

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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October, 1977.

October Meeting Date: Saturday, October 15th., 1977
at 1:30 PM.

*** Please be sure to note that this month's meeting is on
the THIRD Saturday of the Month.

This month we are to have the pleasure of the company of the members of Palomar Cactus & Succulent Society in a joint meeting. The Palomar members will participate in all the regular club activities, including Cactus & Succulent of the Month Display, Exchange Table, And Regalement.

PROGRAM: "LESSER KNOWN SUCCULENTS".
SPEAKER: CLIVE INNES.

Clive Innes, who resides in Spain, commutes to England to run his Nursery - the HOLLYGATE NURSERY - in Ashington, Sussex. Clive publishes the "Ashingtonia", and is a member of I.O.S.

SUCCULENT OF THE MONTH: EUPHORBIA
CACTUS OF THE MONTH: WEINGARTIA

On Friday, September 30th. we were shocked to learn that Dr. George E. Radwin had passed away suddenly that day of a Heart Attack. George was an extremely active member of our club, researching and writing our "Cactus of the Month" article and participating in all Club Functions and Shows. His last article appears in this issue. We dedicate this Bulletin to his memory.

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	Audrey Johnson
	Audrey Johnson
	Richard Latimer
	Dr. George E. Radwin

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PUBLICATION:	Audrey & Geoff Johnson (Phone: 745-5773)
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San Diego Floral Association	- Verna Pasek
Quail Botanical Gardens	- Audrey Johnson
Balboa Park Desert Garden	-

The San Diego Cactus & Succulent Society is open to all persons interested in growing Cacti, Other Succulents, and Exotic Plants.

Dues are \$6.00 annually; Single copies of Espinas y Flores are \$0.50.

Meetings are the second Saturday of each month, 1:30 p.m. in Room 101 of Casa del Prado, Balboa Park. (Exceptions noted in Espinas y Flores.)

Executive Board Meeting after the General Meeting.

Deadline for November Issue.....October 24th...PLEASE!!

ABOUT THIS, THAT & THE OTHER

or: Everything about the things you wanted to know, but never got around to asking!

Ye Lady Ed.

REGALEMENT:

As usual, those members of the Club responsible for the refreshments last month "did us proud".

Our thanks to the following, who provided the goodies:-

Francis Johnson, Rosemary Myers,
Marcia Hamecher, Rita Cotten,
C.L. Benbow, Ruth Nelson,
Goldie Peddie, Joylene Bunch.

Our special thanks (and apologies) to Maria Fisher, who was omitted from our list of members to be thanked last month. Sorry, Maria, but, unless the Regalement Committee give me the entire list, how am I to know? And so, Regalement Committee, please, the full list, capitalized, if possible, and get me off the hook!!

PLANT SALES:

A big thank-you to Kathryn McDonald for her donation to the Plant Sales Table at the September Meeting.

ANOTHER BIG THANK-YOU - TO JIM DICE.

For several years Geoff and I have been Docents at Torrey Pines, but right now we have given up our duties at the Lodge - at least for the time being. Recently, however, I was asked whether I could arrange for one of the members of our Club to deliver a lecture upon cacti and succulents at one of the Lodge meetings, and this request I passed on to our President, Warren Buckner. Knowledgeable though the Docents may be on local flora and fauna, I did feel that their information upon our own special favourites was somewhat limited!

I was therefore delighted to learn, over the 'phone, from Warren yesterday that Jim Dice stepped into the breach with a most interesting program which he delivered to quite a large gathering of enthusiastic Docents at the Lodge. Thank you so much, Jim. I know that, from the information obtained during your lecture, the tours at Torrey Pines will benefit no end in the cacti and succulent fields!

LETTERS TO THE CLUB, AND TO Y.L. ED.

Those of you who were present at our last meeting, I'm sure, enjoyed as much as I did Helen Hegyi's letter to the Club. For those who weren't present - Helen wrote in her usual humorous and perky fashion, thanked everyone for a snowfall of good wishes, and seems to be getting along fine. She misses the meetings, of course, and will be with us again at the first possible moment. We all look forward to that day, Helen!

Emily Park:

During the past month, I was delighted to receive two letters from this, our favourite 92 years young, member, who puts us all to shame with her seemingly endless energy and cheerfulness.

(Cont'd)

Besides saying some very nice things about "EyF", Emily is ambitious to cover her own little canyon, and asked my advice upon the various types of groundcover.

Apart from suggesting the usual ice plant, it occurred to me that I might introduce Emily to my own favourite vining groundcover, *Senecio Angulatus*, about which I have written on several occasions. Despite being accidentally yanked out in large clumps last Spring (when a Mexican gardener was trying to rid our boulders of poison oak), my spunky vine continues to flourish, and is at the moment coming into bloom. I hope to bring some to the Exchange Table next month, if only to show off the bright and cheery yellow flowers.

There is some talk at the moment of using *Senecio Angulatus* on one difficult area in the Wild Animal Park. Since this vine is evergreen, and grows like crazy under the most adverse conditions, it appears ideal to me for the purpose. The flowers, also, (which last into the New Year) make a spectacular display in large quantities. I do hope it works out.

Ellie Wacker:

I received yet another charming letter, this time from an old friend, Ellie Wacker, of Las Vegas, who tells me that she reads "EyF" from cover to cover, and then leafs through it again to make sure she hasn't missed anything. What bigger compliment could we all receive?

Thank you so much, Ellie, for your encouraging comments. I will certainly pass on your suggestions for the cover of the Christmas issue of the bulletin to Scotty, and do my best to encourage him to do something of the sort. It sounds like an excellent idea to me!

I, too, was sorry that you couldn't make it to one of our meetings this Summer. Do try again soon - we'll all look forward to the re-union!

And now, - off to prepare for the show at the Wild Animal Park next week-end. Hope to see some of you there.

Y.L.Ed.

OH, PICKLES!

Emily Park

There was a young lady named Perkins,
Who had a great fondness for gherkins;
She went to a tea
And ate twenty-three,
Which pickled her internal workin's.
The Gimlet.

(I thought that you might all enjoy
Emily's limerick, enclosed in her
letter. Y.L.Ed.)

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IMPORTANT NOTE

Just prior to going to press we learned that Dr. George Radwin's valuable collection of plants will probably be available for sale to our members at our October meeting thru his executor, Joe Bibby, Past President of our club.

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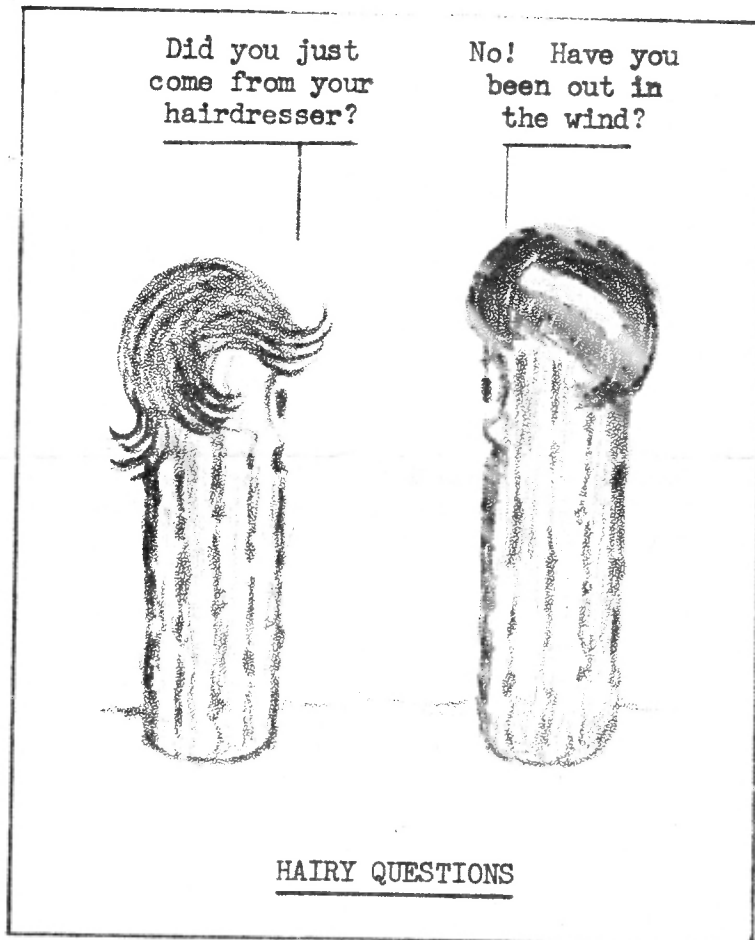
ACKNOWLEDGEMENTS BY THE TREASURER:

The following people gave the Society Treasurer 25% of their gross sales at the September meeting:

Rose D'Attilio - \$6.00 from the sale of plants.
Phillip Favalle - \$8.75 from the sale of pots.
Also Ruth Stanton - 50¢ from the sale of plants at the August meeting.

Thank you very much.

(Sgd.) R.E. Evans.
Treasurer. 9-18-77



M.E. REPORTING

Geoff Johnson

Two of our well-known members have combined their talents and knowledge in an excellent presentation in the July/August issue of the C.S.S.A. Journal.

Dr. George E. Radwin researched, and wrote, the article on 'CEROPEGIA', and Tony D'Attilio collaborated with many beautiful illustrations. Those members who do not receive the C.S.S.A. Journal may borrow it through our Library at any regular meeting.

HIGH SUMMER IN THE BACK COUNTRY
(OH BOY, IT'S HOT!!)

Audrey Johnson

Somehow this past month got rather out of hand! All my 'check-ups' came due about the same time - behind me now, thank goodness; Mike's musical: "Candide" at Palomar College, was coming up to its Opening Night - always a hectic time for all of us; and (in the middle of it all) Geoff and I were attempting to celebrate our wedding anniversary!!

Meanwhile, the excessively hot spell of weather went on and on, and I, along with my heat-weary plants, became more and more overwhelmed. (Sometimes I think that I, myself, am nothing but a two-legged mobile plant, as they, and I, seem to wilt under exactly the same climatic conditions!) Finally, when those humid, high nineties, days seemed to have gone on forever, the heat eased off a little, and we started to have cooler, damper nights again. In the words of the Alka-Selzer commercial (more or less): "Oh, what a relief it was", and we all perked up slightly.

As a particular treat for this anniversary, Geoff promised me my long-awaited pool and fountain in full working order, and he nobly carried on the good work through all that overpowering heat - mostly during the early evenings. Things are progressing nicely now, and, as soon as we return from our vacation, I intend to get my fountain going, and stock the pool with water-plants (maybe a water-lily or two), goldfish (for ornamental purposes), and other fish (to get rid of the bugs). Before leaving (very reluctantly) the subject of my forthcoming fountain and pool, I must mention one little incident which thrilled us all... Geoff had done a super job of finishing off the bottom of the pool, and, the next day we checked to make sure that it had dried off nicely. Imagine our pleased surprise to find, all over the area, the foot-prints of many of my little friends of the wild animal and bird world! (Maybe they thought that they were in Hollywood, leaving their hand and foot-prints as the film stars do.) In any case, I was delighted to get their 'stamp' of approval - at least, I hope they approved!?

Yet another bonus has fallen to my lot this month. Geoff recently discovered, at the office, another bird-lover, like myself. This young lady has started her own aviary (we are taking notes!), and has already produced a number of young birds of her own breeding. How exciting that would be - to instigate the right conditions for breeding, and to watch the little birds pop out of the eggs!! I am inspired to do the same: who knows, maybe I'll be starting an aviary of my own shortly, which is another one of my life-long ambitions. Anyhow, about five weeks ago her aviary produced three little Cockatiels, and today Geoff is bringing one home for me. I can hardly wait to start on the training of my own personal bird pet! They tell me that Cockatiels are the most affectionate little creatures, are very fond of people, and that, at five weeks, they've hardly had the time to realize that they are birds! We are planning on making young --- (no name yet) one of the family, and, somehow I imagine you'll all be hearing a lot about him, or her, in the future.

As for my friends of the plant world, although dashed, they are reviving with amazing rapidity. They really do much better than I do in this respect, as I am only now beginning to struggle back to normal.

(Cont'd)

Recently Geoff and I made a tour of inspection of my various garden areas to see the full extent of the damage, and, suddenly, we received another nice surprise. Overnight (or so it seemed to us) a large "dagger" plant, which we had put into the rocky ground some two years ago, had sent up a tall spike of bloom, and now it is in full flower. Since, this year, we had blooms on our ocotillo, and this (the first) spike on our yucca-type plants, maybe we're not doing so badly after all! Oh well, as I've said so many times before - never a dull moment in the garden with our ever-changing California climate. Who knows what this new spell of weather will bring forth?

COMING UP TO THE COOL!

Audrey Johnson

After such a busy, active year, and such a long, hot Summer, it was inevitable that Geoff and I should head for the ocean to spend our all-too-brief holiday this Summer. As a matter of fact, I seem to be getting into a rhythm of - Fall, Winter, and early Spring in the hills and mountains (with side trips to the desert to enjoy the flowers in Springtime), whereas, during the Summer months, I make for the ocean at every opportunity. At this point, it occurs to me how lucky I am to be able to make that choice, as we all are!

Anyhow, after dropping off Michael at the Los Angeles Airport (what a hassle that was!), our time was our own, and we straight-way made for Santa Barbara, our first stopover. The general idea was to investigate, in leisurely fashion, some of the places which had attracted us last year as we sped on our way to San Francisco, and Santa Barbara was high on my list. I had particularly liked the town's location, sandwiched as it is between the mountains and the ocean, but very quickly we found that it had many other attractions to offer. For myself, I especially liked the Spanish decor which prevailed throughout the town, the beautifully tiled pavements and fountains, the outdoor cafes and hidden courtyards, and the luxuriously flowering trees and shrubs which flourished everywhere. In fact, we found the atmosphere quite European, and most relaxing.

One other arrangement in Santa Barbara particularly pleased us, and that was the very adequate supply of free, beautifully hidden, parking places in the town. Here one could dump the car and explore, on foot, to one's heart's content, and this we proceeded to do. To my surprise, even Geoff adjusted to this leisurely atmosphere, and seemed quite content to forego his usual passion for driving another 2 or 300 miles to see what might be on the other side of the mountain! In true tourist fashion (for once) we made the scenic tour of the town, but this was the extent of our car travelling for the first couple of days.

Early on, we were fortunate to discover a particularly charming motel, right on the ocean, with a handy swimming pool, and Continental breakfast in a lovely little Courtyard (with fountain) which was surrounded by the most beautiful hibiscus that I have ever seen. The "Crown of Bohemia", which flourished in Santa Barbara so delightfully, I now have around my little garden pool - if it blooms half as well here in Escondido, I shall be more than satisfied. This comfortable accommodation, combined with perfect weather and a temperature of around 75 degrees, soon made it evident that Santa Barbara was to be our headquarters for the entire trip, and so it was.

(Cont'd)

Solvang was on our list of places we had missed last year, and, after a day or two of loitering, we decided to arouse ourselves to make the trip. Before those of you who are Solvang enthusiasts descend upon me, I must assure you that I intend to return there, at a different time of year, and in a different mood. Although admittedly both quaint and interesting, at that time it appeared to us as hot, dry, dusty and crowded, as well as strangely reminiscent of a Disneyland set. We could hardly wait to return to our cool ocean climate. Nevertheless, I shall certainly return for a second impression, I promise!

Morro Bay, which we discovered last year, is an all-time favourite with both Geoff and myself, and we had originally intended to spend at least half of our time in this little fishing village. To our surprise, we found ourselves almost reluctant to journey further north, and drag ourselves away from our leisurely existence. Finally, we made up our minds to leave in the morning, stay overnight, and return next day, and, having made the effort, we enjoyed every minute of this little trip. Upon arrival at Morro Bay, we first ensured ourselves of accommodation for that night, and then proceeded to the Recreation Park and Lodge to confer with our friends, the Rangers and Docents, about the type of wildlife to be observed at this time of year. Upon their suggestion, we drove slowly along the coast until we reached a beautiful, rocky coastal area, where we "dumped" the car, and explored on foot. We did see quite a variety of wildlife on the cliff tops, including several deer grazing in the distance, but not a single sea-otter did we glimpse disporting himself in the deep rocky pools. What a disappointment! We enjoyed our scramble among the rocks in the little hidden bays, however, collected some interesting shells and pebbles, and met a gentleman who had seen a sea lion on the rocks the previous day. Lucky fellow!

Our big thrill came the next day, a beautiful morning, as we wandered around Morro Rock, before starting on the return journey. Noticing great activity among the birds at the water's edge, we were delighted to realize that the large, wheeling and diving, birds were brown pelicans, and we stood, entranced, watching their antics for quite some time. Apparently a school (?) of anchovies had drifted into the little harbour, and it was feasting time for the birds.

Back in Santa Barbara, the weather continued to be cool and sunny, and the rest of the time we spent relaxing in preparation for the return journey. Picking up Mike at the Los Angeles Airport brought us back to earth with a bang, but we did have a pleasant surprise when we reached home to find that the plants had not suffered too much in our absence. It seemed obvious to me that (after that endless heat) the weather had cooled off the very week that I had gone away - wouldn't you know it!!

The very next day, we picked up the birds from my daughter (Fred, the Cockatiel, and our two budgies), Buddy, the Cockapoo, from the kennels, the 'phone started ringing off the wall - we were in business again..... Next year I intend to do things differently. Our second week's holiday was taken up with chores, which should have come the first week, with a relaxing period to follow (if you follow me). Why didn't I think of that before?

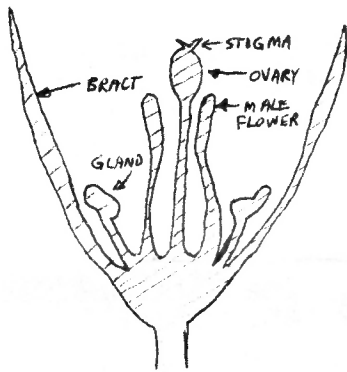
SUCCULENT-OF-THE MONTH

Euphorbia

Rick Latimer

The family Euphorbiaceae (of the order geraniales and class dicotyledon) consists of milky-sapped herbs, shrubs, and trees; most of which are not succulent. This family is divided into about 250 genera and approximately 7,000 species including the Castor-oil Plant (*Ricinus communis*; Africa), Tapioca Plant or Cassava (*Manihot utilissima*; Brazil), and the crotons (*Codiaeum*; Polynesia, India, and Malaya). The largest tribe of this family, Euphorbieae, contains *Euphorbia*, *Monadenium*, *Synadenium*, *Pedilanthus*, *Jatropha*, etc. Many of the 2,000 species of the genus *Euphorbia* are also not succulent. A few examples are: Gopher Plant (*E. lathyris*), Snow-on-the-mountain (*E. marginata*; Western U. S.), and Poinsetta (*E. pulcherrima*; S. Mexico).

The vital link which distinguishes Euphorbias from all other plants is the flower. The insignificant Euphorbia "flower" is



Generalized Euphorbia flower
(cross section)

actually, according to the botanists, a composite of petal-less flowers called a cyathium (Greek: cup). The cyathium consists of the female flower (stigma and 3-celled ovary) clustered with five or more groups of male flowers. I gather they are considered "separate" because the male flowers are ultimately connected to the female flower below the ovary. However, some Euphorbias are dioecious. That is, the male and female flowers are divorced onto separate plants. The cyathium also contains sometimes colorful bracts and glands which secrete honey which surround the flowers in the middle. As far as beauty contests are concerned, Euphorbias would lose points in the flower column as opposed to cacti, for example.

The Euphorbias are on even ground as far as foliage is concerned. Succulent cultivators grow Euphorbias due to their wide range of odd shapes and bizarre markings. Some of them have geometrical forms and their names sometimes reflect this: *E. trigona* (hermentiana), *tetragona*, *squarrosa*, *quadrangularis*, *pentagona*, *quinquecostata*, *hexagona* (American herbs), *heptagona*, etc. Some Euphorbias look like other succulents (more or less): *E. fasciculata* - *Opuntia vulgaris*, *E. onoclada* - a potato-Tephrocactus-totem pole, *E. globosa* - a cross between a Tephrocactus and a Lophophora, also *Opuntia*-like are *E. orthinopsis* and *E. platyclada*, *E. piscidermis* - *Ariocarpus lloydii* or *Pelecypora* (*Encephalocarpus*) *strobiliformis*, *E. fasciculata* - *Turbinicarpus schmiedeckianus*, *E. cryptospinosa* - a *Wilcoxia* or a *Peniocereus*, *E. tirucalli* - an upsidedown *Rhipsalis capilliformis*, *E. resinifera* - a *Stapelia*, *E. misera* (Baja) - *Portulacaria afra*, and so on. My personal favorite Euphorbias are the Euphorbia Euphorbias. Those that are either very angular and colorful like *E. knuthii* (Mozambique), *aeruginosa*, *stellata*, *coerulescens*, *pseudocactus*, *grandicornis* (all South Africa), or *E. abyssini-*

*(Morocco)

(Cont'd)

ca and canariensis; or those that are special in their own way like *E. obesa*(S. Africa), *E. turbiniformis*(Somalia), and *E. decaryi* and *E. splendens*(Madagascar). A few Euphorbias make attractive crests, such as *E. susanne*, *flanaganii*, and *mauritanica*(not from Mauritania but S. Africa).

Euphorbia Anecdotes:

1. The flowers of *E. tetragona* are so rich in nectar that the bees fill their hives in a very short time, but the honey is unpleasant to eat and as hot as pepper.

2. The latex of virtually all Euphorbias is to a greater or lesser extent poisonous, and can cause considerable irritation to a cut or to the eyes. *E. virosa* and *tirucalli* have the worst reputations. The juice of the little *Aeonium lindleyi* is an excellent and immediate antidote. We will throw-in this plant as an additional plant-of-the-month, so everyone can recognize it. *Senecio anteuphorbium* may also be an antidote, perhaps.

3. *Euphorbia phosphorea*(Brazil) reportedly shines with a phosphorescent glow on warm nights due to a particular species of bacteria or fungus that it is associated with in nature.

4. The fact that Euphorbias range from tall trees like *E. ingens* to small globular plants like *E. horwoodii* leads taxonomic "lumpers" to say that perhaps cacti should not be divided up so much on the generic level, e.g. *Lobivias* and *Trichocereus* have a similar flower structure.

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CACTUS-OF-THE-MONTH

Weingartia

George E. Radwin

The species in this genus, comparatively rare in American and European collections as recently as 5-10 years ago, are inhabitants of mountainous terrain (up to 13,000 feet elevation). in Bolivia. Although, according to most authorities, not closely related to the rebutias, they live in the same region and in not dissimilar habitats. In addition, the complex, confusing species and genus interrelationships seen in Rebutia also seem to be characteristic of Weingartia. Hutchison submerged the genus in Gymnocalycium, and Backeberg has submerged Neowerdermannia in Weingartia, but most workers today consider these three genera distinct, if more or less closely related.

The plants have fairly small, clustering or solitary stems that are globose to briefly cylindrical. Large, prominent tubercles bear large, woolly areoles on their upper halves. Spines are generally numerous and either straight and erect or gently curved. The day-blooming, yellow to yellow-orange (one or two newly discovered species have red-purple flowers) flowers occur below the apex on younger areoles; they have short tubes and the ovary and fruit are naked, or with scattered scales. The fruit is small and round, and splits at its base to release the seeds. Some species (W. fidaiana, W. neumanniana) have heavy, tuberous roots, whereas others don't.

Successful culture of Weingartia, as is often the case in specialized plants such as succulents, is closely related to the conditions in the natural habitat. Best growth and flowering requires intense light, such as that available in their high mountainous habitat. Generous watering will not cause problems, especially in the growing season, if an exceptionally well-draining soil is used. Weingartias are tolerant of comparatively low temperatures, even moderate degrees of frost, if they have been sufficiently hardened by withholding water in cold weather.

References:

- Bleck, M., 1973, Weingartia Werd. Cactus and Succulent Journal (U.S.) 45: 40-41.
Cardenas, M., 1969, Bolivian Cactus Formations, pt. IV. Cactus and Succulent Journal (U.S.) 41(3): 107-110
Hutchison, P.C., 1957, Icones Plantarum Succulentarum 5. Gymnocalycium westii P.C. Hutchison. Cactus and Succulent Journal (U.S.) 29(1): 11-14.
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