

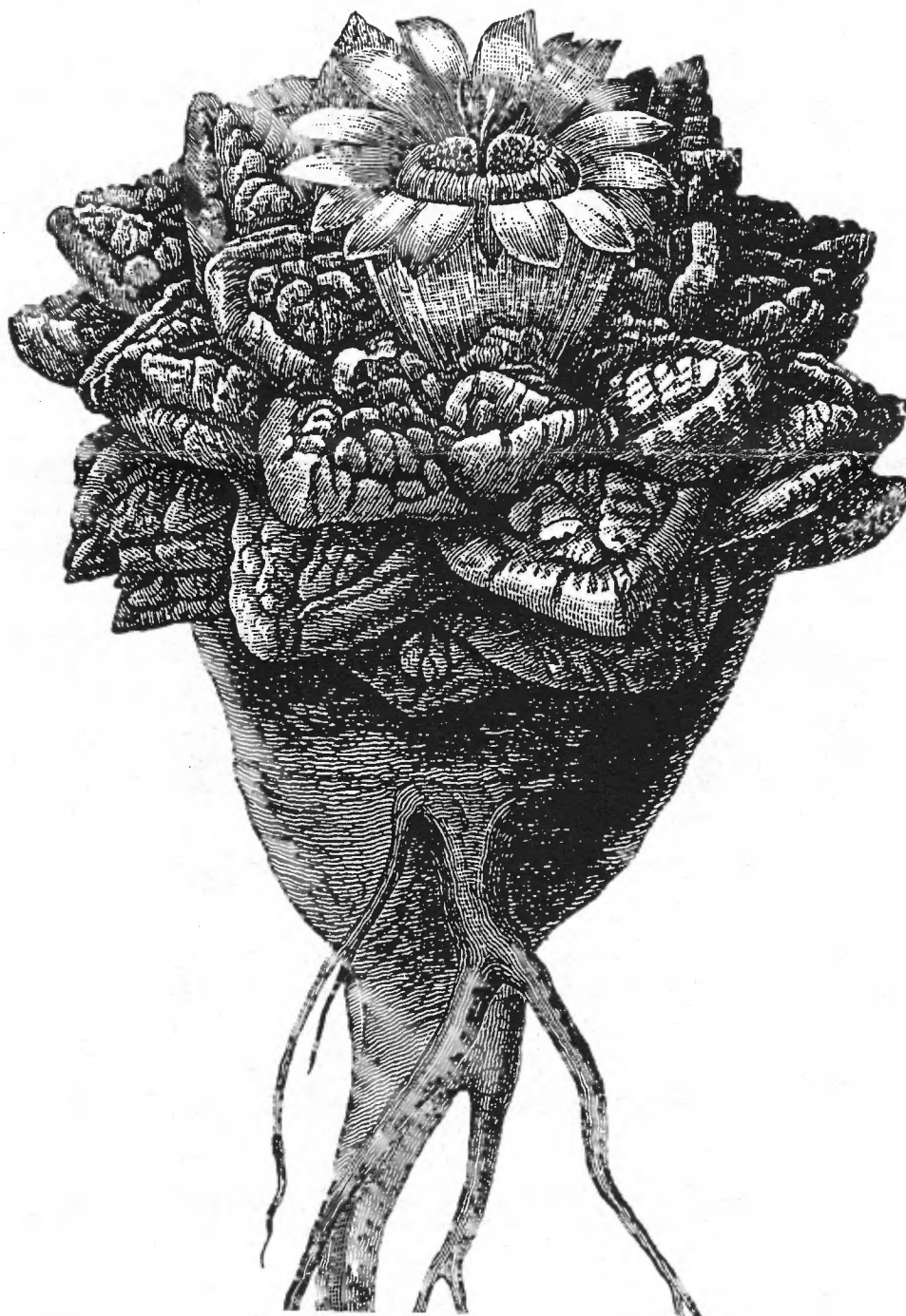
*MAMMILLARIA THORNERI*

# *Espinas y Flores*

NEWSLETTER OF THE SAN DIEGO CACTUS & SUCCULENT SOCIETY

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

VOLUME XXXI NUMBER ELEVEN, SATURDAY, NOVEMBER 9, 1996 @ 1:00 PM



## *Burseraceae*

### Program for November: *Nora M. Barboza*

We are really looking forward to the SDC&SS's final 1996 program featuring speaker Nora Martinez-Barboza, curator of Palm & Cycad Collections at the Huntington Botanical Garden. Researching the *Burseraceae* family (Frankincense/Bursera) under the guidance of Prof. Arthur Gibson of UCLA, Nora has recently achieved a Master's Degree in Botany.

This slide program should be very enlightening and educational, since this family is dear to all of us caudiciform collectors, and very little research or study has been accomplished on the subject matter. If you have in your collection any Commiphoras, Boswellias, Old-World Frankincense, or any New-World Burseras or other members of this plant family — please bring them in to share with all.

**OUR FRONT COVER:** An illustration of *Ariocarpus fissuratus* taken from **CACTACEAE OF THE BOUNDARY**, by George Engelmann, M.D. of St. Louis, 1858 — **United States and Mexico BOUNDARY SURVEY** under the order of Lieut. Col. W. H. Emory, MAJOR FIRST CAVALRY, AND UNITED STATES COMMISSIONER.

*Please send your letters, artwork, poetry, Cactus or Succulent-of-the-Month articles, doodles, puzzles, comments, or criticisms, etc. to:*

**MICHAEL & JOYCE BUCKNER, EDITORS**  
**4822 SANTA MONICA AVENUE, #103**  
**SAN DIEGO, CA 92107**  
**PHONE OR FAX (619) 222-3216**

**PUBLICATION DEADLINE IS THE 20th of the prior month.**

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



**A Sad October the 13th Tale:** SDC&SS member **Wilbur Glover** was at a swap meet in New Jersey, and while he was looking at things on a table, a car went out-of-control and knocked over two tables — one of those tables knocked over Wilbur, breaking his left hip at the socket; he said that of the thousands of people at the swap meet, he was the only one to get hurt. Let's hope that this event was the end of his bad luck. Now according to his sister **Elizabeth Glover**, he should be out of the hospital by our November meeting — there will be a great big Get Well Card for him at the at the hospitality table — please remember to sign it and wish him a speedy recovery.

**Saturday, November 9 — Dylan Hannon "Propagating Plants for California"** at Quail Botanical Gardens, 9:00am to 1:00 pm. Sponsored by the S.D. Museum of Natural History. Dylan will discuss treatment for different horticultural groups; students will take home plant materials. \$24 for Nat. History Museum members; \$34 non-members. To register call (619) 232-3821, ext. 203.

**October 31 - Bizarre Sex ; November 7 - Herpetological Sex; December 5 - Insect Sex; and January 9 - Plant Sex — Pat Flanagan, SDNHM Director of Education and Jon Rebman Ph.D., Curator of Botany ; January 23 - Ocean Sex:** The San Diego Natural History Museum presents a series of Thursday evening (always at 7:00 pm) slide lectures; all will take place in the Auditorium of the SD Museum of Natural History in Balboa Park. Price: \$5 SDNHM members; \$7 non-members. Contact the **Education Dept. (619) 232-3821, ext 203.**

Looking for that perfect Cactus & Succulent Christmas present? The ***Kakteen 1997 und andere Sukkulenten Calendar*** features 13 high quality photos of cacti & succulents, of course; four of the photos show plant in habitat. This annual publication is always loaded with totally stunning photographs. Plant description, cultural requirements, and habitat information (*all in English*) accompanies each illustration. Order from: Anthony Speca, 4306 Hill Forest Drive, Kingwood, TX 77345-1423. Calendars are \$12.50 each. email inquiries to anspeca @ gnn.com.

This is your last chance to donate plants for the **V.A. Disabled Holiday Bazaar**. The plants donated by SDC&SS Members are greatly appreciated and as Ruth says "These plants are always the first items that sell." Michael & Joyce Buckner will be collecting plant donations for Ruth Richardson at the November meeting, then she will pick them up from us, along with the plants that we will contribute. For questions or special donations please contact **Ruth Richardson at (619) 281-9267.**

★ ☆ ✨ **Please Remember! Our December Holiday Meeting starts at Noon.** ✨ ☆ ★

We will have our Holiday Gift Exchange — If you have not participated before, this is how it works: Any member, or guest of member, may participate; all you do is bring in a healthy, happy, desirable cactus or succulent. (*Occasionally, someone brings in a creative succulent related item - I am the proud owner of a Virginia Innes "No Water Ever Necessary Cloth Cactus" that I obtained at one of these exchanges many years ago.*) Gift should have a label that identifies plant and your name. The first plant to selected will be auctioned off at the end of the meeting, and the person who brought in that plant gets first choice of all the gifts on the table. Whenever a plant is selected, the person who brought it gets the next choice. The more appealing the gift that you bring in is, the earlier you will get your chance at the many fine specimens our members have brought in. This is a terrific way to give, receive, and broaden your plant collection. So look through your collection, and start grooming that special December gift!

**BRAG TABLE WINNERS FOR OCTOBER 1996:  
JUDGED BY KELLY GRIFFIN**

CACTUS:	FIRST PLACE:	Shirley Berry's <i>Rebutia ritteri</i>
	SECOND PLACE:	Shirley Berry's <i>Mammillaria parkinsonii</i>
	THIRD PLACE:	Ed DeLollis's <i>Pereskia aculeata</i>
SUCCULENT:	FIRST PLACE:	Rudy Lime's <i>Pelargonium alternans</i>
	SECOND PLACE:	Alan Weiss's <i>Pseudolithos viperæ</i>
	THIRD PLACE:	Shirley Berry's <i>Haworthia truncata</i>

 **The Monthly Benefit Drawing**  
**Wow, What a Plant Table!!**

We had **25 happy winners** walk away with unusually good plants and plant-related items from our October drawing. Additionally, ticket holders that did not win were treated to a special one-time-treat of a SDC&SS plant of their choice from the Sales Area — talk about people with big grins! Plus, we added \$65 to our Society's treasury.

A big bundle of thanks goes to the following special people for donating plants:  
**Carol Jean Wolcott - *Gasteria* species; Joe Kraatz - *Agave ferox* and *Brachychiton rupestris*; Dylan Hannon - *Gasteria acinacifolia*; Shirley Berry - *Notocactus magnificus* and *Haworthia maraisii*; and Betty Athy - *Ipomea platense*, *Adenium obesum*, *Lithops julii*, *Dinterantens wilmotianus* and *Pachypodium lealii* ssp. *saundersii*.**

November will be out last Monthly Benefit Drawing for 1996! So, if you have a fantastic specimen to donate that will make us all want to "do the Macarena", please give Betty Athy a call at (619) 469-7647 and let her know.

**Many thanks to all of you for supporting this program.**

. . . **Thanks, Kay Quijada**

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Kay Quijada, a member of the nomination committee (*We have not heard from the nomination's committee chairperson.*) tells us that the proposed nominations for 1997 - 1998 San Diego Cactus & Succulent Society Officers are as follows:

<b>President</b>	—	<b>Thomas Knapik</b>
<b>Vice President</b>	—	<b>Tom DeMerritt</b>
<b>Secretary</b>	—	<b>Beverly Kirkegaard</b>
<b>Treasurer</b>	—	<b>Herb Stern</b>

**WE HAVE BEEN WARNED:** These nominations are by no means "Written in Stone". If you wish to run for office and/or have any suggestions, contributions, etc. — please contact Nomination Committee Chairperson, Shirley Berry at (619) 756-3659.

# The Genus *Ariocarpus*

## Cactus of the Month by Greg Wade

The plants now known as the genus *Ariocarpus* have been, in the past, classified as *Roseocactus*, *Neogomesia*, *Anaholium*, *Mammillaria*, and, of course, *Ariocarpus*. Even *Encephalocarpus* (*Pelecypora?* *Turbinicarpus?*) *strobiliformis* was believed to be an *Ariocarpus* at one time. (Borg, 1948)

There are now seven recognized species. All habitats are located in the Chihuahuan desert (southern Texas and northern Mexico). All have a long beetlike taproot; they can be dome-shaped, flat, or have long pointed tubercles. All *Ariocarpus* are spineless and use camouflage and alkaloids for protection. They are all slow growers, though once you get used to them, the growing and flowering times can be pretty exciting. It seems that they will only propagate from seed. The flowers are diurnal, last more than one day, and usually appear from late August through November. Flowers have no scent and range in color from white to pink to a vivid purple-magenta; one species has yellow flowers.

The current species and varieties may be divided according to size into two groups.

### Among the LARGER SPECIES:

*Ariocarpus retusus* is found in the states of San Luis Potosi, Coahuila, Nuevo Leon, and Tamaulipas, Mexico. A mature plant can grow up to ten inches in diameter — perhaps a little bigger in cultivation. It has smooth triangular tubercles — approximately  $\frac{3}{4}$  of an inch long three-sided pyramids that are blue-green to olive green in color. *Ariocarpus retusus* variety *furfuraceous* is smaller and has a woolly tuft on the tip upper surface of the tubercles, which are longer and thinner than the type. Both have a woolly crown. This species rarely produces offsets. The flowers of the type are white or pale pink. Variety *furfuraceous* flowers are purple — though there are discrepancies in the documentation regarding flower color.



ARIOCARPUS KOTSCHOUBEYANUS



ARIOCARPUS FISSURATUS

*Ariocarpus fissuratus* is from southwestern Texas, northern Mexico, and maybe still New Mexico. *Ariocarpus fissuratus* variety *lloydii* is from the states of Coahuila, Nuevo Leon, San Luis Potosi, Zacatecas, and Tamaulipas, Mexico. The appearance of this species and its varieties is highly variable. *Ariocarpus fissuratus* can grow to a diameter of six inches; *Ariocarpus fissuratus* var. *lloydii* may grow a little larger. Both are usually domelike, although the type may also grow quite flat. The tubercles are generally grey to grey-green, stubby, three-sided, and from ½ - 1 inch wide at the base — any or all of this description may vary widely. The top surfaces are very wrinkled with a wooly central furrow in the type. Variety *lloydii* has smaller tubercles that angle outward from the furrow; it looks like an overwatered overfed *Ariocarpus fissuratus*. Both have a wooly crown and flower in the center from the base of the tubercles. The type flower that I have seen is pink. The sources I researched claim that the flower color ranges from a pale pink - almost white to pink to magenta and purple. Variety *lloydii* is said to have a purple or magenta bloom.

The variety *hintonii*, described in 1989 has been found in two locations, both in San Luis Potosi, Mexico. There was at one time a variety *intermedius*, but this name has apparently been discarded. *Ariocarpus fissuratus* variety *hintonii* is the smallest of this species, in habitat, growing to about three inches in diameter. Its shape is flatter than the type and the tubercles have a different arrangement of the fissures. The crown and furrows are wooly and the flower is pink.

*Ariocarpus trigonus* is from Nuevo Leon and Tamaulipas, Mexico. This is the largest growing *Ariocarpus*, sometimes growing ten inches in diameter. This plant rarely offsets. The tubercles are somewhat like *Ariocarpus retusus* but more erect. Their shape varies from elongated and slender to short and stout. The elongated form has sometimes been called variety *elongatus*. Flowers are large and yellow.

#### SMALLER SPECIES of *Ariocarpus* include:

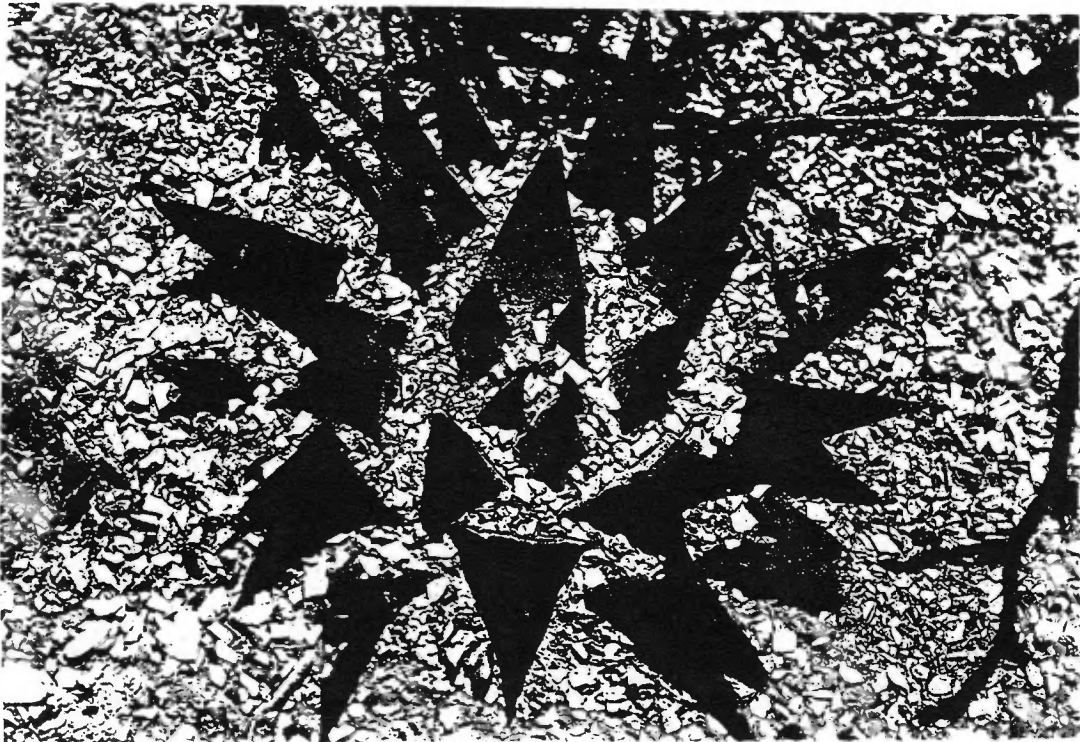
*Ariocarpus kotchoubeyanus* comes from San Luis Potosi, Nuevo Leon, Durango, Tamaulipas, Querétera and Zacatecas, Mexico. It has, in the past been called *Ariocarpus sulcatus*. This is the species discovered and brought to Europe in 1830, that sold for an outrageous price. (One source says 1,000 francs, another states \$300,000 US.) This *Ariocarpus* never grows much more than a couple of inches in diameter. The tubercles are shaped similar to an *Ariocarpus fissuratus*, but are smaller, smooth on top, and more numerous. The furrows and the crown are characteristically wooly. There are two reported varieties: *Ariocarpus kotchoubeyanus* variety *albiflorus* has a white flower. *Ariocarpus kotchoubeyanus* variety *macdowellii* has a pink flower — like the type, but this plant is only half the size of the type. When mature this plant seems to offset nicely.

## Cactus of the Month: Ariocarpus by Greg Wade continued . . .

*Ariocarpus agavoides* does not, at least to me, look much like an Ariocarpus. This species used to be the monotypic *Neogomesia*. It grows in habitat in the state of Tamaulipas, and with age still relatively small — only reaching about three inches in diameter. The tubercles are thin, elongated and erect. Tubercles are dark green or grey-green, have no central furrow and a single woolly areole on the upper surface. This plant may offset when old. The flowers are shiny purple - magenta and almost as large as the plant.

*Ariocarpus scapharostrus* is the smallest of the genus. Its habitat is Nuevo Leon, Mexico. This species has dull dark green tubercles and can grow up to three inches in diameter. The species name implies "boat shaped" and that is a fair description of the tubercles. The flowers are large and purple. The only specimens I have ever seen are grafts — so maybe, its reputation for being the slowest growing and the most difficult of this genus to keep alive is justified.

The newest species, *Ariocarpus bravoanus*, was described in only one source that I could find — that was an article by Bill Weightman "Ariocarpus Update" in **CACTUS FILE** \*. This species has been found in only one location in San Luis Potosi, Mexico; it grows to about three to four inches in diameter. The photographs seem to show a plant appears to be a cross (or triangle) between *Ariocarpus fissuratus*, *Ariocarpus trigonus*, and *Ariocarpus agavoides*. The tubercles point upward (*A. trigonus* or *A. agavoides*); the upper surface is slightly rough and looks pyramid-like (*A. fissuratus*); it has a tufted areole on the upper surface instead of a central woolly furrow (*A. agavoides*). The **Cactus File** article speculates that this species could be a natural hybrid between *Ariocarpus agavoides* and *Ariocarpus fissuratus* var. *hintonii*.



*Ariocarpus trigonus* growing in limestone gravel in the Jaumave Valley, Tamaulipas (June, 1986)  
(photo: Taylor - Threatened Cacti of Mexico Edward Anderson, et.al, Royal Botanic Gardens, Kew. 1994)

## Ariocarpus by Greg Wade continued . . .

There are crest and monstrose forms of these species, though I have never seen an *Ariocarpus agavoides* or an *Ariocarpus scapharostrus* in these forms. Hybrids have been produced in cultivation by Neudecker \*\*.

Cultivation is not too difficult, as long as you can protect them from being cold and wet at the same time. They all like plenty of sun and heat — as hot as possible. Be careful with new plants — as they can burn like many other species, if not acclimated; small seedlings need protection the most. *Ariocarpus* in habitat thrives in direct sun and hard rocky soil, often limestone. I am using a high mineral soil — sand, DG, perlite mixed with a small (20% to 25%) amount of regular cactus mix. You should be careful of watering "over the top" as this seems to promote rot. As a general rule, in the San Diego area, in the summer — water once a week; once a month in winter. If there is a problem with keeping them warm enough in winter, it might be best not to water at all during the coldest times. Fertilize lightly and only when plants are growing.

Due, I am sure, to our wonderful climate, I have seen *Ariocarpus* growing outside — in a pot, not the ground. These larger specimens seem to be tolerating this treatment. I have not and probably will not try this approach with my Arios. If there is something I have forgotten to mention, please speak up at the meeting. Maybe I (or someone) can answer. If you grow *Ariocarpus*, please bring a plant or two in for the rest of us to enjoy.

### Bibliography:

- \* "Ariocarpus Update" by Bill Weightman from **Cactus File** vol. 2, #7, November 1995
- \*\* "Crossing Experiments within the Genus *Ariocarpus*" by T. Neudecker, **British Cactus and Succulent Journal**, volume 3, #1, 1985.
- The Cactus Handbook* by Eric Hanson, pp 254-257.
- Cacti of Texas* by Del Weniger, pp 9, 100-102.
- Cacti* by J. Borg, pp 206-208.
- Cacti, The Illustrated Dictionary* by Rod & Ken Preston-Mafha, pp. 15-16, 200.
- Encyclopedia of Cacti* by Culman, Götz, and Gröner, pp. 17, 128-130.
- Book of Cacti for the Amateur Collector* by H. C. Lawson, pp. 6-7, 32-33.
- Cacti for the Connoisseur* by John Pilbeam, pp. 22-23.
- Guide to Cacti and Succulents*, Simon & Schuster, pp. 5-7.
- The Illustrated Encyclopedia of Succulents* G. Rowley, pp. 28, 40, 71, 90, 178-179, 198-200.
- Cacti* by Clive Innes and Charles Glass, pp. 23-24.



*Ariocarpus fissuratus* var. *hintonii* in habitat (July, 1993 — *Threatened Cacti of Mexico*, Kew, c. 1994.



**PROGRAM FOR DECEMBER: HAPPY HOLIDAYS  
ELECTION OF SDC&SS OFFICERS  
DINNER PROMPTLY @ 1:00 PM\*  
SPECIAL PLANT EXCHANGE  
SIGN UP OF VOLUNTEERS FOR EDUCATION & REFRESHMENTS  
DISTRIBUTION OF GIFT PLANTS TO MEMBERS  
MINI-AUCTION  
NO LIBRARY AND NO PLANT SALES**

**HOLIDAY BUFFET MENU \*:**

**ROAST TURKEY WITH SAGE DRESSING  
MASHED POTATOES WITH GIBLET GRAVY  
HOT BUTTERED CORN  
TOSSED GREEN SALAD WITH TOMATOES  
TWO CHOICES OF SALAD DRESSING  
RELISH TRAY OF FRESH VEGETABLES  
CRANBERRY SAUCE  
ROLLS AND BUTTER  
COFFEE, TEA, SODAS OR WINE  
APPLE OR PUMPKIN PIE**



**PLEASE MAKE CHECKS PAYABLE TO:**

**S.D.C.& S.S. - TREASURER  
C/O S.D. CACTUS & SUCCULENT SOCIETY  
P.O. BOX 33181  
SAN DIEGO, CA 92163-3181**

**DEAR BEVERLY,  
YES! PLEASE RESERVE HOLIDAY DINNERS FOR MEMBERS @ \$10.00\* PER MEMBER:**

**MEMBER NAME (S) \_\_\_\_\_**

**PLEASE RESERVE HOLIDAY DINNER FOR GUESTS @ \$10.00\* ( SORRY, NO GIFT  
PLANT FOR NON-MEMBERS).**

**GUEST NAME (S) \_\_\_\_\_**

**SATURDAY, DECEMBER 14TH MEETING BEGINS AT 12:00 NOON\* - HOLIDAY  
DINNER TO BE SERVED AT 1:00 - PLANT EXCHANGE DURING DINNER, GIFTS  
PLANTS WILL BE DISTRIBUTED DURING DESSERT.**

**\* PLEASE NOTE: *The editors have not received any information about this year's  
holiday dinner, time/date, menu, prices, etc. So, we are including an old form  
based on the assumption that we will be having the usual holiday dinner party??!!***

## San Diego Cactus & Succulent Society Membership ....

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

Regular meetings are held on the second Saturday of each month in Room 101, Casa del Prado, Balboa Park at 1:00 p.m. (One may come as early as noon to socialize.) Annual dues are \$10.00 for a single membership plus \$5.00 for each additional member at the same mailing address; mailings are sent at bulk mail rate. International memberships, including Mexico and Canada, are \$20.00 (surface mail only). Dues are payable at time of joining, and in January of each succeeding year; for new members that join during our June show or at other times during the year, prorated membership dues can be paid in November/December to complete the succeeding year.

Members receive our monthly publication *Espinas y Flores*, are entitled to library check-out privileges, and may partake in activities. We offer knowledgeable speakers who present educational & entertaining programs; many are world renowned scholars, botanists, explorers and authors. The San Diego Cactus & Succulent Society's Annual Show and Plant Sale occurs the first weekend of June in Room 101, Casa del Prado, Balboa Park. A wide range of succulent plants, ceramic pots, and growing supplies are available at favorable costs during most meetings. There is also a plant exchange table and a seed library /exchange. All members will be consistently encouraged to contribute and participate in our many functions.

For more information regarding membership, please call Elizabeth Glover,  
Membership Committee Chairperson at (619) 264-6769.

- Yes, I (we) wish to become 1997 member(s) of the San Diego Cactus & Succulent Society.
- Yes, I (we) wish to renew our San Diego Cactus & Succulent Society membership (1997).  
Membership active for one full year — eleven issues of *Espinas y Flores*.  
If you joined SDC&SS in the middle of the year - dues may be prorated to complete 1997.

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

NAMES OF ADDITIONAL MEMBERS: \_\_\_\_\_

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

CITY, STATE & ZIP + 4: \_\_\_\_\_

PHONE / FAX / E-MAIL: \_\_\_\_\_

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

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

SEND THIS FORM TO:

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

# SOME MAGNIFICENT ALOES OF MADAGASCAR

## SUCCULENT OF THE MONTH BY PHIL FAVEL

The island of Madagascar is home to many rare and beautiful plants. The genus *Aloe* is among the vast botanical treasures of this spectacular land. With 56 known species, there is a tremendous diversity. The aloes range from rosettes the size of a quarter to trees that reach twenty feet or more in height. Many of these Madagascan aloes we now find here in our cherished collections — whether in pots, in a greenhouse, or as landscape specimens.

The most popular aloes in collections seem to be the dwarf species; because of their compact size these aloes lend themselves to growers with limited space.

*Aloe descoingsii* is perhaps the smallest. This colorful species forms neat, compact clusters with small reddish flowers. It is very easy to grow and is frequently seen in shows.

*Aloe deltoideodonta* and its seemingly endless varieties is one of the most beautiful aloes of all. The leaf color is extremely variable — from sky blue through light green with lines (or stripes). Some varieties have numerous spots with leaves that have pink and orange hues.

*Aloe versicolor* is another miniature aloe of great beauty. When grown in full sun the leaves are a dark bluish-gray and have a peculiar banded effect. The individual flowers are pinkish-red and rather large for the plant size.

Several new species of Madagascan aloes have recently been discovered. The following are a few species that have proved to be worth cultivating.

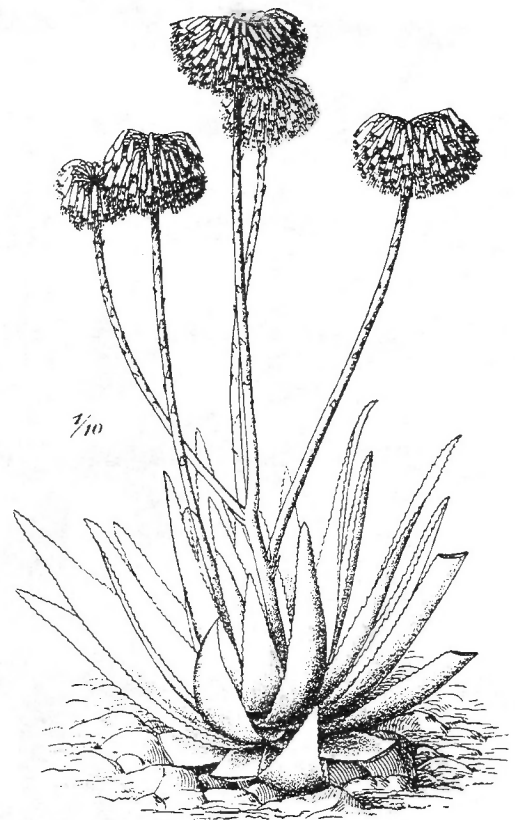
*Aloe fragilis* forms dense clumps and has thorny leaves — somewhat like a *Faucaria*.

*Aloe guillaumetii* is another fine new aloe suitable for container. The

long, greenish, marbled leaves are somewhat similar to some of the aloes of Ethiopia and Somalia (i.e. *Aloe harlana* and *Aloe somaliensis*). The flowers are quite different, being analogous to the flowers of other Madagascan aloes in shape and color.

There are a number of aloes that are medium sized. These are usually solitary or sparingly branched.

*Aloe capitata* and its varieties are among the most strikingly beautiful in all the genus. The large delicate flowers are tightly clustered in a ball at the top of the inflorescence. They are commonly bright lemon yellow, however, with *Aloe capitata* var. *quartziticola*, the flowers are a tangerine-orange.



*Aloe capitata* Bak. Habitus.

## MADAGASCAR ALOES – SUCCULENT OF THE MONTH BY PHIL FAVEL CONTINUED

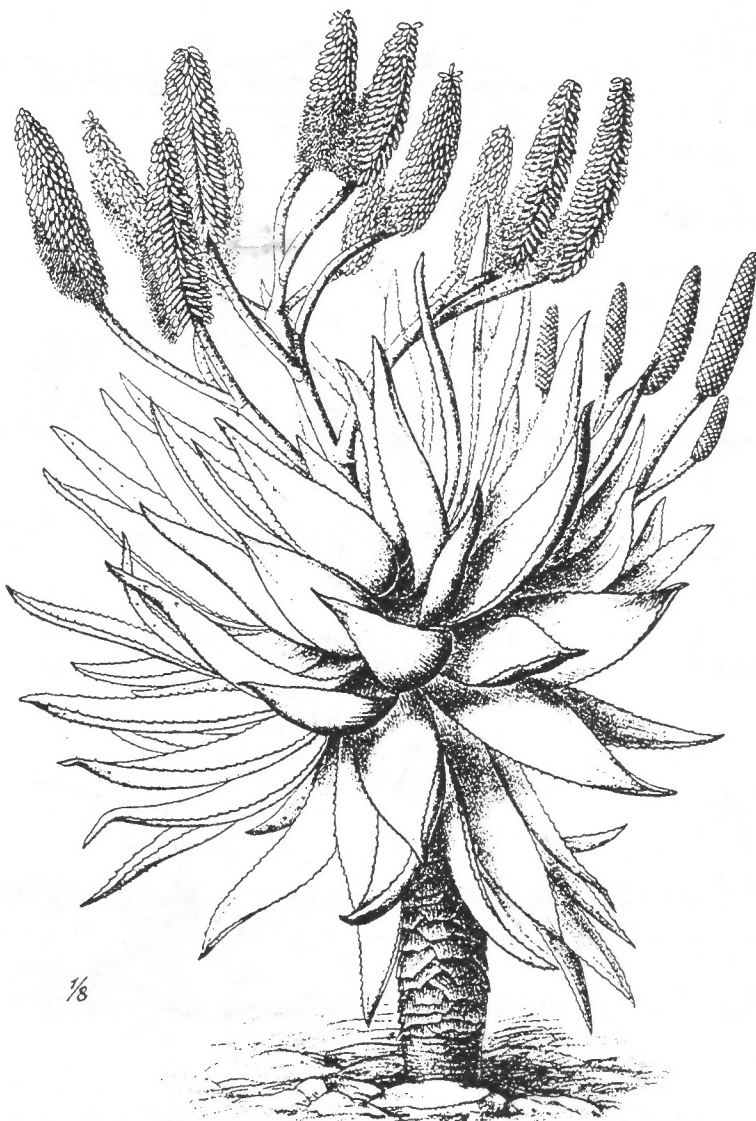
*Aloe imalotensis*, another beauty, is at first glance strikingly similar to the popular South African species, *Aloe striata*. The leaves are large, multi-colored and very pale. The flowers though, are quite different than those of *Aloe striata*.

Madagascar has several tree aloes and they grow surprisingly well outdoors here in San Diego county.

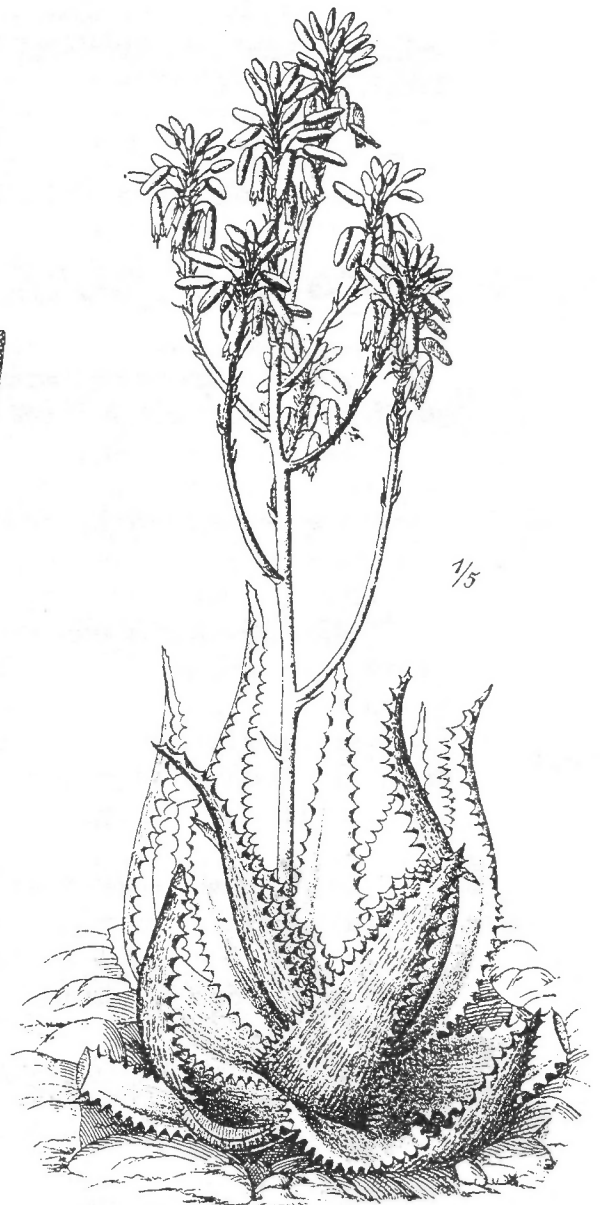
My favorite is *Aloe suzannae*; this spectacular species grows to be a large tree in the southern region of Madagascar. Here in Southern California, it appears to divide freely, forming low clumps. Plants have very long, thick, rough and leathery foliage — forest green in color. The flower spike is very tall and unbranched with pretty white flowers growing along the entire inflorescence.

Three tree aloes that are very comparable in growth habit are *Aloe vaombe*, *Aloe vaotsanda* and *Aloe belenae*. These species are also similar in appearance to a number of tree aloes in southern Africa (i.e. *Aloe ferox*, *Aloe excelsa*, *Aloe spectabilis*, etc.). These are single-stemmed and can grow upwards to an impressive height of twenty feet. *Aloe vaombe* is the only species seen here in our area.

With all their diversity, beauty, and ease of cultivation, the aloes of Madagascar are all well worth growing, whether in a greenhouse or outdoors in the garden.



*Aloe ferox* Mill. — Habitus.



*Aloe somaliensis* C. Wright. Habitus.



This is a photograph of Axa Galindo (and brother) in Ecuador. Axa had polio and needs an operation. Arrangements for operation /medical expenses have been made. Axa's family has been unable to come up with the \$400 in roundtrip airfare to Cuba, which is necessary for Axa to have this operation.

If you can help, please contact Professor Jorge Yalindo, Avenida de la Prensa 21-85, Quito, Ecuador. As you can see, Axa loves cats and plants!

Alfred B. Lau  
c/o Tim Metcalf  
202 N. Walnut Street  
Woodland, CA 95695 Tel:(666-7671) Area Code 916

October 19, 1996

Dear Michael and Joyce,

Only now I have a few moments free to dedicate to the correspondence without which I would be quite lost. Let me first of all thank you for the assistance and kindness shown when I was in San Diego, for your wonderful hospitality, the good food and the entertaining evening in your home. Angel also enjoyed it immensely, considering that he comes from such a poor and primitive background and is pulling himself up by his own bootstraps. He has left a very favorable impression wherever he went. In the home of Dr. Nolan they even had a birthday party with cake and candles, the first such occasion in his 23 years. I trust that he will struggle through his life and be an inspiration to other. Thank you also for your fine report that you gave in your publication as an echo to my visit in Southern California. May this not have been the last time for such an opportunity to present some of my talks.

It would be very important for me to know whether anything tangible has been done, or is planned, for Axa Galindo in Ecuador, the little girl that needs an operation because of her polio which she suffered many years ago. It does not take much to have her completely re-established and even do sports. She can take off her braces for short moments, but after a successful operation she may recover completely and lead a normal life. She is an extremely intelligent and very pretty girl. I am here now in Seattle, and the hospitality is superb. Alas, I have still many, many open dates which could be fatal to the purpose of my visit: To win new friends to support our university students in Southern Mexico. Wherever I go, the people are very enthusiastic about the subjects and quality of the talk, and yet, they do not seem to be able to help in arranging meetings, not even in private homes with maybe four or five couples. Almost all of next week has blank spots which preoccupies me. I believe that the reason is a lack of communication when I needed to set up the dates months ago. This cannot be changed now, and I hope and trust that I shall not be forgotten. Also the information on Internet has not found any echo. I am sure that your recommendation of my visit in your home has been read by many people, and their response should be positive.

The weather has turned cold here in Washington State, and the passes are snowbound. Today we had lovely sunshine, although the weather report announced rain. Naturally, this part of the world has much bad weather, but the scenery is marvelous. You will realize that I stay until the end of the year. How much I would value some more meetings in California but around Christmas there would be little interest to book such events. From September 17 to 30 I do not have a single meeting. I would probably stay in Tucson, which is not far from California. I can get any messages through Tim Metcalf, whose address and phone number you see above. It is not easy to get a visa, and thus the time spent in the USA should be utilized to the fullest extent. I do trust that your health will improve. I heard that shortly after my memorable visit you fell sick again. I shall never forget that evening. Let us stay in close touch.

Yours sincerely,

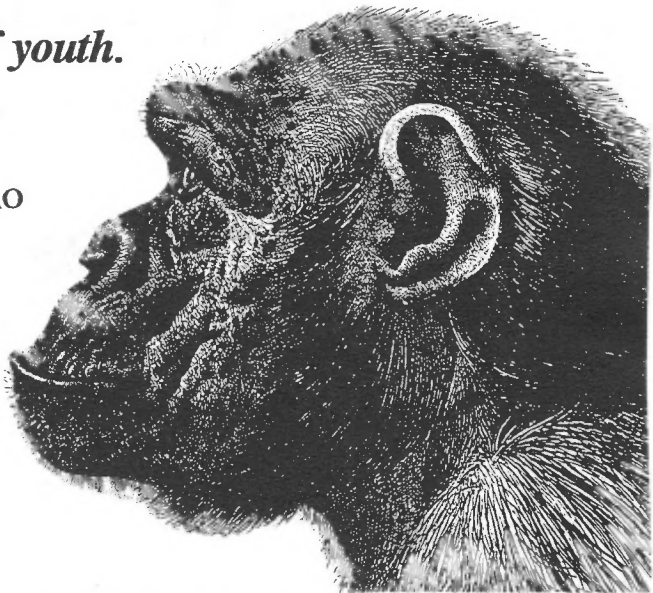
  
Alfred

*Learning is the fountain of youth.  
No matter how old you are,  
You mustn't stop growing.*

DENG MING-DAO

## WISE AND OTHERWISE

*by Michael Buckner*



Clouds are flowing in the river, waves are flying in the sky.  
Life is laughing in a pebble. Does a pebble ever die?

Flowers grow out of the garbage, such a miracle to see.  
What seems dead and what seems dying makes for butterflies to be.

Life is laughing in a pebble, flowers bathe in morning dew.  
Dust is dancing in my footsteps and I wonder who is who.

Clouds are flowing in the river, clouds are drifting in my tea,  
On a never-ending journey, what a miracle to be!

EVELINE BEUMKES

A new study at Washington State University shows for the first time that live interior plants may increase worker productivity and reduce stress.

The study, published in the *Journal of Environmental Horticulture* reports that productivity increased 12 percent when people performed a simple task on a computer in a room with plants compared with workers who performed the same task in the same room without plants.

The task was stressful. Blood pressure for both groups rose during the task, but only two points for people tested with plants, while it rose four points for people tested without plants. The average blood pressure for both groups before the test was roughly the same.

... "We have not been able to find other studies that document worker productivity in the presence of live plants," said Virginia Lohr, a WSU horticulturist. Her research focuses on the effects of plants on people. ...

... The researchers can't explain how plants help people relax and perform better. "There are two major theories I'm aware of that could account for this," Lohr said. "One relates to reduced blood pressure. A number of studies have documented that plants or nature can lower blood pressure. By somehow causing us to be more relaxed, plants help us be more productive and focused."

She said other people think that plants may reduce mental fatigue. "One of the things that happens when you suffer mental fatigue is that you no longer are able to make good decisions."

"Plants are not just fluff," she said. "We have felt and many people who work with plants intuitively believe, that having plants around us is vital to our well-being."

**Landscape & Irrigation**, volume 20, number 10 — October 1996; <http://www.aip.com>.

*"If we value the pursuit of knowledge we must be free  
to follow wherever that search may lead us."*

— ADLAI STEVENSON

### Tree

Did you measure to attain your height?  
Did you use geometry to radiate your limbs?  
Did you lament storm-torn branches?  
Did you inventory your leaves for the sun?  
You did none of these things, yet man in his  
cleverness  
Cannot match your perfection.

DENG MING-DAO

## WISE AND OTHERWISE

*"The earth was the world and man was its measure, but our minds  
have looked  
Through the little mock-dome of heaven the telescope-slotted  
observatory eyeball, there space and multitude came in  
And the earth is a particle of dust by a sand-grain sun, lost in a  
nameless cove of the shores of a continent."*

— Robinson Jeffers, "Margrave"

Although mucilage is generally considered to be a nuisance, one cactus, *Ariocarpus kotschoubeyanus*, has such a fine-quality mucilage that it was and still is used as a glue for repairing pottery by Indians in Mexico.

The simple, single mucilage cell is found throughout the cactus family. Some species also have large mucilage reservoirs, where all or nearly all the cells in a particular region of the stem or root produce mucilage. . . . Mucilage is produced in canals in the famous species of *Ariocarpus*, which are well known to natives who use the mucilage as a type of glue. In the tribe Cactaceae — specifically in the "milky" and "semi-milky" mammillarias (for example, *Mammillaria gummifera*), the canals produce thick, sticky, white or off-white "latex". In these species the canals are produced from long rows of cells, several cells across, that break down to form a wide tube, which contains mucilage and all of the cellular debris.

THE CACTUS PRIMER by Arthur Gibson & Park Nobel, Harvard University Press, Cambridge, MA; 1986.

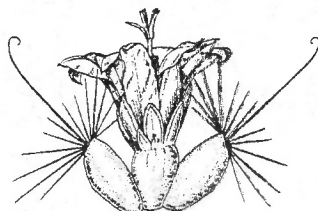
Yes, the young sparrows  
If you treat them tenderly  
Thank you with droppings.

ISSA KOBAYASHI (1723-1828)

**The San Diego Cactus & Succulent Society, Inc.  
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***Espinas y Flores***

Editors: Michael and Joyce Buckner - (619) 222-3216  
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