

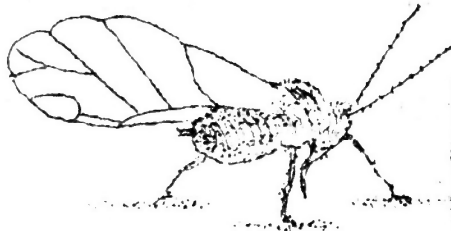
Espinas y Flores

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

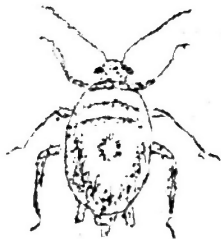
TOMO NUEVE, NUMERO DOS

FEBRERO 1974

I A M A N A P H I D



Winged aphid



Aphid

I am an APHID. That's only one of my names. We aphids (or aphides if you prefer Linnaeus) have many names. Perhaps the most common is simply 'plant louse' or 'plant sucker' which may be more derogatory. And then there are aphid 'specialists' such as 'apple tree', 'box elder', 'spruce gall' and 'willow' aphids, and so on.

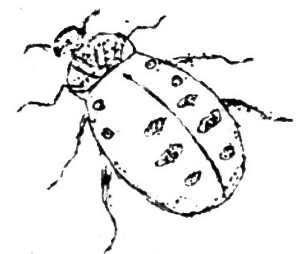
Regardless of what you may wish to call us, we are relentless 'suckers'. We suck the juices out of tender plant tissues. We endeavor to keep our activities under cover so to speak, or maybe more appropriately 'under a leaf' and out of sight.

We only stop feeding when we are disturbed or when eaten by something else. After a disturbance passes we get right back to our feeding. We extract great quantities of sap from the tissues of a plant, so much that a plant leaf recurves upon itself as tho it had been subjected to a hot flame. Why shouldn't we have insatiable appetites? We must eat in order to produce a dozen generations in a season.

We are awkward, ungainly and slow moving insects. We are equipped with strong pointed beaks or probes which we insert like a hypa needle into the tender tissues of a plant for the sole purpose of extracting its juices. It is not our intent to harm the leaf but by the insertion of our probos virus diseases may be permitted to enter the tissue. You appreciate that we have neither the time nor facilities to sterilize our probes.

It may appear to you that we stand on our heads when sucking. If you watch a group of us closely, our feeding habits will bring to your mind the action of rigs in an oil field. . .up and down...up and down, with no group rhythm.

We are all about the same size, we measure about 1/16th to 1/8th inch in length. Unlike people who are heavy eaters, our measurements remain constant. You should not rely on the above statistic for soon you will have to convert to metric measurements. Our new measurements will approximate 1 1/2 to 3 millimeters lengthwise.



Hippodamia
convergens
'Lady bug'

Continued overleaf.

I A M A N A P H I D

(Continued)

You may think we are larger than we really are. If so, you must be judging by the appearance of the leaf under which we are grouped. Damage appears to be devastating and we are the first to admit it is. A leaf never really recovers. It is 'sapped'.

Some of our kind are winged and their wings are transparent. We can't tell you why some grow wings while others manage without them, and all are contented.

Our life cycles are very complex. Like people, there is variation from area to area and from individual to individual. Some of our species have wingless females called 'mother aphids' which hatch from eggs in the spring and thereafter reproduce by parthenogenesis* and viviparously* up to a dozen successive generations of wingless females. Wingless mother aphids give birth to living young in fantastic numbers. Some aphids grow wings and fly off to new pastures, . . . oops . . . new host plants where asexual generations of new offspring are produced.

When the warm season ends and the flow of plant juices slows or ceases, fertilized eggs are hidden in crevices in the host plant where they remain until sap flows again in the next warm season. Life cycles thereupon repeat.

Many, in fact most of our species excrete a sweet substance which people call 'honeydew'. No doubt you've seen it in your garden and wondered where it originated. Our ravenous appetites together with our dual exhaust systems produce honeydew so rapidly that it may cover the ground, or whatever, beneath us. The area may become 'wet'. And that's when the picture darkens. Our sweet product attracts molds as well as ants but molds give it a black or sooty appearance.

Honeydew is highly prized by some insects such as ants and bees, especially ants. But that's another chapter in the story of insect life. We favor the ants over the bees because they are considerate, gentle and kind. They 'tend' us, tote us from leaf to leaf, and groom us for our honeydew just as a man tends a cow for its milk. It is said the ants 'milk' us. Perhaps that is why we are sometimes called 'ant cows'. The name describes the relationship very nicely but it raises a question. Why shouldn't man's milk producer be a "man cow"?

Slender long antennae protrude from our heads. You may think they are conspicuous until you look at our opposite ends, our posteriors. There you will find two tubes called 'cornicles'! which have the appearance of exhaust pipes. Man shouldn't think dual exhaust pipes were his invention. We had them first, a l-o-n-g first. Man emits nitrous oxides from his exhaust pipes, we use our 'cornicles' to eject honeydew, a waxy, sweetish fluid, the ant food mentioned earlier. By the way 'cornicle' means 'little horn' and each of us has two of them back there. And that isn't intended as a 'corny' comment.

We have two devastating enemies. People are NO. 1. Lady bugs are NO. 2. Usually you see our enemies as individuals but both congregate in great numbers also. There is only one species of NO. 1 but several hundred species of NO. 2, and sad to say, we are their favorite food. Their appetites for us are even greater than our appetites for plant juices. They are fast eaters too. We will never be able to understand how one lady bug, about twice our length, encased in a shell, can consume aphids hour after hour and day after day, without EXPLODING! Ye Ed

*parthenogenesis, egg development without fertilization. 'E & F' Feb. 1974

*viviparous, bringing forth living young.

*cornicles, pair of tubes in aphids.

SAN DIEGO ZOOLOGICAL SOCIETY

"Mr. Reuben V. Vaughan
1041 Leroy Street
San Diego, CA 92106

December 7, 1973

Dear Mr. Vaughan:

On behalf of our Trustees, employees and all members of the Zoological Society of San Diego, I would like to thank you for your donation of the following plants:

- | | |
|----------------------------|----------------------------------|
| 15 - 15 gal. Aloc thraskii | 100 - 5 gal. assorted Aloes |
| 50 - 50 gal. Aloc thraskii | 1 - 24 in. tub Howea forsteriana |
| 5 - 1 gal. Hoya parviflora | 1 - 30 in. tub Sabal causiaruns |
| 3 - heating cables | |

Your interest and support of the Zoological Society is greatly appreciated. We hope you will have many enjoyable visits to the Zoo and the Wild Animal Park and that you will share with us the pride and excitement of seeing both areas grow in beauty and conservation value.

Sincerely,

Patrick O'Reilly
Development Director

It will be remembered that Dr. Vaughan purchased 'Inholdings' of two acres in 1972 and an additional 3-acres in 1973 in the program to make Anza Borrego State Park a 'whole' park at some future date. (Ref: E & F, July '73, p2)

PROGRAM FEB.

FAMOUS EUROPEAN CACTUS AND

SUCCULENT COLLECTIONS by Les Rothstein, a 35 mm slide program to be narrated by Anthony D'Attilio.

Les Rothstein's slides have come to San Diego. They are "unbelievably interesting and revealing" so it said in Espinas y Flores last July, page 7. It also must be added that Rothstein's narration and commentary added dramatically to their showing.

Now comes February 1974 and the slides will be at Casa del Prado. Les will not be on hand but Anthony D'Attilio was in Las Vegas at the Rothstein program and he was so imbued and impressed with what he saw in the color photographs and descriptions of what each represented, that he has volunteered to attempt to do a 'repeat' of the Rothstein show.

On the one hand it will be a tough job, but on the other hand, if anyone can do it, Tony can. (So says our Vice President and Program Chairman)

We will be 'at home' again in Room 101 and meeting time will be 1:30 p.m.

New Zealand C & S Journal, October 1973: (Martin Mooney please note:)

"My melocactus seeds have germinated in their pods while sitting pinkly on top of their cephalium home". Mary Mary

C O U N T R Y S T O R E

A Club Program

Sacramento C & S Society It began in October 1963. Our news-
letter of October 1964 called all to "Join
in the fun of an old-fashioned shindig*".

Ever since that time it has been an annual event. The month was changed a couple
of years ago so that excess goods could be offered at our "White Elephant Sale".

On Country Store nights, the business meeting is abbreviated to allow two
hours for country store activity. It is sponsored by our club both for total
fun and fund-raising. It is most successful both ways. Requirements are few:

- 1 -- A Chairman or -lady is named! Every activity needs a leader!
- 2 -- Booths are necessary, maybe six of them, each designed to handle
a specialty, each an activity unto itself.
- 3 -- Each booth has a manager or master, let's call him a 'boothmaster'.
Last year six booths were set up. Booth activities are limited
only by the imagination and ingenuity of the show chairman or
the boothmaster. 1973 Booths were:

*shindig, an
elaborate or
large party
or celebra-
tion.

- A -- The "Pin Cushion (cactus) Booth. Guess what was in it!
- B -- Ye Olde Sweet Shoppe. Candy, cookies, jams, jellies,
cup cakes, brownies, etc. etc. This booth always has
a lot of goodies, and the most ticket stubs are deposited
in its can. (See below: 'Tickets')
- C -- Succulent Booth -- succulent plants of course.
- D -- The Giftie Shoppe, the Greene Thumb. House & Garden plants.
- E -- Novelty Booth: Driftwood, rocks, sand, plant food, flower
pots, fertilizer, dish gardens, bark and other miscel-
laneous items.
- F -- Garden Products Booth: Home canned products, nuts, garlic,
onions, potatoes, dried corn, squash, pumpkins, cucumbers,
and so on from the garden.

Tickets are sold on Country Store night. Stubs are deposited in a
stub can at the booth of the purchaser's choice. For example if one
prefers 'Sweetes', that's where his stub goes.

When ticket numbers are called, the lucky persons go to the booth where
their stubs are on deposit and choose the item which makes them
happiest.

Refreshments are a part of Country Store program. A refreshment committee
is selected by last letters of their names. On a particular night
that might be K, L, M and N for example.

In order to produce a true-to-life atmosphere of country life, members
are asked to attire themselves in apparel of the era prior to 1900.
What fun seeing the attire of 'another' generation----regardless of
which direction you look, backward or forward.

Everyone goes home happy and of course with items of their own choosing.
The event has brought out good numbers of 'old timers'. . . and use-
ful and interesting items. Country Store Night is publicized in the
Club bulletin ahead of time. The occasion gives everyone time to
socialize, relax and enjoy club activities.

Societies looking for fun and fund raising activities are urged to look
into 'Country Store' programs. . . Dorothy Williams, Carmichael, CA

Feb '74

THERE once was a dragon named Bruce
Who thought that his head had come loose.
When he grafted a cactus
Without any practice,
He hung at the end of a noose...!

by Patricia Kennett (11 years old)

We hope Audrey Justice is feeling MUCH better...while hospitalized recently for a gall bladder operation and repair of a hiatal hernia, she suffered a heart attack...however, she sounded vigorous when we talked to her. And Lorena VALENTINE we hope your day and those to come finds you in better health...Ruth and Bill Nelson are both feeling better...Bill was in the hospital for testing recently but did a full day's work with Oliver Loyland since putting in shelves in our storage spaces. We also hope that Olivia & Bob Fletcher, and Mabel & Walt Greenwood have been too busy rather than too ill to come to meetings...you are missed.

OUR SOCIETY extends sympathy to Margaret Lickert whose husband Carl died the 15th of January after a long illness.

WELCOME to Mathew Barsick...one of Alice & Wilson Well's Junior Members is now a cardcarrying member of SD C&SS. (Oops, Matthew BARISIC)

Notable and Quotable

FLOWER POWER was the name of the game when all southern California clubs met here last month...the cosily crowded Quarterly-CSSA, regular-SDCSS combo was the largest meeting for us EVER and yet there was an atmosphere of warmth and friendliness...Virginia Buckner sized it well: "It was just GREAT - there was obviously lots of planning -- and it paid off with PERFECTION!"

Sophie & Oliver Loyland said, "When we arrived at 0930 with plants for the Sales Table, Jean and Leta Hapeman were already there!" "We could hardly unload the car for people buying plants!"

TOO
It was a long day/for Julianne Rice who is very nice and multi-talented as well...for she chaired the Plantorama, supplied the recipes and was called on to take a bow for writing Succulent-of-the-Month... a long but TRIUMPHANT day. Bill Lockwood said: "Julianne Rice took the whole burden off CSSA."

The Editor thought there were about 260 present...Penny said, "We set up 200 chairs with 50 extra handy." Leta Hapeman said: "We planned for 300 but think it was only 250!" (Now we have women in CONTROL who can say "ONLY 250 came to lunch!")

Jean and Leta Hapeman were only in sight to be counted for the brief moments that it took them to take a bow in acknowledgement of their culinary success planning, staging and serving the multitudes neatly, quickly and DELICIOUSLY - along with Joan Somers, Marcelle



In the meantime let us
be the first to wish YOU
A HAPPY VALENTINE'S DAY!

Barfield , Perlso Lewis, Pat Mooney, Elvira Bibbey, Lena Ann Rice, Hazel Scott AMONG MANY OTHERS...Jean and her husband Jay Hapeman expanded a recipe for 6 to 60 and then farmed it out to the makers of Tamale Pie...there was macaroni salad with color and texture... variations on a theme...and the ladies from IMPERIAL VALLEY C&SS made a memorable salad with Dupretta (phonetically spelled) lettuce ...personally picked and packed and tenderly arranged with the most delectable secret-recipe oil dressing (a Ways-and-means project for their club and available for \$5 a gallon) ...there was an enormous cake that 'Nita Cotten baked and helped serve...and a million cookies...everyone who had a hand in and around the kitchen KNOWS how very much it was appreciated ... cactus people always think SUCCULENT in food and deed. (Leftover luncheon food sold for \$22 and fifty cents...that's a leftover fact.)

CACTUS NUTS (for so do we not jokingly describe ourselves to the uninitiated?) came from Palomar, Imperial Valley, Los Angeles and Riverside and all points between and around...fortunately many people belong to many clubs so may they forgive me for any errors in Society names.

President of CSSA, Bill Lockwood, was one of 51 from the San GABRIEL SOCIETY ... easily counted in the bus plus 10 in cars... SG's twin girls Friday - Fay & Faythe were hostesses. Faythe was full of fun and frolic: "We left in the dark and watched the sun come up through the rain clouds over Santa Anita - it was BEAUTIFUL!"

BILL LOCKWOOD: "It's good to see the response to Quarterly meetings. The next is April 7th in Oakland...then ARCADIA IN AUGUST!" (The emphasis is to whip up enthusiasm for a bus load for that one from San Diego.) Bill mentioned that CSSA originated in 1929 and strangled along with here-a-club, there-a-club forming and dissolving until the CSSA JOURNAL solidified the situation. At present there are 4,500 members! Of the 12 composing the Board, all four officers and five of the Directors were present. (Including our own Scotty and Lee, of course.)

Mary Blade, Treasurer, was there - we hear she's a specialist in aloes. Virginia Martin, Secretary - Bill said, "We could not run the club without her!" He means it, too, Virginia, for he said it TWICE. The Vice President, Peter Sharp, also chairman of the Organization Committee, a real promotional job...Peter claimed that if you DON'T want to get involved, stay away from Bill Lockwood.

Others of the Executive Board present were Leo Pickoff, Joyce Tate and Kitty Sabo. We also met Affiliate Chairman Ted Taylor, a past president. We admired Joyce Cactus-Cook-Book Tate's lavalier ... (wager you haven't heard THAT for a long time - but: Lavalier - ornament hanging from a small chain worn around the neck)...Joyce's lavalier featured the new CSSA emblem and was made by a woman in



(NOTEBOOK continued) in Ontario... it will soon be available for approximately \$7.50... Dainty earrings swung from Kitty Sabo's diminutive ears...tiny green cactus enameled on golden metal...Kitty said they come for pierced ears or plain - Bill L. said: "You buy our earrings -- I'll pierce your ears!" (It's a date - August in Arcadia.)

Vivienne W. Doney



TELEPHONE 358-2037

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639 PARKER AVENUE	720 MONTEREY AVENUE
MONROVIA, CALIFORNIA	MONROVIA, CALIFORNIA
	ZIP CODE 91016

Both Bill and Kitty were heard to call - "Where's Ruth?" Ruth Byrne?

CSSA is pushing them* for profit - along with pins and charms and dangles for your arms...they're listed in the CSSA JOURNAL.

(* the earrings)

Beads are in, for sure...Palomar's DESIGNING WOMAN Betty Woolrich's tremendous turquoise still has the pawn ticket attached from Crown Point, New Mexico.. "Betty dug her degree with a shovel," Mildred Gregory told us - for Betty is also an archeologist and anthropologist. ...New member Isobel Fisher's fantastic silver Yucatan figure, or so he seemed to...a warrior god?...attracted many eyes. She and her doctor-husband are from Pasadena - Jerome.

During a break in the day's activities we met Reba Smith from Covina CSS whose son Greg Smith in El Cajon on 1066 Magnolia makes Totem Stones...strings them with feathers twitching...most bewitching... telephone 446-6526. Also had another chance to admire Ellen Low's necklace designed by her daughter, as beautiful as she is talented ...right, Bill Low? (It's ONLY five clubs they belong to - not 7!)

There were 28 from Riverside's GATES club...Bill Gunther knew Harry Tate because both of them are IRIS nuts...

ABOUT THE PAINTINGS - the four were done by Julie Anne Mooney, the 16-year-old middle daughter of Pat & Martin...Julie Anne donated them, saying, "I don't care what you do with them only don't bring them home -- I saw enough of them while I was painting!" She had worked from the covers of CSSA JOURNALS.

Lee spoke on CAUDICIFORMS...most learnedly, of course...caudiciform originally meaning "woody trunk of a tree", then "woody base of a plant" until Lee arrived at the satisfying definition of "any plant with a fat woody base". (Oh dear...)

"Calabanis hookeri is the EPITOME of a caudex. For two years I treated it like a succulent - it was planted deeper and watered seldom and it never grew - now I treat it like a bonsai - water it every day, twice on hot days, and keep it in the sun. Yes, it was root pruned then kept in dry soil for a few days and it's grown like a weed - hasn't been dormant since. I feed it once a month or two with anything that's handy....Beaucarnia recurvata, one of the Elephant Foot - Elephant Feet?...Bought it from Bill Seaborn's Del Dios Nursery near Escondido." (Lee uses traditional bonsai pots with drainage holes the size of a dime - THAT'S important.)

MARTIN MOONEY masterminded moviemaking of Melocactus for our entertainment and captured the audience...Someone asked of the cephalium, "What is IN there?" Martin felt it was plant tissue but he would never have the heart to cut into it to find out...he spoke tenderly of red seed pods on one plant..."Redheads in a cotton patch" WHAT ARE YOU DOING WITH ALL OF YOUR SEEDLINGS, MARTIN???

"I never let it go dry despite specialist's advice to allow it to be dormant in winter." Martin's Fat City soil recipe is equal parts of garden soil, redwood compost and planter mix. Take one-third of that mixture and add one-third vermiculite and one-third sand. He combines the virtues of plastic and clay pots by spraying clay pots with lacquer!

SCOTTY'S SKIT was done with Vivienne Doney who is one of the NICEST plantswomen anywhere...he presented her with his own hybrid CACTUS DURABILUS IMPOSSIBILUS...and introduced his staff. Scotty asked, "Who knows Doc Vaughan?" Many many hands were raised and there was an audible WE MISS HIM heard throughout Room 101...and you, too, Ruth Cuzner. "How many of you are interested in cartoons? There was a 100% show of hands which must have been gratifying to our cartooning Editor...there was spirited bidding later for Scotty's framed cartoons and all through the rest of the meeting people were four-deep across the table choosing the give-aways...

Scotty summed up the meeting later with: "It was the BEST meeting any time and any where of my cactus career!" It really WAS.

It was a spirited AUCTION that had excited bidders sitting on the edges of their seats...bidding ahead of Lee...bidding fast and high and wide...WOW like we've NEVER heard before - was it the plants or the people or the auctioneer? \$25 was the top price bid by Charles Norona from San Gabriel and Mojave...for a Notocactus uebelmannianus - "And it's WORTH it!" Lee assured him.... Gerry Clements (SG) was kept too busy to bid during her tenure as treasurer...Helen Hegyi "won" the Agave proliferata (which we it IS, prolific, that is), a true miniature. Alice Bishop and Kitty Sabo both reopened bidding after "Going once... going twice..." Kitty for \$14 for a Mam Lewisiana "...that's only a variation but the type local is so small - near Miller's landing"... Alice for a slightly caudexy pelargonium.

CACTUS for the auction were supplied by CSSA and purchased from Hans Britsch Nursery in north San Diego County (wholesale only)... CAUDICIFORMS came from Don DeFussi in San Fernando Valley...we understand Don is/was head gardener for the Bob Hope estate and that Don is a member of the San Gabriel Club. At our Board Meeting it was reported that our half of the profits from the auction was \$166...that the Plant Sales Table made a profit of \$90 -- now THAT is one big batch of plants anyway you propagate them...that's toil with soil...As a matter of fact the Loylands are taking Elaine Niehaus and me to Ruth Stanton's in Carlsbad to pick up the cuttings she has for the Society, then we'll swing around to Vista and to Cactus Jack's ... lots of time and gas involved for us to have a Plant Sales Table... lots of lugging to & from meetings - isn't there, Ricky Latimer? Speaking of selling plants I will be for CALIFORNIA NATIVE PLANT SOCIETY...the local ferocactus saved from the bulldozer on Mt Soledad this spring - they'll be well rooted and proceeds for CNPS.

Thelma O'Reilly



Jatropha cathartica

THE EUPHORBIACEA is comprised of a large family of flowering plants including herbs, shrubs and trees of such variable nature that one who searches for the rare and unusual finds this family a "collector's delight".

This family of about 250 genera and 6,000 species has settled in nearly all parts of the world. The plants main characteristics are a milky-juice and the absence of petals in their flowers.

The genus Euphorbia is composed of about 300 species. It is, in my opinion, the most fascinating in this large family. The curious and varied growth forms in the species which have developed a succulent growth habit captures the interest of the most discriminating collector.

The "new look" in gardens of succulent plant collectors is the caudiciforms. Generally, this term is applied to a species having a swollen caudex (the base of the stem), or a large tuberous root with succulent stems and/or leaves. Many caudiciforms are found in the Euphorbiaceae family.

J A T R O P H A C A T H A R T I C A



Jatropha podagrica

A species of the Euphorbiaceae family which has been grown under the synonym berlandieri for many years. Its native habitat is the Rio Grande plains of Texas and Mexico. This unusual species is an "eye catcher" to all who are fortunate enough to make its acquaintance. It is difficult to choose its most attractive feature.

The annual stems and leaves are softly grey-green in color with a silvery bloom. The delicate palmately-cut foilage grows lush and strong when given nearly full sun. The sand colored caudex is covered with a maze-like pattern of light brown corky patches, small cinnamon colored round dots are randomly scattered over the surface. Lucky collectors can boast of one or more

sunken eyes or holes in the caudex of their plant. Clusters of small small salmon-pink flowers on slender stems are held above the foilage during summer and early fall.

The plant should be potted with most of the caudex above soil level and watered sparingly during its dormancyperiod.

KISSIN' COUSINS

Continued:

J A T R O P H A P O D A G R I C A

This is a stately succulent shrub from Central America, West Indies and Colombia.

The caudex, thickened at the base and slender above, reaches about two feet at maturity. It is grey skinned, later turning tan and shedding. The smooth green, peltate, three-lobed leaves are long-petioled and slightly pruinose. One of the most interesting features of this stunning plant is the horny stipules. The branched inflorescence bears many brilliant scarlet red flowers during the entire year.

It seems to like partial shade, humus in a sandy soil and moderate watering--except in summer when it responds to heavy watering and misting.



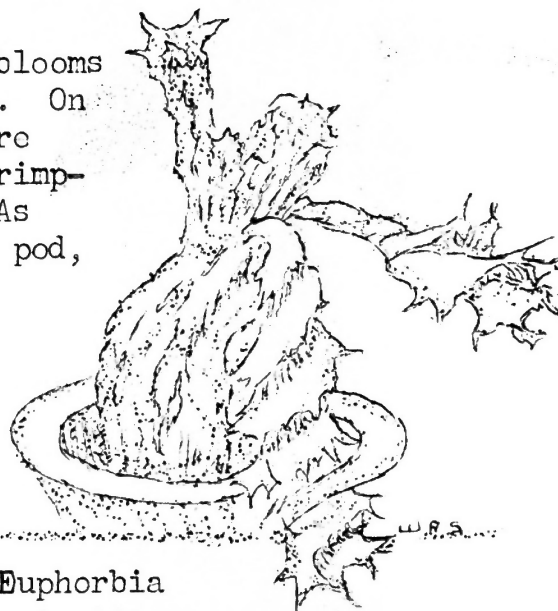
Pedilanthus macrocarpa

P E D I L A N T H U S M A C R O C A R P A

This particular plant is a cutting from one collected on the coast of Baja, but it is also native to the West Indies, California and the Mexican mainland. It is common around Punta Prieta which is about 500 miles south of the border. It is a succulent shrub with erect branching shoots growing about three feet high. The shoots are grey-green, jointed, round and from one half to one inch thick with tiny leaves which fall off soon after they are formed.

It is a desirable plant for its unusual blooms which appear on and off throughout the summer. On a short pedicel sprouting from the shoot, there appears what resembles an inch long flying shrimp-pink miniature bird with an elongated beak. As this most interesting bloom turns into a seed pod, it assumes the shape of an inverted Parisian parasol with a deeply recurved handle.

The plant makes many normal off-sets but few crests. Under my growing conditions the swirls of the crest have become tinged with a soft pink, and it reminds me of a lovely undulating sea creature.

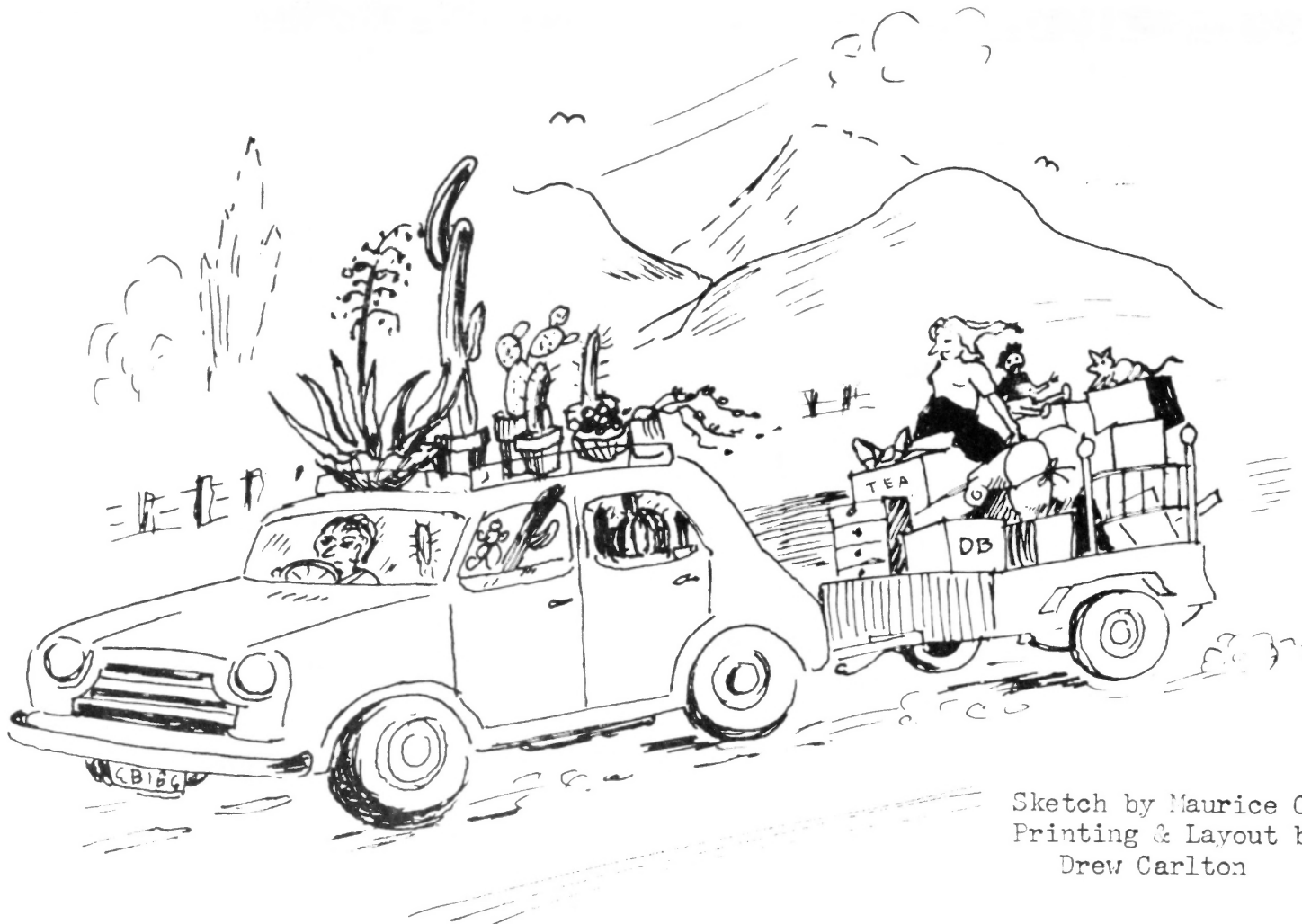


Euphorbia
tortirama

E U P H O R B I A T O R T I R A M A

This is an odd, spiny, succulent dwarf Euphorbia that was collected in the Transvaal, Africa. The thickened main root forms a carrot-shaped, tuberous body which is raised above the soil level when potted. Thick three-angled branches, which are irregularly tuberculate and spirally twisted along the angles, are formed from the apex of the caudex. The inflorescence is yellow and rather insignificant. This caudiciform is very rare and not easily obtained.

(Note: "Espinasy Flores" credits CALIFORNIA GARDEN as the source of this splendid article and thanks the author Thelma O'Reilly, a Club member for permission to use it.)



Sketch by Maurice Creed
 Printing & Layout by
 Drew Carlton

MOVING HOUSE
 CACTUS FIRST, THEN THE SPOUSE

With the Compliments of :-

**Hamilton Branch of Cactus & Succulent
 Society of New Zealand.**

1974

1974

MAY						
Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

May 4th. Branch Birthday.

JUNE						
Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
30						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

June 8th. Unusual Container with Plant.

JULY						
Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

July 6th. Sulcorebutia.

AUGUST						
Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August 3rd. Gold Spined Mammillaria.

An invitation to attend

ALOE 75

Monday 14th to Sunday 20th July, 1975

RHODESIA'S

FIRST INTERNATIONAL SUCCULENT CONGRESS

Aloes are to Africa what Cactuses are to the Americas: the outstanding flowering succulent of the Continent. The emphasis of Aloe 75, therefore, will be on the genus Aloe. Accordingly, although the Congress will pay attention to Euphorbias, Stapelias and other succulents, it will be primarily devoted to Aloes and thus may be regarded as:

THE WORLD'S FIRST ALOE CONGRESS

The Congress will be of interest to gardeners and collectors of rare species, as well as to professional botanists and horticulturists. Indeed, the aim is to attract a balanced cross-section of enthusiastic delegates, including all those whose souls will revel in the wide open spaces of the endless veld.

Rhodesia has some of Africa's most striking species of Aloes. Some unusually interesting small species, from the rugged Eastern Highlands, have only been identified within the last decade.

Hybridization is opening up great new possibilities: plants that are more floriferous and have more magnificent form, combined with the incredible hardiness of the true xerophyte.

Delegates will be offered a choice of activities that will be arranged around the nucleus of a formal programme. Events will include lectures and demonstrations, slide shows, the Society's Annual Show, national photographic and art competitions, a banquet, an ox-braai, visits to the greatest Aloe gardens in the World, and, finally, a unique feature will be conducted photo-safaris to outstanding wild colonies of different species growing on their native veld.

Aloe 75 is being organised by the Aloe, Cactus and Succulent Society of Rhodesia, P.O. Box 8514, Causeway, Salisbury.

You are invited to complete the attached Provisional Registration Form to enable long range and meticulous planning to proceed.

A R E Q U I P A (Br. & R.)

Francis J. BORG, Malta
(Continued from page 12,
January, 1974)

Thus, one may safely come to the conclusion that these two genera, after all, are not as distinct as one would have originally thought. This is exactly what Kinnach meant, that although there are certain differences

between them, there are sufficient similarities to suggest that they are closely related. Whilst compiling this commentary, the justification of certain genera is not at all decided, however, the greatest majority of cactophiles still consider the genus Arequipa as valid.

I must also mention a small experiment, perhaps not at all significant, which I myself conducted lately as regards the problem of Arequipa and Matucana. In March last year (1972) I planted four species of Arequipa and Matucana, all the seeds bought from the same dealer and most probably all coming from the expeditions of Dr. Lau. These seeds were of Arequipa rettigii, A. weingartiana, A. spinosissima, and A. erectocylindrica, and Matucana blancii, M. Haynei, M. mystrix and M. multicolor. While during the first and second months as expected, there was little or no difference between the two groups. From the third month onward all Arequipa took a more elongated form than Matucana, such that eighteen months later all Matucana had a flat globular form while all Arequipa were corioid. It must be stressed that this experiment was conducted in a glasshouse. In habitat these might grow differently.

Persons who have just started collecting cacti may be a bit surprised to find such confusion in the classification of certain genera. It must be said that many new plants are still being found and it is probable that new light may be thrown on this question after they are carefully examined.

It is interesting at this stage to observe that even great botanists confused one species with another in Borzicactus (Buxbaum), and this probably confirms Kinnach's theory that many genera have to be combined. Examples follow:

Britton and Rose in their book "The Cactaceae" described Echinocactus myriacantha (Vaupel) 1913 as Arequipa myriacantha. Now this plant grows on the opposite side of Peru to where all other Arequipa grow. It was only after many years that Backeberg placed this plant in the genus Submatucana because of the fine hairs in the axils of its flowers and also because of its dry fruit which splits vertically.

Backeberg in 1931 found a plant in Chile which he published in 1938 as Oreocereus varicolor. Afterwards in his famous book "Die Cactaceae" he himself transferred the species to Arequipa varicolor. And thereafter when he published his "Lexicon" he again transferred it back to Oreocereus varicolor. All this happened because this plant has characteristics of both Oreocereus and Arequipa. This is another confirmation of Kinnach's theory.

In 1939 Professor Werdermann placed Echinocactus aurantiacus, which Werdermann found in 1904 in the genus Arequipa as A. aurantiaca. A few years later this plant was placed by Backeberg in his genus Matucana.

Professor Borg himself in his book "Cacti" under Arequipa has a certain Arequipa clavata, which is nothing but Neoporteria clavata, a plant which grows to a height of 1½ meters and has red flowers, and which, because of its thick spines which come out from its felty areoles, is often mistaken for an Arequipa.

In conclusion I include with this discussion a list of all Arequipa known to exist.

AREQUIPA (Br. & R.)

Continued from page 13

List of all known Arequipa:

- A. australis n.n. (FR 1080)
- A. cylindrica n.n. (Knize)
- A. erectocylindrica (Kz. 335)
- A. hempeliana (FR 127a or FR 598)
- A. hempeliana V. subtilispina (FR 598a) (LAU 140)
- A. leucotricha (Lau 805)
- A. mirabilis
- A. rettigii (FR 127) (R 429) (LAU 123) (Kz 533)
- A. rettigii v. borealis n.n.
- A. soehrensii (LAU 139)
- A. spinosissima (FR 196) (LAU 113) (Kz 569)
- A. weingartiana (Kz 186)
- A. weingartiana v. carminanthema

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- Rauh, W. - Contributions to the Knowledge of
Peruvian Cactus Vegetation
- Schatzel &
Simo - G.O.K. Newsletter

SEEDLINGS

I've studied seed lists for four months. My birthday gift this year is my selection of seeds, about 20 species, from the famous Andreae Nurseries in Germany. Most seeds represent species unavailable as plants in the U.S.A.

I'm eager to get going but I must control myself until March 1st. Last year I started too early. Even with an electric heating cable, conditions were unfavorable. Pano-Drench was off the market and results were less than satisfactory.

I'm not accustomed to failure. I've used about every seed growing method. Best results were obtained when I used Edgar Lamb's methods. Recently I learned of a method used with success by a German botanist-biologist. I'll try his method this year. He plants seeds in ground, sterilized spagnum moss which has been saturated with boiled rainwater containing one large Chinosol pill to a liter of water. Pots used for seedlings are sterilized in the same manner.

Coffee-maker, one-cup type filter papers are used. Plant names are written on the filter papers which are folded twice and seeds placed inside, keeping species separated. The group of seed bearing folded filter papers are immersed in a Chino-solution for 30 minutes to assure complete sterilization.

Filter papers with seeds are removed from the solution, dried with a hair dryer and planted immediately in sterilized pots.

Anita M. Heywood, Glendale, MO

C O M M U N I C A T I O N S

From our readers:

1 Netherwood, Gossops Green,
Crawley, Sussex, RH11 8PT
England

6th January 1974

Dear Mr. Scott:

Crawley Branch of the National Cactus and Succulent Society receives 'Espinasy Flores' by a reciprocal arrangement with your G. Stanley of San Francisco who took out a subscription in the name of Mr. D. J. Bashford.

I am editor of our Branch newsletter and as such I would like permission to reprint occasional articles from 'Espinasy Flores'; naturally I would give full acknowledgements.

I must compliment you on your bulletin under your editorship. It is most interesting and very readable. I only wish I could think that our newsletter comes within one tenth of the quality of yours. However we all struggle on to the best of our abilities. I certainly envy you for the number of contributors you have. What do you do. . .blackmail them?

I hope you will consider my request favorably.

Yours truly

D. Desborough
D. Desborough

Mr. Desborough:

Thank you for your letter of January 6th. It was regarded as so complimentary we thought it best to 'frame' it in 'Espinasy Flores'. We were able to accomplish its framing on paper (above) as you will observe.

And thank you for your idea. . .blackmail. We have never resorted to such but it appears to have considerable potential. It has been filed in our weapons drawer for future exploitation if necessary.

Permission granted! Surely our contributors will be very happy to learn that you regard their writings as newsworthy and they will appreciate knowing their efforts are receiving recognition. Please use any material you think has reader appeal.

A copy of this issue is being mailed to you.Ye Ed

Carmichael, CA

Ye Ed:

I must tell you about the Othonna minima that I received in November from Africa. It has leafed out and it has two flower buds. It is a jewel! I must go to the books and read up on this beauty!

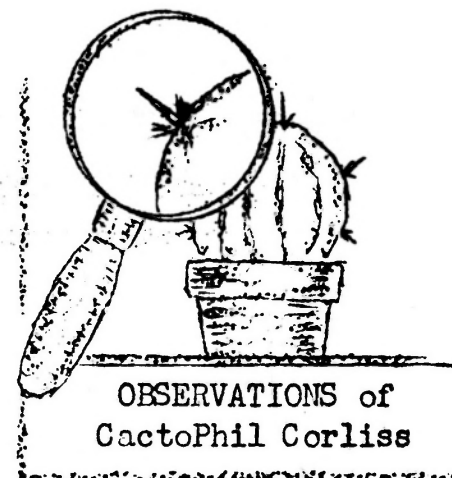
Dorothy

(Dorothy: Your description of O. minima should have a more fitting species name.....like 'maxima'. . . .Ye Ed)

C A C T U S F O R S E C U R I T Y

and Other Thoughts about Mexico Today

Dr. Philip G. Corliss



There was a note waiting for me on my arrival at my hotel in Guadalajara from a friend who had bought a complex of three apartments in Ajijic--the town on Lake Chapala which is said to be the only town in Mexico with more American than Mexican residents.

A plain black door opens off the cobblestone street in a bleak wall into the covered walks which surround the beautiful patio in the center of the apartments. My friend sought my advice about planting cactus on the roof of the apartments. I knew this was for security for on the occasion of my last visit to Guadalajara she had returned home just in time to cause burglars to flee over the roof, leaving her treasures in sacks behind them.

I advised her to plant Nyctocereus serpentinus on the roofs. N. serpentinus grows rapidly and with the excellent drainage of the roof tiles, it will stand the rainy season of Guadalajara. I had used a planting of this beneath my bathroom window in Arizona--the only vulnerable part of my place. It faithfully repelled burglars for many years while every other building on the street had been burgled.

Then I made the mistake of cutting it down. I was promptly robbed. I lost my TV, radio, all my surgical instruments, to name some.

Windows in all latin countries are heavily barred and broken glass is cemented atop most walls. These may be circumvented by crowbars and blankets, so other precautions are sometimes needed. I met an American in Guadalajara this winter whose home had been broken into by use of a crowbar. The burglar intends to repeat, the phone rings constantly to see whether anyone is at home. My friend feels obligated to stay at home every night, venturing to town only in the daytime when his neighbors can watch the house. He suspects the plain-clothes security guard who is supposed to patrol the neighborhood to prevent burglaries!

Inflation and anti-Americanism are rife in Mexico. Restaurants and hotels in Puerto Vallarta have in many cases exactly doubled their prices in the past two years. Guadalajara is not as bad, my large hotel room in the heart of the city with two double beds and bath still cost me but \$3.20 a night. Jose's favorite restaurant still serves a six-course "comida", plus beverage for only 96¢, up from last year's 80¢, with choices for every course. Taxi fares have doubled, however, and thanks to Echeverria's "anti-imperialism" talks, it is now the rule and not the exception to try to cheat or overcharge tourists. I was rather pleasantly surprised to find that Echeverria is now as unpopular in Mexico as Nixon is here! "They" even accuse him of being the cause of the recent assassination of a banker in Monterrey, and when he went to that city for the funeral, "they" gave him 24 hours to get out of the city! He is now reputed to be a man of many promises but few fulfilments.

There is more unrest in Mexico than is realized, too, I know an American who was within one block of four recent bombings in the heart of the center of Guadalajara. The local papers do not report these bombings nor the fights between soldiers, police, and leftists, which have resulted in many recent killings. Mexico's hope lies, I believe, in the development of a strong middle class, and this is coming too slowly. With the population explosion, it may be forever impossible. What will the United States do, or dare try to do, when the revolution comes?

CACTUS-OF-THE-MONTH

FEROCACTUS Britton & Rose, 1919

Dr. George E. Radwin

The name of February's cactus-of-the-month is derived from "ferus" (wild) and cactus.

Britton and Rose separated this group from Echinocactus on the basis of differences in fruit and flower. The moderately large, green through yellow, red, and purple, broadly funnel-shaped flowers are self-sterile and are produced at the areoles on the upper portions of the plant. The fruit, which is oblong, usually thick-walled and dry, dehisces (splits) by a large basal pore, freeing numerous moderately large black seeds that have a pitted surface.

The strength and relative stiffness of the impressive spines of Ferocactus species results from the impregnation of each with limy (calcium carbonate) material. The larger spines of ferocacti are transversely striated, each stria (line) indicating one day's growth. The long centrals of F. rectispinus may grow up to 150 days.

Species of Ferocactus are distributed from the southwestern U. S. as far south as south-central Mexico and throughout Baja California, where the process of speciation of Ferocactus seems to have reached its fullest development. Where Ferocacti occur they favor areas of low and uneven rainfall, low humidity, high air and soil surface temperatures with great daily and seasonal fluctuation and strong winds. Ferocactus species have a shallow root system and grow in rocky, well-drained soil, usually on slopes. Central Mexican species are calciphiles (lovers of limy soils) and all are at least tolerant of alkaline soil conditions. Members of the genus are limited in southward distribution by excessive rainfall, over 20 inches per year. In such a situation their succulent storage system becomes unnecessary and is actually a liability because it is susceptible to rotting when wet. Northward distribution is limited by low temperatures. Most species can withstand 14-20°F briefly but need temperatures over 28° for long-term survival.

Man has found several uses for ferocacti or "barrel-cacti" as they are commonly known. In Mexico where most of the species are found, the general name for all species of the genus is "Viznaga" (as it is for virtually all globular cacti) (pronounced "Bees-nah'-gah) from the Nahuatl Indian words meaning "spines all around".

The central, pulpy core of a barrel cactus contains about 85% water and barrels have long been known as a source of water in desert areas. Others have scooped out the pulp, placed heated stones inside, and used the interior of the cactus as a steam cooker. Cactus candy is made from strips of Ferocactus pulp that have been boiled in syrup made from Sahuaro fruit juice.

Altho authorities disagree as to the precise number and identity of species to be assigned here, probably 30-35 species can be shown to be distinct. Of these, 16 inhabit Baja California or islands in the Gulf of California. A rather uncritical list of species with locality follows: (Please consider species names as underlined)

- | | |
|--|--|
| acanthodes - SW U.S. & Baja Ca. | melocactiformis - Eastern Mexico |
| alamosanus - Alamos, Sonora, Mex. | nobilis - Eastern Mexico |
| chrysacanthus - Cedros Id., Mex. | orcutti - Valle de las Palmas, Baja Ca. |
| coloratus - Baja Ca. | peninsulae - S. Baja Ca. |
| covillei - S. Ariz., S. Sonora, Mex. | pringlei - Coahuila, Mex. |
| crassihamatus - Queretaro, Mex. | rafaelensis - San Luis Potosi, Mex. |
| diguetti - Islands of Gulf of Ca. | rectispinus - Central Baja Ca., Mulege |
| echidne - Hidalgo, Mex. | recurvus - Eastern Mex. |
| flavovirens - Tehuacan Puebla, Mex. | robustus - Tehuacan, Puebla, Mex. |
| fordi - Central outer coast of Baja | rostri - Eastern Ca. & Northern Baja Ca. |
| glaucescens - E. Cent. Mex., (Toliman) | santamaria - S. outer coast of Baja Ca. |
| gracilis - Baja Ca. | stainesi - San Luis Potosi, Mex. |
| horridus - Gulf coast of Baja Ca. | tortulospinus - Central Baja Ca. |
| johnsoni - S.W. U. S. | townsendianus - San Jose Id., Gulf of Mex. |
| latispinus - South central Mex. | uncinatus - W. Texas to northern Mexico |
| lecontei - S.W. U. S. & N. Mex., Baja | viridescens - coastal S. Ca. & N. Baja |
| macrodiscus - San Luis Potosi & So. | wislizeni - S.W. U.S. thru Chihuahua, Sonora |

Britton & Rose, The Cactaceae, VOL III, 123-147; Lindsay, Geo., The Taxonomy and Ecology of the genus Ferocactus (unpublished doctoral dissertation); Manning, J. 1930, The Cactacean's Primer: Viznaga or Barrel Cactus, Jour. of CSSA, II No. 6, 367-370.

R E G A L E M E N T

Jean and Leta Hapeman
and Nita Cotten say

"Thank you" to about two score of individuals who contributed to and assisted with the regalement for the CSSA Special Activity at Casa del Prado on Saturday, January 12th. It was festive---it was the greatest! Two hundred sixty persons (adult count) lined up and thereby served as expert witnesses and testified by their activities and actions that they were in total agreement. Not a single dissent!

Seven electric ovens, each containing a tamale pie large enough to serve forty were brought to Casa del Prado and hooked up to the electrical outlets to keep them energized. And it seemed there would be no end of individuals who brought 'goodies' to a special table at the end of the line. The table really should have had side boards.

And there was a 'spectacular'-----a turkey salad. It came from Holtville. It was fashioned in the shape of an Ocotillo in flower, if you can visualize such. Everyone looked longingly and slowed as they passed 'turkey-salad-a-la-ocotillo' but "t-s-a-l-o" did disappear spoonful by spoonful.

And WHO do you think had the ability and imagination to prepare such a dish. You guessed it! It was our PLANT-O-RAMA producer, Julianne. And she did it by 'remote control'-----120 miles away, by correspondence and by phone, and she put across the ideas which originate in her imagination, all timed to take effect at 12 o'clock January 12th. And give this a thought, Julianne is full time employed.

Jean says she is a collector and user of serving pieces but her inventory is out of balance. As a broker would say, she is short and long some particular pieces, for example short (missing) a stainless steel serving spoon and an iccream server or dipper with a moving handle. And she is long five spoons and a fork which don't fit in with her kitchenware at home. She says they are strangers looking for their rightful homes.

Will the real owners please make claims. Also will all persons who acquired sales slips for ingredients for dishes please sign the get Jean's initials so that they can be presented to Treasurer Korver.

Now to the salad. Rightfully there should be a macaroni shortage in a number of places around the county, on the other hand there will not be a shortage of lettuce in Imperial Valley by reason of the amount of salad the Imperial County group brought across the mountains. Salads, like cookies, were plentiful indeed.

And the Club and all visitors say "Thank You" Joan, Leta and Nita. If the three of you ever build an engine there will never be a knock, sputter or squeak in it.

* * * * *

F E B R U A R Y W-I-N-D-U-P

SHELVES --- Oliver K. LOYLAND and William (Bill) NELSON have made 'mastershelves' in 7 of 10 Club lockers in Rooms 101 and 104, Casa del Prado. Gracias amigos!

DESERT BOTANICAL GARDEN, Phoenix: Annual Cactus Show coming Feb. 17 to 25th.

NEW MEMBERS -- Watch for yourself in the March issue, but welcome NOW !!

DUES --- Have you paid? If Treasurer Korver doesn't report positively by mid-February, you'll be missing the March issue. Act now!

PLANT-OF-THE-MONTH, SUCCULENT, Aeonium tabulaeforme, a beauty, bring yours Feb. 12

PAGE NUMBERS: Ye Ed counts glibly up to 7, 11, maybe 13, but after that HELP!!!

(NOTEBOOK cont'd)

PEOPLEGREETERS were Lucille Beckfield, ever affable, and Edith Billmeyer...whose ankle is healing nicely in a burgandy wine velvet pants suit...they'll have even more people to greet for we picked up a number at The Big Meeting.

For instance, Llewellyn and Lois Wood of Pacific Beach... he's better known as "Babe" and is a surgeon...they've been friends of Lockwood's for a long time but hadn't seen each other for 11 years until they met at the meeting...prearranged with a note on Bill's Christmas card...what's more they joined both his and our organizations.

Joan and Paul Johnson of 3560 Lake Garden in Fallbrook, CA 92028 (telephone 714-728-7317), members of the GATES CLUB took the opportunity to become one of us. Helen Van Norman who lives in Jamul and deals in real estate, and her daughter Linda Osborn of Lemon Grove are also newly greetable as is Captain Wally Millson USN (Retired)...learned that at one time he lived next door to my boss - file that under Small World. Introduced him to Bill Gunther, co-editor of CALIFORNIA GARDEN magazine, and to the immediate past president of CALIFORNIA NATIVE PLANT SOCIETY Bill Knerr...you may have seen Bill at Presidio...QUAIL GARDENS also had a representative there but unfortunately we didn't get her name...and names are the game...

Alberta Klinert is a talented and productive designer of ceramic pots - particularly of miniatures - makes her own molds - also belongs to FLORAL ASSOCIATION.... Charles Harbison, known affectionately as Harbie the "Bug Man" at the Natural History Museum celebrated his 70th birthday at our meeting - HAPPY BIRTHDAY, HARBIE - we're looking forward to your paper on Euphorbia biglanulosa with the original description.

Sarah Jervey will think I'm nervy...but WHO is your friend? The little darkhaired beauty holding tight the big goldenspined cactus, loot from the auction, was Mimm Tsung... Ed Miller has just built a 12x18 greenhouse of fiberglass and will compare notes with other builders...the melocactus painting highlighting Martin's exhibit of that genus was a gift to Bob & Suzanne Taylor who were not able to attend... but we saw their melocactus...Julie Anne Mooney should be pleased that Ted Taylor paid \$15 for the enlarged focuaria cover that she donated...and Ted must have been very pleased to get such a great bargain...Art Montague didn't bid on any plants...said, "I have ALL I can water!" which sounds like a good place to stop...his wife Del identified the Kalanchoe beharen-sis "oakleaf" as a Hummel hybrid...we're still sad to have let the longlong spined ferocactus photographed at Conception Bay go for \$13...! Hope we never top those prices - let that auction stand on a peak!

Pat Mooney learned more about human nature as she passed among people offering candy and studied their various reactions ranging from a simple no-thank-you to complex emotionalism. "It would be good material for candid camera," she concluded.

Which the Notebook had better...

NK

SAN DIEGO CACTUS & SUCCULENT SOCIETY

Affiliate of the
Cactus & Succulent Society of America

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* * * * *

COMMITTEES FOR 1974

ACTIVITIES Shall try to give you this
 EDUCATION and this
 EXHIBITS and this in March bulletin.

LIBRARY --- Edith WERNER, Pat MOONEY and Helen HEGYI
 MEMBERSHIP --- John A. KORVER
 PLANTS & SUPPLIES --- Ricky LATIMER, Oliver K. & Sophie LOYLAND
 PROGRAMS --- Martin L. MOONEY, V.P.
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 RECEPTION --- Edith BILLMYER and Lucille BECKFIELD
 REGALEMENT --- Jean and Leta HAPEMAN and Nita COTTEN
 PLANTS-OF-THE-MONTH: Cactus, Dr. George E. RADWIN
 Succulent, Julianne RICE

(Was anyone overlooked, Mr. President?)

* * * * *

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4	Dorothy WILLIAMS, Carmichael, CA "COUNTRY STORE" a program. (Sorry for this slip in position, page 4...Ye Ed)

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