

MAMMILLARIA THORNERI

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SATURDAY, SEPTEMBER 11, 1993

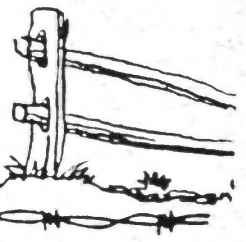
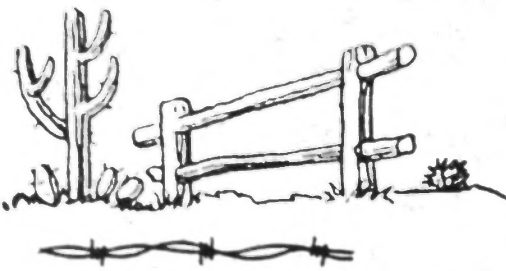
Espinas y Flores

BULLETIN OF THE SAN DIEGO CACTUS AND SUCCULENT SOCIETY
AFFILIATE OF THE CACTUS AND SUCCULENT SOCIETY OF AMERICA
AND THE INTERNATIONAL ORGANIZATION FOR SUCCULENT PLANT STUDY

"The Succulent Pelargoniums & Sarcocaulons of Africa".

GUEST SPEAKER
Michael Vasser





SEPTEMBER

PLEASE RENEW YOUR MEMBERSHIP

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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.

PROGRAM FOR SEPTEMBER

Michael Vasser, African explorer, plantsman, nurseryman, and *Pelargonium* (Geranium) and *Sarcocaulon* specialist will give us an overview of the Gerantaceae complex from south and southwest Africa with a slide show of these remarkable plants and their fabulous biomes - many African botanical slides of *Aloes*, *Commiphora*, *Pachypodium*, etc. included. Michael is an excellent speaker and his slides are always of the highest quality - you may remember the terrific program he gave on the Namib Desert in 1992. See you all there!

NEXT MONTH IN ESPINAS y FLORES:

Guest writer, Fred Keller: "One Lump or Two - It's Still a Big Pickle: *Kleinia obesa*", formerly *Senecio deflersii*. This is a delightful article contributed by a remarkable Santa Barbara C&S Society member.

Frank Thrombley: MEMORABLE MOMENTS - Will nab one of us!

Brunhilde Scheffler: "An Embarrassing Moment in My Life", A photo safari to the Anza Borrego Desert.

Michael Buckner: "Wise and Otherwise"

Shirley Berry: FROM ALL CORNERS - growing hints for all of us, from someone who knows - Thank you Shirley!

Joe Clements: CACTUS OF THE MONTH - *Sulcorebutia*, wonderful small cacti.

Amna Cornett: SUCCULENT OF THE MONTH - *Haworthia*, everyone has at least one!

Please send us your notes, comments, poems, drawings, and articles. We know there is alot of talent and knowledge out there, and it needs to be shared, so Thank you! Thank you! Thank you! Thank you!

DEADLINE FOR OCTOBER ESPINAS y FLORES IS SEPTEMBER 24th.

Thank you for your many kind comments regarding the August "Special Issue" of your newsletter. With a little encouragement, we are now planning a spring issue featuring Insects and their controls in our gardens, collections, and greenhouses. Plan for "The Bug Issue - the Good, the Bad, and the Ugly" is targeted for March of '94. Please give some thought to what you might contribute in the way of articles, artwork, comments, cartoons, questions, etc. - and contact your editors....

CONGRATULATIONS !! MARYLYN HENDERSON!!! AGAIN!!

Marylyn entered three plants in the Inter-City show, known as the largest cactus & succulent show in the world, in the novice class. She won two Trophies and a special rosette. Trophies were for "Best Echeveria" and "Best Novice Succulent" for her beautiful *Ipoemoea platensis*. Also, congratulations to SDC&SS member Jerry Williams of Rainbow Gardens! His phenomenal *Gasteria* was awarded the "Best Gasteria Trophy".

We welcome and encourage other organization newsletters to print any material published in Espinas y Flores. We request that you credit the author, any notes included in our publication about the author, and "Espinas y Flores", as the newsletter of the San Diego Cactus & Succulent Society, Inc. If you plan on editing or condensing an article, please contact the author personally for permission. And should you reprint our articles: Please send two copies of your newsletter to the editors of Espinas y Flores for dissemination to the writers.

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.

AUGUST BRAG TABLE WINNERS

Judged by: Dylan Hannon

- FIRST: Joe & Kay Quijada's *Pachypodium namaquanum*
SECOND: Alex Cardenas-Murphy's *Mammillaria bocasana* v. "Fred"
THIRD: Rick Latimer's *Agave nizzardensis* and (tie)
THIRD: Joe & Kay Quijada's *Tillandsia caput-medusa*

THANKS FOR YOUR INPUT AND HELP!!

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.

REFRESHMENT BREAK!

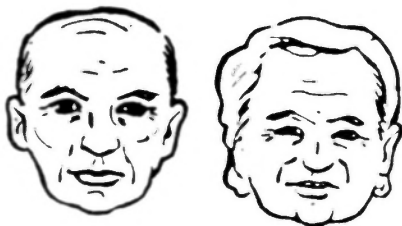
REFRESHMENT VOLUNTEERS SEPTEMBER

MERLE ODEGAARD
PERLSO LEWIS
DAVID ALLSHOUSE
GLORIA GRAHAM
STEFI MANGOLD
SARAH JERVEY
SUSAN BARKER
CHARLES & JOANNE CLARK
SANDY FROST
RUTH RICHARDSON
MICHAEL & JOYCE BUCKNER
FLOYD GABLE

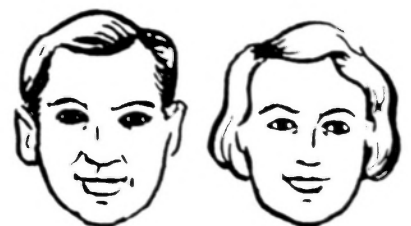
REFRESHMENT VOLUNTEERS OCTOBER

SUSAN HOPKINS
MILDRED & HAROLD RICHTER
REED PIERCE
JOAN FLEER
ROBYN NATWICK
FRANCES RICHARDSON
MARY HOLMAN
PERLSO LEWIS
BETTY ATHY
JOHN WILLIAMS
BOB MARDER
THOMAS KNAPIK

NEW MEMBERS! WELCOME!



DAVID T. CLOPPER
DUKE BENADOM
JIM DICE
DAVID & KRIS TURNER





PLEASE HELP US PRESERVE OUR LIBRARY

Being a member of the SDC&S Society allows you to utilize our remarkably large and EXTENSIVE library. Many of the books which you have available for your research and reading are expensive, rare, and/ or out-of-print. We would like to educate and inform you of our policies, so that future members (2050?) will have access to this vast field of wonderment. Rick Latimer and Michael Buckner have successfully encapsulated most all of our books in protective dustjackets of mylar plastic sleeves. NOW IT'S UP TO YOU, each of you, who avail yourselves of our important library books to help us preserve our library.

When you check out books:

Please handle with care – as if it were your own, or borrowed from a dear friend. Be sure to return in the same condition as when checked out. Be sure your hands are clean and dry when handling. Please give this book all the support you can and never leave open or face down. No paper clips or dog-ear pages – please use a paper book-marker! Please keep book away from: food, drinks, smoking, children and pets. Please never write notes, or underline and NO highlighters, please. Treat books especially gently when making photocopies. Please keep out of direct sunlight and protect from high heat; do not leave in your vehicle for long durations. PLEASE NOTIFY LIBRARIAN IF YOU HAVE CHECKED OUT A BOOK THAT IS DAMAGED OR HAS MISSING PLATES, ETC.

Would you really like to make a difference? Consider a provision in your Last Will & Testament leaving your Botanical and /or Cactus and Succulent books to the San Diego Cactus & Succulent Society. Then your books can continue to be best utilized for what they were intended:

EDUCATION!!!!

THANK YOU! THANK YOU! THANK YOU! THANK YOU!

"BOOKS ARE THE LEGACIES THAT A GREAT GENIUS LEAVES TO MANKIND, WHICH ARE DELIVERED DOWN FROM GENERATION TO GENERATION, AS PRESENTS TO THE POSTERITY OF THOSE WHO ARE UNBORN."

Joseph Addison, 1711

SUCCULENTS: THE NEXT GENERATION
 HUNTINGTON BOTANICAL GARDENS



TENTH SUCCULENT PLANTS SYMPOSIUM PAGE 6

Program

Hybrids, Cultivars, Mutants
 Saturday, September 18, 1993

Other Events

- *Aconium Hybridization and Selection*
John (Jack) Catlin, La Cañada, California
- *New Trichocereus and Adenium Hybrids*
Mark Dimmitt, Arizona Sonoran Desert Museum, Tucson, Arizona
- *Epicacti: A Case of Questionable Origin*
Rudi Dorsch, Houston, Texas
- *Noteworthy Natural Cactus Hybrids of the Southwest*
Dave Ferguson, Mesa Garden, Belen, New Mexico
- *Naming and Registration of Hybrids and Cultivars*
James P. Folsom, Huntington Botanical Gardens, San Marino, California
- *Succulent Selection from Hummel to Wright*
Paul Hutchison, Tropic World Nursery, Escondido, California
- *Crested Plants and Monstrose Flowers: Notes from the Laboratory*
Elliot Meyerowitz, California Institute of Technology, Pasadena, California
- *Bigger and Better Echinopsis Hybrids*
Bob Schick, Northridge, California
- *Huntington and ISI: Three Decades of Succulent Introduction*
John N. Trager, Huntington Botanical Gardens, San Marino, California

- Succulent Plant Sales
- Silent Auction of Rare and Unusual Plants
- Tours of the Desert Garden and Conservatory
- BBQ and Special Anniversary Drawing at the Director's Home Saturday Evening

Time:

Continental breakfast and registration start at 8:00am. Programs from 8:45am until 6:00pm will include speaker presentations, silent auction, garden and conservatory tours, refreshments, lunch. Optional barbeque with prizes.

REGISTRATION

Symposium	\$60.00
Saturday Barbeque	\$20.00

To Register: Mail your name(s), address and a check for the appropriate amount to:

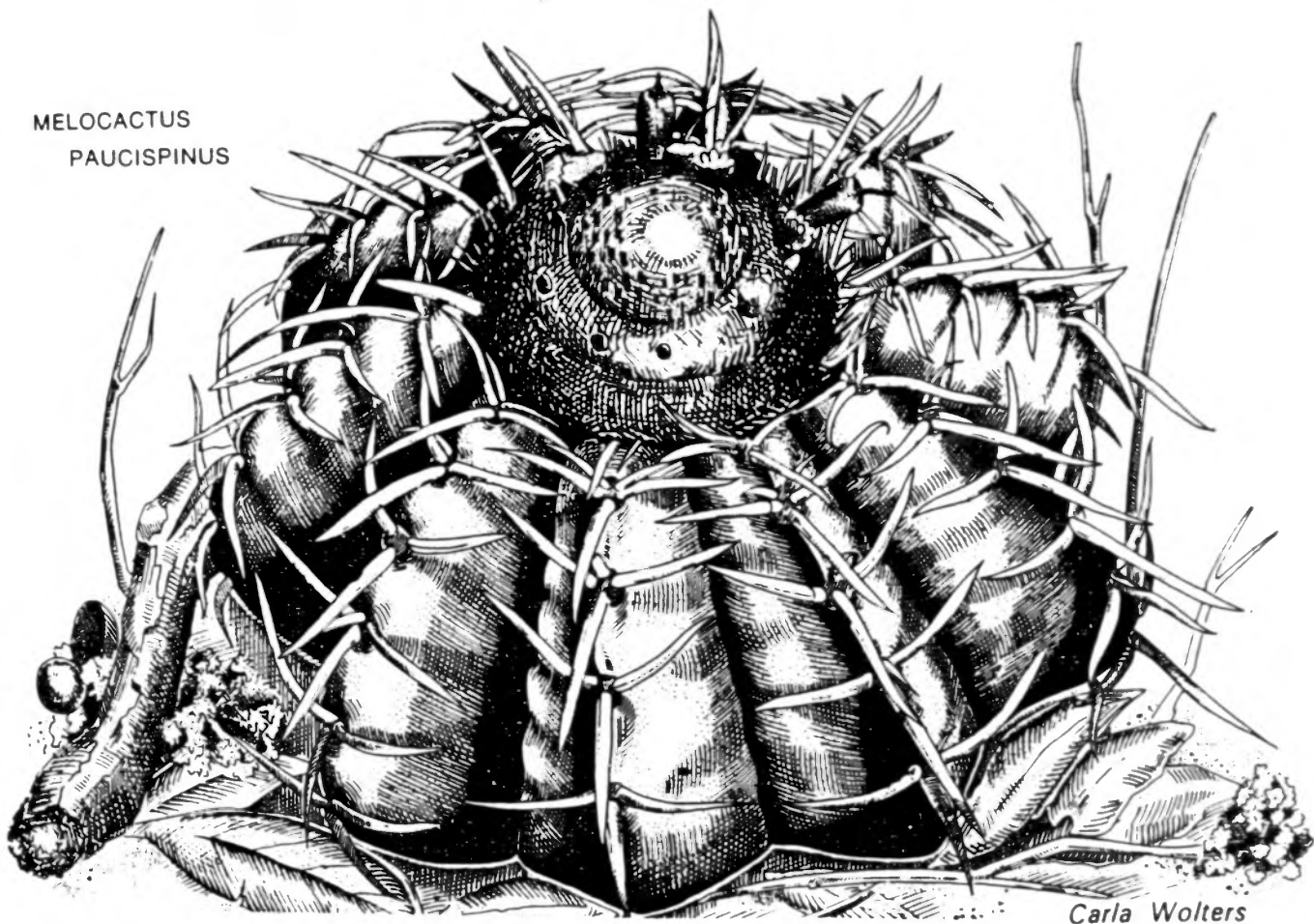
Succulent Symposium
Huntington Botanical Gardens
1151 Oxford Road
San Marino, CA 91108
(818)405-2160, FAX (818)405-0225

Make checks payable to: The Huntington Botanical Gardens

Registration **DEADLINE**: September 6, 1993

We cannot guarantee meal/refreshments for late registrants. Friends' Hall-At the Huntington

MELOCACTUS
PAUCISPINUS



Carla Wolters

CACTUS OF THE MONTH: MELOCACTUS Joe Quijada

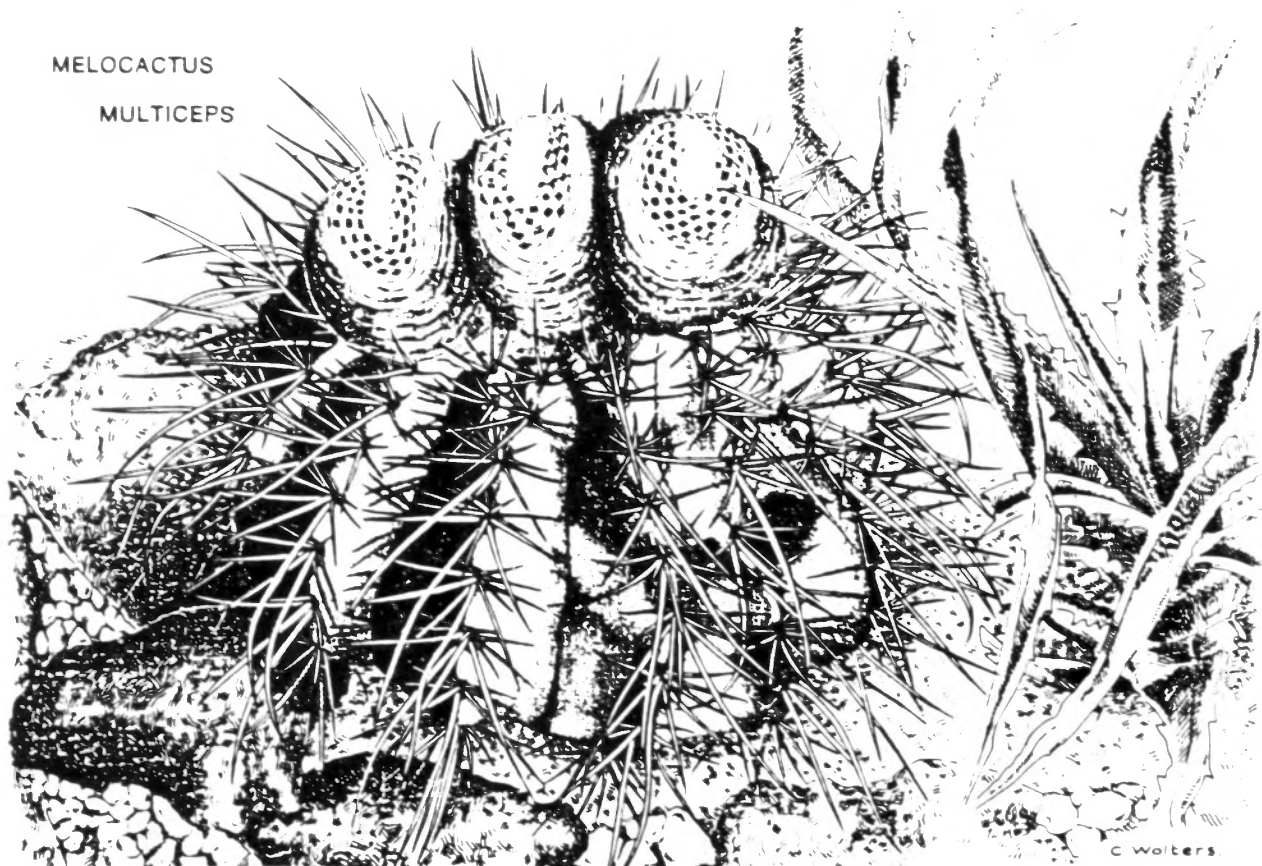
Melocactus the 'melon thistle' as it was described in 1588, is often a large cacti, globular to elongated with distinct strongly spined ribs, and a true cephalium. Plants of this genus were among the earliest cacti known to Europeans, by whom they were first called *Echinomelocactus*. The name was shortened to *Melocactus* and again to *Cactus*. This name held until 1827 when Link and Otto restored the name to *Melocactus*. These plants have various common names, like "Turks Cap" or "Turks Head" due to the turban looking cephalium.

The cephalium, a dense, cylindric, cap of wool and bristles, may take from 4 to 20 years to form, terminating vegetative growth. The cephalium continues to grow, which in the case of *M. intortus* [var.] *communis* can reach a height of several feet. The pink to reddish flowers, rather small for *Cactaceae*, appear from the cephalium. In some species the entire flower is immersed in the cephalium. The flowers typically open at noon to late afternoon and close the same evening. The berry-like fruit range in color from white to reddish violet and are pushed out of the cephalium when they are ripe.

Melocactus flowers are adapted for cross pollination and are regularly visited by hummingbirds. Other pollination vectors may include bees, butterflies, ants, and as reported by one researcher a small lizard. It would appear that most species are self compatible and able to self-pollinate. My own plants, isolated from insects, have set fruit.

CACTUS OF THE MONTH: MELOCACTUS

I have found growing *Melocactus* from seed may not be as difficult as many books suggest. I have also read that *Melocactus* are not beginners plants. They should only be taken on by experienced cactus collectors with appropriate premises and technical facilities at their disposal. This may be true, but I have had good success by using a system of seed propagation for cacti developed by Manuel Rivas of the University of Mexico Botanical Gardens. The essence of the system lies in the use of a sterilized environment in a sealed container. This system, modified only slightly, has allowed me to grow from seed *Melocactus* and many other cactus as well. A detailed set of



directions is published in the Cactus and Succulent Journal, Vol. 61 No. 1, Jan - Feb. 1989. For you folks who do not want to enjoy the excitement of growing from seed, and prefer to start with a larger plant, cultivation is not difficult.

They are sensitive to excess cold and wet, therefore good drainage should be ensured. Winter care, in San Diego, should include protection from rain. Most experts prescribe minimum growing temperature at around 60 degrees. The majority of my plants grown from seed, and kept somewhat on the dry side, have tolerated temperatures to 40 degrees for short periods.

Most species of *melocactus* are found near the coast in Mexico, Central America, West Indies, Venezuela, Colombia, Cuba, and Brazil. A few species live inland in Brazil and Peru.

MELOCACTUS

By Joe Quijada

Over 300 species have been described, of which only about 10% are now recognized as genuine species. The following is a list of names accepted at species rank, (Taylor 1991.)

M. andinus	M. curvispinus	M. lemairei	M. paucispinus
M. azureus	M. deinacanthus	M. levitestatus	M. peruvianus
M. bahiensis	M. ernestii	M. macracanthos	M. salvadorensis
M. bellavistensis	M. estevesii	M. matanzanus	M. schatzlii
M. broadwayi	M. glaucescens	M. mazelianus	M. smithii
M. caroli-linnaei	M. harlowii	M. neryi	M. violaceus
M. concinnus	M. intortus	M. oreas	M. zehntneri
M. conoideus	M. lanssensianus	M. pachyacanthus	

References

- Andersohn, Günter (1983) Cacti and Succulents: A&C Black (publishers) Limited.
Borg, J. (1937) Cacti: Macmillan & Co.
Britton, N.L. & Rose, J.N. (1922) The Cactaceae 3: Dover Publications, Inc. New York.
Haustein, Erik (1988) The Cactus Handbook: Chartwell Books Inc.
Taylor, Nigel (1991) The Genus Melocactus(Cactaceae) in Central and South America:Bradleya Vol. 9 (1991).
Maurice, Fritz (1989) Fieldnotes :Cactus & Succulent Journal Vol. 61 No. 1.

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THE 1993 POSTER: ALOE MARLOTHII

Artist Irina Gronborg has created the tenth poster in her series of botanical illustrations for Quail Botanical Gardens. The painting, of Aloe marlothii, will be featured at the annual plant sale at the gardens, on October 23 and 24.

Native to southern Africa, Aloe marlothii is an imposing example of the well known succulent group that make fine plants in the xerophytic landscape or choice potted plants for collectors. Quail Gardens' specimens may be found in the aloe collection just east of and downhill from the main parking lot. Aloe marlothii is a large, single rosette of thick leaves at the top of a tall stem. Old leaves completely clothe the stem, in the manner of the California fan palm. The leaves, which are quite thick, have short prickles scattered on both surfaces, and strong teeth at the edges. The plant may grow to about 12 feet high. The orange flowers are borne on a many-branched horizontal panicle at the top of the plant. Because this aloe does not offset, it must be grown from seed.

Aloes are the African counterpart of the agaves of the Americas, but are not closely related to them. Aloes range in size from tiny rosettes only 1-2 inches across to very large trees, with every size in between the two extremes well represented. The small varieties are excellent pot plants, while the larger ones are very handsome in the landscape. Many bloom in winter, when color in the garden is most needed. In their native countries, many have medicinal uses; Aloe vera, for example, is well known in this country as a burn remedy and as an ingredient in lotions and shampoos. Aloe marlothii is thought to be a source of Natal aloes, a stomach remedy.

SUCCULENT OF THE MONTH -CEROPEGIA by Phyllis Flechsig

There is a small but enthusiastic subgroup of collectors of succulent plants who are mad about odd, intricate flowers--and few are odder or more intricate than the flowers of the genus Ceropegia. Though they are not really colorful, being usually red-brown, green, or velvety dark purple, their strange shapes are endlessly fascinating. Think of Chinese lanterns, old-fashioned chimney pots, or little cages--the flowers have been described as being like all these things. All have a long tube at the base, with the reproductive structures hidden at the bottom; most have fine hairs or bristles inside the tube, often outside as well, and the whole is surmounted by a fantastic superstructure of lobes that are usually joined at the tips.

Ceropegia (the name means "wax fountain") is a genus in the large milkweed family (Asclepiadaceae). There are about 160 species in the genus, occurring throughout Africa, the near East, the Canary Islands, India, the far East, New Guinea, and even northern Australia. Many Ceropegias are not succulent and most are not even in cultivation. Many are vines, though some have stiff stems, erect or prostrate. Leaves are opposite, often large and fleshy, sometimes minute on fleshy stems or present only on new growth. Roots vary from fat tubers to thick fusiform to fibrous.

The downward-facing hairs inside the tube serve a purpose in pollination: a tiny insect crawls down the long tube, then finds he can't get out because of the hairs on the tube; while his stay inside the flower is enforced, he crawls about, inadvertently depositing on the stigma some pollen from another plant and picking up a fresh batch; then the aging flower wilts, allowing him to escape, and (because insects are not bright) he flies to another plant and starts the process all over. That, at least, is the theory.

As with many other plant groups favored by collectors, there are species that are easily grown and other species that are a real challenge. Needless to say, it is the difficult ones that are most in demand and hardest to come by. All of us are familiar with C. woodii and its variants, the popular "heart vine" (for the heart-shaped leaves) or "rosary vine" (for the little tubers that appear along the thin, dangling stems). For all its commonness, this plant makes a very attractive hanging basket in light shade.

In the intermediate group (less commonly grown but quite showy and not difficult) are such plants as C. distincta ssp. haygarthii, with really strange flowers that have a sort of hairy pompom on top; C. sandersonii with large parachute-shaped flowers; and C. stapelliiformis, with large, open purple and white flowers that have long prongs at the tips instead of the usual cage-like arrangement.

Somewhat less easy, but not bad if you remember to leave it dry while it is dormant, is the small C. rendallii, which has a tuberous root and an annual vine, and covers itself in summer with cute little parachute-shaped flowers. This plant can be propagated from the many tubers it produces underneath itself in the soil, or from seeds (it is self-fertile).

SUCCULENT OF THE MONTH - CEROPEGIA

by Phyllis Flechsig

On the difficult end of the spectrum are such plants as C. devecchii from Ethiopia and Yemen, and the closely related C. variegata from Arabia. Both are vines with thick, smooth stems and wonderfully elaborate flowers.

Most Ceropegias grow up through bushes in the wild, and so need light shade and excellent drainage. The stick-like species from the Canary Islands will stand full sun near the coast; they go relatively dormant in summer, flowering very profusely in spring and fall. These are best propagated from cuttings in late winter. The vining types can also be propagated from cuttings in warm weather--bottom heat helps--or from division of tubers. Seeds are sometimes available, and most species grow easily from seed.

LITERATURE CONSULTED

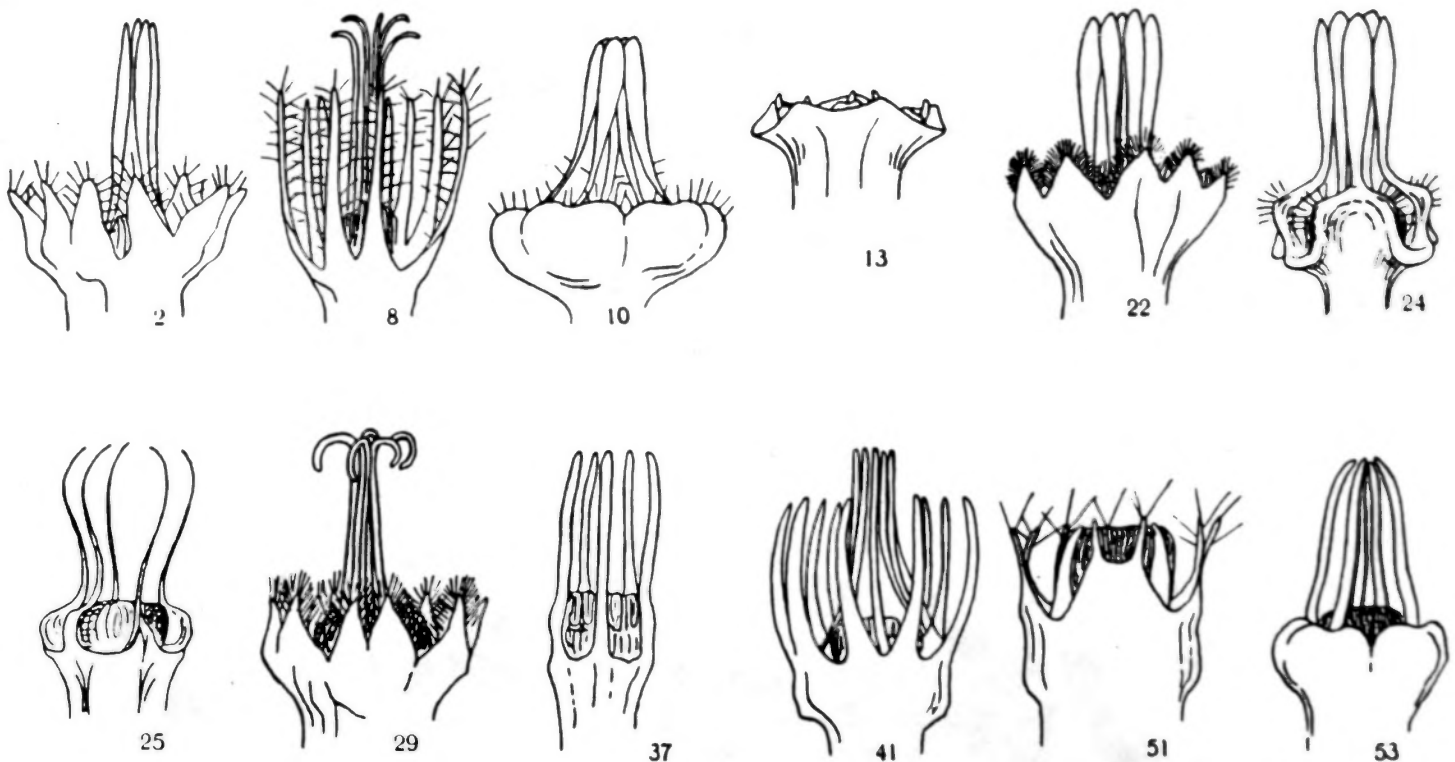
Dyer, R. A. 1983. Ceropegia, Brachystelma and Rilocreuxia in Southern Africa. A. A. Balkema, Rotterdam, Netherlands.

Bruyns, P. V. 1984. Ceropegia, Brachystelma and Tenaris in South West Africa. Dinteria, 17: 3-80.

1985. Notes on Ceropegias of the Cape Province. Bradleya, 3: 1-47.

Jacobsen, H. 1974. Lexicon of Succulent Plants. Blandford, London.

FIGURAE CORONARUM



- 2 *C. wallichii* (Strachey & Winterbottom)
- 8 *C. macrantha* var. *macrantha* (Strachey & Winterbottom)
- 10 *C. pubescens* (J. D. Hook. & Thoms. 2039)
- 13 *C. dorjei* (Typus)
- 22 *C. lucida* ssp. *dryophila* (Typus ssp.)
- 24 *C. candelabrum* (Herb. Wight 1933)

REVISION DER GATTUNG CEROPEGIA HERBERT HUBER

- 25 *C. bulbosa* (Secundum Roxburgh)
- 29 *C. hirsuta* (Jacquemont 491)
- 37 *C. odorata* (Stocks & Law)
- 41 *C. elegans* var. *elegans* (Herb. Wight 1934)
- 51 *C. sankuruensis* (J. Louis 2553)
- 53 *C. fusca* (Asplund 886)

IN CELEBRATION OF TREES

Brunhilde G. Scheffler

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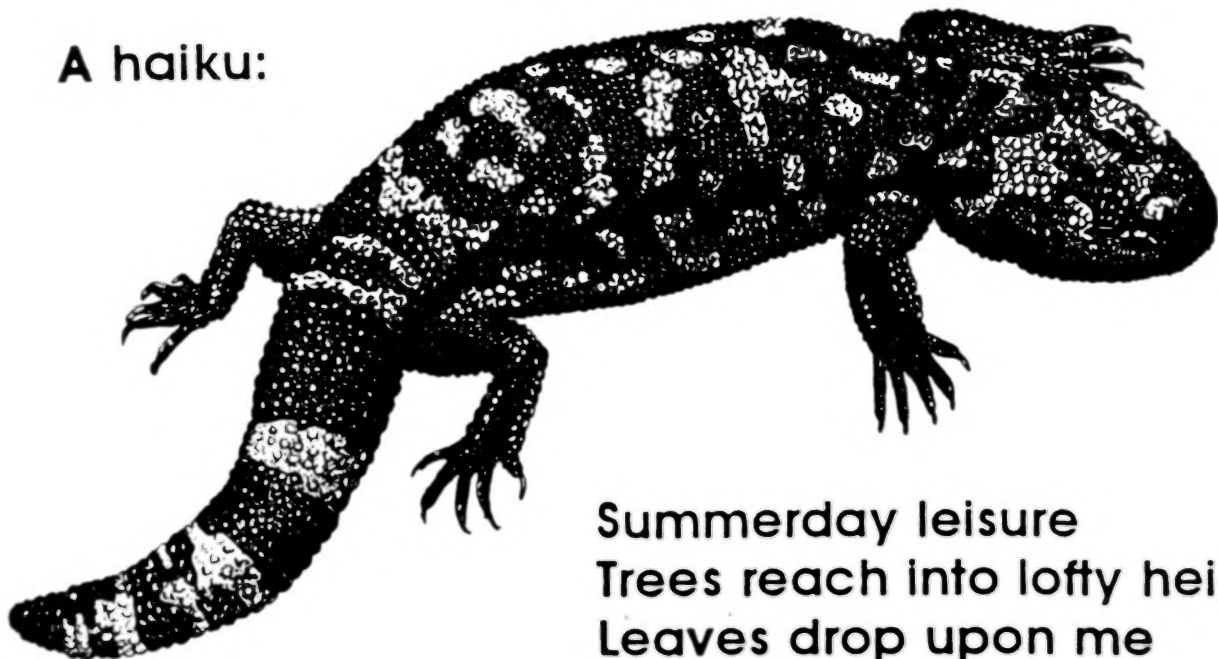
Trees grow into the sky. They reach for the sun. They live ancient lives. Trees give shelter to innumerable living creatures and provide for our existence in many ways. Have you ever thought of cacti or succulents as trees? Do you see the Joshua like huge candle sticks reaching with their white blossoms into the California sky? They are trees and there's more to it.

In Her infinite wisdom Nature has allotted those special kinds of trees to special places on Earth. They strive and grow and bloom in lands and soil where other plantlife cannot exist. There in barren grounds they struggle and fight and reach out to the heavens and the sun and live in a glorious manner. The Joshua adorns its spiny arms with "candles" and like a ghost reaches out to your imagination. Like giant guards of serenity the Saguaro branches in candelabra style and offers dwellings to the creatures of the desert. When their flower stars open their faces to the sun a glorious day in the Sonoran desert celebrates with the birds and the bees.

The *Euphorbia ingens* and the *Baobab* of Africa, the *Opuntia gigantea* of the Galapagos Islands, the *Boojum* of Baja are creations of exquisite beauty and haunting imagery. The *Aloe trichodoma* grows in a desert land of unspeakable grandeur. They all provide resting places and food for many a creature living in harmony.

These are not trees under which one can seek shelter from a downpour! One cannot break off a flowering fragrance for a delightful bouquet. The lands of their domicile is for many uninviting, forbidding, a stark landscape of sand and boulders, scorching sun, harsh winds, and endless craving for a drop of dew - unforgiving land, but oh, so wonderful. So full of wonder!

A haiku:



Summerday leisure
Trees reach into lofty heights
Leaves drop upon me

REPORT ON THE FIFTH I.O.S. INTER-CONGRESS

Rick Latimer

March 22, 1993: I am on the plane on the runway at Lindbergh Field for over two hours. The weather is bad in Chicago so all flights are delayed. Finally we leave. Upon arriving at O'Hare Airport I find all or most corresponding connecting flights are also delayed, so most passengers have no worries. Not so with me though. My United flight to Zurich has already left. I can be transferred to British Airways, but I have to claim my luggage and check it in at British Airways. One piece of luggage is not there. I wait for it to appear. Another passenger on another flight is also missing a suitcase. She is going the other way to Australia. Finally, she suggests we complain at the office. The luggage is there in the back. Alas it is now very late. I never had time to call my aunt in South Bend. The cargo hatch is closed, but they will take me. I run down the hall and I made it in time. Later, I will find out that my return tickets are missing. The plane pulls away, but will spend some time on the runway.

At some point during the flight it is now March 23rd. The plane lands in London. Walking down the hall I see Dr. Robert Wallace ahead of me. He must have been on the same plane. It turns out his flight from Iowa was also delayed. During our conversation I look up and see the foreign flights sign and I follow it out, temporarily forgetting that most of the U.S. citizens are flying in and out of London. So we unintentionally part our ways thinking the other one has vanished into thin air. He spends some time at Kew Gardens, while I catch my flight to Zurich. I spend the rest of the day filling out papers at the Lost & Found so that the luggage will be sent to Malta. I find a convenient hotel.

March 24: As I couldn't sleep on the plane I wake up at 2:12 am local time. I have breakfast at 6:30 and upon returning to the lobby, who should walk out of the elevator but the other San Diego County participant - Hans Britsch (who flew Swiss Air). After his breakfast, we went to the Air/Train terminal and bought round trip tickets by train and tram to downtown Zurich. The tram stopped at the lake and we had to walk off to the right to get to the Succulent Collection (our February '93 program). This is as far as I got 12 years ago on a previous trip. Hans had always driven this way by car and didn't realize how far it really was, and now it was slightly raining. We finally got there and saw Urs Eggli and the plants. Afterwards the two of us and Dieter Supthut were driven back to the airport to catch the flight to Malta. The flight was delayed, of course. At some point my luggage arrived from Chicago.

I luckily got a window seat, but it was cloudy most of the way. Finally, as we flew over Palermo in Sicily, I saw something worthwhile. Soon we landed in Malta at the year old Air Terminal. And who should be there to greet us - Charles Glass and some of the Maltese representatives. We were driven to the hotel, which is on the north coast, west of the capital and east of where Saint Paul was shipwrecked in 60 A.D. My hotel instructions are in German.

As two years ago in Bonn, I woke up at 8:30 am, just in time to catch the tour bus and miss breakfast. This time the bus took us to the "new" capital city of Valletta. In the afternoon I went to the airport and got my luggage. (so in contrast to the Bonn trip where the luggage arrived two hours before me, this time it was two days behind me.) In the evening many of us returned to Valletta to hear an organ recital by David Hunt's wife Margaret Phillips. One of the compositions she performed was by member James Iliff, who was in the audience.

March 26: We were driven to the west end of the island and caught the ferry to the smaller island of Gozo. The water was very clear and one could see the bottom in the bay. I saw many *Opuntia ficus-indica* hedges on both islands. The local people had not heard of the custom of eating the young pads. We first explored the landscape for native (and otherwise) plants. Of special interest was a red *Sedum*, a terrestrial orchid, *Ophrys sphegodes*, and a cliffside colony of *Aloe vera* (2000 year old introduction?). Other things we saw that day were the 2800-2450 B.C. Ggantija Temples and the capital city of Victoria (Rabat). We did not have time to visit "Calypso's Cave" and "Fungus Rock". We returned to Mgarr harbor and took the ferry back to Malta Island.

March 27: I woke up at 4:00 am to thunder and lightening. A tour around the island that I had signed up for was cancelled due to the poor weather. So I walked around the cape of Bugibba in the harsh winds and some hail and rain. In the evening Ted Anderson, IOS President delivered a public lecture titled "Conservation Fieldwork in Mexico and Chile".

The morning session of this day was the most important event of the entire inter-congress. What was discussed was the fact that growers wish to legitimately propagate endangered species and distribute them. Having more plants available in the trade, should decrease the pressure on field collected plants due to high priced "forbidden" plant poaching. International regulations seemed to be having the opposite effect. The CITES (Convention for International Trade in Endangered Species) representatives felt that the growers were not the problem, but that governments have mis-interpreted their guideline. CITES recommends nursery certifications. The commercial plant nursery owners hope they are not burdened with just another piece of paperwork.

March 28: there were three lectures this day - CSSA President Dr. Gerald Barad's "Stapeliad Pollination and Hybridization" (given to SDC&CC in March of 1980), Mrs. Susan Carter-Holmes' "Succulents of Somalia", and Prof. Dr. W. Barthlott's "Classification and Biology of Cacti". The most educational event of the day for me was witnessing Dr. Rob Bregman of the Netherlands present his views on how *Cleistocactus* and close relatives should be classified and why. This was followed by his august peers (e.g. Dr. Barthlott, David Hunt, Nigel Taylor, Dr. Wallace, etc.) chance to voice their disagreements. All the arguments for and against were very compelling, but I do not believe these issues will be settled until the DNA of all species is compared - if even then. The tentative schedule for the next four congresses were named: '94 = Netherlands; '95 = Mexico (Charles Glass); '96 = Bologna; and '97 = South Africa.

FIFTH I.O.S. INTER-CONGRESS, R. Latimer (cont.)

March 29: The bus takes us into Valletta again to see the tapestries in one room in the President's Palace. These tapestries are of interest, because they include cacti in their design among other mostly Brazilian and African plants and animals. We saw *Opuntias*, *trichocerei*, and *Melocacti* rendered in cloth. From there we left the city and headed southeast to Gnar Dalam. The earliest traces of humans on the island we found here and are dated between 4000-3600 B.C. Also fossils of extinct species of dwarf elephants, hippopotami, from about 250,000 years ago were discovered here. We did some botanizing on the cliff above the "Blue Grotto" and saw our first *Anacamptis urvilleana*, another terrestrial orchid. Then we visited two more neolithic temples - Hagar Qim and Mnajdra. We had lunch at the "old" capital of Mdina. Frau Dr. H. Schluter happened to be sitting next to me and asked what the connection was between my family name and the fish genus *Latimera*. The afternoon was spent botanizing on the west coast. We saw another orchid *Ophrys fusca*, the arum family member *Arisaema vulgare*, and a bushy *asclepiad*.

March 30: This was the "unscheduled program day". The first part included reports on collections: Herr and Frau Wolf of Austria on their *Mammillaria* collection, Andrea Cattabriga of Bologna, Italy, Ben Gron of the Netherlands, and Susan Carter-Holmes on *Euphorbia* species in cultivation. The second part was the three conservation programs: Gary Lyons, Charles Glass, W.A. Fritz Maurice, and Rick Latimer. The first program included slides of *Nolina interrata* and the original clone of *Pachgerocereus orcuttii*. The second program, Charles Glass started with his work at the new botanical garden: El Charco del Ingenio, near San Miguel de Allende, Mexico. The January CSSA Board meeting was there and he continued with slides of the board's tour at the garden and at the site of the newly discovered *Geohintonia mexicana* and *Aztekium hintoni*. He concluded with a reminder: Mexico forbids exportation of cacti now - if anyone sees these plants outside of Mexico they were smuggled out and are illegal! My program went from mainland Mexico to the Baja peninsula. Most of the slides were pictures I took, but the two most important slides were from Bob Taylor and showed the second clone of *Pachgerocereus orcuttii*: one slide showed the flowers. At the closing banquet I told the composer, James Iliff, I had a commission for him - why not a succulent symphony or a cactus suite? He replied like a true professional, "Okay, where is my money?"

March 31: Departure day - We were originally supposed to have left for Zurich at 9:10 am, but this was moved up to after 4:00 pm so we were creative with our remaining time. The Fitz Maurices, Hans Britsch and I visited the Maltese city of Mosta. The dome of the church there is said to be the third largest dome in Europe. So then Hans and Dieter and I were joined by the other "Swiss-American" Wendy Strahm on the trip north. The good news was that the skies were clear, the bad news was I got an aisle seat and the plane was delayed again. The flight took us up the Italian peninsula. The mountains east of Rome still had snow on them as did the Alps, of course. In Zurich Dieter went back to the Succulent Collection and Hans headed southwest by car to visit relatives. Wendy and I went by train to the French part of Switzerland. She was returning home near Geneva, and I to revisit the family that had my father for Christmas dinner at the end of World War II.

Looking Down Memory Lane...

MEMORABLE MOMENTS

Frank Thrombley

The title could have been "People and Plants". For me, however, the 1983 SDC&SS Show and Sale was a memorable one. We had close to 900 plants in the show that year - but I should start at the beginning.

It was about 7:30 pm on the Friday before the show. The doors were open at 9:00 am to set up the tables and at 7:30 pm I was tired. One cannot close and go home because the couple I have been waiting for just arrived.

Yes, Michael and Joyce Buckner arrived with stone, books, props, and plants. The three tables cannot possibly support all of this material - it must weigh a ton. In an hour's time everything was in its place. The tables groaned (if tables could speak) and the display was outstanding.

Without a doubt, Michael has to be rated *extraordinaire* in the ability to raise the very best plants. Coupled with his ability to display said plants with the artistic flair which has constantly won for him coveted awards. He has, in fact, won more awards for outstanding displays than anyone in the SDC&SS.

This could have been the end of this article. But I must digress back to the afternoon of this Friday.

One of the members, with his wife, came in with lumber and plants. Two by fours, 2 X 2's, nails, hammer, and even a stepladder. He must have the wrong show! He built an arch, or pseudo-gazebo, which was approximately 8 feet by four feet by eight feet high. Virginia, his wife, and I had a few laughs through the building stage; for he had pre-cut the lumber and had a temporary loss of memory in the assembly of same. It was completed in due time and then came the hanging of the baskets. Instead of baskets, I should say potted *Rhipsalis*. There must have been 25 or more plants of all sizes. What a display!

Warren and Virginia Buckner were the two members with the *Rhipsalis*, and yes, they are the proud parents of Michael Buckner.

This does not end the story, for the next day, Saturday, the judges unanimously awarded the Best Display Trophy to Warren & Virginia Buckner. This could have been a good ending, however, the better ending came when the judges then awarded the Best Artistic Trophy to Michael & Joyce. What a team of competitors those Buckners are.

Thank you Warren, Virginia, Michael and Joyce for a memorable moment.

ed. note: Thank you, Frank for writing all those nice things about us! And we all would like to wish Warren a very Happy Birthday!

FROM ALL CORNERS by Shirley Berry



The virtues of vermiculite as a rooting medium were discussed in the May, 1993 issue of this paper in this column. It was explained that the value of this medium for rooting lies in its sponge-like quality whose particles are both porous and absorbent, giving plants the oxygen and moisture needed for growth.

Has anyone wondered HOW and WHY this product was discovered and developed?

In the Cactus and Succulent Journal of America, September - October 1952, Jaye Mayall gives the history of vermiculite's development. He describes vermiculite (the ore) as a light, metallic appearing substance, a granular hydrous silicate of the mica family that surged into commercial importance during World War II.

He states, "It was during that time of steel shortages that architects and engineers, as well as government authorities saw in it possibilities for conserving steel in commercial and industrial buildings.

"By applying a one inch fireproofing layer of vermiculite - gypsum plaster to steel columns instead of concrete ordinarily used, substantially lighter steel columns could be used."

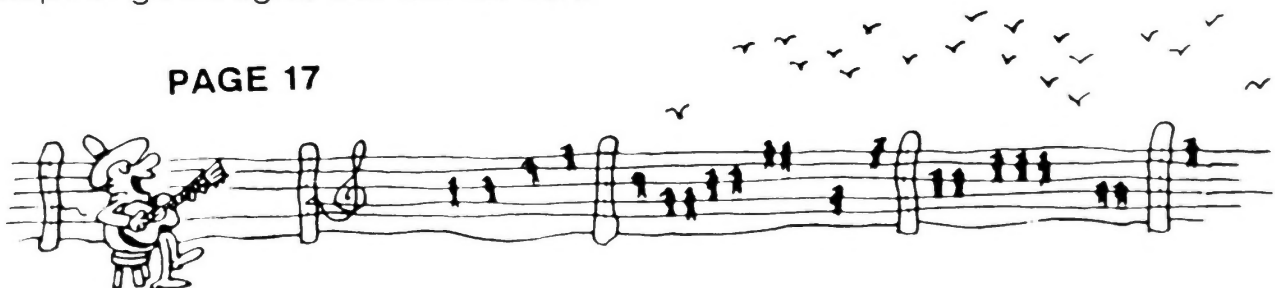
"Further uses were found --- as an insulating medium both for sound and for heat. Its water retaining properties and low density have made it valuable as a conditioner for soil and fertilizers."

At the plants in Montana and South Carolina where it is mined, it is processed and expanded up to 14 times into the light substance weighing less than 10 pounds per cubic foot. When this ore is exposed to a temperature of 1800 F millions of air cells are formed which provided vermiculite with its unique properties.

Now you know "THE REST OF THE STORY".

Having established the value of vermiculite as a rooting medium, and I can personally attest to that, let us look at some of the other factors in rooting. Cullman, Gotz, and Groner in The Encyclopedia of Cactus tell us something we should know by now, that cut surfaces should be dry before they will root. They say that standing the cutting vertically is correct, as the new roots tend to grow downward. However, I have found that when trying to root *Opuntia* pads, they form roots much more quickly from their areoles when laid flat on a rooting medium. Cuttings must not be planted until you can see the roots, and they must be kept in good light, but not full sun.

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DEADLINE FOR OCTOBER ESPINAS y FLORES IS SEPTEMBER 24th.

"If man empties his purse
into his head no one can
take it from him."

Benjamin Franklin

WISE AND OTHERWISE

by Michael Buckner



"It was not until the "Age of Explorers" in the fifteenth and sixteenth centuries that cacti and other succulents became popular horticultural plants. According to one writer, "Europeans first became aware of the cactus family following Christopher Columbus' discovery of America". It is probable that Columbus first observed cacti in the West Indies, reportedly a species of *Melocactus* commonly known as Turk's cap cactus. He collected some to return to Queen Isabella of Spain. *Melocactus* species went on to become one of the very popular cacti grown in sixteenth century England. Among Linnaeus' descriptions in his 1753 Species Plantarum were twenty-two species of cacti and the succulent genus *Euphorbia*. In 1774, Frances Masson and Carl Oeter Thunberg (one of Linnaeus's pupils) discovered many succulents on an expedition to Africa, including *Aloe dichotima*, 70 *Mesembryanthemum* species, and 40 *Stapelia* species. That same year, cultivation practices for succulents made a great stride with establishment of the first "rockery" or rock garden in England, and rock gardens became frequent sites for cultivated succulents. Rock gardens have continued to grow in popularity up through the present day."

-from CONSERVATION AND COMMERCE OF CACTI AND OTHER
SUCCULENTS, A Brief History of the Cactus & Succulent Trade by
Linda R. McMahan, TRAFFIC (U.S.A) - World Wildlife Fund,
Washington D.C.

"We live in a world that is full of misery and
ignorance, and the plain duty of each and all of
us is to try to make the little corner he can
influence somewhat less miserable and
somewhat less ignorant than it was before he
entered it."

Thomas Huxley

WISE AND



Contemplate a tangled bank,
clothed with many plants of many kinds,
with birds singing on the bushes,
with various insects flitting about,
and
with worms crawling through the damp earth:
these elaborately constructed forms
have all been produced by laws
acting around us.

Thus, from the war of nature,
from famine and death,
the production of the higher animals
directly follows.

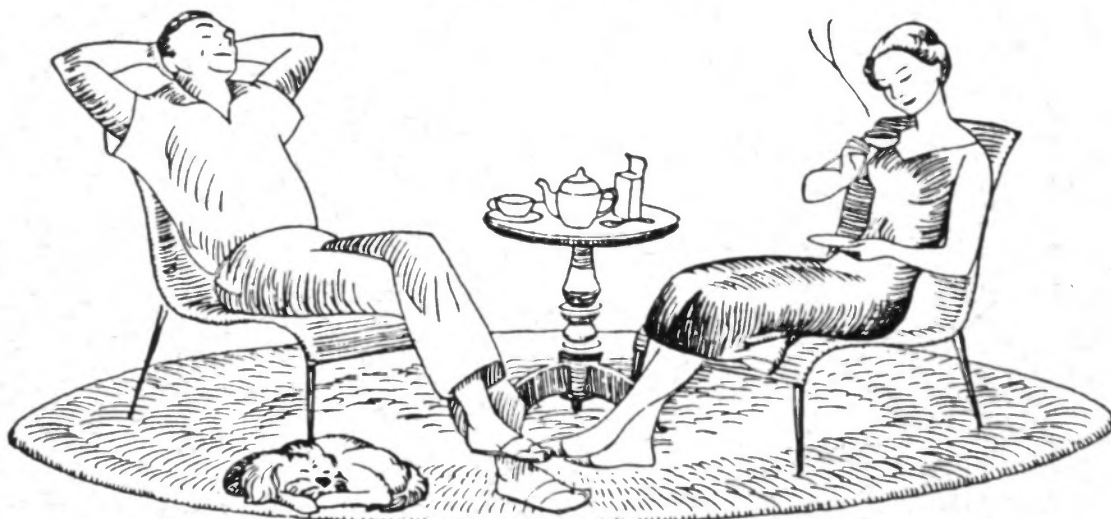
There is grandeur in this view of life:
whilst this planet has gone
cycling on according to
the fixed law of gravity,
from so simple a beginning
endless forms most beautiful and
most wonderful have been
and are being
evolved.

CHARLES DARWIN

If the labours of men of science should ever
create any material revolution, direct or indi-
rect, in our condition, and in the impressions
which we habitually receive, the poet will
sleep then no more than at present; he will be
ready to follow the steps of the men of science,
. . . carrying sensations into the midst of the
objects of science itself. The remotest discov-
eries of the chemist, the botanist, or mineral-
ogist, will be as proper objects of the poet's art
as any upon which it can be employed . . .

WILLIAM WORDSWORTH

OTHERWISE



**"Life consists not in holding good cards
but in playing those you do hold well."**

Josh Billings

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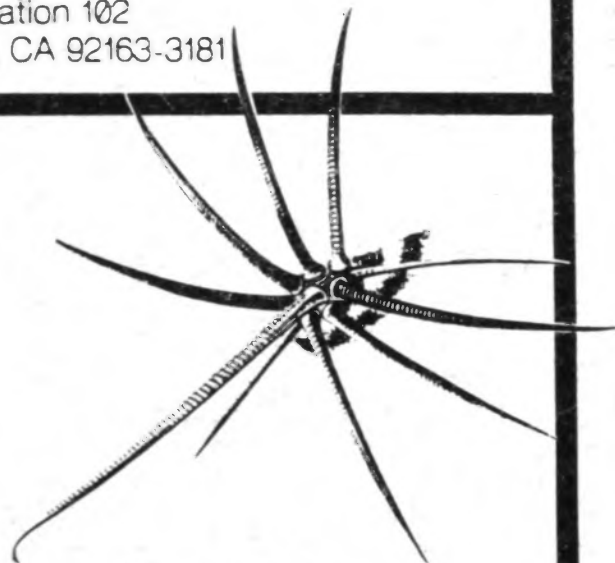


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The San Diego Cactus and Succulent Society, Incorporated is open to all persons interested in growing cacti or other succulent and exotic plants. Meetings are held the second Saturday of each month at 1:30 P.M. in Room 101, Casa del Prado, Balboa Park. Board of Directors meetings are held at 12:00 P.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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