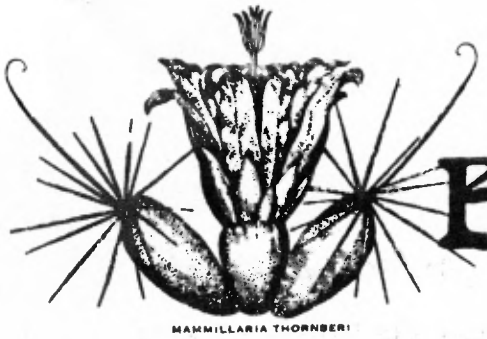


Espinas y Flores

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

Vol. XIV, No. 2. February, 1979

February Meeting

Saturday, February 10th, 1979
1:30 pm
Casa del Prado, Room 101, Balboa Park

A Calendar of Flowers

by Shirley Berry

The February program will feature a slide presentation by Shirley Berry, a member of the SDCSS since 1972. Shirley has been a collector of cactus and other succulents for twenty-two years and has been photographing them for as many years. The program will show a selection of plants in bloom every month of the year, all photographed from her collection.

In This Issue . . . . . Page

Borzicactus s/g. *Matucana* sect. *Submatucana* — R. Monroe 2

Annual Desert Gardens Walk 3

Senecio, Kleinia, Othonna, and *Coreopsis* — R. Latimer . . 4

The National Botanic Gardens of South Africa — M. Mooney 6

Cactus Cartoons — W. Scott 8

Quotes and Notes — J. Myers 9

A Letter from Dr. Daniel L. Mahr 10

Membership Renewals 11

Notes & News 12

CSSA Notes 13

CACTUS-OF-THE-MONTH

Borzicactus
(s/g. Matucana-s. Submatucana)

Dr. Ronald E. Monroe

In 1849, Otto described a new species of cactus from the high mountains of central Peru which he called Echinocactus haynei (Salm-Dyck, 1849). Later Britton and Rose (1937) proposed a new genus for this plant which they called Matucana even though acknowledging that the color, shape and size of the flower resembled those of species of Borzicactus. Too, they suggested that other species of Echinocactus might also belong in Matucana, but made no definite move towards such a novo comb.; therefore, Borg (1959) considered Matucana as monotypic. Backeberg (1977), however, made bold inroads by combining several species of other genera, not only into Matucana, but also into a gen. novo--Submatucana.

The basis for such a division was made purely on gross morphological differences of the flowers, but there were also minor differences between the plant bodies as well: Matucana had glabarous flower tubes and the plant bodies had numerous ribs with smaller tubercles while Submatucana had hairy flower tubes and the plant bodies possessed broad, few ribs with fairly large tubercles (as a rule!).

Kimnach (1960) made a massive novo comb. by submerging Arequipa, Bolivicereus, Clistanthocereus, Loxanthocereus, Oreocereus, Morawitzia, Setiereus and Matucana and Submatucana into Borzicactus. Such a combination was not done lightly as the relevant floral parts, fruits and seeds showed only minor differences.

Oddly, nearly all scientists working on Matucana/Submatucana agree that they are really Borzicactus. Only unknowledgeable collectors disagree! Besides the attempt of Ritter to erect another gen. novo (Eomatucana) which quietly died a quick death, it now appears that these plants are all Borgicactus with Matucana as a subgenus and Submatucana as a section (Donald, 1973).

The distribution of these remarkable cacti is throughout the high mountain areas of central Peru (upper Rio Saña valley to south of the Pisco valley; section Submatucana is more northerly), and the plants are found growing from 400 - 3700m in rocky outcrops, low grass or completely exposed.

The plant bodies are extremely variable from dark green, ribless (and nearly spineless) species (B. madisoniorum) to those with many ribs and numerous short white spines so as to hide the entire plant body (B. haynei v. perplexus). Some of the plants are low growing and globular (B. ritteri) while others are known to become rather ceroid with age (B. elongatus and B. cereoides).

A rather new species recently introduced is B. luteispinus which is small, ceroid and has numerous long, yellow hair-like spines that completely cover the plant.

The flowers are spectacular with a long flower tube and usually distinctly zygomorphic, although some species or forms are just as distinctly actinomorphic. Colors range from dark crimson (B. pauci-costatus), pink (B. myriacanthus), yellow (B. weberbaueri) to near orange (B. pallarensis).

Most plants in cultivation are B. haynei, B. paucicostatus, B. madisoniorum and B. aurantiacus, but the group as a whole is very hardy and other (or newer) species are fast becoming popular. They can take winter rains, they are frost hardy and most can be grown in full sun although some shade from the hot afternoon sun for some species is advisable. Caespitose species (and there are several) are easily propagated via cuttings while others must be grown from seed (or offsets induced by topping the plant).

The usual pests (mealy bugs, scale and red spider mite) can be controlled by Cygon-2E.

References Cited

BACKEBERG, Curt. 1977. Cactus Lexicon. Blanford Press, England.

BORG, J. 1959. Cacti. Blanford Press, England.

BRITTON, N. L. and J. N. ROSE. 1937. The Cactaccae. Dover Publ.,Inc., New York, Vol. III.

DONALD, J. 1973. Ashingtonia. 1:16-17.

KIMNACH, M. 1960. Cact and Succ. Soc. J. 32: 8-13, 57-60; 92-96; 109-112.

OTTO, 1849. In Salm-Dyck. Cact. Hort.: 165.

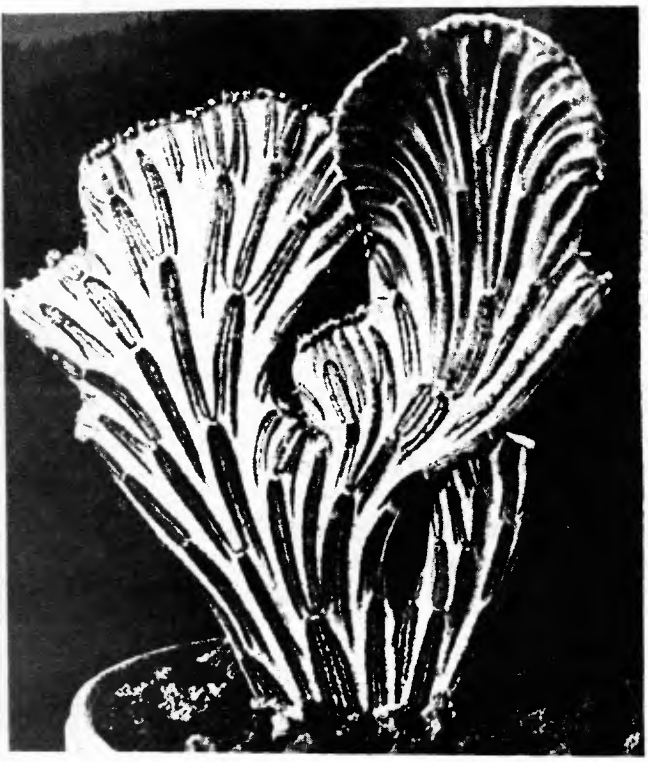
ANNUAL DESERT GARDENS WALK

The Anza-Borrego Committee of the Desert Protective Council will hold its annual walk on Sunday, March 18th at 11 am at the new Visitor Center near Anza-Borrego Desert State Park Headquarters at the west end of Borrego Valley. There will be archeology and paleontology demonstrations. Plant, wildflower, bird and general desert walks, including a "100 inch" walk, will be led by State Park Rangers. For further information call (714) 767-5311.

SUCCULENT-OF-THE-MONTH

Senecio, Kleinia, Othonna, and Coreopsis

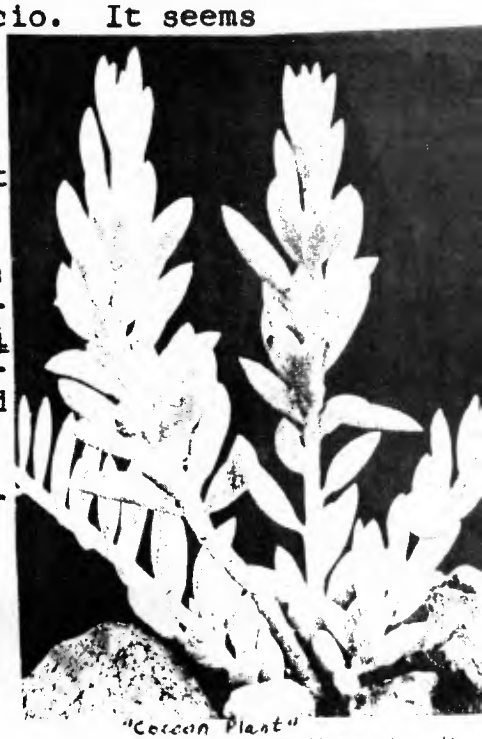
Rick Latimer



A unique crested form of *Senecio gregorii* (S. Moore) Jacobs. which in its normal form has erect, thin, rounded, pencil-like stems.

The Compositae (or Asteraceae) is the largest family of vascular plants with about 900 genera and 15,000 species. They are distributed over most of the Earth and in almost all habitats. The family is so large that it includes two other garden societies (Chrysanthemum (November) and Dahlia (January)). Many members are state or national flowers: Austria & Switzerland (Edelweiss=Leontopodium alpinum), Alabama, Kentucky, & Nebraska (Goldenrod=Solidago virgaurea), Germany (Cornflower=Centaurea cyanus), Indiana (Zinnia), Japan (Chrysanthemum), Kansas and Russia (Sunflower=Helianthus annuus), Maryland (Black-eyed Susan=Rudbeckia hirta), Netherlands (Calendula (October)), and Scotland (thistle=Onopordum acanthium). Some names suggest celestial objects: Cosmos, Aster, and Daisy (=day's eye=sun(April)). Edible members of this family are:artichoke (Cynara scolymus), Chicory (Cichorium intybus), lettuce, and Jerusalem artichoke. The family runs from the rare Argyroxiphium sandwicense to the mundane dandelion.

The family is considered to be the most advanced of the dicotyledons, because of how the flowers have come to be arranged. The typical composite "flower" consists of a number of miniature flowers pulled together into one head. Sometimes this head is surrounded by false petals called ray florets, e. g. yes in common daisies but no in plants like the purple-leafed Gynura. Jacobsen states that Senecios (also Othonnas) have flowers with yellow ray florets, while Kleinias have red, purple, orange, pink, yellow, and white thistle-like heads with no ray florets. In recent years, the Kleinias have been placed in Senecio. It seems more logical to me to have placed in Kleinia all those plants without ray florets; put all with ray florets like S. crassissimus, S. medley-woodii, and S. scaposus in Othonna; and leave the genus Senecio to the 1000 or so present nonsucculent members.



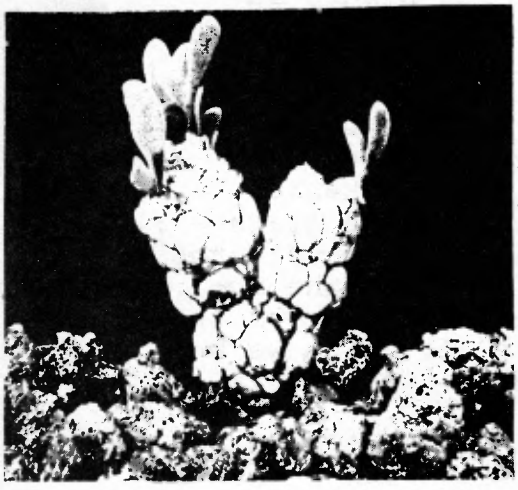
"Cocoon Plant"

Senecios come from a wide range of locations: S. kleinia(= K. neriifolia) ia from the Canary Islands, S. anteuphorbium from Morocco, S. deflersii from S. Arabia, S. pendulus from S. Arabia, Ethiopia, and Somalia, S. amaniensis from Tanzania, and S. haworthii(=K. tomentosa) from S. Africa. Senecios have an assortment of shapes from the most popular Senecio, the windowed String-of-Pearls S. rowleyanus, to caudiciforms like S. fulgens and

S. tropaeolifolius, to bushes of sea green sticks like S. anteuphorbium and S. kleinia, fuzzy white leafy plants like S. scaposus, S. medley-woodii, and S. haworthii, to the creeping blue S. serpens(=repens), to S. pendulus (the"inch worm"-Wally Falk calls it the"2.5 centimeter worm"), a mottled, purplish stemmed plant that arches back into the ground, roots again, and then arches out into another loop. The flowers are of varying scents. On the pleasant end of the spectrum is S. rowleyanus with white flowers and a scent of cloves. S. gregorii has the aroma of coconut candy and colored red. At the other end of the spectrum we have S. jacobsenii with a cheesy smell and appropriately colored orange and S. anteuphorbium with a licorice odor. To date the most unpleasant smell is that os S. articulatus somewhat like plastic.

Othonna crassifolia

In general, those thick-stemmed species which renew their leaves annually are summer dormant. Species with persistent leaves (leaf succulents) are winter dormant. Snails seem to love Senecios, particularly S. amaniensis, S. serpens, and S. articulatus. Except for the easily grown Othonnas like O. crassifolia, most of this genus is fairly new to collectors and considered a bit difficult to grow unless given no water in the summer. An interesting plant is O. lepidocaulis that looks like gooseneck barnacles or a chicken's foot.



Othonna lepidocaulis Schltr., also from Little Namaqualand in the Cape.

The number of genes for Senecio is 20 and 10 for Othonna. The word Othonna came from a Greek name for a plant other than this genus, so Othonna shares this distinction with Cactus and Yucca (indian for the Tapioca tree). Kleinia was named for Jacob Theodor Klein (1685-1759). Senecio derives from Senex, Latin for old man and refering to the dried seed pod ~~like for~~ Hoyas and Stapelias. Coreopsis is Greek for bug-like named after the tick-shaped seeds. This genus is not closely related to the previous, Old World plants. A California native, it grows along the coasts and on the islands, but is not commonly grown in gardens here. C. gigantea looks in the dry summer like a lot of dried roots stuck upside-down in the ground. In the winter the plants are covered with airy, green foliage and large yellow flowers.

that are similar to those of (being dispersed by the air)

REFERENCES:

Chidamian, Claude, The Book of Cacti and Other Succulents, p. 88.

Glass & Foster, Cacti and Succulents for the Amateur, p. 65-66.

Jacobsen, Hermann, A Handbook of Succulent Plants, V. II, pp. 702-707, 824-843.

Lawrence, George H. M., Taxonomy of Vascular Plants, pp. 726-731.

Moore, R. J., Index to Plant Chromosome Numbers, 1967-1971, p. 414, 420-424.

Smith, A. W., A Gardener's Dictionary of Plant Names, pp. 85, 188, 238, 290.

THE NATIONAL BOTANIC GARDENS OF SOUTH AFRICA

by Martin L. Mooney

One of the first things you notice about the National Botanic Gardens of South Africa is that they are unlike most other botanic gardens. They are different in that they contain almost exclusively plants which are native to South Africa, and the rich flora of South Africa, with some 18,000 species of flowering plants, provides a wealth of material to work with. Of the approximately 200 natural orders of plants in the world, 180 can be found in South Africa. In addition, nearly 3,000 of the 18,000 species of flowering plants found there are succulent. A truly astonishing number of different kinds of succulents can be found within a comparatively short distance of one another. The ardent succulent enthusiast is sure he has died and gone to heaven!

South Africa's National Botanic Gardens actually consist of seven different gardens, with headquarters at the main garden of Kirstenbosch. The six other gardens, each containing plants indigenous to that particular area, are: 1) The Lowveld Botanic Garden, Nelspruit, S. Africa (Aloes, Euphorbias, and Bauhinias); 2) The Drakensberg and Eastern Free State Botanic Garden, Harrismith, S. Africa (high altitude plants, including Aloes, Orchids, and Proteas); 3) The Harold Porter Botanic Garden, Betty's Bay, S. Africa (Ericas and Disas); 4) The Orange Free State Botanic Garden, Bloemfontein, S. Africa (mainly trees, shrubs, and grasses); 5) The Karoo Botanic Garden, Worcester, S. Africa (succulents); and 6) The Natal Botanic Garden, Pietermaritzburg, S. Africa (the numerous species of the Natal flora). This article shall address the three gardens, Kirstenbosch, the Karoo, and the Natal, which we had the opportunity to visit on our recent trip to South Africa.

Kirstenbosch National Botanic Garden is situated at the foot of Table Mountain, 6.5 miles from Cape Town. The land there had been developed as farmland in 1653 and was purchased in 1895 by Cecil J. Rhodes, who bequeathed it to the nation, together with other property on the eastern slopes of Table Mountain, in 1902. In 1913 the Garden was founded in this idyllic setting, with its moderate climate, sparkling streams, and mountain backdrop. The maximum temperature there is 70°F, with a minimum of 52°F and an average rainfall of 58 inches. The Garden covers approximately 1,320 acres of decomposed granite, clay, Table Mountain Sandstone, and loam, a soil suitable for the growth of a large number of South African plants. The central part of the garden consists of labelled displays, while the upper region is a natural forest reserve.

One of the real highlights at Kirstenbosch is the Proteaceae area, which includes some 80 species of *Protea*, 48 of *Leucospermum*, and 91 of *Leucodendron*. This collection was started in 1971 to determine those species most suitable for horticulture. We also saw the brilliant green Protea Beetle (*Trichostetha fascicularis*).

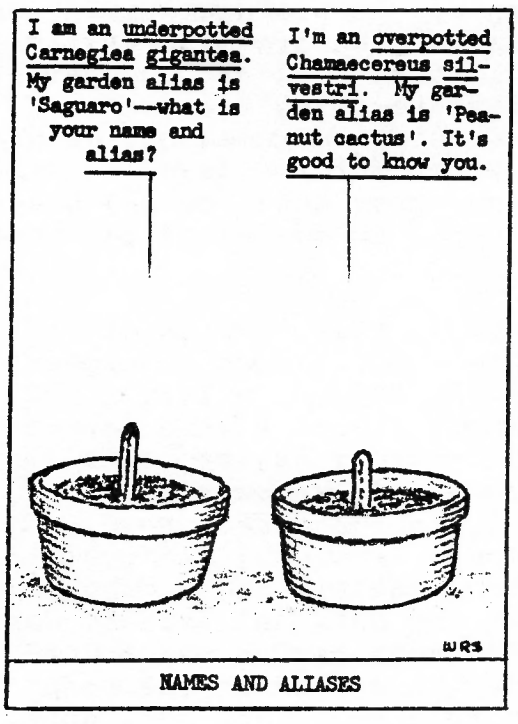
The succulent displays contained very large collections of *Crassula*, *Aloe*, *Euphorbia*, *Lampranthus*, and *Cissus*. The succulent display was not open to the public, but we were permitted a visit by the curator, Dr. John York. Some of the smaller plants which would not tolerate the high winter rains are housed here (Lithops, Conophytums, Gasterias, and some small Aloes). It was here that we saw *Pachypodium namaquanum*, and what a plant that is! Someday I will have one. The nature study school here has two full-time biology teachers to teach primary school pupils, with emphasis on nature conservation and ecology. One needs venture only briefly into the Garden to become aware of the surrounding silence and beauty of nature, and to see what a magnificent place Kirstenbosch is.

The Karoo Botanic Garden, located at Worcester, contains mostly plants from the arid regions of South Africa — the Karoo, Namaqualand, Bushmanland, and the drier sections of the interior. The Garden was established in 1921 at Whitehall, and was moved to its present, 300 acre site in 1946. The elevation is 1,000 to 1,500 feet above sea level. The soil is an outcropping of Malmesbury shale, mainly undeveloped, varying from sandy loam to heavy clay and ranging from highly acidic to alkaline. Annual precipitation is approximately 8 inches, mainly in winter, and the temperature ranges from 40°F to 110°F. Karoo contains an outstanding display of succulents, including the Haworthia collection, which has nearly all the 450 species represented. This is the collection which Bruce Bayer, the curator, did most of his study on in compiling *The Haworthia Handbook* (which we have in our library). Also represented are some 300 described species of *Conophytum*, and 50 species of *Lithops* — more or less all endemic to South Africa. *Cyphostemma juttae*, the Desert Grape, is a grotesquely fat relative of the vine grapes. It produces vivid red, inedible, grape-like clusters of berries which are most attractive. The facilities here include a lecture hall and laboratory, with living quarters for visiting botanists doing research. While our visit here could hardly be considered research, we were fortunate enough to be the guests of Bruce for two days. A visit to the Karoo Garden is a most rewarding experience for any succulent collector. In my opinion, this has to be one of the most outstanding gardens in the world!

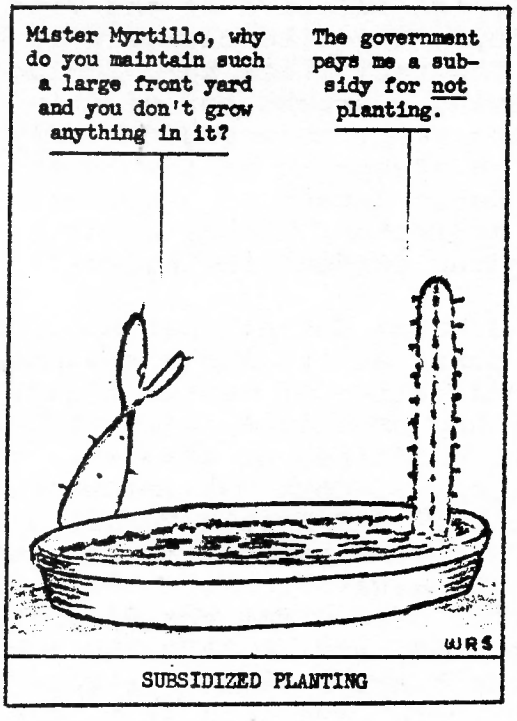
The Natal Botanic Garden is unique in that it consists of two gardens, an old and a new one. The older garden is a magnificent collection of exotic trees. It was formed in 1860 to introduce and experiment with timber trees. South Africa has no large timber trees of its own. The introductions included: *Quercus suber*, Cork Oak (southern Europe); *Cinnamomum camphora*, Camphor Tree (SE Asia); *Metasequoia glyptostroboides*, Dawn Redwood (China); *Sequoia sempervirens*, Coast Redwood (California); and *Pinus palustris*, Pitch Pine (United States), among others. The Garden came under the direction of the National Botanic Gardens in 1969, and in 1970 the new indigenous garden was opened. The Gardens are in the Swartkops Valley in a bend of the Dorpspruit River. The soil is a dolerite type — a dark red, soft, clayey alluvial fill, high in organic content and fairly acid. The Gardens are situated on 120 acres at an elevation of 2,000

feet. The average annual rainfall is 40 inches, with temperatures of 28°F to 104°F. The vegetation ranges from tropical mangrove swamps and coast forests to thornveld and savanna. The Natal Gardens include an outstanding Cycad collection, particularly of *Encephalartos*, with all of the species native to the Natal region represented. Cycads are sometimes referred to as "living fossils" because their form has hardly altered since the time of the dinosaurs. Aloes were also strikingly abundant, dotting a hillside, the most spectacular being *A. arborescens*, *A. bainesii*, *A. marlothii*, and *A. spectabilis*. Another highlight was the midland temperate forest with *Ficus* spp. (Wild Figs), *Trema orientalis* (Pigeonwood), *Turraea floribunda* (Wild Honeysuckle), and *Prunus africanus* (Bitter Almond). The education center and teaching garden form a link between the theoretical and practical aspects of the environment, with emphasis on ecology and the interdependence of insects and plants. It is at this exceptional center that Ted Giddy instructs primary school pupils. I have nothing but admiration for the work which Ted is doing there. In addition, I would like to express my gratitude to the curator, Peter Law, for letting us be a part of this magnificent garden.

I didn't intend to be so lengthy in my account, but there is just no way to briefly describe something as grand as South Africa's National Botanic Gardens. If you ever have the chance to visit them, do so. You won't regret it!



NAMES AND ALIASES



SUBSIDIZED PLANTING

QUOTES and Notes by JBM

BEWARE OF GREEK BEARING WORDS

Many of the generic and specific names of cacti and succulents derive from Greek word roots. They describe the plant in one way or another so that if you know the meanings of the roots, the botanical name makes sense, is easier to remember and it adds interest to the plant itself. Once in a great while, however, it doesn't work out that way. An example from my experience is the genus DIOSCOREA - pure Greek, no doubt about it.

In the Dictionary of Word Roots and Combining Forms by Donald J. Borror, National Press Books, 1971, the Greek prefix "dio" means "divine or noble" and the Greek suffix "scoria" means "dung", so the generic name of these strange looking plants presumably means "divine dung".

Most of us have seen the "Elephant's Foot" from Mexico, Dioscorea macrostachya. Now it takes a little imagination to say it looks like diving or noble dung, but the name is not immediately rejected as unworthy until you look in A Manual of Plant Names by C. Chicheley Plowden, Philosophical Library, 1970, and learn that the genus was named in honor of the Greek physician DIOSCORIDES ! Both excellent books, by the way, and available from Abbey Garden Press.

— — — — —

Q: "What is a cactus?"

A: "A cactus is: a perennial plant, the seedlings have two leaves, the flowers have numerous stamens and a divided stigma, the fruit is an undivided one-celled berry that forms below the petals, and it has a special organ called an areole."

(My own non-technical composite definition)

Other plant families may have one or more of these characteristics but only the cacti have them all.

"The most distinguishing feature of the cactus is the areole which corresponds to nodes on other plants from which leaves, branches, and flowers emerge. Areoles are usually round and consist of two buds; but they can be of other shapes, from minute to fairly large. The pair of buds are often set close together or superimposed, but sometimes, as in Mammillaria, one of the buds will be found in the axil of the tubercle and the other will be located at the tip of it. Usually the areoles are filled with felt, wool, bristles, hair, or spines; occasionally they are naked."

from: CACTUS GUIDE by Ladislaus Cutak, Van Nostrand Reinhold Company, 1976, p 2.

681 El Monte Road
El Cajon, CA 92020

3 January 1979

Dear CSSA Affiliate Representative:

I am writing this letter in the hopes of generating some enthusiasm amongst the ranks of the membership of the Cactus and Succulent Society of America -- enthusiasm which I hope will strengthen and improve our society. I am not acting in any official capacity and this letter has been neither authorized nor approved by the CSSA leadership. I am writing only as a concerned CSSA member.

I would appreciate this letter being read, discussed, and made available to your members at your next scheduled meeting. Also, I think it would be appropriate and worthwhile to print it in your next club newsletter.

My concerns with current CSSA policy, as well as other aspects of our hobby are too numerous to detail them at this time. However, there is a single underlying concern, which is that there is a lack of representation by the membership as a whole in CSSA affairs. A most graphic example of this is that a total of only 58 votes were cast in the last CSSA election, out of a membership of approximately 7000! This figure of less than 1% is deplorable. I feel that the single main reason for this poor vote is lack of knowledge of the candidates and the workings of the Society. CSSA affairs are directed primarily by southern Californians, whereas approximately 75% of the affiliated societies are from outside of the southern California area. I personally know of CSSA members who feel that there is very little reason to get involved with CSSA affairs because of the power structure within California. There is very good historical reason for the current situation. CSSA was founded in southern California, which still has a higher proportion of members than any other region. Also, the Articles of Incorporation require that business be conducted within Los Angeles County. This makes it very difficult for members outside of the southern California area to personally attend meetings of the Board of Directors. Also, the dates and aggenda of Board meetings are not made known to the general membership, which stifles even written input.

I feel that this is a situation which weakens the Society as a whole. The leadership needs input from <u>all</u> interested and concerned members, irregardless of their geographic location. After all, this is a nation-wide organization. And I do feel that the current leadership of the Society is willing to listen to and discuss the input of "outsiders". At least, I have found this to be true in my own case.

However, several members of the Board of Directors have expressed that it is their belief that apathy is universal amongst the membership, that very few people care about the workings of the Society, and that as long as the Society continues to produce an interesting journal, the membership will be content. My answer to the Board has been that if there was better communication between the Society and its membership, there would be less apathy and more people would be willing to take an active role in Society business, at least to the point of expressing their opinions.

Some questions to consider. Would you have voted in the last election if you had known more about the candidates? Do you have any interest in the Society's business and policies? Are you curious about the Society's finances? Do you think the Society should take a stand on the conservation of endangered or potentially endangered succulent plant species? Would you like to see more Society news and business printed in the Journal? Would you like the dates and aggenda of Board meetings to be made known so that you can furnish input if it is your desire to do so? Would you like to see the Society take action against unscrupulous or unprofessional nurserymen who advertise in the Society's Journal? Or do you have any other comments you would like to make regarding the Society?

If your answer has been "yes" to any of the above, I ask you to take the following first step. Write a personal letter (or an officially sanctioned affiliate letter) to the President of CSSA (address below) stating that you feel that greater input from the membership would strengthen the Society, and that in order to do this the membership must somehow be notified of Society business. The Board of Directors will be meeting March 17, 1979. Please, if you have any opinion on this matter, exercise your right as a CSSA member and make that opinion known by writing to the President before that date:

Miss Virginia F. Martin, President
The Cactus and Succulent Society of America, Inc.
2631 Fairgreen Ave.
Arcadia, CA 91006.

Remember, the only way the Board will take action on a matter is if opinions about that matter are expressed -- loudly.

Sincerely,

Dr. Daniel L. Mahr

MEMBERSHIP RENEWALS

A notice to all members who have yet to renew their membership -- your dues are past due! This is the last copy of *Espinas y Flores* you will receive until your dues for the year 1979 are paid. Annual dues are $6.00, single or family, and may be paid at the February meeting or sent to our Treasurer, Joan Johnson, 3560 Lake Garden Drive, Fallbrook, Ca. 92028. Make checks payable to the San Diego Cactus & Succulent Society.

NOTES & NEWS

At the January meeting of the Board of Directors Dr. Ronald Monroe and Martin Mooney were appointed to fill the two vacant positions on the Board, created by the election of Joan Johnson and Rick Latimer to the offices of Treasurer and 1st Vice President, respectively.

A reminder that the following people have signed up to provide refreshments at the February meeting:

Patty Buchanan, Mr. and Mrs. Charles Clark, Joan Fleer, Trudy Hart, Herb Hewitt, Audrey Johnson, Ruth Richardson, Dorothy Ronske, Ruth Stanton, and Marianne Thrombley.

Marcia Monroe captured the award for the top "Bragging Plant" at the January meeting with a beautiful specimen of *Adenium obesum* var. *multiflorum*. Each month's "Bragging Plant" winner will receive an extra gift plant at the December meeting.

January's Member's Monthly Display Table was a fantastic array of succulents collected by Martin Mooney on his recent trip to South Africa. February's display, by Warren Buckner, will feature members of the epiphytic genus, *Rhipsalis*. Martin still needs volunteers to set up displays for the coming months.

Perlso Lewis reports that she has name tags available for any new members who might wish to purchase them. Cost is $2.00 each. See Perlso at the Registration Table at the February meeting.

New Regalement chairwoman Nancy Roth and Plant Sales chairman Carl McLeod are both in need of volunteers to work at their respective tables during the meetings. If interested, please contact Nancy or Carl.

President Tom Hamecher is still searching for chairpersons and volunteers for several committees (see back page). If interested in volunteering, contact Tom at 440-6245.

Librarian Betty Athy reports the following new additions to our library in January:

Gardening With Cactus - Mabe (gift of Rick Latimer)
Gardening With Succulents - Mabe (gift of Rick Latimer)
The Complete Book of Gardening Under Lights - McDonald
The Nature Conservancy News

There will be a Green Thumb Show at the San Diego Wild Animal Park, featuring displays of cacti and succulents in Nairobi Village, on February 17, 18, and 19.

Member Reed Pierce has an envious, and interesting, schedule for the month of March. He will be accompanying, as botanist, two different South American tours sponsored by Harvard University. The first tour will be a two-week trip to the tropical rainforests of northern Peru, followed by a two-week visit (drool) to the Galapagos islands.

CSSA NOTES

Board member Lee Phelps, who is also on the Board of Directors of the Cactus & Succulent Society of America, has been appointed by the national society as chairman of an *ad hoc* committee to review CSSA election policies and procedures.

At the January 20, 1979 meeting, the CSSA Board of Directors voted unanimously to adopt a "C.S.S.A. Code of Conduct for the Conservation of Succulent Plants." A copy of this document, which is very similar to our own Code of Conduct — drafted by Dr. Ron Monroe and adopted last year, will undoubtedly appear in the near future in the *Cactus and Succulent Journal*.

Madelyn Lee reports that she has nearly completed the indexing work for the CSSA's 50 - year Index for the Cactus and Succulent Journal. Proofing still remains to be done before it goes to the printer.

Plan now to attend CSSA's 18th Biennial Convention in Pasadena, May 21st through 25th. Watch for more information in future issues of the *Cactus and Succulent Journal*.

§§§

Deadline for the March issue is February 23rd.

San Diego Cactus & Succulent Society

Officers

President - Tom Hamecher 440-6245
996 Terrace Crest, El Cajon, Ca. 92020

1st V. Pres. - Richard Latimer 463-1655
5990 Lake Murray Blvd., La Mesa, Ca. 92041

2nd V. Pres. - Carl McLeod 279-2817
3516 Mt. Everest, San Diego, Ca. 92111

Recording Secretary - Beverly Kirkegaard 463-2801
10009 Bonnie Vista, La Mesa, Ca. 92041

Treasurer - Joan Johnson 728-7317
3560 Lake Garden Dr., Fallbrook, Ca. 92028

Corresponding Secretary - Amna Cornett 291-6426
3905 Ibis St., San Diego, Ca. 92103

Immediate Past Pres. - H. Warren Buckner 469-1391
1744 Englewood Dr., Lemon Grove, Ca. 92045

Board of Directors

Shirley Berry, Perlso Lewis, Dr. Ronald Monroe,
Martin Mooney, John Pasek, Dr. Leroy Phelps

Committees

Activities: H. Warren Buckner
Audit:
Conservation: Dr. Ronald Monroe
Education:
Cacti - Dr. Ronald Monroe
Succulents - Richard Latimer and Dr. Leroy Phelps
Exhibits:
Bragging Table - Shirley Berry
Member's Monthly Display - Martin Mooney
Historian: Richard Latimer
Library: Elizabeth Athy
Membership: Joan Johnson
Open House:
Plant Exchange Table: Ethel Standish and Frances Johnson
Plants & Supplies Table: Carl McLeod
Programs: Richard Latimer
Publication: Jim Dice (ph. 276-6739 or 276-2589)
Reception: Perlso Lewis and Veryl Snowhill
Regalement: Nancy Roth
Representatives:
Balboa Park Desert Garden -
Quail Botanical Gardens - Audrey Johnson
S.D. Botanical Garden Foundation -
S.D. Floral Association - Verna Pasek

The San Diego Cactus & Succulent Society is open to all persons interested in growing cacti, other succulents, and exotic plants. Meetings are held the second Saturday of each month at 1:30 pm in Room 101, Casa del Prado, Balboa Park. Board of Directors meetings are held after the general meetings. Annual dues are $6.00 per family. Single copies of *Espinas y Flores* are 50¢.

Jim Dice
3228 Clairemont Drive
San Diego, CA 92117

Address Correction Requested