

MAMMILLARIA THORNERI

Espinas y Flores

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

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May 1976

PROGRAM:

Walking Tour through Quail Botanical Gardens, Encinitas, conducted by Mr. Gill Voss. For further details and instructions see page 2-A, detachable for your convenience.

May 10th, 1976, 1:30 pm, at Quail Botanical Gardens, Encinitas, Ca., Quail Garden Drive, in the Ecke Family Building.

CACTUS OF THE MONTH : Echinocereus.

SUCCULENT OF THE MONTH: Senecio.

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MEMBERSHIP: The San Diego Cactus and Succulent Society is open to all persons interested in growing cacti, other succulents and exotic plants.
Dues: \$ 5.00 annually, due in December of each year.
Single copy of E y F : \$ 0.50

Meetings: 2nd Saturday of each month, 1:30 pm, Room 101, Casa del Prado, Balboa Park, unless otherwise indicated. Board convenes after the general meeting.

Deadline for June publication is May 16th, 1976.

CACTUS-OF-THE-MONTH

Echinocereus

Dr. George Radwin

This large North American genus, distributed throughout Mexico and the western United States, comprises perhaps thirty to sixty species (the precise number depending upon the authority one follows). In general Echinocereus species take the form of a cluster of spherical, egg-shaped, or elongate-cylindrical stems joined at or near their bases. In contrast to the stems of Opuntias and more "primitive" cereoids, in which stem branches can continue to grow essentially throughout the life of the plant, the stem-branches of Echinocereus species grow to maximum size (varying with species, individual, and external conditions) and then cease growing (i.e. the growing center at the tip of the branch stops functioning). Stems in which this has happened remain living, the epidermis turning brown or gray. New growth is carried out by new stem-branches arising at or near the bases of the old ones. This eventually produces the typical clumps of approximately equal-sized stem-branches so characteristic of the genus. Areoles are "determinate"; they form their quota of generally long, sharp spines the first season and grow no more spines (again in contrast to other cereoids and Opuntias. With age Echinocereus spines turn gray or black. In spite of this the areolar region remains capable of producing blooms and/or vegetative branches for many years. These don't grow directly from the areole, as in most cacti, but burst through the epidermis directly above it.

Echinocereus species produce large, colorful, day-blooming, bell-shaped or funnellform flowers in shades of red, purple, yellow, or white. The ovary and flower tube are always spiny and the stigma (the end of the female reproductive organ) is usually bright green. The fruit is thin-skinned, colorful, and spiny; the spines are easily removed and the fruits of many species are eaten by humans.

A substantial number of "species" live throughout Oklahoma, Texas, New Mexico, Colorado, Utah, Arizona, Nevada, and California, many in anything but typical desert conditions. In general Echinocereus species can withstand quite low temperatures and even desert species may be better able to survive at high desert altitudes too cool for many other cactus species.

The Echinocereus species with which most Californians are familiar is E. engelmanni, the strawberry cactus of the Colorado Desert; it also ranges some distance into Baja California, where it varies more in spine color and length.

Other species often sought after by cactus enthusiasts are: E. knippelianus, E. pulchellus, E. triglochidiatus, E. delaetii, E. pectinatus, E. reich-
enbachi, etc.

Marshall, W.T. & T.M. Bock, 1941, Cactaceae. Abbey Garden Press, 220 pp.

Moran, R.V., 1972, Echinocereus ferreirianus H.E. Gates. Cactus & Succulent Jour. (U.S.) XLIV: 162-167.

MAY MEETING

The meeting will be held at the QUAIL BOTANICAL GARDENS in Encinitas. (see map)

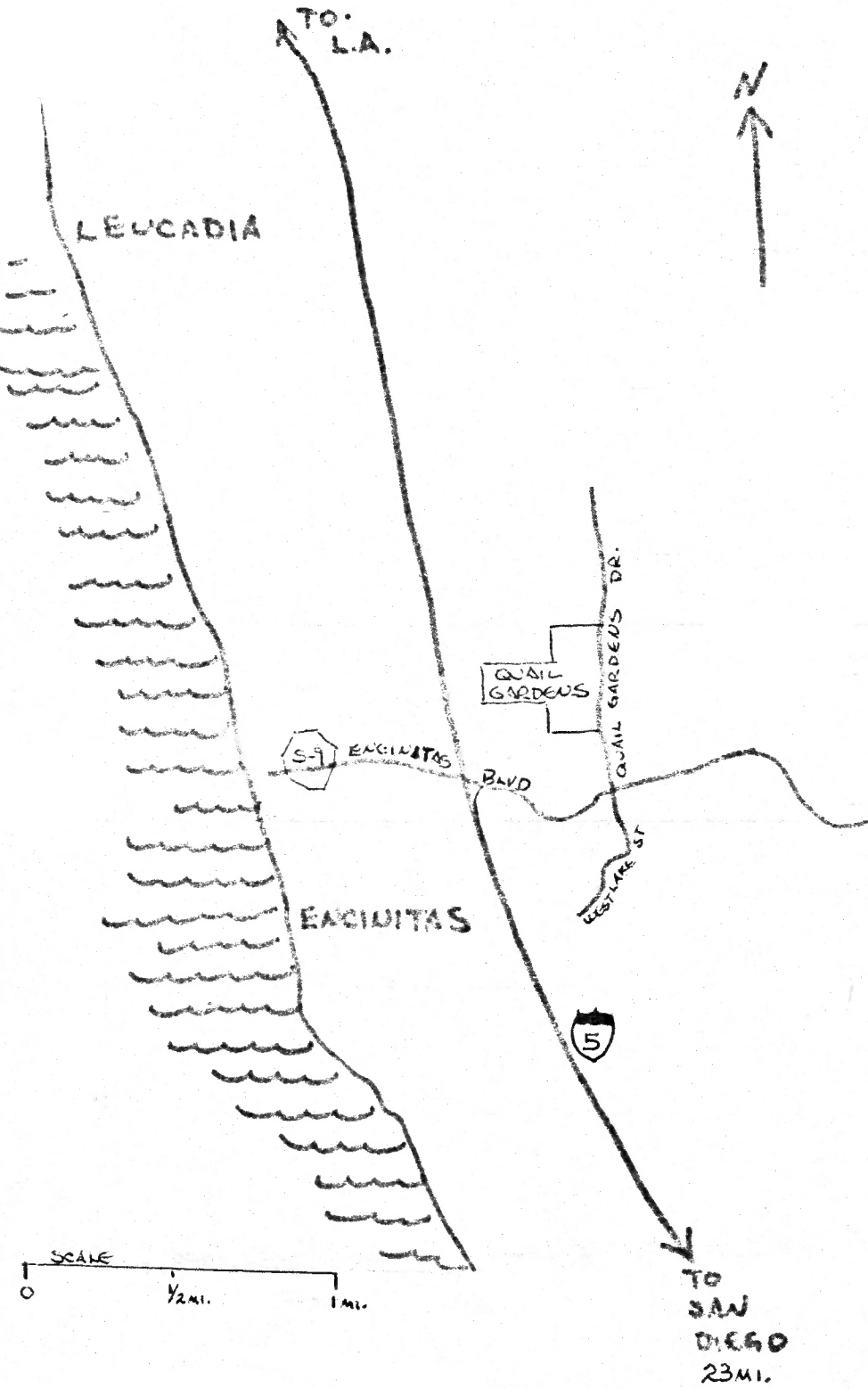
The San Diego Cactus and Succulent Society is a member of the Quail Garden Foundation. The Foundation has invited us to hold our May meeting in the newly completed Ecke Family Building at Quail Gardens.

For the program, Mr. Gill Voss will conduct a walking tour of the succulent related areas of the gardens.

There WILL be a plant of the month table. There will NOT be a drawing table or plant sales.

For those who wish to come early lunch tables are available throughout the gardens. The meeting will start at 1:30 p.m..

Take this opportunity to enjoy and learn about the plants in one of our newer and more interesting botanical gardens.



INTERESTING PLANTS

Harry D. Stewart
Reprinted from CSIE
April 1975, Dec. 1974

Of the numerous Euphorbia species available to growers, E. obesa is quite possibly the best. The first specimens were sent to England at the end of the 19th century, but all of them died because no one knew their requirements. Since then conditions of their native habitat have become known, and this plant is no longer the great rarity it once was, although it still must be considered one of the most beautiful species. It is a pale green spherical plant with red-brown stripes when grown in the sun. As it becomes older it will attain a height of about six inches and becomes columnar. This plant bears either all pistillate or all staminate blooms, so both types must be available in order to produce seed. For that reason, E. obesa has not become commonplace. When seed is produced, the ripe ovary bursts and ejects the seed a considerable distance. Most growers cover the plant at this time with a nylon net (nylon hose is excellent) to prevent the seed from becoming lost. For good growth, the plants need a sunny, warm location, with porous soil. In winter it should be kept in a light, dry place with a temperature no lower than 55°. Propagation is by seed, and the seedlings are sensitive to damp. E. obesa is sometimes grafted onto other Euphorbia stock, in which case the growth rate is increased. It is possible to decapitate the grafted specimen, in which case the remaining portion will produce offsets.

Astrophytum asterias is perhaps one of the best species of this genus. It was first discovered in 1843 by Baron Karwinski in northeastern Mexico. He failed to give the exact location of this plant, however, and it was not until one hundred years later that the plant was rediscovered. It is not an easy plant to find in the wild since it is pulled down into the ground during dry periods. The plant is a prolific bloomer and grows well from seed. It will eventually reach nearly ten inches across in its native habitat. Down the center of each of its eight ribs is a line of spineless areoles. The hard skin of the plant is dotted with white wool. The yellow flowers usually have a red throat. In very bright light the plant will turn red-brown with purple tints, but it grows best with less sun, in which condition the plant will become a bright green. Moderate watering during the growing season satisfies its requirements.

Peniocereus greggii produces flowers which are among the most beautiful of the cacti. It is one of those plants known by the common name 'Queen of the Night'. The plant is most often found in southern New Mexico and Arizona, normally growing in rocky, well-drained soil within the shade of a bush. Most often the stems of this plant grow among the branches of the shrub, making the location of this plant hard to spot. Because of habit of growth and its rarity, Peniocereus greggii is seldom found in collections. It is a plant which produces a very large tuber, a swollen root which serves as a storage organ for food and moisture. This tuber is extremely difficult to remove from the ground. The stems are usually blue-gray, sometimes with brown or red-brown markings. The spines are hardly more than bristles.

CACTUS PLANTS FACE VARIETY OF THREATS

(Arizona Daily Star, 9-7-74), Reprinted
from Cactus Capital Chatter

Demand for cactus plants is so high in the United States, Europe and Japan that smuggling the ornamentals out of Mexico has become lucrative business, according to a report by the National Geographic Society. The thieves are not the only threat to cacti in Mexico and other countries. Growing towns, roads, overgrazing and mining have taken their toll.

Native to the Americas, cacti have diversified into more than 1000 species and have developed hundreds of distinctive shapes. Many cacti bear edible fruit, and shelter or otherwise help sustain creatures of the desert including man. The saguaro may house white-throated wood rats at its base and the Gila woodpecker and gilded licker nest in holes in it. After they move out, a succession of occupants move in -- elf owls, flycatchers and sparrow hawks. The cactus flowers splash the deserts with color. Hedgehog cacti have bright red or purple flowers, and prickly pear blossoms range from yellow or orange and often take on deeper hues with age. The golden barrel cactus opens its flowers during the day and closes them at night. In contrast, the delicate greenish-white and brownish-green petals of one variety of organ pipe cactus unfold only at night. The cactus family has given up most of its leaves as they are water spendthrifts, but the green hue in the stems reveals the presence of chlorophyll which takes over photosynthesis, a role that leaves perform in most other vegetation.

CEREUS-LY SPEAKING

Sad news: Dr. Phil Corliss, a long-time member of the Society, passed away earlier this month. 'Doc' Corliss contributed many articles to *Espinasy Flores* several years ago and was well-known for his huge collection of diversified plants.

Regalement Committee: As usual, the refreshment tables were stacked with delectable items meant to induce you to break your diet. Thanks to Jean and Leta Hapeman with assistants Mildred Anders, Nita Cotton, Rita Gordon, Ina Hines, Audrey Johnson, Alma Moore, Verna Pasek, Ethel Standish, Ruth Stanton and Edith Werner.

All of us greatly enjoyed Dr. Leroy Phelp's Program during the April meeting on Bonsais. And just as much fun was his role as auctioneer following the program. Plants auctioned off were donated by him and Madelyn Lee and enriched the treasury by \$ 39.50.

The Bragging Plant of the month belonged to Tony D'Attilio, a magnificent specimen with a label bearing the name Echinocereus pulchellus. And Mr. and Mrs. Paul Johnson brought in some beautiful plants for the monthly display tables. A great show.

A greatly relieved Perlso Lewis informs me that Allan Pederson and Keith W. Wildvank volunteered to chair jointly the cactus and graft exhibits at the Del Mar Fair. R. Latimer will take on the succulent display. The Fair will run from June 22 through July 5, 1976. Working parties, however, will be on the scene every day starting June 12th through June 21st. Free passes will be issued to all workers and donor of plants first. For further information call Perlso Lewis at 583-9085 after 7 pm.

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SUCCULENT-OF-THE-MONTH

Madelyn Lee

SENECIO

Family: Compositae

Originating in Africa, Madagascar, the Canary Islands, the East Indies and Mexico, this interesting member of the daisy family has long been a favorite of both gardeners and collectors.

These plants were under cultivation in the early 1700's. Those with yellow, daisy-like flowers were called Senecio, and those with urn-shaped, other-colored flowers were called Kleinia. In 1845 Kleinia was incorporated into Senecio. In 1910, Berger separated the two again. In 1956, Jacobson incorporated them again. Today, if you follow Berger, you use both names. If you are tired of changing labels or are a 'lumper', you call them all Senecio.

There is a wide variety of shapes, growth habits, and color in the genus Senecio. It is hard to believe that S. rowleyanus, 'The string of beads', with its cinnamon scented flowers is related to S. fulgens with its tuberous roots and wide blue-green leaves. But with Senecios, that is only the beginning. S. repens has brilliant blue leaves and makes a beautiful garden plant, especially on a rocky slope. S. haworthii is densely covered with soft white felt and particularly loves full sun. S. scaposus and S. Medley-woodii are both covered with a white cob-web like covering. S. articulatus, 'the candle plant' appears to be a stand of striped fat candles. S. pendulus, 'the inch worm', seems to dive in and out of the soil like a seal. S. citriformis looks like many blue-green lemons on a six inch bush.

With Senecios, the differences are more interesting than the similarities. The genus is not difficult to grow if you remember to slow down on the water during their resting period. Knowing when a Senecio is in its resting period will take a little study and observation. (i.e; S. articulata rests in summer; S. haworthii rests in winter.

Propagation is usually done by cuttings. Cultivated plants seldom set viable seed.

Bring one of your Senecios to the meeting at Quail Gardens.

GARDEN HINTS

Something more on "Keeping The Bad Bugs Out", from the Government Printing Press:

Wood ashes strewn at the base of plants or as borders ward off slugs and root maggot.

Frogs delight in making a feast of sow bugs. (Editor's Note: and so do boxturtles! We have to make a special effort to cultivate sow bugs - and snails - in order to keep our two boxturtles well-fed).

Toads are long-time friends of gardeners. The major portion of a toad's diet consists of harmful insects - slugs, aphids, cutworms, spiders, ants, caterpillars and squash bugs.

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Garden Hints, cont'd:

The Importance of Water, by R. Milton Carleton, from HORTICULTURE.

"..house plant enthusiasts would do well to experiment with maintaining soil moisture in pots at a constant level rather than by 'now dry - now wet' culture so commonly recommended. My experience is also that constant moisture produces a better plant. Even more impressive is the experience of Dr. De Werth at Texas A & M University. In a greenhouse with practically 100 % humidity he has grown cacti and other succulents for years. The results have been astonishing. Many cacti respond by growing true leaves, apparently from buds which have laid dormant for centuries in their ancestors."

Stem Cuttings and Offshoots, by H.M. Butterfield, Agriculturist Emeritus, University of California, Berkeley 4, Ca. Stem cuttings of different kinds of Cacti, ice plants, crassulas, and euphorbias all root easily with good drainage and a suitable temperature, although some may take several months to form a good root system. Even the fruit tissue (modified stems) of some cacti, such as certain opuntias, produces new plants when it is placed in moist soil. This method of propagation preserves the exact form of the parent plant, and is resorted to especially where hybrid plants are to be increased.

The top portion of the stem may be cut off. After the base of the cutting has been calloused to help prevent rot, it is set in coarse, moist sand until rooting takes place.

Echeverias and similar succulents produce offshoots or suckers that arise from the base of the plant. A few species die after they have flowered and formed seed, and such plants must be replaced either by seedling plants or by offshoots or cuttings. Certain Aeonium and Agave species, for example, may be lost unless the offshoots are saved.

Cereus-lySpeaking, cont'd:

Fun and Funds Festival at Quail Gardens, 230 Quail Gardens Drive, Encinitas, May 2nd, 10 am to 4:30 pm. Many plants of many varieties will be for sale. The Gourmet section will cater to selective tastes. Unusual crafts will be displayed, including weird and history packed bottles and fascinating baskets made from materials gathered in Quail Gardens. Come and join the fun. Refreshments available. Plant donors, please note: All plants should have their botanical name attached and must be delivered to the Ecke Building by Thursday, April 29, or Friday, April 30.

From the Editor's Desk: At the January Board meeting I informed the Board that the increasing workload at my job would no longer permit me to continue as editor of Espinas y Flores. I agreed to stay on as editor until June. It has been fun - and hard work as well - putting together this monthly publication. Rumor has it Audrey Johnson will take over - but not until September!

Cont'd last page

SAN DIEGO CACTUS AND SUCCULENT SOCIETY

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Cereus-ly Speaking, cont'd:

Please remember: Bring your plant-of-the-month to Quail Botanical Gardens! There will be no plant sales table, no drawing table and the library will not be open. Return your books at the June meeting.

Augie Pfeiffer
5163 E. Bedford Drive
San Diego, Ca. 92116

Address correction requested

FIRST CLASS