

Espinas y Flores

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

Vol. X, No. 10

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PROGRAM:

"That Man from Jamul, George Kennerson", an Expert on Cacti and Succulents - He Collects Them, Grows Them and Sells Them.

October 11th, 1975, 1:30 pm, Rm 101, Casa del Prado, Balboa Park.

SUCCULENT OF THE MONTH: Stapeliads.

CACTUS OF THE MONTH : Ariocarpus and Its Allies.

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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 November publication is October 16, 1975.

CACTUS-OF-THE-MONTH

Ariocarpus and Its Allies

Dr. George Radwin

(Encephalocarpus, Leuchtenbergia, Neogomesia, Obregonia, Strombocactus and Turbinicarpus)

This group consists of oddly unactus-like cacti which are all indigenous to the Chihuahuan Desert and surrounding regions in Coahuila and Tamaulipas States of Mexico. They range in shape from that of a pine cone (in Encephalocarpus and Strombocactus) to odd rosettes of short to long, faceted tubercles. They either lack spines entirely or have short or long ineffectual spines of almost papery consistency. Virtually all have large tuberous roots; in several genera these can pull the plant into the ground during periodic droughts prevalent in the area. The flowers arise from young, apical areoles amid copious wool, and vary in size and color.

These plants all live in areas of low rainfall, high temperature, and alkaline soils, and most benefit, in cultivation, from the addition of gypsum, or other sources of calcium, to their soil. In addition to these generalities the species of each genus exhibit certain individual characteristics that serve to distinguish them from members of other genera.

ARIOCARPUS (6 species) lack spines as adult plants; have horny tubercles, generally 3-sided, which make up most of the plant body; and have flowers mostly violet; white and yellow in A. retusus and A. trigonus respectively. A. fissuratus and A. kotschoubeyanus (comprising the subgenera Roseocactus) have extended areoles forming wool-filled slits running the length of each tubercle.

ENCEPHALOCARPUS (monotypic - 1 species, E. strobiliformis), which means "fruit in apex", differs from Ariocarpus in its numerous incurved, scale-like tubercles, keeled on the back and imbricate the plant as a whole, resembling a pine cone.

LEUCHTENBERGIA (monotypic - L. principis) has a cylindrical body, with a glaucous green-blue epidermis, and bears numerous long, three- or four-sided tubercles with terminal areoles from which thin, flat, papery spines arise.

NEOGOMESIA (monotypic - N. agavoides). Originally erected for N. agavoides, this genus and species have shown conclusively (Anderson, 1963) to be an extreme form of Ariocarpus.

OBREGONIA (monotypic - O. denegrii) is superficially similar to Ariocarpus but differs from it in its horny, erect, leaflike tubercles and its funnel-shaped white flower with its naked ovary.

STROMBOCACTUS (monotypic - S. disciformis) has a blue-gray epidermis, is spineless except in its newest growth, and has thickened, overlapping, scale-like tubercles.

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Cactus-of-the-Month, cont'd:

TURBINICARPUS (8 species) are generally small, weakly-spined plants with low, rounded tubercles. The spines are, in most species, weak and papery and curved or twisted.

These unusual genera, so obviously related and yet, by most standards, distinct, may represent the few surviving members of species-groups or genera that contained many more species in the past.

- References: Anderson, E.F., 1963, A Study of the Proposed Genus Neogomesia. J. Cact. Succ. Soc. Amer. 35(5):138-145.
_____, 1965, A Taxonomic Revision of Ariocarpus (Cactaceae). J. Cact. Succ. Soc. Amer. 37(1):39-49.
_____, 1968, A Systematic Study of Obregonia. J. Cact. Succ. Soc. Amer. 40(3):101-107.
Buxbaum, F., 1953, Morphology of Cactus Genera. 1. Leuchtenbergia. J. Cact. Succ. Soc. Amer. 35(3):82-84.
Glass, C., 1964, Pelecyphora-Encephalocarpus. J. Cact. Succ. Soc. Amer. 36(6):159-161.
_____ & Foster, 1974, Ariocarpus, Living Rock Cactus. J. Cact. Succ. Soc. Amer. 46:172-174.
Marshall, W.T. & T.M.M. Bock, 1941, Cactaceae. Abbey Garden Press 220 p.

FERTILIZING CACTUS & SUCCULENTS

Reprinted from CHRONICLE, L.A.
C & S S, July 1975

A group, which included the Tegelburgs, at the CSSA Show got to discussing fertilization. This discussion disclosed that most of them did not understand fertilization of cactus and succulents. Some were afraid fertilizing would destroy the desirable characters of the plant such as spination, shape, etc. This is not true if the correct ratio of ingredients is used and they are not overfertilized. Most are using fish or lawn and bedding plant fertilizers which have nitrogen-phosphorus-potash (NPK) ratios of 6-2-1 and 15-10-5. These are too low in potash which should be as plentiful as the nitrogen. Fish fertilizer in particular is very poor. Potted plants need fertilizing with every watering or at least with every other watering during the growing season.

Tegelburg said he used Peters 18-18-18 or 20-20-20 but not always every watering. Peters fertilizers are available from Robert B. Peters Co., 2833 Pennsylvania St. Allentown, Pennsylvania 18104. Available at most nurseries is Hyponex 20-20-20. Another good one is Grants 12-10-16.

How much should be used? For Peters or Hyponex, a level teaspoon per gallon is good for seedlings and small plants; older specimens require only half as much.

RE-POTTING

G. Rollerson
CSIE, Jan. 1975

Generally speaking, it is recommended to repot your collection in the spring when growth is just beginning. Certainly this is the safest approach for beginners, and probably most convenient for many people. However, it may be a very busy time too, with other gardening chores. Many experienced collectors have found that it is quite possible to repot cacti and succulents at almost any time of the year if care is used. By 'due care' I would mean to use soil with only a very slight amount of moisture in it, and to dust fungicide on any roots which were damaged or had to be trimmed. Then, if repotting was being done during the winter, no water would be given until the usual time in spring.

If you are at the stage of newness to handling cacti and succulents that you have little or no idea how to begin repotting them, a few suggestions may help. You will need fresh clean pots and fresh soil. Porous clay pots (not used too often now) should be thoroughly cleaned or even sterilized if they have been used before, and should always be soaked before using or they will dry out your soil. Plastic pots are easily washed clean and free of disease or pest organisms, but when several years old begin to get brittle, particularly if they have been exposed to much sun and weather, so are better replaced with new.

Soil is a problem for many people, both where to get it and what to get. If you are a gardener of long standing, it makes sense when we say, "use 1/3 loam, 1/3 leafmold and 1/3 coarse sand, with a little charcoal and bonemeal",-- but not everyone has gardened! Then we suggest alternatives: peat or compost for the leafmold; chick-grit, aquarium gravel, kitty litter or perlite for the coarse sand. and loam? Theoretically good loam is made from sods taken from a meadow or pasture and composted for a year or two until well broken down. In practice loam is usually good garden soil or 'topsoil', or what you buy as 'potting soil' in a garden shop, done up in plastic bags. Since much of such 'potting soil' today seems to be already 50% peat, we often suggest that 2/3 of this be made porous with an added 1/3 of grit, sweetened perhaps with 1/2 cup of granulated charcoal per gallon, and enriched with 1/4 cup of bonemeal (preferably finely ground). If you burn wood in a fireplace or go camping, collect and save your own charcoal, pulverize it before using. If you can't get bonemeal in any garden shop, which apparently will soon be generally the case, you may have to use chemical fertilizers when watering your plants in the future,-- unless you can find good loam and rich leafmold from which to prepare your soil mix in the first place. Every bit as good as leafmold is well-made composted vegetable and organic waste (if you have facilities for a compost pile), made with healthy garden refuse, vegetable peelings, coffee grounds, citrus rinds and even plate waste including meat scraps, bones and bread crusts. Don't hesitate to empty the cat's litter box onto your compost pile either! Well-rotted manure is another excellent alternative to leafmold, but seldom available to most of us today. So now find a large container and thoroughly mix your soil 'ingredients' together.

To be concluded next month

GARDEN HINTS

The question was asked: what can one do about grasshoppers? Henry F. Lee, Philadelphia, Pa. writes: "We had this problem on our outdoor tables for a single season three years ago. One or two moth balls, laid on the surface of each pot or on the spines if there is no space, solved the problem for us. They should not be in direct contact with the skin of the plant. (They will also keep sparrows away from Lithops). The moth balls that we used were para-di-chlor-benzene. Others are made of naphthalene. The compounds are related but not identical, so I cannot speak for the naphthalene. WARNING: If there are small children around, the use of moth balls of any kind is hazardous because they are quite toxic if swallowed." Moth balls also come in handy when the ground near your favorite plant coincides with your neighbor's cat's litter box. Again, this method should not be used where children or pets might develop a taste for moth balls. Cats will not touch them because they intensely dislike the odor. P.S. This may also work to keep skunks away.

From P. Bourdoux, in CACTUS, Vol. 5, No. 6, 1973, pages 110 and 111: Hoya cordifolia, which is doubtless the loveliest and most remarkable of the hoya species, must be rested at not lower than 15° C (59° F) in plenty of light.

Haworthia truncata, and all Haworthias and Gasterias, for that matter, can be increased by cutting the leaves near the stem with a good, sharp knife and letting them dry for a couple of weeks. They should then be placed on - not in - a moist soil, in semi-shade, until they root root or throw out offsets.

Mealybugs are little pests which invade choice plants: if the bugs cling to cacti, the white feathery appearance is easily to be seen on the green background. However, where succulents are concerned - mealybugs love echevarias - their leaves provide excellent hiding places and one does well to inspect every single plant on a regular basis. Most insecticides do not work well with mealybugs, as the latter have a waxy covering which is difficult to dissolve. A mixture of half rubbing alcohol and half water is their deadliest enemy. The mixture may be applied with a Q-tip or a small mist sprayer. I have had excellent results and have never had any damage to the plants.

From Bromeliad Journal, submitted by William Throop: "Type of water can affect insecticides -- If you have been spraying your plants with recommended insecticides to get rid of pests, and still have not gotten rid of them, it may be due to the type of water you have been using. Dr. Charles Cole of Texas A & M University points out: 'Water from municipal supplies is generally alkaline in nature and therefore reduces the effectiveness of many insecticides when used in preparing a spray solution. Using distilled water helps. Also, rain water is good to use in mixing insecticides. It will not only put more life in the insect sprays you prepare, but it's also better for watering flowers, pot plants, and the like.'" I understand, that using distilled water on seedlings prevents the formation of the bothersome mold and bacteria. Have any members ever tried this method? If so, it would be interesting to know what results you had, because it would be so much simpler to use just distilled water rather than treat the soil with a fungicide.

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CEREUS-LY SPEAKING

The regalement committee: One might say the Hapeman tornado has struck again! I don't know how they do it, but somehow the Hapeman gals always manage to find contributors. Thanks to: C.L. Benbow, Kathy Bromwell, Francis Johnson, Nibby Klinefelter, Marcia Hamecher, Ina Hines, Verna Pasek, Doris Rake, Lena Rice, Julianne Rice and Ethel Standish.

The bragging table has really been coming along nicely in the past few months but looked exceptionally attractive at the last meeting. Best plant of the month was Ruth Stanton's eye-catching Echeveria Cinderella.

We are looking forward to taking up Martin Mooney's suggestion: Bring your unidentified plants with you to the meetings - a special table will be set up for them and you may call on our various experts to give your plants their proper names. If a disagreement arises over the name, then we will flip a coin.

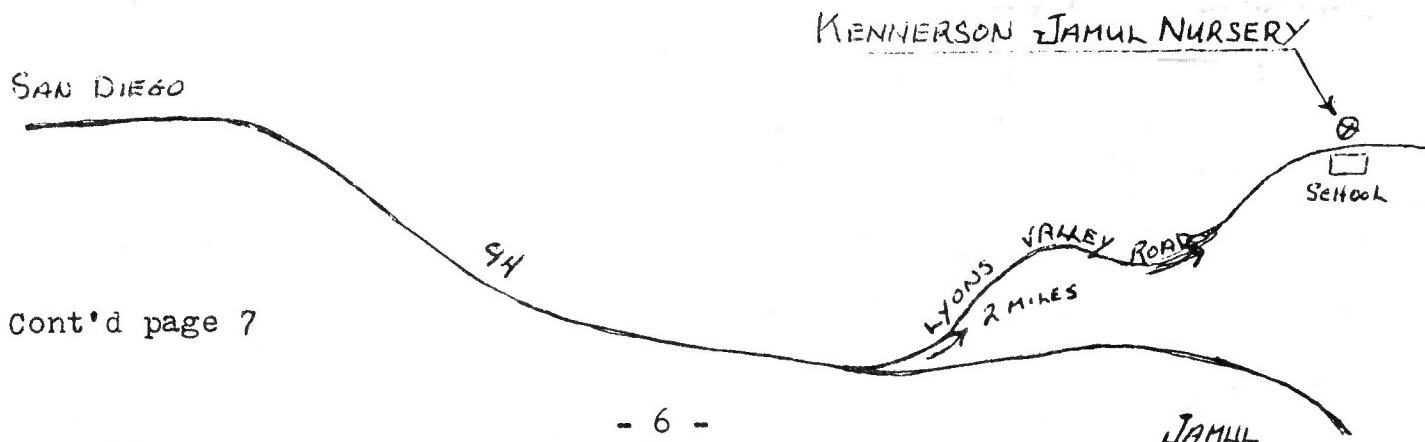
Board Meeting Notes: Verna Pasek is our new representative to the San Diego Floral Association. The three-year term of two board members expires Dec. 31, 1975 and a nominating committee has been set up to submit a list of new candidates. Members of the Nominating Committee are: Mary Birchell, Chairperson; Perlso Lewis and Augie Pfeiffer.

From Ted Taylor, Affiliate Reporter: The 1977 CSSA Convention will be held in Tucson, Arizona, May 16th through May 20th., at the Braniff Place Hotel, 180 W. Broadway. Several fine programs have been reviewed and plans are going forward to see that the next convention has as good or better speakers than before for it has long been the slogan of all the CSSA Conventions that each convention is bigger and better than the last.

And now, about that missing CSSA Journal! There is always the unlucky one whose copy somehow gets lost in the shuffle. Sometimes it seems as though the more postage we pay, the less service we receive. The only suggestion we have is to keep writing the Editor at either Box 167, Reseda, Ca., 91335, or, at his home address, 1593 Las Canos Road, Santa Barbara, Ca., 93105.

By the way, the same fate may happen to your copy of E y F! If it does, please let me know.

Kennerson Jamul Nursery, 14622 Lyons Valley Road, Jamul. Mark your calendar for Saturday, October 18th, 1975. Come and browse, after 10 am, have a fun day, bring your picnic basket, relax and chat with old friends and make new friends.



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SAN DIEGO CACTUS & SUCCULENT SOCIETY

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EXHIBITS -- Thomas and Marcia Hamecher
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Rep. to S.D. Botanical Garden Foundation -- Mr. & Mrs. Robert ANDERS

Cereus-ly Speaking, Cont'd:

Plants in bloom at Quail Gardens - October, November, December:
Arbutus unedo (Strawberry Tree), Anemone hupshensis japonica (Windflower), Bauhinia Blakeana (Hong Kong Orchid), Calliandra inaequilatera (Pink Powder Puff), Cassia bicapsularia (Senna), Cestrum elegans (C. purpureum) (Scarlet Jessamine), Crotalaria agatiflora (Canary Bird Bush), Erythrina lysistemon (Coral Tree), Leptospermum scoparium (Ruby Glow), Poinsettias (Christmas Flower), Protea varieties, and Tibouchina semidecandra (Princess flower).

Garden Hints, cont'd:

In the article published in this issue headed "Repotting" by G. Rollerson, the use of kitty litter as an addition to your compost pile was recommended. This brought about the following letter by Mrs. Katherine Strassburg, Grand Ledge, Michigan, published in CSIE, April 1975.

"I must voice opposition to part of your soil mix suggestions in the January Bulletin. Used Kitty litter can carry a disease called 'toxoplasmosis'. Even after long periods of time in a compost pile the microorganisms which cause the illness would still be alive. According to one of the veterinarians at Michigan State University, toxoplasmosis is not too serious except to children and pregnant women. It is an intestinal parasite (toxogondii) which causes dysentery and would be somewhat comparable to trichinosis. Any soil mixture which would come in contact with the hands should not contain cat feces. (And keep cats out of the children's play sand-box".

(Well, keep those mothballs handy!)

Augie Pfeiffer
5163 E. Bedford Dr.
San Diego, Calif. 92116

Address Correction Requested