizing rare and endangered plants of California (including succulents and cacti of which there are many endangered). January's speaker: Jim Dice, president of the San Diego Native Plant Society; Jim also works for the state of California in this capacity.



February will be real special with the curator of the Zurich Botanical Gardens, Horice Eggly, showing slides of this famous botanical garden and its renowned succulent collection. Also, in March, how about another Winter Mini Show?

Oct. 2-4	<b>SANTA BARBARA BOTANIC GARDEN</b> Santa Cruz Island Getaway: Christy Ranch 1212 Mission Canyon Road, Santa Barbara. Join Steve Junak, Botanic Garden Herbarium Curator, for an introduction to the island's plants. Call 805/682-4726.
Oct. 3-4	<b>SOGETSU SCHOOL OF IKEBANA</b> Show Casa del Prado, Majorca Room, Balboa Park. Sat. & Sun. 11-4:30 p.m. Free.
Oct. 13	<b>SAN DIEGO FLORAL ASSOCIATION</b> Advanced Flower Arranging Casa del Prado, Balboa Park. Class limited. Registration/information 232-5762 or 298-5182.
Oct. 17	<b>QUAIL BOTANICAL GARDENS</b> Lecture "Palms in the Landscape" 230 Quail Gardens Dr., Encinitas. Lecturer: Dr. Henry Donselman, Rancho Soledad Nurseries. Ecke Bldg. Bring leaves and/or photos showing problems. 11 a.m. Free. \$1 parking. Call 436-3036.
Oct. 17-18	<b>SOUTH COAST BOTANIC GARDEN</b> Fall Plant Sale 26300 Crenshaw Blvd., Palos Verdes. Plants from Propagation Workshop. 9-3 p.m. \$3 admission. Call 213/544-1948.
Oct. 22-23	<b>CUYAMACA COLLEGE BOTANICAL SOCIETY &amp; S. D. COUNTY WATER AUTHORITY</b> "Xeriscape '92 - San Diego Style" (drought tolerant landscaping) San Diego Convention Center, 111 W. Harbor Drive. Speakers, discussions, exhibits, tours. \$65. Call 443-1756.
Oct. 24-25	<b>SAN DIEGO COUNTY ORCHID SOCIETY</b> Fall "Mini" Show Casa del Prado, Majorca Room, Balboa Park. Sat. 12-5, Sun. 10-4:30 p.m. Free.
Oct. 24-25	<b>QUAIL BOTANICAL GARDENS</b> Annual Plant Sale 230 Quail Gardens Dr., Encinitas. Rare species from Quail collection. Seminars & demonstrations Sat. 10-1 p.m. members presale; public 1-4 p.m.; Sun. 10-3 p.m. public. Free admission & parking
Weekends	<b>SAN DIEGO NATURAL HISTORY MUSEUM</b> Canyoneers Outdoor Program Starts 3rd week in Sep. Free guided nature walks. Apply for Canyon Leaders position information/brochure: 232-3821 X 203.
Weekly	<b>SAN DIEGO JAPANESE FRIENDSHIP GARDEN</b> Docent Tours Balboa Park by Organ Pavilion. Tues./Fri./Sat./Sun. 10-4 p.m. Donation. Call 232-2780.
Every Saturday	<b>QUAIL BOTANICAL GARDENS</b> Free Guided Tours 230 Quail Gardens Drive, Encinitas. Meet at Visitor's Center. 10 a.m. For pre-scheduled tours (any age), call 436-3036 Tues.-Fri. 10-1 p.m. Garden admission free. \$1 parking.
Every Saturday	<b>OFFSHOOT TOURS</b> One-hour Plant Walks in Balboa Park Meet in front of Botanical Lath House. Canceled for rain or less than 4 attendees. 1st Sat. Histor Walk; 2nd Sat. Palm Walk; 3rd Sat. Tree Walk; 4th Sat. Desert Walk; 5th Sat. Sample of all four tours. 10 a.m. Free. No reservations.

## SUCCULENTIST—A WORD WHOSE TIME HAS COME

WILLIAM C. BAKEWELL

Reprinted from CSSA Journal Volume 64 # 4, July-August 1992

People interested in orchids have a word for themselves—*orchidist*. But no similar word for the devotees of the succulent plants seems so far to have appeared in our language. I have checked various dictionaries, including the recently published second edition of the *Oxford English Dictionary*, only to draw a total blank. There is the word *cactophile*, but this term covers only those of us who work with cacti. Clearly, the time has come for a new word for people who deal with other succulent plants as well as cacti. I therefore propose to coin the new word *succulentist*.

Let me enlarge upon the definition of the word *succulentist*. A *succulentist* is anyone interested in the succulent plants whether or not he or she deals with cacti. Many devotees of succulents are

not interested in cacti; clearly these people are not cactophiles. The word *succulentist* is there meant to define anyone who is interested in succulent plants of any kind.

I have found it easiest to accent the the third syllable when pronouncing the word *succulentist*. Thus the word is pronounced as follows: suck-you-LENT-ist.

During the past several years I have been using the term *succulentist* in discussing our kind of botany with my fellow fanciers of succulent plants in the Los Angeles area. These people have readily understood the meaning of the word *succulentist*. Therefore, it is high time to introduce the word *succulentist* to the readers of this journal and to the succulent-plant community at large.

# CALENDAR OF EVENTS

## Southern California

PAGE 6

### Quail Botanical Gardens Annual Plant Sale

Oct. 24, Sat.: 10 AM - 1 PM, Members' Pre-Sale

Oct. 24, Sat.: 1 PM - 4 PM, Public Invited

Oct. 25, Sun.: 10 AM - 3 PM, Public Invited

- **Plant Selection:** Drought tolerant plants including California natives; cacti & succulents; unusual perennials & herbs, including ornamental grasses; rare species of bamboo; subtropical fruit and unusual plants propagated from the Quail collection. Coinciding with the release of our new poster we will have 3 cultivars of *Rosa rugosa* and the endangered *Rosa minufolia*.
- **Dried Plant Material:** Gathered from the Quail collection by our docents.
- **Succulent Wreaths:** A limited supply of 12-inch wreaths made in-house using over 200 individual plants per wreath.
- **Botanical and Horticultural Books:** A large selection available on Sunday from VLT Gardener Books.
- **Gourmet Foods:** Jams and jellies made from unusual fruits and other homemade baked goods.
- **Speakers:**
  - How to Grow Prizewinning Roses* by Dick Streeper, garden columnist for San Diego Union-Tribune
  - Ornamental Grasses for the San Diego Landscape* by John Greenlee, owner of Greenlee Nursery in Pomona
  - A year of Native Flowers* by Angela Delavalle of Tree of Life Nursery in San Juan Capistrano
  - Landscaping with Natives* by Rob Mejian, a landscape architect specializing in design with California natives
  - Using Succulent Plants in the Garden* by Doris Graf Matthews, owner of Los Angeles Plant Co. in Vista
  - Butterfly Gardening* by David Marriott, Director of Monarch Program
- **Demonstrations:**
  - How to Propagate and Control Bamboo* by Gary Stinson of the So. Cal. Chapter, American Bamboo Society
  - Home Composting* by Jeff Lindenthal, recycling specialist of San Diego County
  - Pruning* by Arlan Hurwitz of Arlan & Sons
  - Growing Plumerias in Southern California* by Don Walker, plumeria grower
  - Designing with Flowers* by Glenn Haugh, flower show judge and floral designer
  - How to Make a Succulent Wreath* by Mary Ciccarelli, docent
- **Booths:**
  - Innovative gardening products by Arlan & Sons
  - Mulch exhibit by the County of San Diego
  - Vermigro by Fallbrook Sanitary District
  - Monarch Program
  - Artworks by Nancy Rupp (Chinese brush painting)
  - Gem & minerals by Volunteers for Gem & Minerals Society
- **Tour:** noon on Saturday; **Refreshments:** Available for a small fee.

### Bonsai Exhibit and Sale

Oct. 3-4—Door prizes and two bonsai demonstrations will be given each day. 10-4:30. Free. Brookhurst Community Center, 2271 W. Crescent Ave., Anaheim. Phone: (714) 964-6973.

### South Coast Botanic Garden

Oct. 10-11—Orchid Show and Sale. Sat. noon-4:30, Sun. 10-4:30. Oct. 17-18—Fall Plant Sale. 9-3. Adults \$3; seniors, students \$1.50; ages 5-12, 75 cents; under 5 free. 26300 Crenshaw Blvd., Palos Verdes Peninsula. Phone: (310) 544-1948.

### Flower Show

Oct. 10-11—Twenty African violet societies will participate in a show and sale sponsored by the African Violet Council of Southern California. Open during mall hours. Free. Buena Park Mall, Center Court, Dale and La Palma, Buena Park. Phone: (714) 526-4773.

### Descanso Gardens

Oct. 10-11—Thousands of plants, including cuttings from the garden's famed camellia and rose collections, will be available to the public at a plant sale. 9-4:30. Free. Plant Propagation Area, upper parking lot, 1418 Descanso Dr., La Cañada Flintridge. Phone: (818) 790-5414.

### Desert Festival

Oct. 30-Nov. 1—The annual Borrego Springs Desert Festival includes a grand parade, a pageant, a horseshoes tournament, a Halloween costume contest, live music, a street dance and a barbecue. Free. Anza-Borrego Desert State Park. For further information, phone (619) 767-5555.



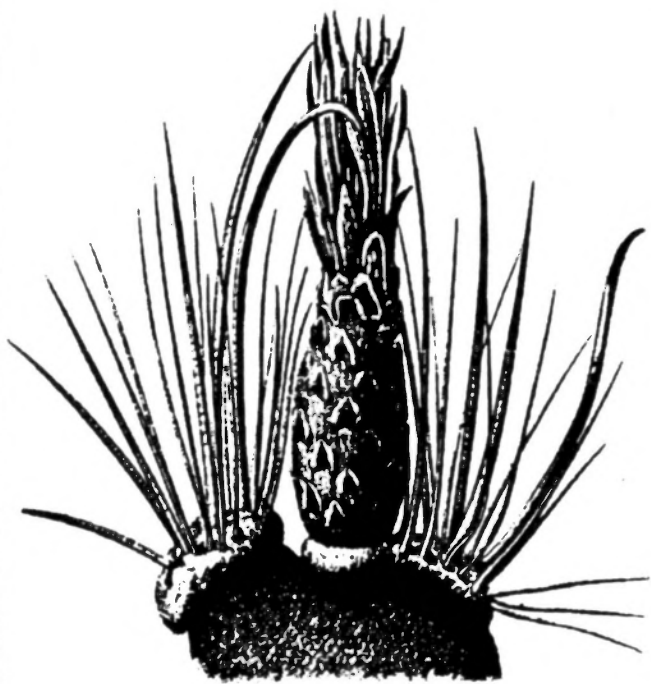
# FEROCACTUS

## CACTUS OF THE MONTH

PAGE 7

By Joe Clements

Often called the sentinels of the desert, Ferocacti are formidable plants with fierce spines of enormous dimensions. The largest known plant is a specimen of *Ferocactus diguettii* on the island of Santa Catalina in the sea of Cortez with a height of thirteen feet and a diameter of thirty-two inches.



*Ferocactus acanthodes* from Engelman 1859

But, what are Ferocacti? Britton and Rose erected the genus in 1922 to describe large barrel-shaped plants from Mexico and Southwestern United States. They stated that these ribbed plants can have fierce straight or hooked spines, flowers that are funnel-form or bell-shaped with scales and fruits that are fleshy. The most detailed description of the genus was undertaken more than thirty year ago by Dr. George Lindsay in his doctoral thesis, which has never been effectively published. A subsequent study by N.P. Taylor in 1984 drew heavily on Lindsay's work. Taylor lumped several of the genera together to come up with 23 species and 20 varieties in 4 main groups.

To the collector Ferocacti are prized for their spines which can exceed 12 inches. Flowers are a bonus but with many varieties it may take several years to flower a plant, and with these it is best to grow them in a garden situation. Most barrels prefer a well drained mix and a sunny location. Mostly they are disease free. However, in cultivation they may develop sooty mould or creeping crud at the base of the plant body. This can be controlled by regular use of fungicide along with a good fertilizing program.

### RECOMMENDED SPECIES FOR CULTIVATION

***Ferocactus latispinus*** (Haw) Britton & Rose: Is the favorite to many collectors for it has broad and bright red or yellow hooked spines with a small body. It flowers when small with purplish flowers. Its from central Mexico, San Luis Potosi.



***Ferocactus glaucescens*** Britton & Rose: A solitary, globular plant with a bluish body that may become slightly elongate. There are 11-15 ribs that bear white wooly areoles and 6-7 short yellow radial spines with one central. *F. glausceens* is a handsome addition to the show table or to a garden setting. Planted in the ground it will grow quite rapidly to a remarkable size, sometimes forming clumps. In Mexico it has considerable range and is found in the states of Colima and Michoacan.

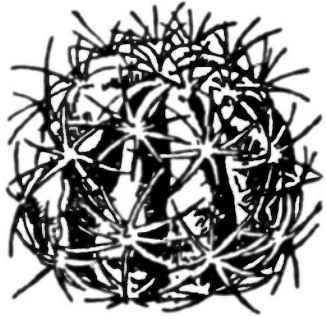
***Ferocactus cbrysacanthus*** (orcutt) Britton & Rose: Comes from Cedros Island for the coast of Baja. It is a globose to cylindric plant 3 feet in height to 1 foot in diameter. There are 13-22 tuberculed ribs with areoles that bear six slender white radial spines and four to ten curved yellow or red centrals. This arrangement, making it a show winner, resembles a gold cage that wraps around the plant. Flowers are diurnal and yellow.

## CACTUS OF THE MONTH



***Ferocactus acanthodes*** (Lem) Britton & Rose: Taylor calls this plant *F. cylindraceous* after Engelmann. It is our local desert barrel. The stem becomes columnar and up to ten feet tall, with 13-27 ribs bearing reddish radial and central spines to 5 inches. Flowers are borne at the top and yellow. It may be difficult in cultivation in the wrong setting.

***Ferocactus fordii*** (Orcutt) Britton & Rose: Another Baja Ferocactus, ***Ferocactus fordii*** is a low growing species similar to our local growing *Ferocactus viridescens*. It has 21 ribs with gray wooly areoles bearing 15 white radial spines and four wide reddish centrals. Flowers are purplish and 1.5 inches long. Range is from El Socorro to Punta Eugenia in Baja California.



***Ferocactus schwarzii*** Lindsay: A tall solitary plant to 30 inches, apple-green in color. Areoles bear 3-5 radial spines and three central spine, all yellowish brown in color. *Ferocactus schwarzii* is still relative in cultivation but may be a handsome plant for the show table.

***Ferocactus viridescens*** (Torrey & Gray) Britton & Rose: This is our local barrel cactus growing along the coast from San Diego Co. to near Colnet in Baja. A globular species to 18 inches with yellow-green flowers, hence the name *viridescens*. It grows well in cultivation. Due to the habitat loss, development, this plant is threatened.

### References Cited

- Benson, Lyman** 1982. The Cacti of the United States and Canada, Stanford University Press.
- Engelmann, George** 1859. Cactacea of the Boundary, U. S. Govt. Publication.
- Lindsay, George** 1955. *Ferocactus*, University of Stanford Press.
- Pilbeam, John** 1987, Cacti for the Connoisseur, Timber Press, p59-61.
- Taylor, N.P.** 1984, A Review of *Ferocactus* Britton and Rose, Bradleya vol 2 p.19-38.



**DEADLINE FOR NOVEMBER ISSUE IS NOVEMBER 1.** We look forward to Succulent of the month: *Anacampseros* by Anna Cornet & Betty Athy and Cactus of the month: *Copiapoa* by Phyllis Flechsig. Have you considered doing your favorite genus for our 1992 Cactus & Succulent of the month agenda - this is a terrific way to learn a lot about a genus that interests you and share your new found knowledge!



## SUCCULENT OF THE MONTH

### SUCCULENTS OF SOCOTRA

Dylan P. Hannon

By any measure a fascinating archipelago, the island of Socotra and its nearby satellites have come to have a special meaning for succulent plant collectors. They bring to mind some of the most exciting plants which could grace any collection: *Dorstenia gigas*, *Euphorbia abdelkuri* and *Dendrosicyos socotrana* as well as adeniums as large as can be found anywhere. The island's botany encompasses greater overall diversity than most people might realize, but, with a few breaches, I will try to stay only with the succulent plants of the island group.

Geographically, the Socotra Archipelago is an eastern continuation of the Somali Peninsula and lies along the East-West Rift of the Gulf of Aden. Its geology comprises eocene limestones underlain by cretaceous limestones, both of which overtop the heterogeneous "African Basement Complex". These overlying limestones are in all ways similar to those of nearby Somalia and South Arabia, the former well known for harboring scads of locally endemic plants, including some of the choicest *Euphorbia* species from the collector's standpoint. In the central region of Socotra itself, the Hagher Mountains are formed by an intrusion of alkaline granites and rise to about 1500m elevation.

The climate of the islands is cooler than one might expect for a locality only 12 degrees north of the equator, as they are surrounded by currents drawn up from deep water which are actually cooler in summer than in winter. The Southwest Monsoon brings strong winds steadily from June to September, and cyclones formed during this time in the Arabian Sea off the coast of India affect the islands, but usually only indirectly. Most precipitation falls during the Northeast Monsoon in November-January and averages 50-150mm on the plain of Socotra and even less on Abd al Kuri, while the mountains receive appreciably more.

At elevations of several hundred meters or so, enough rain and mist fall to support a zone of shrubby vegetation, but the thin gravelly soils dry out quickly. Here grow specimens of *Adenium obesum* ssp. *socotranum*, *Euphorbia arbuscula* tree-like as its name implies, the smaller and more shrubby *E. schimperi* (resembling a depauperate *E. tirucallior* *E. aphylla* of the Canary Islands), *E. hadramautica*, *E. spiralis* and *Dendrosicyos*. Smaller succulents include *Caralluma socotrana*, *Edithcolea grandis*, *Kalanchoe robusta* and *K. farinacea*.

Higher up in the mountains, where frequent mists prevail, limestone cliffs and slopes are the haunt of *Dorstenia gigas* probably the most remarkable of all Moraceae for its general appearance. It is no less weird up-close, with its minutely exfoliating, sickly yellow rind and short branchlets sporting glossy obovate leaves of the richest deep green with intricately rugose venation. The flower heads are not as fanciful (nor do they need to be!) and are yellow green with several short blunt rays. The most picturesque specimens, with highly swollen stems and relatively short crowns, are well lodged in narrow fissures on nearly vertical walls and are likely to remain there for all eternity.

Aloes are present only on the main island: *A. perryi* rather non-descript and highly variable in the field; *A. forbesii* and *A. squarrosa*. The mysterious origin of *A. squarrosa* was at last settled when it was rediscovered with much effort by Mr. John Lavranos and Mr. Radcliffe-Smith on their expedition of 1967. This expedition is the source of nearly all of the succulent plants of Socotra in cultivation, although a few other botanical trips in intervening years have been made.

## SUCCULENT OF THE MONTH

Rather distantly related to the aloes, and arguably marginal as to succulence, the genus *Dracaena* is represented on Socotra by *D. cinnabari* one of a complex of taxa involving *D. draco* of the Canary Islands and two further species: *D. schizantha* of the northern escarpment of Somalia and *D. ombet* centered in the Djibouti area. In the Haggher Mountains *D. cinnabari* dots the heavy scrub vegetation of the upper elevations and is every bit as impressive as the familiar *D. draco*. The few specimens of the former in cultivation have proved extremely slow growing.

On the same expedition of 1967, three undescribed asclepiads were discovered at upper elevations: *Caralluma dioscoridis*, *Echidnopsis insularis* and *Sarcostemma socotranum*. The first species is one of the more taxonomically interesting members of its genus and is also rewarding and relatively undemanding in cultivation.

While not truly succulent but rather soft-wooded, members of the Bursera family are increasingly being grown in succulent plant collections and deservedly so. On Socotra several species of *Boswellia* are found, and at least one of *Commiphora* (*C. planifrons*), though these are not, or are scarcely, in cultivation. Definitely in cultivation though quite rare is another soft-wooded shrub, *Jatropha unicostata* with attractive lanceolate leaves and apricot colored flowers.

Some non-succulent Socotran endemics deserving mention include *Begonia socotrana* and *Exacum affine*. The former, a bulbous plant with most unorthodox 'bulbs', has made much of the progress in tuberous begonia hybridisation possible, lending such qualities as a winter blooming season, floriferousness, flower shape, etc. It is very beautiful in its own right, with large on-center peltate leaves and clusters of large pink flowers. It is worth noting that any hybrids between New World begonias and those of the Old World, let alone such fertile ones, are highly exceptional. This plant has apparently been collected only once in the nineteenth century and is still found, infrequently, in cultivation today. *Exacum affine*, the so-called Persian Violet, is well known in the florist trade here in the US and elsewhere. Both of these plants are mountain dwellers on Socotra and need moist, rather cool conditions to grow well.

Other interesting non-succulent plants are the only other species of pomegranate, *Punica protopunica* now critically endangered and just barely in cultivation; *Hibiscus schottii* a large shrub with very attractive deep yellow flowers, also endangered, and the curious *Dirachma* separated by some taxonomists into its own family but probably best regarded as a glorified (or "primitive"?) 8-merous member of the geranium family. Formerly known only from Socotra, *Dirachma* has been found in recent years by John Lavranos in northeastern Somalia.

Abd al Kuri deserves mention if only for its hospitality to *Euphorbia abdalkuri* though curiously here too is found *E. balsamifera* var. *adenensis* unrecorded for Socotra itself. Many other endemics are found on this lonely island. Its highest hill is Jabal Hassala at 820m, on whose northern slopes *E. abdalkuri* is found. Beautiful while young, large old plants of this euphorbia lose much of their distinctive blotchy, lavender-gray cast.

The other members of the archipelago are Darsa and Samha, both flat-topped and rising to some 800m, and one or two isolated rock outcrops with little or no vegetation. The Brothers, as Darsa and Samha are called, remain unexplored and represent something of a parallel to the islets off Mexico's Guadalupe Island.

The expeditions of the latter half of this century have seen many Socotran plants lose their endemic status, while conversely new records of plants have been found on the island which represent taxa previously well known on the African mainland. The number and content of endemics is nonetheless impressive and several interesting cases of disjunct distribution exist between the Canary Islands and the Socotra Archipelago, the large arborescent *Dracaena* among them. The high escarpments of South Arabia and Abyssinia are also important biogeographical

# SUCCULENT OF THE MONTH: SOCOTRA PLANTS

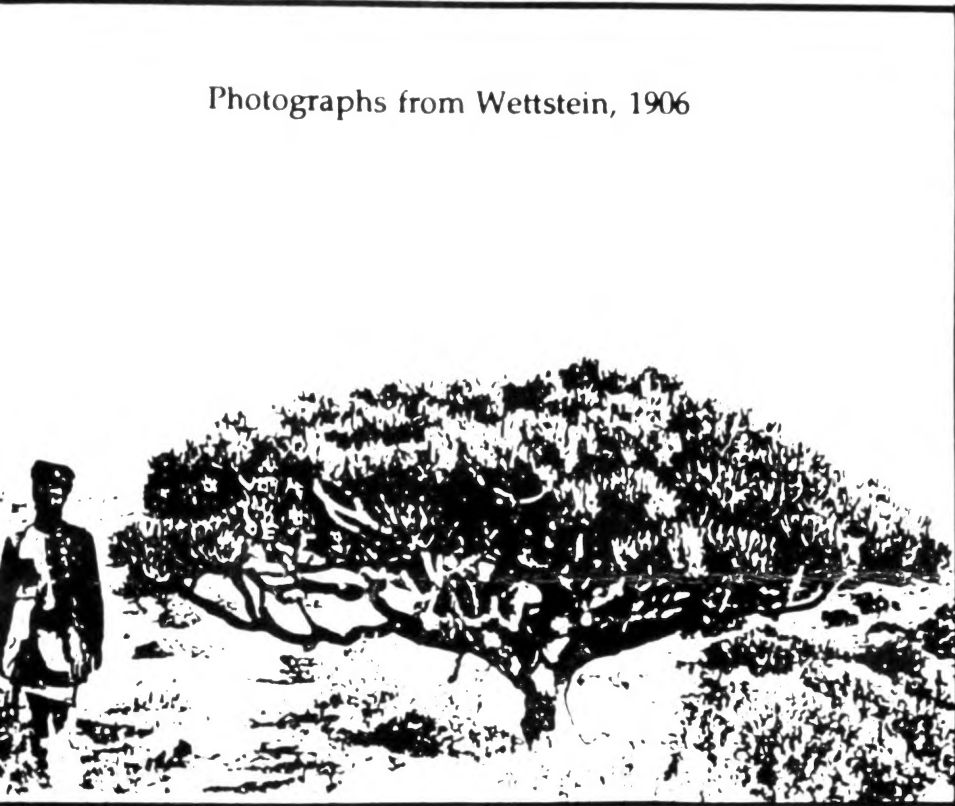
By Dylan Hannon

considerations for the island. Socotra no doubt will continue to be a source of wonder and amazement for all naturalists who ever fall under its enchanting spell.

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1. Lavranos, John J. 1974. Plant Hunting on Socotra. *Excelsa* No. 4: 25-28.
2. Wettstein, R. 1906. In Karsten, G. and Schenck, H., *Vegetationsbilder* 3(5): t. 25-30.
3. Menninger, Edwin A. 1967. *Fantastic Trees*. Viking Press.

Photographs from Wettstein, 1906



*Euphorbia arbuscula*



*Adenium obesum ssp. socotranum*



*Dendrosicyos socotrana*



*Dracaena cinnabari*

FROM ALL CORNERS  
by Shirley Berry



Have you ever asked your Cactus & Succulent friends for the formula of their potting mix, or what fertilizer they use? You will have as many formulas as you have friends.

Let me tell you what good old Buxbaum prescribed in his book, "Cactus Culture Based on Biology", written about 50 years ago. Dr. Franz Buxbaum states, "A plant cannot absorb solid particles from the soil, but only nutritive salts in solution..... the soil is only the carrier of nutritive salts. Mineral salts are formed by gradual weathering of rocks and contain nutritive substances. Since weathering proceeds continuously, the natural soil in the cactus areas is a changing mixture of particles in varying sizes. Where the vegetation is more plentiful, there are also products of weathering parts of plants, but never humus."

"Humus consists chiefly of half-rotted plant remains and contains a great number of micro-organisms.... it contains elements essential for the feeding of plants, but they must first be mineralized by mean of soil bacteria so that they can be taken up by the roots."

He goes on to say that the good balance between loam, sand, and humus is very difficult to achieve ...because "every sand, every loam, every leaf mould is differently constituted." Dr. Buxbaum believes that a proper mixture should be so constituted that when a moist mix is squeezed in the hand, it remains a ball, but pressure of the finger will cause the ball to fall apart again.

The principle of cacti using nutritive salts in their growth is further affirmed by Cullman, Gotz, and Groner in their book, "The Encyclopedia of Cacti". They say, "Cacti require no great quantity of these salts ... heavy doses are not necessary except for the fast growing species. As cacti have relatively low osmotic values ... they are capable of absorbing only very weak solutions of fertilizer. If a higher concentration is given, their roots tend to even lose water. Most cacti prefer a slightly acid soil and do not like any substantial proportion of lime which pushed the PH value of the soil into the alkaline sector".

"Usually it is not the specific type of soil: clay, loam, sand, leaf mould, etc., which is crucial to success with cacti, but rather the PH value and its porosity."

In conclusion, my personal experience with Stern's Miracid (30-10-10) has given me better performance than Miracle-Gro which has the lower nitrogen content, and is supposed to be the more proper formula for these plants. Miracid acidifies the soil (a great help with our alkaline water), has chelated iron which fights yellowing and makes the nutrients available to the plants. These nutrients are locked out by excess alkalinity of both soil and water.

It does seem strange to use a product on succulents recommended for camellias and azaleas. Time will tell, but I have noticed in the last eight months a vast improvement in the appearance of my plants.



# WISE AND OTHERWISE

**by Michael Buckner**

*Wood engraving by Fritz Echenberg from RAINBOWS ARE MADE - Poems by Carl Sandburg, HBJ 1982*

"After his trip to the Galapagos Islands in 1835, Darwin returned to England and arrived at an astonishing conclusion: "Man in his arrogance thinks himself a great work, worthy the interposition of a deity. More humble and, I believe, true to consider him created from animals." But so out of keeping was this idea with what people wanted to believe about themselves that another two decades elapsed before Darwin dared to publish his magnum opus. Even then he pulled its hardest punches as far as human evolution was concerned. But the implications were clear enough, and Darwin finally drew them in 1871 in *The Decent of Man*. Humans, he declared, evolved from primates, which they still closely resembled. Even human mental processes, the bulwark of dualism for a millennium, did not strike Darwin as particularly distinguishing. "My object," he wrote, "is to show that there is no fundamental difference between man and the higher mammals in their mental faculties." On another occasion Darwin scribbled himself a memo to guide his thinking about evolution: "Never use the words *higher* and *lower*."

From *THE RIGHTS OF NATURE, A History of Environmental Ethics* by Roderick Frazier Nash, University of Wisconsin Press, c.1989.

# WISE AND

"Evolution is not a simple game of progress, with newly evolved forms forever driving out the old. Such may happen in some lineages;.....much of human evolution can be interpreted as a matter of bigger-brained species surviving, while their less-endowed ancestral kin die out. Bacteria, however, were neither displaced nor replaced by eukaryotic algae and other, more animal-like single celled forms. Nor did the rise of multi-celled animals and plants displace the inhabitants of the microbial world. Moreover, evolution inevitable entails the modification of some structures at a faster rate than others: bipedalism, came early in human evolution, while brain size increase accumulated at a far more leisurely rate. And, in many ways, we have changed little if any beyond the condition of the ancestor we held common with apes; it is a telling statistic, indeed, that we share 98.5% of our genetic information with chimpanzees."

From FOSSILS, THE EVOLUTION AND EXTINCTION OF SPECIES by Niles Eldredge, c.1991, Abrahms.

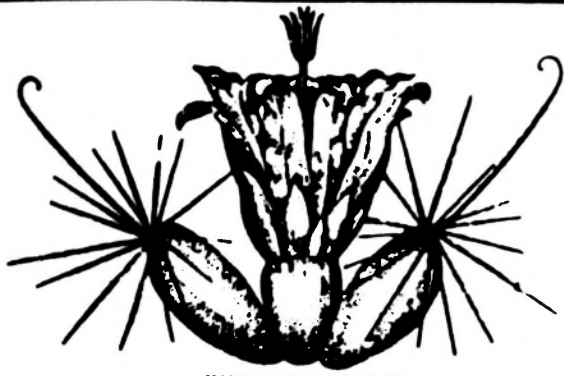


"I'D RATHER WAKE UP IN THE MIDDLE  
OF NOWHERE THAN IN ANY CITY ON EARTH."

Steve McQueen

"Botanical history in Mexico may be considered to have begun with the landing of the Conquistadores, for the earliest letters of Cortes to the King contain references to the curious vegetable products of the country. The true history of botanical activity in Mexico begins at a much earlier date, for the native inhabitants, who had already reached a high degree of civilization, may be said to have begun scientific researches. No other primitive people, probably, ever took so great a interest in botanical matters, and at the time of the Conquest none of the nations of Europe were much superior to the Mexicans in botanical knowledge. In one respect, at least, the latter had made greater progress in botanical activity, for they had established a botanical garden, on an elaborate scale, something that was not attempted in Europe until a still later date. Not only had the Aztec people acquired an intimate knowledge of the economic qualities of the plants with which they came in contact, a knowledge possessed by all primitive peoples, but they had developed an aesthetic appreciation of plants for their beauty alone, a fact which indicates a rather high state of moral development. Flowers were cultivated extensively in the Valley of Mexico, and were brought in great quantities to the markets, where they were purchased for personal adornment and for the decoration of residences and temples. This love of flowers has persisted to the present time among the Mexican people, and cut flowers still occupy much space in the markets everywhere in the Republic."

From TREES AND SHRUBS OF MEXICO by Paul Standley, Smithsonian Institute, c.1920



# The San Diego Cactus and Succulent Society

JOIN US

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, who loves 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 1:30 p.m. (One may come as early as noon just to socialize or obtain a parking space easily.) Annual dues are \$10.00 for a single membership with an additional \$5.00 for each additional member at the same mailing address. The dues are payable at time of joining, and January of each succeeding year. Members receive our monthly publication Espinas y Flores, are entitled to library check-out privileges, and may partake in our many field trips and other activities. We offer knowledgeable speakers at our programs; many are world renowned scholars, botanists, explorers and authorities. We have a number of shows each year, especially our Annual Show and Plant Sale in June. We have a wide range of plants and supplies for purchase at favorable costs at most meetings. We also have a plant exchange table and monthly door prizes. All members will be consistently encouraged to contribute and participate in our many functions. Please join us and help us grow.

\*\*\*\*\*  
MAIL TO: MRS. LAURA DE MERRITT, TREASURER  
P.O. BOX 33181-HILLCREST STATION, S.D., CA 92163-3181

MEMBER NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_

ALL 9 NUMBERS OF YOUR ZIP CODE PLEASE! \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

PLEASE LIST ADDITIONAL FAMILY MEMBERS:

\_\_\_\_\_ \$5.00

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\*\*\*\*\*  
**WELCOME**  
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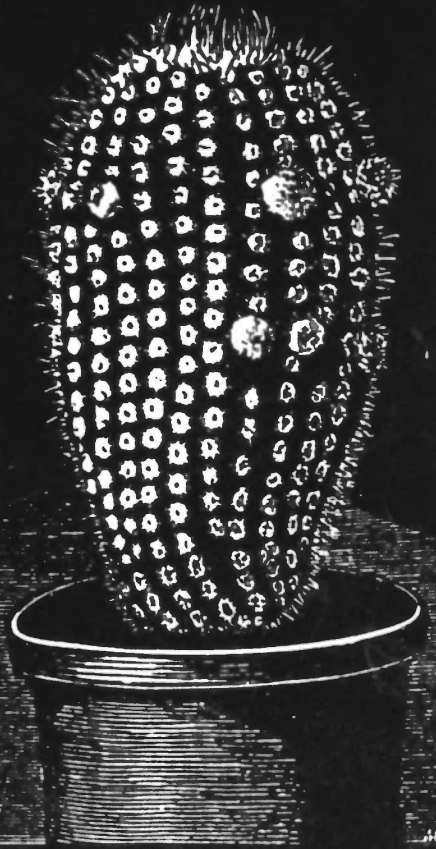
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The San Diego Cactus and Succulent Society, Incorporated is open to all persons interested in growing cacti or other succulent and exotic plants. Meetings are held the second Saturday of each month at 1:30 P.M. in Room 101, Casa del Prado, Balboa Park. Board of Directors meetings are held at 11:00 A.M. prior to general meetings. Annual dues are \$10 per single member per year, and \$5 for each additional member of same household. Single copies of Espinas y Flores are \$1 per copy sent within U.S.A. Affiliated with the Cactus and Succulent Society of America, Incorporated.

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