

Espinas y Flores

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

MAY MEETING

Saturday May 8, 1982

1:30 pm

Casa del Prado, Room 101, Balboa Park

PROGRAM FOR MAY Second Annual Mini-Show

This educational program is planned for member participation. It is our opportunity to learn how to present plants for judging. Everyone bring a plant and enjoy the fun.

JUDGES:

- Group one: Madelyn Lee
Dr. Leroy Phelps
- Group two: Shirley Berry
Joan Johnson
Beverly Kirkegaard

- * The Brag Plants will not be discussed this month due to the length of the Mini-Show Program
- * There will not be an exchange of plants at the exchange table.
- * It is requested that the 1981 winners of plaques or trophies bring them to the May meeting for use in the June 1982 annual show.
- * Club sales table will be set up and the Library will be open.

Award are cash for winners and Participants can leave personal plant identification on plants.

IN THIS ISSUE	Page
News of Interest.	2
Echinocereus Engelmann..F.C. Thrombley.	3
Haworthias and Astrolobas (Liliacease).. Dorothy Dun.	5
Insert..Annual Show and plant sale information	

NEWS OF INTEREST

%%%%%%%%%%

From the Board meeting: It was approved to purchase THE NEW HAWORTHIA HANDBOOK by Bruce Bayer for the Library.

Welcome to our New Members:

Evelyn Diamond, San Diego, - Jane Forbis, El Cajon - Mr. and Mrs. Robert Hufner, El Cajon - Dr. Maynard W. and Marilyn Lemrow, Spring Valley

Bragging Table Winners were:

- 1st - Dave Grigsby for his Pachypodium rosulatum
- 2nd - Dorothy Dunn For her Mammillaria canelensis
- 3rd - Dorothy Dunn for her Neochielenia napina

Much Thanks to:

- Shirley Berry
- Mildred Anderes
- Jim Dice
- 2 unknown/ anonymous for their plant donations-----

The Library wishes to thank MADELYN LEE for giving us Bothalia June 1979 (Including a work on genus Farcocaulon) by Ro Moffett

Refreshment: or those who have signed up to bring all the goodies Jan Miller, Judy Hannula, Marianne Thrombley, Ellen Low, Mary Aubuchon, Peg Bryant, Alana Rillo, Elizabeth Glover, Perlso Lewis, Marcia Monroe.

The Flower Show Schedule for May

May 1 & 2	Exotic Plant Society Show	Sat: 11am - 5pm	Sun. 11 am - 5
May 9	San Diego Epiphyllum Show	Sun: 11am - 5pm	
May 15 & 16	San Diego Geranium Show	Sat: 12pm - 5pm	Sun.10am - 5
May 22 & 23	San Diego Bromeliad Show	Sat: 11am - 4:30	Sun.11am -4:30
May 29 & 30	Heartland African Violet Show	Sat: 12pm - 5pm	Sun.11am -5
May 29 & 30	San Diego Botanical Garden Fdn Annual Sale	Sat & Sun. 10am - 5 pm	
June 5 & 6	San Diego Cactus & Succulent Show	Sat. 1pm - 5pm	Sun. 10am - 5

The Annual Bontanical Plant Sale will be held in the Casa Del Prado Patio on May 29 and 30. Any cuttings, bulbs, or other plants that you can donate will be appreciated. Bring them to the Botanical Library (Casa Del Prado Room 104), on Friday, May 28 or to the patio on Saturday or Sunday, May 29 and 30.

Don't miss the wonderful garden classes held each Saturday morning in the Casa Del Prado Botanical Library, Room 104, from 10:30 to noon.

EDITORS NOTES: There are extra copies of the Espinas Y Flores on the President's table each meeting.

Remember, if you would like to contribute anything to the newsletter, please bring to the next meeting or mail to me before the deadline. Address on back. Mary

DEADLINE FOR JUNE ISSUE: June 1--I really do nothing until that date, but after that!!!!

Cactus-of-the-Month

Echinocereus Engelmann

F. C. Thrombley

Echinocereus (ē-kī'-nō-sē'rē-ŭs). A genus of cacti from the United States and Mexico. They are found in the states of Arizona, California, Colorado, Nevada, New Mexico, Oklahoma, Texas and Utah. They inhabit all of northern Mexico south to Mexico City and throughout Baja, California. Echinocereus viridiflorus was also reported by Britton and Rose, to be found in southern Wyoming to eastern New Mexico, western Kansas, western Texas and South Dakota, growing in the grassy plains.

These plants are always low growing, a few species reaching a height of 18 to 24 inches. Most of them stay under 12 inches in height when mature.

The plant body of some species remains a single, unbranched stem throughout its life. Many, however, form cluster of stems almost from the start. Others cluster or form branches sparingly when they mature. The stems are not divided into joints, but some species will have clusters of stems in one plant that will make a clump of up to 100 stems. A most impressive sight to see these flat masses or mounds with their golden spines.

The flowers of this genus are generally very large and indeed beautiful. The colors range from red through various shades of purple, lavender, pink, yellow and green. The surprise in this genus is that the flower buds, as well as the young shoots, are deep-seated in their origin and do not appear just at the areoles as in most cacti, and hence must break through the epidermis when they develop. They may be produced from almost any point on the stem, different species bearing them high or low.

The fruits are fleshy, thin-skinned and often edible. The fruits are also spiny, but the spines become loosened as the fruits mature, and may be easily brushed off. The fruits of E. dasyacanthus have been used for jams.

The spines are very variable. They may be straight or curved, but never hooked. The "Pectinati" species have a comb-like arrangement of spines, which are conspicuous and colorful. On some species the spines have different color bands which is very attractive.

In nature these plants grow in exposed places on dry slopes and hills, and on grassy plains in the full strength of the sun. They are intolerant of excessive moisture and must have good drainage. Most of the species grow in frost or cold areas on slopes, and some at very high altitudes. In cultivation they must have a porous soil to grow in, and careful watering in the winter months. They are slow growers, but for me very rewarding plants to cultivate. The flowers are outstanding and the intricate spines with their various colors are indeed worthy of having them in any collection.

The first Echinocereus was discovered in 1846 by Dr. Wislezenus. Engelmann treated it as a subgenus of Cereus and named it E. viridiflorus, with its description, in 1848. Britton and Rose accepted this in the genus Echinocereus and it became the type species. It also extends further north than any other species of the genus.

With 80 or more species described at present, and their many varieties, this would certainly be a good genus to specialize in. The hobby would be enriched with the knowledge gained while enjoying ones self for a life-time.

References used:

The Cactaceae - by Britton & Rose

Cacti of the Southwest - by Del Weniger

Cacti of the Southwest - by W. Hubert Earle

THE HUNTINGTON

Within the park-like grounds of the Huntington are a Library, with a wealth of manuscripts and rare books in the fields of American and English literature and history; an Art Gallery, with a distinguished concentration of British art; and Botanical Gardens, with a dozen specialized gardens of note.

The Huntington is a place of learning and a place of beauty. Above all, it is a place for people.

The bus to Huntington will leave the parking lot southwest of the Speckles Organ Pavillion at 7:30 a.m. on Saturday, May 15. North County passengers will be picked up at Hadleys, Palomar Airport Road and Interstate 5 at 8:15 a.m. We will board in the sequence that the \$10.00 per person fee was received. At this time three seats are available on the bus.

We will spend a leisurely two to three hours touring the Desert Garden with Jim Dice and Joe Clements as our guides. There will be ample time for photos, asking questions Etc. before the general public is admitted. Be sure to bring a hat, comfortable walking shoes and plenty of film.

At 1:00 p.m. we will be taken to the cafeteria where soup, sandwiches, salads, desserts, drinks etc. are available. Lunches CANNOT be taken into Huntington NO FOOD or DRINKS ALLOWED ON THE GROUNDS. So eat a big breakfast, bring munchies for the bus or whatever you need to survive till 1:00 p.m.

After lunch you will be free to visit any of the gardens, the library or the art museum. We will reboard the bus and head home at 3:00 p.m. Don't forget a hat and comfortable walking shoes.

SPECIAL NOTICE----

If anyone who was on the Anza-Borrego outing has any extra prints or negatives from their picture taking Please send them to Paul Johnson - 3599 Via Zara -

Fallbrook, CA 92028

They will be used in a display- But they will NOT be returned.

Succulent-of-the-Month
HAWORTHIAS and ASTROLOBAS
(Liliaceae)

Dorothy Dunn

Haworthias and Astrolobas are both members of the large and varied Liliaceae family, which is familiar to all of us for such non-succulent favorites as tulips, hyacinths, and lilies, as well as asparagus and onions. They are closely related to Aloes and originally, along with Gasterias, were all lumped together under the broad classification of Aloe.

Haworthia is a very large genus of usually very dwarf leaf succulents, and is named after Adrian Haworth, a noted English botanist and collector. Depending upon which authority you consult, there are anywhere from 68 (Bayer) to 162 (Jacobsen) to almost 400 described species, varieties, and forms of species, with "new" ones still allegedly being discovered. According to Myron Kimmach in his review of Bayer's Haworthia Handbook (Cactus and Succulent Journal, March-April, 1979): "Haworthias are notoriously variable, many varieties or species gradually merging together in the field; as the intergrading forms do not often find their way into cultivation, the taxa may seem more distinct in collections than they really are in nature. One regrets to see Bayer reducing familiar names to synonymy, or, at best, to varietal status, but, with his advantage of field experience one can hardly reject his decisions."

A few species of Haworthia were known as early as 1700, and by the latter part of the 18th century quite a number had been introduced into Europe from South Africa. They are native to South Africa exclusively, with the coastal fringes of the Little Karroo seeming to have the greatest concentration of different species. They usually occur below 2,000 feet, and extend to sea level. They will tolerate temperatures well over 100 degrees down to within a few degrees of freezing. In habitat they are frequently protected by the shade of grass, bushes, or rocks, but some species, such as H. setata, H. piliifera, H. margaritifera, H. viscosa, H. retusa, and H. attenuata may often be found growing in full sun on rocky ground. Under these exposed conditions the plants are usually well withdrawn into the soil with just the upper parts of the leaves visible. Other species occur in almost complete shade in valleys rich with vegetation, including mosses. The soils in their natural habitats are always well-drained and rich in minerals.

In complete contrast to other genera, vegetative characteristics have always been the predominant basis for classification in Haworthia, and until fairly recently the genus was divided into 20 sections (Berger), with certain characteristics of each plant determining its placement in a particular section. This division was based primarily on the position and form of the leaves. In a much broader concept, you could also say that the genus is separated into just two very general sections: one consisting of those plants with very rigid, usually dark green leaves, often with a roughened texture or heavily tubercled (H. reinwardtii and its varieties, H. coarctata, H. limifolia, H. margaritifera, H. fasciata, etc.), and the other comprising

those species with highly-succulent, lighter green and usually "windowed" leaves (H. cymbiformis and its varieties, H. retusa, H. venosa, H. truncata, H. maughanii, etc.). An excellent article by Werner Rauh explaining the "window leaf" phenomenon in Haworthias as well as other succulent genera appeared in the January-February, 1974 issue of the Cactus and Succulent Journal. Also, Bruce Bayer's Haworthia Handbook presents an exhaustive examination of many species of Haworthia, and proposes a revision of the nomenclature. Mr. Bayer says "The real problem in Haworthia has been and still is the question of deciding just what constitutes a species. No progress will be made toward a stable and rational nomenclature until names are firmly attached to field populations."

In their natural habitats Haworthias have developed various interesting ways of protecting themselves from extreme weather conditions during the hot dry season. In many of the longer-leaved forms, the leaf ends wither and turn brown, thus decreasing the leaf area exposed to the sun. Some of the more "warty" or tubercled species fold their leaves closely inwards, presenting the rough backs to the sun, and shading and protecting the growing point of the plant. The white tubercles themselves seem to play some part in protection from the sun; some experts believe they actually reflect the sun's glare off the leaf, while others theorize that they are another form of "window". Many species have tough, leathery leaves, and some of the more pronounced windowed varieties have contractile root systems which literally pull the plants down into the soil, leaving only the windowed tips visible. It is through these "windows" that light is assimilated into the interior of the plant body. Some species have also apparently developed protective colorations to escape the ravages of animals, such as H. browniana which grows in the wild in the open in reddish soil next to a ledge of rocks. Although they form large clusters and are prominent plants, they are not easily seen as they blend so well with the surroundings; the ledge of rocks is banded in a way which blends with the markings on the leaves.

Haworthias are a good choice for the collector with limited space. They are not difficult to grow, they are moderately slow-growing and never attain any great size, although some varieties do cluster prolifically with age. They will never set the world on fire with exquisite colorations of foliage or spectacular flowers, but they have a definite appeal for those with an eye for symmetry and an appreciation for form. They come in all imaginable shades of green, from pale green through blue-greens to almost black-green. The windowed varieties are fascinating, some almost resembling chunks of translucent glass, and the heavily-tubercled species look as though they are covered with tiny white glistening pearls or sprinkled with sugar. While many people consider their flowers to be insignificant - they are mostly whitish-green and small - they also possess a charm all their own, as they resemble miniature lilies. Some of them produce surprisingly large seed capsules after blooming, and now and then one will put out a new little plantlet along the bloom-stalk. Because of their small

size, slow growth (sometimes excruciatingly slow, as in the case of H. viscosa and H. nigra) and wide range of interesting forms, they make ideal pot plants. However, many of them will do just as well in the ground, given proper conditions of light and drainage. They do need good drainage, and a fairly shady location to look their best. They are sensitive to strong sunshine and, when exposed, will quickly show their aversion to it by turning a reddish-brown color. However, they will usually "green up" again just as quickly when they are moved back again into the shade. They may go somewhat dormant during the peak summer temperatures; during this time they should be given less water, as well as during the coldest part of winter. They are reasonably tolerant of most succulent soil mixtures as long as excellent drainage is provided. Even with adequate precautions for drainage some species have a tendency to rot off at the roots with age (John Pilbeam believes this may even be a natural process connected with dormancy), but are generally easy to re-root.

Pests and diseases are few; mealy-bugs can sometimes be a problem in the center of the rosettes and, believe it or not, Haworthias can get SCALE.

Propagation is usually by offsets - it's possible to grow them from seed, but of doubtful value because they hybridize so easily. Many species may also be grown from leaf cuttings if you have a considerable amount of patience.

Astrolobas are very closely related to Haworthias and were originally known as Apicras. Jacobsen lists 17 species and varieties; the J.R. Brown list consists of about 30, including some unnamed species. The main difference between Haworthias and Astrolobas lies in the flower structure; otherwise most of the above information applies about equally well to both genera. All Astrolobas seem to be very slow-growing, and appreciate shade. To this date, I have had no success in growing any of them from leaves.

References used:

- | | |
|---------------|---|
| Bayer, M.B. | Haworthia Handbook |
| Brown, J.R. | Notes on Haworthias (<u>Cactus and Succulent Journal</u> , various issues) |
| Haselton, S. | Succulents for the Amateur |
| Jacobsen, H. | Lexicon of Succulent Plants |
| Pilbeam, J.W. | The First Fifty Haworthias
The Second Fifty Haworthias |
| Rauh, Werner: | Window-Leaved Succulents (<u>Cactus and Succulent Journal</u> , Jan.-Feb., 1974) |
| Swan, Robert: | Growing Haworthias (<u>Cactus and Succulent Journal</u> , Nov.-Dec., 1976) |

THE PROGRAM FOR MAY will be the second annual mini-show for members only. All of us should participate in this show for the fun, education and the prizes. It will also be the "warm-up" for the societies' annual show, which will be held June 5th & 6th this year.


RULES FOR PARTICIPATION


1. The show will consist of two groups of people: First Group will be made up of all new members, members who have not participated in past SDC&SS shows and members who have not won blue or first place ribbons in past SDC&SS shows. Second Group will be made up of the members who have won blue or first place ribbons in past SDC&SS shows.
2. Judges will not be allowed to enter plants in the show. There will be two sets of judges, one set for each group. Their names will be published in the May bulletin.
3. All participants will bring one cactus or succulent plant only, to enter in the show. The size or species does not matter. Bring your best plant with the intention of winning.
4. All plants must be labeled. We will use the societies' card identifier (see sample below) for identification. These cards will be distributed at the April and May meetings.
5. There will be a first, second, third, and honorable mention awarded in each group. The two groups will not compete against each other. There will be prizes for each award.

Last year there were 54 entrants. Lets all participate this year and show our favorite plant.

Fill the card in with the proper information. Div. and class is not required in this show.

Fold top of card under as shown. Place card under pot so that your name is not visible.

DIV. <u> </u> CLASS <u> </u>		
VARIETY <u>FEROCACTUS</u>		
<u>GRACILIS</u>		
Name <u>JOHN DOE</u>		
Address <u>SAN DIEGO</u>		
1st 0 AWARD	2nd 0 AWARD	3rd 0 AWARD
1st 0 AWARD	2nd 0 AWARD	3rd 0 AWARD
Name <u>JOHN DOE</u>		
SAN DIEGO CACTUS and SUCCULENT SOCIETY		
		
DIV. <u> </u> CLASS <u> </u>		
VARIETY <u>FEROCACTUS</u>		
<u>GRACILIS</u>		

1st 0 AWARD	2nd 0 AWARD	3rd 0 AWARD
1st 0 AWARD	2nd 0 AWARD	3rd 0 AWARD
Name <u>JOHN DOE</u>		
SAN DIEGO CACTUS and SUCCULENT SOCIETY		
		
DIV. <u> </u> CLASS <u> </u>		
VARIETY <u>FEROCACTUS</u>		
<u>GRACILIS</u>		

SAN DIEGO CACTUS & SUCCULENT SOCIETY

OFFICERS

President - Rick Latimer
5990 Lake Murray Blvd., La Mesa, CA 92041
1st V. Pres. - Frank Thrombly
16333 Roca Drive, San Diego, CA 92128
2nd V. Pres. - John Pasek
10283 Covina Place, San Diego, CA 92126
Recording Secretary - Beverly Kirkegaard
10009 Bonnie Vista, La Mesa, CA 92041
Treasurer - Joan Johnson
3599 Via Zara, Fallbrook, CA 92028
Corresponding Secretary - Anna Cornett
3905 Ibis St., San Diego, CA 92103
Immediate Past pres. - Tom Hamecher
996 Terrace Crest, El Cajon, CA 92020

BOARD OF DIRECTORS

Warren Buckner, Dorothy Dunn, Phyllis Flechsig
Madelyn Lee, Dr. Ronald Monroe, Dr. Leroy Phelps

COMMITTEES

Activities: Warren Buckner
Audit: James Berry
Conservation: Dr. Ronald Monroe
Education:
Cacti - Frank Thrombly, Dr. Ronald Monroe and Mark Donnell
Succulents - Madelyn Lee, Dr. Leroy Phelps and Dorothy Dunn
Exhibits:
Bragging Table - Shirley Berry
Historian: Rick Latimer
Library: Elizabeth Athy, Ruth Nelson and Caroline Miller
Membership: Joan Johnson
Open House: Frank Thrombly
Plant Exchange Table: John Roth
Plants & Supplies Table: John Pasek and Gerald and Eleanor Dice
Publication: Mary Aubuchon - 427-3388
Reception: Rose D'Atillio and Perlso Lewis
Regalement: Nancy Roth
Representative:
Balboa Park Desert Garden - John Pasek
Quail Botanical Garden - Audrey Johnson
S. D. Botanical Garden Foundation - Elizabeth Glover
S. D. Floral Association - Verna Pasek
Liaison & Publicity - Anna Cornett
Orientation - Nellie Kennet

The San Diego Cactus & Succulent Society is open to all persons interested in growing cacti, other succulents and exotic plants. Meeting 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 \$7.00 per family. Single copies of Espinas y Flores are 60 Cents.

Editor
Mary Aubuchon
1058 5th Avenue
Chula Vista, CA 92011

FIRST CLASS

FIRST CLASS

FIRST CLASS