

MAMMILLARIA THORNERI

Espinas y Flores

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

Volume XXIV, Number 8

August 12, 1989

AUGUST MEETING

Saturday August 12, 1989

1:30

Casa Del Prado, Room 101, Balboa Park

PROGRAM

SANSEVARIA

B. Juan Chahian

B. Juan Chahian has written about Sansevaria Trifasciata varieties. He is from Reseda, California. He works as a structural stress engineer. This will be a slide presentation.



Sansevieria trifasciata 'Laurentii'

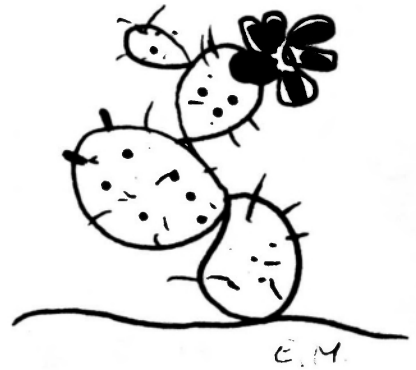
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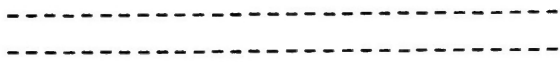
DEADLINE FOR THE SEPTEMBER ISSUE -----August 26, 1989

Thanks Mary



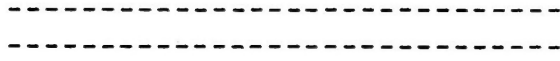
JULY BRAGGING TABLE WINNERS

- 1st Place.....CARL DYKEMA for his Dish Garden
- 2nd Place.....ED BLACKMAN for his Ceropogia distincta
v. haygarthia
- 3rd Place.....TERESITA LIME for her Euphorbia susannae



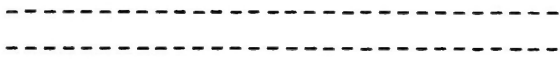
WELCOME TO NEW MEMBERS

- | | |
|----------------------------|--------------------------------------|
| Joan Nimick - La Jolla | Scott and Michelle Grier - San Diego |
| Kenneth Goff - San Diego | Barbara Zarr - San Diego |
| Paul Henderson - Oceanside | |



Those who have volunteered to bring refreshments to the August meeting Are:

- | | |
|-----------------------|--------------------|
| Mary Ann Alexanderson | Mark St. Clair |
| Curt Hammel | Laura De Merritt |
| Joan E. Fleeer | Susan Barker |
| Beverly Kirkegaard | Bob and Sue Marder |
| Teresita Lime | |

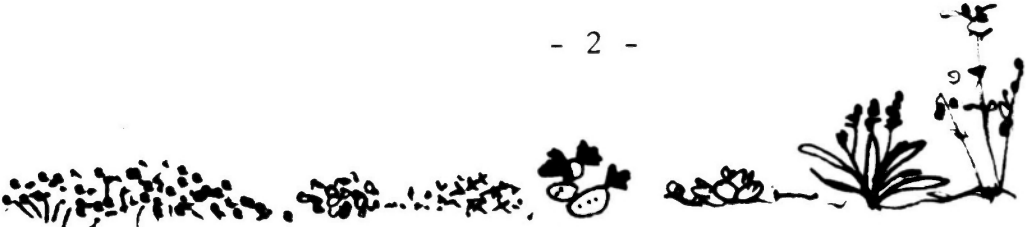


ANNOUNCEMENTS ----

Please don't forget to pay for the plants that you bought at the picnic.

Name tags are on sale \$3.00. See Pearlso Lewis. She must have 10 orders.

If you would like help from Rudy Lime with your Bonsai. Call him at 264-2306
He will be meeting before our meeting by appointment only.



SUCCULENT-OF-THE-MONTH

Sempervivum and Jovibarba

by Rick Latimer

The Stonecrop or Orpine family (Crassulaceae) consists almost entirely of leaf succulents. Some exceptions would be the deciduous (in summer) Cotyledons such as C. paniculata. However the rest of the family (including the stem succulents!) have succulent leaves in rosettes that are very often found growing low on the ground (although there are arboreal species such as Sedum oxypetalum and Kalanchoe beharensis). The family is distributed worldwide (but not in the South Pacific and is poorly represented in South America), but there are rich pockets such as Mexico (Echeverias), the Californias (Dudleya), and South Africa (Crassula). All members of this family have flowers of remarkable symmetry - with an equal number of petals, sepals, and pistils and either as many or twice as many stamens. The most common number of petals is five (as in the subfamilies Cotyledonoideae, Crassuloideae, and Echeverioideae), but may be only four (as in Kalanchoideae) or six to fifteen or as high as thirty-five in the subfamily Sempervivoideae.

This last subfamily (Class 35 in our Show) includes such genera as Aeonium, Aichryson, Greenovia, and Monanthes; which are native mostly to the islands off the northwest coast of Africa (especially the Canaries). The genus that gives its name to this subfamily is Sempervivum (or 'live forever') and is either divided into two subgenera or two genera according to ones preference. The other one is Jovibarba (or 'Jupiter's Beard') although some authorities prefer the name Diopogon. All species in both genera are stemless or short stemmed succulent perennial plants. All are rosette in form and are monocarpic (and bloom from the center of the stem). Since the rosettes die after flowering, plants may be propagated from offshoots (hence "Hens and Chicks") or seed. The plants look alike until they bloom. Sempervivums have erect flat flowers (like Aeoniums) while Jovibarbas have erect bell-shaped to almost tubular flowers. The first genus usually has flowers with 8 to 16 petals, while the latter genus has flowers with only 6 or 7 petals.

Flower colors range from white (S. arachnoideum [a special form of]), greenish white (J. allionii), yellow (most Jovibarbas, many Semps. such as S. grandiflorum), pink (S. atlanticum), carmine (S. cantabricum), to purple (S. montanum). Some flowers are multicolored such as S. borisovae with rose red to purple flowers with white serrated margins, or S. octopodes with yellow petals with red at the base. Leaves range from light green (J. allionii) to dark green (S. wulfenii). Under bright light in the summertime, these green plants may change to reds and purples. Some have smooth leaves (S. wulfenii), many have hairy leaves (S. ciliosum), while the popular S. arachnoideum, the name deriving from the geometric 'cobweb' that forms naturally in each rosette. Rosette sizes range from under an inch (J. arenaria) to ones with 2 inch long leaves such as S. 'rubra Ash'. One rarely sees crested plants, but a monstrose plant called 'Oddity' was widely marketed a few years back.

S. arachnoideum (which commonly has red flowers) is native to the Pyrenees, Alps, Appenines, and the Carpathians. The Caucasian Mountains have a number of native species such as S. borrisovae. Other areas with habitats are Morocco (S. atlanticum - Atlas Mts.), Spain (S. nevadense - Sierra Nevada [by the way the highest mountains in Spain not the Pyrenees]), Jugoslavia (S. macedonicum), Turkey (S. minus), and Iran (S. iranicum). Since the plants are native to mountain areas, they are found commonly grown in Alpine gardens. Panayoti Kelaidis of the Denver Botanic Gardens recommends growing them on top of rocks (ones with depressions on top) or in cracks between rocks. P. J. Mitchell recommends a rich but well-drained soil. Those plants from more southerly native habitats tend to be less frost and snow tolerant (not a great concern here) some of the others. Some of the nicest plants I have seen were grown by the Goodson's of Wichita, Kansas. Plants are said to go dormant in the Fall and Winter.

I hope somebody brings some plants in to show, as of this writing I do not have any.

REFERENCES:

David H. Ahl, The Best of Creative Computing, p. 149

Hermann Jacobsen, Handbook of Succulent Plants, Vs. I & II

P. J. Mitchell, The Sempervivum & Jovibarba Handbook

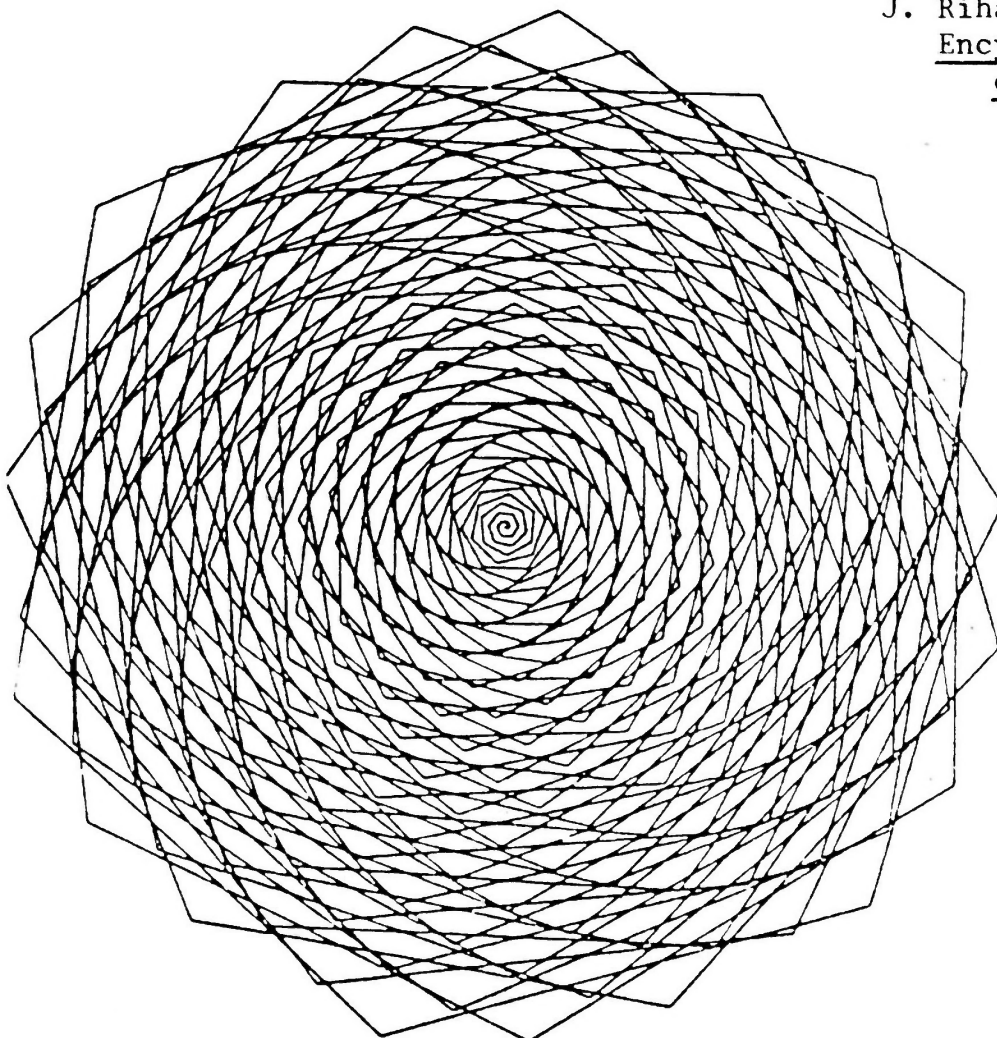
Helen E. Payne, Plant Jewels of the High Country

Gordon Rowley, The Illustrated Encyclopedia of Succulents

J. Riha & R. Subik, The Illustrated Encyclopedia of Cacti & other Succulents

W. J. Tjaden, "Jovibarba sobolifera", ASPS (IV:2 & 5), pp. 40-43 & 167-170.

P. S.: There are about 35 species of Sempervivum & about 5 species of Jovibarba. Also there are many varieties and hybrids both natural and otherwise of Sempervivum.



This design is a plot of the equation, $r = \sin(1.25) * \theta$. The 360 points generated were connected by vectors to produce the spiral shown. The design is by Steve Rogowski, Computing Center, SUNY, Albany, N. Y.

MARY-- PLEASE INCLUDE THIS NOTE IN NEXT E&F. THANKS.

At the May meeting I announced that I would be conducting an inventory of the Society's non-cash assets in the near future. That task has been completed. Here is a list of the major items I found:

- an IBM Selectric Typewriter (used by our E&F Editor)
- a large piece of shade cloth (I have it; we use it at the plant sale each year)
- many beautiful books and two bookcases (maintained by our Librarian)
- many fine trophies (kept by the winners)
- pots and plant sale supplies (cash boxes, adding machines; used by Plant & Supplies Chairman)
- historical records of the Society (maintained by our Historian)
- a slide projector (used at all the meetings)
- a mimeograph machine, some outdoor lighting equipment, and some antique sound equipment (we never use it, and it clutters up our storage lockers)

This may not seem like a lot--but it's all we need.

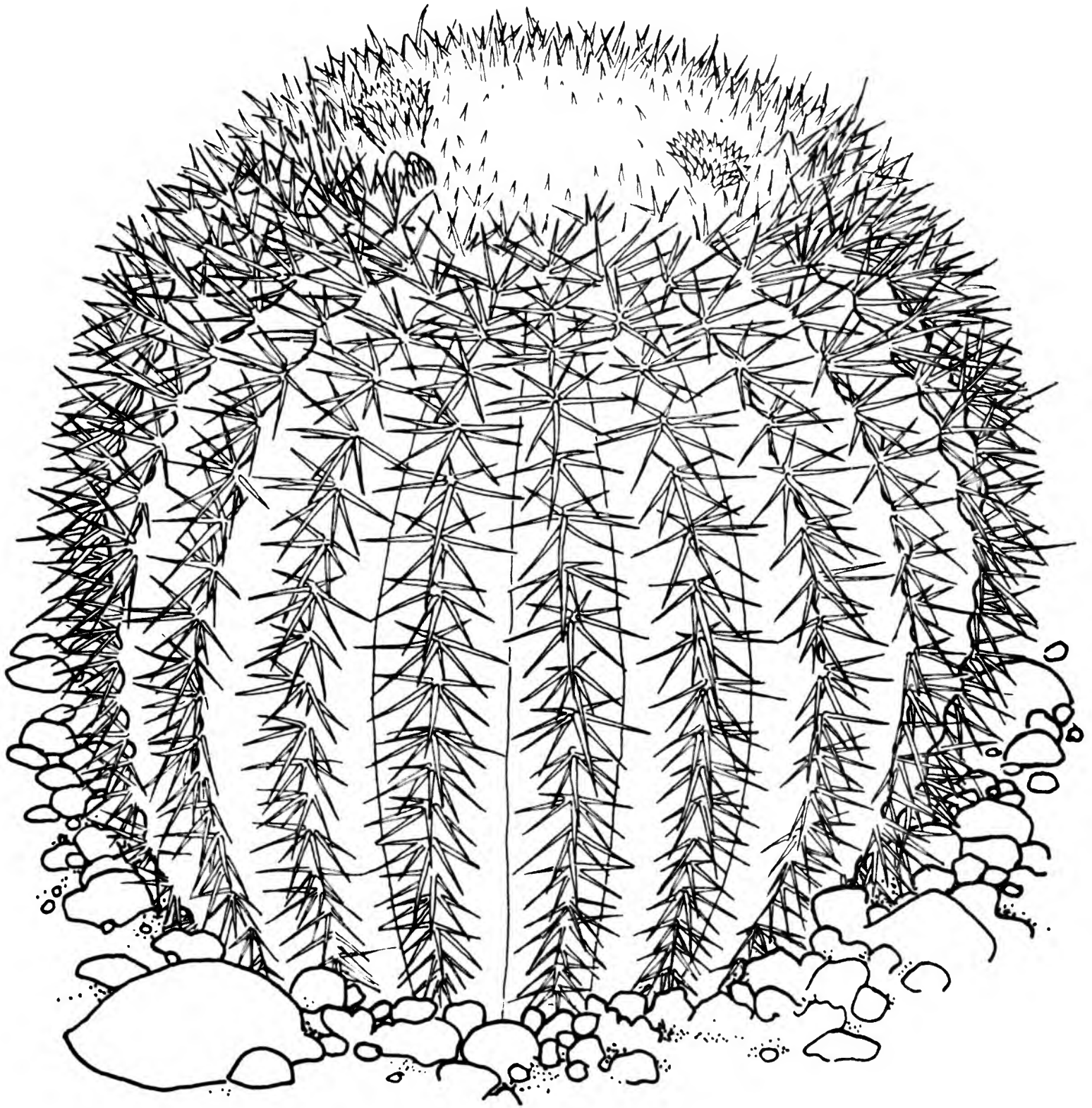


C. L. Adams

SHOW SCHEDULE FOR AUGUST AND SEPTEMBER

Shows are held at the Casa del Prado unless otherwise indicated.

Aug.	5	&	6	San Diego Co. Dahlia Society Show	Sat: 2pm-5pm	Sun 10am-4:30pm
Aug.	19	&	20	San Diego Fern Society 11th Show	Sat: 1pm-5pm	Sun: 10am-5pm
Aug.	26	&	27	San Diego Turtle & Tortoise Soc. 15th Show	Sat:10am-5pm	Sun:10am-5pm
Sept.	2	&	3	San Diego Prof. Horticulturists 6th Show	Sat:10am-5pm	Sun:10am-5pm
Sept.	16	&	17	San Miguel Begonia Show	Sat:10am-5pm	Sun:10am-4pm
Sept.	30	&	Oct.1	San Diego Bonsai Club Fall Show	Sat:10am-5pm	Sun:10am-5pm



ECHINOCACTUS GRUSONII (*Golden barrel cactus*). Mexico. A slow-growing globular plant which may reach a diameter of two feet at maturity. Young plants appear to have prominent tubercles which fuse as the plant matures,

forming ribs covered with golden spines. Young specimens may be grown indoors in bright sun with average soil and watering. A cool, dry winter rest period is essential. Only mature plants bear the yellow flowers.

Cactus-of-the-Month

ECHINOCACTUS

By Dorothy Dunn

Prior to the publication of Britton and Rose's The Cactaceae in 1920, virtually all globular cacti, with the exception of Mammillarias, were classified as Echinocacti. This included a host of seemingly disparate genera such as Astrophytum, Frailea, Echinofossulocactus, Gymnocalycium, Notocactus, Parodia, and, of course, Ferocactus, to mention just a partial list. Since this encompassed about 138 genera with well over 1,000 described species it created a huge, unwieldy, and often ambiguous genus. Britton and Rose subsequently reduced this mass to 9 species while Marshall and Bock, in their Cactaceae, further refined it down to 4 species.

The generic name is derived from the Greek 'echinos' and has variously been interpreted as meaning either "hedgehog" or "porcupine" - an obvious reference to the aggressive spination of the plants. All species are native to the southwestern United States and Mexico. The plants are characterized by very prominent ribs, spines which are straight or curved but never hooked, copious wool at the crown of the plants, and densely wooly fruits. These features, plus the absence of nectar glands, distinguish them from Ferocacti. The flowers of Echinocacti are yellow, except for two species, E. texensis and E. horizonthalonius, and are deeply embedded in the dense mass of wool at the top of the plant. They are usually a little smaller than most Ferocactus flowers.

Echinocactus grusonii, the "Golden Barrel", is by far the most familiar, commonly-grown, and popular Echinocactus, and deservedly so. With its bright green body shining through brilliant yellow spines, its ring of beautiful yellow flowers emerging from a mass of creamy wool, its ease of culture and adaptability to many less-than-ideal soils, it is one of the best and easiest of all cacti for the beginning cactophile to acquire and grow. The plants can live to be several hundred years old, and eventually attain a diameter of at least 30 inches and a height of about 4 feet. The specific name commemorates Hermann Gruson, a German millionaire who possessed one of the finest cactus collections of the last century. In its native habitat in central Mexico (San Luis Potosí to Hidalgo) it is a protected species.

Echinocactus ingens is the largest species in the genus ('ingens' means "huge, enormous, or gigantic") and is possibly the second most widely-grown species. It was discovered and described in 1837 and until 1846 the Royal Botanic Gardens at Kew possessed a specimen with a circumference and height of about 10 feet, which weighed at least a ton. Prior to the Spanish conquest of Mexico E. ingens was regarded as a god by the Aztecs, who used it as an altar for human sacrifices. During

the reign of Montezuma I a temple was erected to this plant in what is now Mexico City. Today, the flesh is candied and sold as a sweetmeat called 'Acitrón'. Many authorities now consider E. palmeri to be synonymous with E. ingens, and Marshall and Bock go even further in uniting E. ingens, E. palmeri, E. grandis, and E. visnaga under the earlier published name E. platyacantha, citing the fact that under similar conditions of climate and soil they are indistinguishable from one another. A constant character in all of these supposedly distinct species is the attractive transverse purple markings which are highly visible on all seedlings.

Echinocactus horizonthalonius probably has the widest geographical range of all the Echinocacti, ranging from Texas, New Mexico, Arizona, a wide area of northern Mexico bordering Texas and Arizona, as far south as San Luis Potosí, where it grows in limestone desert and desert scrub at elevations of 3,000 to 5,500 feet. The spines are conspicuously transversely ringed and often curved like a claw, hence the common name "Eagle's Claw". The showy flowers are pinkish as opposed to the yellow of the foregoing species.

Echinocactus polycephalus is native only to the southwestern United States. In California it occurs in Kern, Inyo, and San Bernardino Counties; in Arizona, Mojave County, and it ranges into Nevada and Utah. It grows in rocky desert or hill areas, or sometimes (in the case of var. xeranthemoides) in woodland at elevations of 4,000 to 5,000 feet. Its growth habit is usually clustering, and according to Lyman Benson the clumps from a distance resemble giant Easter eggs meticulously placed in groups on the rocky hillsides.

Echinocactus parryi, from Texas and the state of Chihuahua in northern Mexico, is often regarded as merely a variety of E. polycephalus. Seedlings are impressively-spined and very handsome, but extremely slow-growing.

Echinocactus (Homalocephala) texensis ranges from Texas through New Mexico into northern Mexico, and usually grows half-hidden among plains grasses from sea-level up to about 1,000 feet. Its sharp downward-curved spines pose a serious menace to both range animals and man, and it is often referred to as the "Horse Crippler". It is a very flat, disc-like plant, and the smallest species in the genus. The flowers are a beautiful satiny pink, with long and somewhat frayed petals. They are very fragrant and last for about 4 days. The fruits are equally striking, being bright red and about the size of small walnuts.

Cultural problems seem to be almost non-existent with the Mexican species such as Echinocactus grusonii and E. ingens (or palmeri). However, the slower-growing southwestern United States

species, particularly E. polycephalus and E. horizonthalonius, require much more attention to drainage and careful watering, needing higher temperatures than the other species. They are particularly sensitive to stagnant moisture. All Echinocacti appear to be relatively pest-free, and should be grown outside, if possible, in very strong light and good circulation of air.

Literature consulted:

Andersohn, Günter:	Cacti and Succulents
Backeberg, Curt:	Cactus Lexicon
Barthlott, Wilhelm:	Cacti
Benson, Lyman:	The Cacti of the United States and Canada
Borg, J.	Cacti
Cullmann, Götz, and Gröner:	The Encyclopedia of Cacti
Marshall, W.T. and Bock, T.M.	Cactaceae
Martin, Chapman, Auger:	Cacti and their Cultivation

**Saturday & Sunday August 19th & 20th, 1989
LOS ANGELES STATE & CO. ARBORETUM
ARCADIA, CALIFORNIA**

4th ANNUAL INTER-CITY CACTUS & SUCCULENT SHOW

9:00 am to 5:00pm

For information please contact:

Larry Grammer

213-599-0856
Woody Minnich

Fred Hutflesz
805-944-2784

818-572-5583

SAN DIEGO CACTUS & SUCCULENT SOCIETY

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Madelyn Lee, Rudy Lime, John Pasek

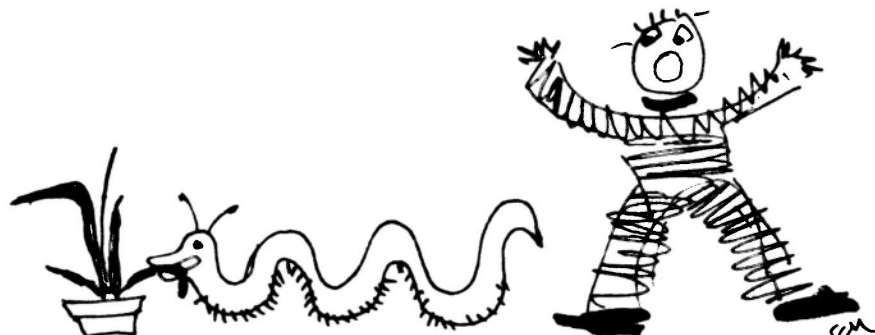
COMMITTEES

Auditor - James Berry
Bragging Table - Madelyn Lee
CSSA Affiliate Rep - Cathy & Sandy Frost
Education: Cacti - Phyllis Flechsig
Succulents - Dorothy Dunn
Historian - Rick Latimer
Membership - Dana Adams
Picnic - Vacant
Plant Exchange Table - Mmes. Lemrow & Larburg
Plants & Supplies Table - John Pasek
Show - Rick Latimer

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Reception - Perlo Lewis & Ethel Standish
Regalement - Diane & Bill Crowley
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Balboa Park Desert Garden - John Pasek
Quail Botanical Garden - Phyllis Flechsig
S.D. Botanical Garden Foundation - Kathy van Arum
S.D. Floral Association - Elizabeth Glover
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The San Diego Cactus & Succulent Society 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 after the general meetings. Annual dues are \$8.00 per single member per year, and \$2.00 for each additional member of a household within the family. Single copies of Espinas y Flores are 60¢.

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