

SOUTH COAST CACTUS AND SUCCULENT SOCIETY

NEWSLETTER

Number 1

January, 2004

President

Carol Causey
(310) 675-5843

GENERAL MEETING: Sunday, January 11, 2004, 1:30 P.M., in the classroom of South Coast Botanical Gardens. WOODY MINNICH, of Cactus Data Plants, will start out our new year by speaking and showing slides of his trip last year to Brazil. Special emphasis will be given to the Minas Gerais area where "blue" cacti are grown. Woody's presentation will include the people and buildings of the area as well as the cacti and succulents. Woody is always a fascinating speaker and nearly always brings a few excellent and rare plants for sale. Lets give Woody a big welcome!!!

1st V. Pres

Lowell Howard
(310) 533-9778

MEMBERSHIP: Good wishes for a speedy recovery are extended to our 1st Vice President, LOWELL HOWARD who is recovering from recent surgery!

REMINDER: Competition in the Plant-of-the-Month increased last year over the previous year. Thanks to everyone for participating! Let's increase it again this year by each person bringing at least two plants to each meeting. It's always interesting to see all the plants and it's an easy and enjoyable way to learn more the wonderful world of cacti and succulents!!!

2nd V. Pres

Gary Duke
(714) 377-0064

LAST CHANCE to have your name included in the 2004 roster of members! Be sure to submit your membership renewal this month!

Secretary

Sandra Fletcher
(310) 538-407

DUES: Are your dues paid yet? In case you have forgotten, fill in the form below, make out a check (\$10 for one; a additional \$2 for each extra family member), and send it to MARSHA HUEBNER, 1043 E. Joel, Carson, 90743. Make th check payable to SOUTH COAST CACTUS AND SUCCULENT SOCIETY

MEMBERSHIP

NEW

RENEWAL

NAME

STREET ADDRESS

CITY

ZIP

TELEPHONE ()

Treasurer

Marsha Huebner
(310) 533-8176



PLANT-OF-THE-MONTH RULES

At the November meeting the following rules were adopted for the 1999 Plant-of-the-Month (POM) competition:

- A maximum of three plants may be entered in each category (cactus and succulents).
- There will be three classes for entrants: advanced, intermediate and novice.
- Advanced and intermediate entrants must have had the plant in their possession for at least six months, beginners for three months.
- Entrants will receive 6 points for first place, 4 points for second place, 2 points for third place and 1 point for showing a plant that does not place.
- At the discretion of the judges there may be up to three third places in a category. If plants are not deemed to be of sufficient quality, no third place will be awarded.
- For an entrant to receive points, the entry tags must be collected by the person in charge of record keeping for POM.
- At the annual Christmas party, award plants will be presented to the ten highest cumulative point holders regardless of class.

PLANTS OF THE MONTH FOR 2004



	<u>CACTI</u>	<u>SUCCULENTE</u>
January	Thelocactus	Agave (small)
February	Echinosis/Lobivia	Crassula
March	Ariocarpus	Euphorbia Caupiciform
April	- - - - - SHOW TIME - - - - -	
May	Copiapoa	Sedum
June	Crest/Montrose/ Vaaruegate	Crest/Monstrose/ Variegate
July	Cereus and other Columars	Kalanchoe/Cotyledon
August	Favorite Cacti (3)	Favorite Succulents (3)
September	Turbinicarpus	Dwarf Aloes
October	- - - - - NO MEETING - - - - -	
November	Miniature (3) under 3 inches	Miniature (3) under 3 inches
Decenber	- - - - - CHRISTMAS PARTY - - - - -	



THELOCACTUS

In the genus Thelocactus are small to medium sized plants from Texas and especially Mexico. They are flattened spherical to elongated in shape, with more or less distinct, tuberculate ribs. The spines are mostly stout, rarely hooked, sometimes brightly colored or flattened, flexible, roughened or fibrous. The attractive large white, yellow or red flowers arise from an elongated areole. Though the flower tubes and fruit are scaly, they do not have hairs or spines. For a great many years this was not a well-defined group. Originally included here but now reclassified are Echinomastus macdowellii, Glandulicactus uncinatus and C. crassihamatus, Turbinicarpus lophophoroides, and Escobaria roseana.

Curt Backeberg has reclassified a good many more as Gymnocactus. These have spines that are mostly finer and lighter, conspicuous light-colored wool in the apex, more slender tubercles and clearly recognizable ribs. The flowers are medium sized, mostly purple (a few are pink or white). The flower tubes and fruit are naked. Species which he includes under Gymnocactus are gielsdorffianus, knuthianus, mandragora, subterraneus, saueri, viereckii, ysabelae, horripilis (previously Thelocactus goldii) and valdezianus. This last little puzzler also has a number of other names, including Normanbokea valdeziana.

Backeberg divides Thelocactus into three different groups.

1. Plants which are broad and low, with thick ribs segmented into pronounced tubercles. In this group are the species hexaedrophorus and variety fossulatus; heterochromus; rinconensis; lophothele; phymatothelos; bueckii; tulensis; nidulans; lloydii; and saussieri. Some of the more interesting are: T. heterochromus, with spines brightly colored in red and yellow bands; T. bueckii, whose body is a rich mahogany color in bright sun; T. nidulans, with long, fibrous spines giving it a nest-like appearance; and T. saussieri, with its very symmetrical oblong tubercles and fresh green color.

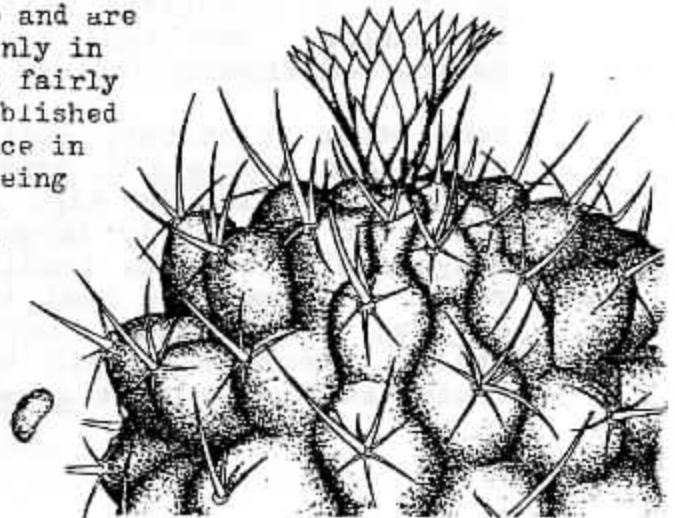
2. Plants becoming more or less cylindrical, with more distinct ribs and smaller tubercles, including T. bicolor and varieties pottsii, bolansis, texensis and tricolor; wagnerianus; hastifer; flavidispinus; and schwarzii. This is the northernmost group, with T. bicolor and its variety texensis extending into the United States. Here it is called "the glory of Texas" even though it is far more abundant in Mexico. Otherwise the common name is a good one, though. The large flowers, almost magenta at the edge, shading to pale pink in the center, are indeed a glorious sight to behold. Variety pottsii is also an especially attractive plant, with larger tubercles and a more rounded form than the other bicolor types.

3. Plants abundantly offsetting, forming clumps, with spines not as likely to be interlacing between the ribs. This is the southernmost group, growing in Hidalgo, Ixmiquilpan and Zimapan. It includes T. leucacanthus and its variety schmollii; porrectus; and ehrenbergii.

Groups 1 and 2 are Chihuahuan Desert plants, which means that they are from altitudes of 5000 feet or so and are tolerant to frost. Rains in that area come mainly in summer, but with good drainage the plants adapt fairly well to our wetter winters. In fact, once established they seem to tolerate almost any condition, since in nature they are not strangers to heavy soils. Being interesting in form, offering especially lovely flowers, and adapting well to either gardens or pot culture, they deserve a place in every cactus collection.

By: Ed and Betty Gay

Illustration: Thelocactus tulensis
from "The Cactaceae" by Marshall and Bock



SUCCULENT OF THE MONTH

SMALL AGAVES

by Phyllis Flechsig

We have all heard the horror stories about people who planted an innocent-looking little Agave in the back yard, only to have it turn into a monster a few years later that threatened to swallow the entire garden and the house with it. Yet Agaves are very attractive, tough, hardy plants that ought to have a place in every succulent collection. The secret is to be very selective, and to plant only those guaranteed to stay at a reasonable size. A few choice species that meet this criterion have been selected for this article, and an arbitrary size limit is 20 cm. (8 inches) across--more or less. Some may exceed this width after clustering for several years, but they may easily be reduced in size by removing outside offsets.

Agave as a genus contains two subgenera: Littaea, with flowers usually on straight spikes, and Agave, with large lateral branches on the flower stalks. The great majority of the smaller Agaves belong to subgenus Littaea. One slight disadvantage to the smaller Agaves is that they may bloom after only four or five years in cultivation, and an Agave rosette that blooms will die some weeks or months thereafter; fortunately, most species are self-fertile, and many will produce offsets.

One of the smallest Agaves is the beautiful but rare A. filifera v. compacta, a bright, shiny green rosette with white markings and little threads on the leaf margins. Another, quite different from other Agaves, is A. nizardensis, a pretty plant with a matte surface, no spines or teeth, and a pale midstripe on every leaf. Some beautiful small species from our Southwest are such ones as A. arizonica (rare and endangered), with dark green leaves that have reddish margins; and A. utahensis and its varieties, especially var. nevadensis and var. eborispina. These have very long terminal spines on the leaves. This particular group is native to high altitudes, and so will stand quite cold temperatures. In the group Parviflorae are A. toumeyana v. bella, A. parviflora, and A. polianthiflora. These are all small plants with beautiful white markings and curly white threads on the edges. The last named species is unique among Agaves in having red flowers instead of the usual yellow.

Some other relatively small Agaves are A. schottii, A. schidigera, and A. striata v. nana, all of which have narrow leaves with sharp spines at the tip. The well known A. victoriae-reginae, which can get fairly large, has a small form, v. compacta, that stays small, offsets readily, and shows the white markings very early. Perhaps the most beautiful form of this species is var. ornata, with really tiny rosettes, exquisitely painted with white. Mention should be made here of A. pumila, for years touted as the smallest Agave. In its juvenile form it is a tight

grayish rosette with only a few leaves; give it 15 years in the ground, however, and it becomes two or three feet across and looks quite different. It is thought to be a natural hybrid of A. lechuguilla and A. victoriae-reginae. Some interesting cultivars that are miniatures have been coming from Japan; one of these is 'Shoji-Raijin.' This is a cute little plant with broad bluish leaves, clustering very readily.

Agaves are very easy to grow. They need water all year, as they are not actually very succulent. These small species do well in pots, but be sure to give them enough room for their long roots. Propagation is from seed or from offsets. One caution: do not leave offsets lying about for long after they have been separated from the mother plant; unlike other succulents, they are best planted right away. Agaves in cultivation are not very much subject to pests, though it pays to keep an eye out for scale.

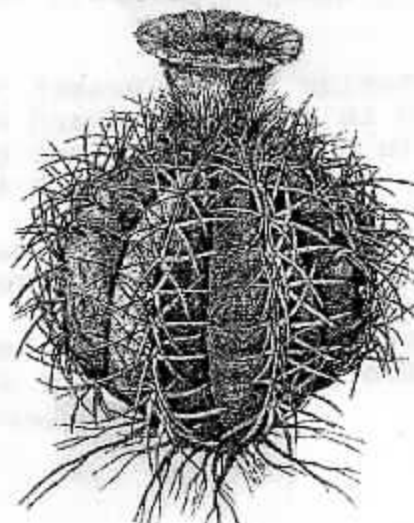
LITERATURE CONSULTED

Gentry, H. S. 1982. Agaves of Continental North America. Univ. of Ariz. Press, Tucson, Arizona.
Cactus & Succulent Journal. Various issues.

FIRES: in far-off South Africa, has raised concern among succulent people. Gerhard Marx, a world famous plant hunter, grower, artist, and author, suffered the loss of his life's work in a fire that destroyed the study and kitchen of his and his wife's home at Volmoed near Oudtshoorn. He lost his computer, digital photos, all the slides he'd taken over 20 years, all his books, journals, maps, field notes, drawings, paintings, art equipment, cameras—everything. At the time of the fire, Gerhard was leading a tour to the Little Karoo for people who had attended Succulenta, the international congress on succulent plants. Two CSSA board members, Lee Miller and Bob Barth, were on the tour, and later saw the damage to the house. CSSA has donated \$2,000 to help rebuild, and also are sending back issues of journals, books, and other materials. Individuals and groups may contribute to a fund that has been set up to help Gerhard: Checks should be payable to Succulent Society of S.A., and sent to: Gerhard Marx Fund, SSSA, P.O. Box 12580, 0028 Hatfield, Pretoria, South Africa.

Gerhard Marx has made enormous contributions to our hobby, by introducing new plants into commerce, by his writings and artistry. (You have probably seen his work in the plant journals, perhaps without realizing who the artist was.) Our group might want to consider contributing in some way to this fund.

Fresno Newsletter



HOW SMART ARE PLANTS – REALLY?

It is easy to dismiss plants as a lower form of life even though they compose 99% of the earth's biomass. Plants don't move much, are pretty quiet, and certainly do not think—we think! It seems, though, that the old phrase "dumb as a stump" is very far off the mark. How far off we don't know because we are just now realizing how complex plant behavior really is.

Two recent articles in the journal *Nature* outline new discoveries about plants ("Mindless mastery", Feb. 21, 2002; "How plants fight dirty", March 21, 2002).

Humans possess five major senses, but plants continuously monitor 15 different environmental variables, from sunlight to the alighting of a herbivorous insect. These signals from the plant's sensors are fed into a remarkably diverse communications system comprising chemicals (proteins, hormones, nucleic acids, etc.), electrical signals, and mechanical information. Every plant processes a prodigious amount of information—how and where this is done we don't know. We do know, though, that incoming information is acted upon in ways that increase the fitness of the plant. If intelligence is defined as adaptable behavior leading to increased survivability, then plants are intelligent.

Take the dodder, a parasitic plant, as an example. It reaches out for a host and upon contact assesses its exploitability within an hour or two with its sensors. If the first potential host is inadequate, it makes a "conscious" decision to move on to another prey. When a suitable host is found, the dodder coils around, deploys the appropriate number of suckers, and starts to siphon off the host's resources.

Plants even warn their neighbors of herbivore attacks by releasing volatile chemicals and thereby allowing early construction of chemical defenses. It has also been observed that in some contacts with herbivorous insects the attacked plant sends out specific volatile signals that attract the proper species of parasite that will dispatch the insect attacker.

Where are these plant decisions made and where do the 15 streams of sensor data end up? Untold numbers of bytes must be processed somewhere but we know of no plant central-processing-unit. We suppose that plant brains are of a distributed nature and employ chemical and electrical "chips". In reality, we can only guess because we have long ignored the information-processing aspects of this kingdom of life. A kingdom, which, lest we forget, powers all other life—except for a few bacteria that can tap geochemical energy sources.

(Based on a note in *Science frontiers*. no. 141)

THIS AND THAT

Lovers of the Crassulaceae rejoice! Gordon Rowley is preparing a book on this big--and from the publishing point of view, neglected--plant family. It should be available by now. Will it answer all our questions? Of course not; those who want to argue about *Echeveria*, *Crassula*, *Sedum*, *Dudleya*, etc. will continue to do so, but at least there will be a new book to relish!

The new research laboratories at the Desert Botanical Garden, Phoenix, have been named in honor of Edward F. Anderson. Dr. Anderson died suddenly in March, 2001, just before his major work, The Cactus Family, was published. It is a fitting tribute.

NEW BUG FIGHTER: Carolyn Unruh recommends Bayer Advanced Garden Tree and Shrub Insect Control, a systemic product which contains 1.47 Imidacloprid as an active ingredient. Growers have found Imidacloprid to be effective against mealy bugs and other common plant pests. The dilution rate is 2 Tb per gallon of water and used as a drench.

fresno Newsletter