

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 DIEZ

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THE WORLD OF INSECTS

Insects make up about three-quarters of all known kinds of living animals. They are differentiated by having three pairs of legs. Classic examples in your garden are honeybees and spiders.

Some insects obtain their food by sucking juices from plants-----or animals-----and so are accorded the classification of 'sucking insects'. Others by reason of their mouth parts are classified as 'chewing insects'. Aphids and nosquitos are examples of the first group and the Japanese beetle and grasshopper are examples of 'chewing insects'. They are equipped with mouth parts that cut and grind their food. You recall as a youngster catching a grasshopper and 'force feeding' it with a blade of grass, if not a straw just to watch the movement of its jaw parts, and perhaps its show of resistance by doing a bit of simultaneous spitting.

Some insect groups lead a Dr. Jekyll and Mr. Hyde existence. They may be highly useful and beneficial in one of their life phases and quite destructive in another. Butterflies and moths are typical examples of the 'double life' groupings. In the adult stage butterflies (or moths) do useful work by pollenizing flowers in your yard whereas in their larval stage, they are often found affixed to the underside of a leaf which appears to be having quite a struggle for freedom.

Millions of years before man made his appearance on this earth... in the Garden of Eden or in Africa....whichever serves your feeling of well being, these six-legged creatures were already in abundance and competing for the food supply of the world.

When man did finally make an entrance and began to contemplate the problems of food supply by producing more rewarding varieties, he found his greatest competitor for the products of his efforts such as fruits, flowers and leaves, were the countless numbers of insects, and they have remained a problem right up to this day, even this moment, perhaps in your garden while you are reading this.

The spray can doesn't distinguish between 'good' and 'bad' insects and the struggle continues. Insects have a way of 'adapting'. Maybe at some future time a new layer of vapor will encircle the earth, but of course that will not be in our time....we hope....Ye Ed

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

135 Mohawk Avenue
Louisville, KY 40214
August 7, 1974

"Dear Mr. Scott:

For sometime I have been a member of the American Cactus and Succulent Society. I also hold membership in the Cactus and Succulent Information Exchange of Canada and the Desert Botanical Garden of Phoenix, Arizona.

My primary interest rests with our native cacti species. For several years I have been concerned with forming a collection of U. S. species and varieties following the recent research of Dr. Lyman Benson. I have made much progress in this effort with the help of such wonderful people as Mr. Hubert Earle, Mr. Clark Champie, Ed and Betty Gay, Mr. Harry Johnson, and others who have shipped plants and provided information.

Recently, Dr. Benson advised that because of your interest in the native plants, you might be able to help me locate the few missing species that I need from California. Most of them are Opuntias which I understand grow so freely out there that most people do not bother to grow them in cultivation.

I will be very grateful for any help you can provide in the nature of individuals who might ship me those plants that I need. If you have or would be willing to get them for me, I will be most happy to reimburse you for whatever expense involved.

Using for a reference Benson's The Native Cacti of California with one exception as noted by an asterik (*), I am interested in obtaining the following plants:

- | | |
|--|---------------------------------|
| Echinocereus engelmannii, v. armatus | Opuntia bigelovii v. hoffmannii |
| " " v. howei* | " littoralis v. littoralis |
| (Benson, C&S Journal, Mar-Apr '74) | " " v. vasseyi |
| Echinocereus engelmannii v. munzii | " " v. austrocalifornica |
| | " " v. piercei |
| Opuntia megacantha, (spiny cacti similar to O. ficus indica) | " " v. martiniana |
| Opuntia wigginsii | " oricola |
| " echinocarpa v. wolfii | " tomentosa |
| " acanthocarpa v. coloradoensis | (Total --- 18 species) |
| " " v. ganderi | |
| " " v. major | |
| " prolifera | |

Have you ever heard of a Texas plant known as Echinocereus lloydii and do you know someone who has such a plant? It is found in the Fort Stockton, Texas area. If you know of this plant or if you know of a cactophile in the Fort Stockton area, I would be very much obliged if you will pass along information or addresses of persons that you might know in that area.

Thank you very much and I look forward to hearing from you.

Sincerely,
Owen E. Bailey
135 Mohawk Avenue
Louisville, Kentucky 40214

FACTORS AFFECTING THE FLOWERING OF PLANTS

(C. & S. Journal, Mar-Apr 1949)

By Richard Kolasinski

Much has been written about how to grow cacti and to get them to bloom. Much of this information is more confusing than helpful. Examples are formulas for soil mixtures that contain many different ingredients and contradictory cultural methods found in books. The result is that many cactophiles come to the conclusion that cacti are different from other plants and in order to get them to bloom, one must have a green thumb or use black magic.

Nothing is farther from the truth. The same factors that control the blossoming of a dandelion in your lawn also control the blossoming of cactus. The purpose of this article is not to add to confusion but rather to discuss the factors that determine whether or not any plant (cactus or other) will bloom.

First of all if we expect blossoms we must have a healthy mature plant. A plant must be free of disease and it must grow in a soil capable of feeding it and it must have moisture sufficient to enable it to grow but not excessive to the extent that the result is 'plant rot'. Maturity is a variable factor depending upon plant species and individual plants. If we take a branch of *Tamarix* in February, root it in water and plant it in the spring, it will blossom the same fall. It will mature in a few months. A lilac under similar conditions would require four or five years; an Oak tree ten to twenty years.

The same is true of a cactus. An *Echinopsis* or *Notocactus* or *Rebutia* offset may bloom a year after it has been removed from its parent plant. An *Opuntia* may take four to five years before it becomes blooming size. A *Carnegiea* or a *Fero-cactus* may take many years. A blooming size *Rebutia* or *Notocactus* may be kept in 3" pot whereas an *Opuntia* would require a much larger pot.

Once a plant matures, it may bloom on the current season's growth, or the previous season's growth or on older growth, depending upon the plant. An example of the first group is a hybrid Tea Rose. It may be cut almost to the ground in the spring and in a few months it is in blossom again. In the second group is the bush rose. If it is cut to the ground, it will produce growth but no flowers the first year. The following year flowers will be produced on the previous year's growth. In some instances a branch which has blossomed will never blossom again. That is why we prune berry bushes, the branches which have already produced fruit are pruned out.

In the case of cacti, they too may be grouped according to the type of growth that produces blossoms. The *Echinocactanae* bloom from the point of growth. *Opuntias* and *Eriocereus* blossom from the current year's growth. *Epiphyllums* bloom on growth that is at least a year old. The same is true of *Mammillarias* and *Echinocerei*. Cacti such as *Rebutias* and *Lobivias* bloom on older growth.

Let us assume we have a healthy mature plant. What conditions are required to bring it to bloom? The first and most important factor which influences blossoming is light. Some plants bloom during a short day and others during a long day. Tulips and Narcissi bloom early in the spring. They are short day plants. Irises and Roses are long day plants. In the fall we have short day plants such as *Chrysanthemums*.

Let's use the florist's *Chrysanthemum* to demonstrate the effect of light on the habits of a particular plant. These plants are grown from rooted cuttings planted during early summer. Early varieties bloom during November and late varieties bloom late in December. (Continued on next page)

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FACTORS AFFECTING THE FLOWERING OF PLANTS---continued:

But--florists may have Chrysanthemums blossom almost any month of the year. How is this done? Let's take two examples: Suppose flowers are wanted in August. **Cuttings** are planted in the spring in outdoor beds with a framework over them. When buds are expected, they are covered with a black cloth for several hours each day. The plants are fooled into thinking the days are shorter and they bloom. If blooms are wanted in early spring, the nuns are started in late fall and grown under extra light, and then in the spring they are covered with cloth to decrease the number of hours of light and this induces buds. The amount of light a plant receives affects its budding.

Cacti may also be considered as short day or long day plants. In early spring we have short day plants such as Echinocereus, Lophophora and Epiphyllum. Long day plants are Echinopsis, Thelocactus bicolor, Hamatocactus setispinus and Eriocereus martinii. An example of a short day fall plant is Ariocarpus fissuratus.

A chrysanthemum started from a cutting may grow, bloom and be discarded in a period of a few months. Perennial plants are kept over a period of years and other factors other than light enter into their culture.

Perennial plants go through a definite cycle each year during which there are one or more rest (dormant) periods, one or more growing periods and one or more blossoming periods. In addition to the right amount of light at the right time, some plants must have dormant periods at the right time. Failure to provide a dormant period upsets the plant's cycle, sometimes with drastic results. Botanists once took several species of deciduous trees and kept them growing through their winter dormant period. One tree in the experiment finally went dormant in early spring and instead of resuming growth when its time came, it stayed dormant through its growing period, through its second dormant period and finally resumed growth a year late. While the results of changing the cycle are not always as noticeable as the case mentioned, they often have an effect on the blossoming of the plants.

Now that we have demonstrated the importance of a rest period, just what conditions are required to induce a plant to become dormant? We know that potatoes kept in a cool dark cellar do not sprout, but as soon as the temperature rises, the potatoes start to grow. If the potatoes are kept in a light cool cellar, they will turn green but will not sprout. So we see that temperature controls dormancy. The cool temperature kept the potatoes dormant.

In our discussion of garden perennials, we saw that many of the spring flowering plants had a dormant period in midsummer when it was hot. Most plants are dormant when it is cold and dry, some are dormant when it is hot and dry, some may be dormant when it is cold and damp, but we do not know of any that rest when it is hot and wet.

What applies to garden plants also applies to cacti. They too go through a definite cycle each year and theoretically we could get any healthy nature cactus to bloom by duplicating the conditions under which it grows in its native habitat.

In practice we run into difficulties. There are very few cactophiles who have the knowledge, the time and the facilities for individual care for their plants. The most that they can do is to furnish such conditions as are acceptable to the majority of their plants with special care being reserved for one or two choice plants such as the Christmas cactus.

What cycle is most acceptable to the majority of plants in our collections? In our observations, the plants need winter rest, spring growth, and in the case of Echinocereus, Chamaecereus, Epiphyllum and some Hammillarias, there is a midsummer rest followed by fall growth. (To be continued)

'EyF' Oct. 1974

Club members who do not subscribe to CALIFORNIA GARDEN will enjoy:

S T U N N I N G S U C C U L E N T S

by Thelma O'REILLY

A SUCCULENT IS a plant possessing fleshy leaves and stems of greater proportions than the average plant so that they may store water and enable the plant to survive for long periods of drought. Many succulent plants occur in the deserts of the world but not all succulents are desert plants. Most of them are found in South Africa where collectors find treasures ranging from tiny dainty proportions to towering bulky ones. Many beautiful and interesting succulents come from the Canary Isles, Mexico, Central and South America. The latter two regions are the home of the largest family of succulents, the Cactaceae.

Most succulents can be grown in pots. Watering is one of the most important abilities a grower must acquire for success with their culture. They require less water than other plants but I find they respond with more watering than is usually recommended. I use a fast draining mix fortified with fertilizer. Although a resting period is necessary for some types, I have best results by never allowing the soil to remain bone-dry for a prolonged period of time.

Travelers, collectors and men of science have been fascinated for many years by succulent plants. Who can help being impressed with their unusual and sometimes bizarre forms, striking foliage and fantastic flowers!

Agave victoriae-reginae (dwarf form) is a beautiful slow-growing species found in Nuevo Leon, northern Mexico. It is a solid, broadly spherical rosette with stiff, erect, six inch leaves that are slightly curving at the plants center and tapering towards the tip, terminating with a dark spine. The color is dark green with striking white stripes in the center and on the edge. This one is an eye-catcher whose perfection of form and color will give distinction to your collection if you give it a heavy rich soil and partial shade from the hot summer sun.

If well-grown, Dudleya brittonii is a specimen of the Crassulaceae family which will cause viewers to stop and pay silent tribute to the breathtaking beauty of its color and form. It is found growing from crevices in nearly inaccessible rock formations along the coast of northern Baja California. The low branching rosette of graying green, glaucous to densely white leaves must be handled with special care. The leaves are brittle and break at the slightest pressure. Proper light exposure results in such a thick coating of the chalky bloom that it will take several weeks to rebuild if the plant is disturbed by water on its foliage. A rich soil, incorporated with pebble-sized gravel for drainage, produces a healthy plant that flowers each spring

Cotyledon paniculata is a member of the Crassulaceae family that is found in southern Africa where it is known as "Dotterboom of the Boers." It is a strange but striking plant in appearance. The tree-like erect swollen trunk is covered with yellow-brown papery peeling skin. Few thick arm-like branches are topped with two to four inch gray-green obovate leaves with yellow margins. Fallen leaves leave distinct small dark pock marks on the trunk. The inflorescence, which has not yet occurred on my plant, is a tall branching panicle of red flowers with green stripes. It is deciduous during the summer resting period but my plant never completely defoliates. It likes a rich sandy soil and filtered afternoon sun.

Pachycormus discolor, a uniquely interesting tree found in the Central Desert of Baja, is known here as the Elephant Tree. The lower part of the swollen trunk may be as much as three feet in diameter with branching stems that quickly taper, adding to its heavy, obese appearance. The bark is smooth and peels away in thin pale yellowish sheets. Although usually growing in the hot, arid interior, it is also found on the Pacific Coast where it grows prostrate along the dunes and takes on the appearance of a handsome cascading bonsai.

S Y N T H E S I S and
P H O T O S Y N T H E S I S ::

The dictionary says "synthesis ... the combining of the constituent elements of separate material or abstract entities into a single or unified entity (opposed to analysis)."

It also says "Photosynthesis (esp. in plants) is the synthesis of complex organic materials, esp. carbohydrates, from carbon dioxide, water, and inorganic salts, using sunlight as the source of energy and with the aid of a catalyst, as chlorophyll."

Green plants differ from the population of the animal kingdom in that plants are able to manufacture their own food. Of course they differ in other ways too! Radiant energy of the sunlight is absorbed by a plant leaf and it may be thought of as the "fuel" responsible for the production of the plant's food.

Chlorophyll is the green coloring matter of leaves and plants, essential to the production of carbohydrates (sugars) necessary for a plant's proper growth. It may be likened to the haemoglobin of animal blood. Chlorophyll makes it possible for a plant to 'manufacture' its food within its leaves. Chlorophyll molecules are found within structures called chloroplasts, usually within leaf cells, but they may also be found in stems, flowers, etc. of some plants. A native orchid of New Zealand which lives in the branches of high trees, has chloroplasts and chlorophyll in its roots. In this instance the plant's roots may be exposed to the sun's light.

Chlorophyll must be present before plants can manufacture their food--or sugars, and they must have light. Observing persons note that plants grow "toward the light. They do not have a brain or system or nerves to direct them. Neither is light energy stored within a plant. When light is available it is used by the plant, if it is not available the plant suffers. To test this theory, cover a plant or place it in darkness and see what happens. No light no food; no food no plant.....and it may turn 'yellow' in the process.

A contributor believes he has a partial answer for helping a plant manufacture its own food. He suggests that a solution consisting of a teaspoon of "Glucose D" in a pint of water be used to water plants which show a lack of chlorophyll at monthly intervals. He states that he gets "phenomenal" results.

Further he states: Readers may be familiar with Sansevieria "Bantel's sensation" with its wide, silvery bands. Before using 'glucose d' the leaves of my plants shrank when shorter days came. After Glucose D was used, all was well." And: "The beautiful Kalanchoe "Evelyn's beauty" after the addition of Glucose D is a veritable feast of beauty with its striking pink. Bromeliads which had lots of variegation suffered sadly from die-back in winter, but with Glucose D, this has been arrested." Further:

"Two imported Euphorbia suzanne, one untreated and the other treated with Glucose D, the latter one has doubled in size and its white part has developed a pink tinge. The other has not responded.

Instead of using Glucose D in a solution, some plants were treated by making a trench around the plant in the soil and about a half inch deep. A quarter teaspoon of powdered Glucose D was sprinkled in the trench and covered with soil. It is too soon to report results at this time.....results breathlessly awaited !! Glucose dissolves slowly.

Anyone in the Club who would like to experiment with glucose----and report?

G A R D E N V I S I T S

Fifth in a series

Bette Baker

THE GARDEN OF ANTHONY AND ROSE D'ATTILIO:

Tony and Rose D'Attilio who live at 4124 47th Street in San Diego exercise a balanced program of perfectionism and aesthetic qualities. As most people in the Succulent and Cactus 'melee' know, Tony is an artist of distinction and a scientist of long standing. He occupies a respected and revered position in the Museum of Natural History in San Diego as well as in our hearts.

A delightful umbrella-shaded patio in the rear of their home in East San Diego is the focal point of their gardening activities and it encompasses two green houses, a small (and very neat) potting area and a very large back yard garden.

One greenhouse enclosure contains predominantly Bromeliads, Euphorbias, and a marvelous variety of more delicate succulent species all of which are arranged very carefully and in a most eye-appealing order. Every plant is potted with utmost care to reveal the beauty of the plant to the best possible advantage and with great consideration for good culturing conditions about which they are both very knowledgeable.

This enclosure and all the plants within it are so lovely and perfect that even the common varieties of plants have a very special appeal.

The second and larger greenhouse is especially adapted for the culture of true cacti of which there are hundreds of species, many of which are rare or newly described. Tony's very respected professional knowledge of animal systematics and taxonomy have enabled him to accrue an authoritative store of information. He is seldom, if ever, stumped by even the most sophisticated questions about succulent plant families.

The visitor should pay particular attention to Tony's collection of Copiapoas which group rates perhaps first among his favorites. The Cereanace subtribe are resplendent in an especially protected environment. Many species I saw there for the first time.

Rose D'Attilio provides unceasing labor in producing the antiseptic appearance of the large open garden where the countless beautifully cultured plants have attained maturity and size commensurate with the many years that the D'Attilios have been collecting.

Crushed rock of a grey color provides a weed-free cleanliness and it provides for the retention of moisture also, throughout all the outside garden beds. One cannot list all the plant species represented in the garden but a sizeable number of genera are included and all are in marvelous growing condition.

A gorgeous ring of perfect, snowy-white, hand collected Dudloya brittonii as well as other Dudloya species are at home in a bed which surrounds the base of a generously bearing apricot tree.

The pleasures of perusing all the facets of the D'Attilio garden is greatly enhanced by the charm and knowledgability of this most compatible and gracious couple.

Cereoids--columnar cacti

Dr. George E. Radwin

In reviewing the groups selected for this feature during the past nine months I find that just about all of them can be characterized as "globular" types. This is reasonable, as most cacti that may be kept in pots are relatively small and globular. They also have the advantage that many bloom at this small size. This is not, however, a completely true reflection of the proportion of globular to columnar types in the Cactaceae. If we were to exclude the large genus Mammillaria we would find that perhaps 35% of the species and (if we follow a taxonomic splitter like Backeberg) about 50% of cactus genera are columnar in growth form.

According to students of the evolution of the Cactaceae the cereoid group is not unitary but comprises several major branches. The obvious difference between a columnar and a globular cactus is the elongated shape of the former. This is not, however, an infallible guide as some groups that clearly belong with the globulars contain some cylindrical or columnar types (eg. Mammillaria guerrerensis and Coryphantha clava) and some cereoid genera contain some globular or subglobular members (eg. Echinocereus weinbergii, E. knippelianus, Buiningia aurea).

Columnar cacti also have a different aspect because of the long, curved, branching offsets. Because many columnar cacti live for many years and reach a great height and size, in most cases they must be mature (and also very large) before they will flower. A further difference, of some importance to horticulturists, is that, as a rule, columnar cacti root more readily from cuttings than species with globular forms. This, it can be readily understood, would be a distinct advantage to a plant with many offsets, some of which invariably are dropped. Also, as cereoids primarily flower only after many years, this additional vegetative method of propagation is advantageous to the plants.

If all this is not sufficient to attract you to the care and feeding of cereoids, all students of landscaping recognize that a well-balanced landscape requires both low and high objects; so if you are making a cactus bed, remember that tall (as well as round) is beautiful.

The diversity of form among the columnar cacti is illustrated by the following list of some genera and their best known species:

<u>Azureocereus hertlingianus</u>	<u>Cleistocactus strausii</u>	<u>Marginatocereus marginatus</u>
<u>Austrocephalocereus dybowskii</u>	" <u>fricii</u>	<u>Myrtillocactus geometrizans</u>
<u>Arrojadoa rhodantha</u>	<u>Echinocereus engelmannii</u>	<u>Neobuxbaumia polylopha</u>
" <u>penicillata</u>	<u>Eupostoa lanata</u>	" <u>tetetzo</u>
<u>Buiningia aurea</u>	<u>Helianthocereus pasacana</u>	<u>Oreocereus celsianus</u>
<u>Browningia candelaris</u>	" <u>poco</u>	" <u>trollii</u>
<u>Cephalocereus senilis</u>	<u>Haageocereus chrysacantha</u>	<u>Pilosocereus palmeri</u>
<u>Cereus peruvianus</u>	<u>Lemaireocereus thurberi</u>	<u>Pachycereus pringlei</u>
" <u>janacaru</u>	<u>Lophocereus schottii</u>	<u>Carnegiea gigantea</u>
<u>Chamaecereus silvestrii</u>	<u>Morawetzia doelziana</u>	<u>Stetsonia coryne</u>

There are many other varied, and in some cases bizarre-looking genera; far too many to include here. Everyone has at least a few of these species. Bring them in...please...not so much for competitive reasons but in order to allow the membership to see the range of diversity to be found among the columnar cacti.

A ROSE BY ANY OTHER NAME

OR PERHAPS BY A NUMBER ?

In past columns we have discussed some of the several reasons why cacti may be propagated and sold under the wrong name.....such as mistakes in naming by the vendor, mistakes in spelling, and wrong guesses as to proper identity by the vendor or recipient.

In this issue we will discuss another cause of incorrect nomenclature: plants propagated from incorrectly labelled seeds.

It is true that many plant species (especially cactus) have been "newly discovered" by writers who hasten into print with a new name, but later the new species is found to be one already known and named by an earlier authority.

This accounts for some of the extra names given to some mammillarias which have had 40 or 50 different names. The problem is complicated in reverse when an incorrectly named plant is found to be identical with a known other species and on this basis it is declared that the incorrect name is not a true species.

To illustrate this, I cite the following: In 1967 I grew plants from seeds purchased from a leading seed dealer which were labelled "Mammillaria bombycina, var. flavispina". All the plants proved to be Mammillaria columbiana. Many of these incorrectly labelled seed packets must have been sold, as I have purchased plants from two dealers labelled "M. bombycina var. flavispina" that were indeed M. columbiana. I finally acquired the true M. bombycina var. flavispina from Uebelmann. There seems to be no excuse for the wide-spread mislabelling of these plants as all M. bombycina var. flavispina have hooked spines whereas M. columbiana does not. The spines of M. bombycina var. flavispina are uniquely glass-like.

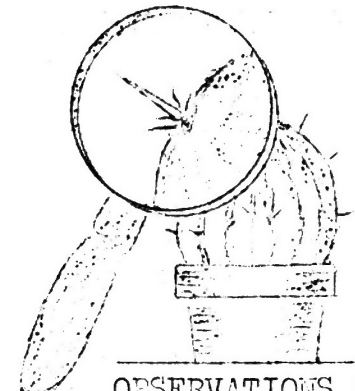
I suggest that a similar mislabelling of seeds has resulted in the wide-spread belief that Mammillaria bella (not to be confused with Escobaria bella) is only a variety of Mammillaria spinosissima.

It is true that there are many varieties of Mammillaria spinosissima, mostly due to spine color, and Mammillaria spinosissima has been known under sixty-four different names (!) but I believe Mammillaria bella is a true species. And while I agree that M. columbiana and M. bogotensis are identical, I feel that the plants I have seen and/or grown as Mammillaria hennisii represent a valid species.

From reports I have received of the papers presented at the recent I. O. S. meeting in Santa Barbara, there will be a rash of new names and transfers of species from species into other genera. I see no excuse for this except for glorification (?) of the author of such changes. A name once published, even though incorrect, should remain the valid name. Some species have been cast to and fro so many times that they must indeed feel they are unloved and of questionable parentage.

If our learned authorities cannot do better than to just change names and families, perhaps we should learn to call cacti by numbers instead of names.

At least we wouldn't have to be concerned about mistakes in spelling!



OBSERVATIONS OF
Cacto-Phil Corliss

I thot you were a
Mammillaria !

I was until they
began using dice
for naming !



NEW CACTUS GENUS*

M O R A N G A Y A Rowley

by Virginia F. MARTIN:

Dr. Reid MORAN of the San Diego Museum of Natural History and Ed and Betty GAY of Tarzana have been honored in having a new genus of the Cactaceae named for them by Gordon Rowley of England----MORANGAYA rowley n.gen.

The newly named plant was originally collected by T. S. Brandegees in 1890 and described by his wife Katherine in ZOE VOL 1, 1904 as Cereus pensilis. In 1908 J. A. Purpus, after he had visited the area and collected specimens, named it Echinocereus pensilis. Its habitat is at the southernmost tip of Baja California, Sierra de la Laguna, at 5,000 feet and upwards on steep inaccessible rocks. Dr. George Lindsay in his article on the "Echinocerei of Baja California" in Cactaceas y Succulentas Mexicanas, October-December 1967 issue, told of Dr. Reid Moran collecting specimens at the type locality and subsequently investigating their taxonomic relationships. His investigations assured him that the plant did not belong in Echinocereus, it was closer to Apocactus but that it did not seem to fit there either. Dr. Lindsay suggested that probably a new genus would be erected to accommodate it in the future.

The new designation MORANGAYA Rowley n.gen. has now been ascribed to this plant. Rowley's (English) description is as follows and is published in Ashingtonia, Volume 1, #4, January 1974:

"Stems to 2m, long, with aerial roots, erect at first, later prostrate hanging and rooting, 3-4cm. thick, ribs 8-11, up to 6mm tall, with areoles 2-3mm. diam. bearing short, white felt, a single central spine up to 2cm. long and about 6 slightly smaller radials, later up to 20 spines which begin pale yellow and pass to grey, straight; flowers actinomorphic, from near the apex of the stem, solitary, 5-6.5cm. long, trumpet-shaped with a long slender tube bearing sparse small areoles and scales; sepals and tube orange-red; receptacle with areoles bearing short whitish wool and up to 7 fine bristles to 8mm. long; stamens white with cream anthers; stigmas 6, pale yellowish to pinkish white; fruit globular, 1.5-2cm. diam., spiny; seeds black, rugose, very numerous, up to 2mm long, very oblique at the base."

The generic name commemorates Dr. Reid Moran and Ed and Betty Gay, experts on the flora of Baja California and jointly responsible for recollecting and making information and plants available of this remarkable species.

Habitat of MORANGAYA is reported as one of the most local, remote and inaccessible and it is therefore not surprising to find that the species has been visited, photographed and collected more than many commoner cacti in habitat, beginning with the Brandegees and Purpus at the turn of the century and more recently by Gates, Moran, Lindsay and the Gays. This bears out the familiar axiom that the desire to collect goes in inverse proportion to the collectability of a species."

This is a most fitting plant with which Ed and Betty should be identified. Their expedition in May 1968 to the Sierra de La Laguna from Todos Santos via their pickup to Rancho La Burrera, on horseback to Rancho de la Laguna and somewhat beyond and then the rugged climb to gain El Picacho at some 7,000 ft. will probably remain their most exciting and impressive plant experience. Their detailed account in the Cactus & Succulent Journal, VOL XLI NO 4, 1969, of this memorable experience...sighting, photographing, collecting and "reverent contemplation" of this fantastic plant in habitat is one of the most stirring accounts of any plant excursion it has been my pleasure to read. Their fine pictures and commentary on this particular plant was a highlight of their program on "Echinocereus" in June 1974.

*(Credit: Los Angeles Cactus Chronicle, VOL XLII NO 6 June 1974)

LEN NEWTON -- JOHN LAVRANOS --- CYNTHIA GIDDY

LEN NEWTON, we're awfully sorry you couldn't be with us on October 5th in the Auditorium at Casa del Prado in Balboa Park to personally conduct our group on a "Search of Succulents in West Tropical Africa" as we had planned.

Everyone was very, very "Africa conscious" and keyed up, particularly after hearing Dr. John J. Lavranos on August 31st and Cynthia Giddy on September 21st tell about the lands and plants of Africa. What wonderful programs....total attention! Everyone fully enjoyed them....and perhaps envied John and Cynthia their enthusiasm, interest and knowledge of the strange and unusual plants of Africa. Of course we wouldn't have wanted to be left abandoned in some of the areas pictured by Mr. Lavranos in N. E. Africa without instant recourse to a helicopter. The area reminded everyone very much of the Grand Canyon, but the plant forms startled everyone. We feel inadequate to even begin to attempt to put his program into words.

The group's interest in succulent plants was further enhanced when Cynthia Giddy of Johannesburg described and showed color slides of the "Succulents of South Africa". If she had said: "Let's start two new plant clubs in San Diego, 1) an "Aloe Club" and the other 2) a "Cycad Club", she would have had one hundred instant members. Or she might have placed San Diego in jeopardy....all one hundred might have decided to go immediately to the source of these unusual plant families.

Most of our members have a few aloes but of course only a half dozen or so can handle some of the larger ones which she described and showed with color slides. In fact we didn't even know that some of the aloes grew to "tree size". Even so, we'd be very happy to settle for the 'miniatures'.

Everyone was impressed and enthused with the speakers and their presentations of the unusual plants of Africa.

Cynthia did a double-header with a 'snack' in between, perhaps better described by "ALOES", (snack) and "CYCADS". To her listeners, it was like personally discovering a large group of strange and well-nigh unbelievable plants.

The above brings to mind an idea which we would like for you to mull over in your mind upon your return to your 'Chair' at the University of Kumasi. Why not tell us about African plant life in occasional contributions to Espinas y Flores? Our members and readers are very much enthused and interested in African plants.....perhaps more than ever now following your and Dr. Lavranos' visits to the States for I. O. S. and other events.

Or is it possible that some students at the University of Kumasi are sufficiently inspired by native African plants to write about them for foreign publications?

.....
A nine-foot tall Cereus peruvianus for sale.....please call 461-6309
.....

PROGRAM FOR OCTOBER 12TH: Dr. Leroy H. PHELPS will tell "ALL ABOUT EPIPHYTES" with the assistance of live epiphytes from his garden. Come prepared to find out everything you ever wanted to know about "Epiphytes" but were afraid to ask. Have both eyes and ears wide open and don't be afraid to ask.

Lee's presentation and demonstration will be the best you have ever heard (or seen) on this subject....he is TOPS. We will be seeing you on October the 12th at Casa del Prado, Room 101 at 1:30 p.m. on Oct. 12. Come early and look.

T H E O C O T I L L O

- - - Audrey Johnson - - -

Last February, Geoff and I were happy to perform a favour for some friends at Salton Sea by removing a good sized ocotillo from under a hedge of tall oleanders in their garden. For a long time we had wanted an ocotillo to add to our varied collection of plants, and after quite a struggle, we finally managed to get it packed into the trunk of the car, complete with all its beautiful little green leaves and its vicious spines! After arriving safely home with our treasure, we quickly found what we considered the ideal spot, and (on Ruth Stanton's suggestion) "bagged" its tips for protection from the sun. Nevertheless, in spite of a great deal of "TLC" that poor much-travelled ocotillo dropped all its leaves in a few days, and, for the past seven months it has looked more dead than alive with grey, spiny branches.

With true British determination, of course, I continued to watch and water it. This week my optimism was rewarded. As I sent my usual perfunctory glance ocotillo-wards, I did a double take. I nearly fell on top of my precious plant in my excitement! Yes...the ocotillo was again covered with the filmy green of tiny leaves. My joyful shouts brought Geoff a-running from the house to join in the excitement.

Together we stood admiring the success of our joint efforts. From now on in its full-sun location at the top of a rocky hillside, how could "Super-Ocotillo" go wrong? Maybe the "brown bagging" paid off after all---with a little help from the sprinklers, of course.

Note: Geoff measured the longest "branch" just now. He tells me it is sixty-five inches long. Our ocotillo is no baby!

*Never Say Die" No. 1, 'E y F' Sept. 1974 page 12.

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13	Len NEWTON, Dr. John LAVRANOS and Cynthia GIDDY
14	Audrey JOHNSON "Never Say Die" The Ocotillo, No. 2 and IN THIS ISSUE
15	OFFICERS and DIRECTORS. MEMBERSHIP. ELECTION OF OFFICERS FOR 1975 and COMMITTEES

WELCOME TO NEW MEMBERS: Ed and Lucille OXLEY, 307 'D' Street
National City, CA 92050 (477 6725)

SAN DIEGO CACTUS & SUCCULENT SOCIETY

Affiliate of the
Cactus & Succulent Society of America

PRESIDENT -- Loyal J BIBBEY, 490 Citrus Ave., Imperial Beach, CA 92032 . . .	423	5133
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YE EDITOR -- Walter R. SCOTT, 3430 Wilshire Ter., San Diego, CA 92104.	296	6022

1975 C SSA CONVENTION COORDINATORS

H. Warren BUCKNER, Dr. Philip G. CORLISS and Walter R. SCOTT

BOARD OF DIRECTORS

- 1-year terms: Dr. Leroy N. PHELPS and Wilson L. WELLS
- 2-year terms: Oliver K. LOYLAND and Ione HUBNER
- 3-year terms: H. Warren BUCKNER and August PFEIFFER

MEMBERSHIP in the San Diego Cactus & Succulent Society is open to all persons interested in growing cacti and other succulents and exotic plants. Membership currently is \$5.00 per year on an annual basis. Persons joining at other times may obtain back issues of the bulletin "Espinas y Flores" for the period of their membership so long as back issues are available.

ELECTION OF OFFICERS AND BOARD MEMBERS FOR 1975

ARTICLE IV SEC 2: A nominating committee of three members shall be elected by the Executive Board by general consent at the board meeting preceding the regular October meeting of the Society:

The nominating committee elected at the board meeting was:
1) Ione HUBNER, 2) Nibby KLINEFELTER and 3) August PFEIFFER

ARTICLE IV SEC 2, cont'd: "It shall be the duty of the nominating committee to nominate candidates for the offices to be filled at the annual meeting in December. The nominating committee shall report at the regular meeting of the Society in November.....additional nominations from the floor shall be permitted, provided the nominee is present and agrees to nomination.

ARTICLE IV SEC 3: The officers, except for the Directors, shall be elected by ballot for a term of two years or until such time as new officers are elected. The Directors shall be elected for a term of three years, two being elected each year, except that the first year two shall be elected for a term of one year, two for a term of two years and two for a term of three years.

ARTICLE VII COMMITTEES: Committees to be appointed include:
1) PROGRAM, 2) PLANTS & SUPPLIES, 3) MEMBERSHIP, 4) EDUCATION, 5) PUBLICATION
6) EXHIBITS, 7) ACTIVITIES, 8) RECEPTION and 9) AUDITING

~~OCTOBER 5th, 1:30 pm~~ in the Auditorium of Casa del Prado, Balboa Park;
Len NEWTON of the Univ. of Science & Technology, Kumasi, Ghana "In Search of Succulents in West Tropical Africa."

Walter R. Scott
3430 Wilshire Ter.
San Diego, Ca. 92104
Return Requested

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AH JERVEN