

# Espinas y Flores

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

Volume XXV, Number 2

February 10, 1990

## FEBRUARY MEETING

Saturday February 10, 1990

1:30 P.M.

Casa Del Prado, Room 101, Balboa Park

## PROGRAM

"Succulents of Namibia"

By Guy Wrinkle

Guy Wrinkle Now teach biology and environmental science at West Los Angeles College where he has been teaching for about ten years. He has also taught biology at Pierce college.

He now runs a nursery, Guy Wrinkle/Exotic Plants, which specializes in rare and hard to find succulents, cycads etc.

He has a masters degree in Entomology (insects) from U.C.L.A. and a B.A. from C.S.U.L.A. where He studies among other things, plant tissue culture.

He has traveled to South Africa five times looking for plants a well as to Namibia, Mexico, Hawaii, and Europe.

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DEADLINE for the March issue of E y F. is February 24, 1990

Thanks-Mary

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Congratulations to our new Board Members -- Joey Betzler, Dorothy Dunn, Beverly Kirkegaard, Madelyn Lee, Rudy Lime, and Mark St. Clair

## THE SUCCULENT MEMBERS OF THE ASTERACEAE

By J. A. Betzler

The **Asteraceae** (**Compositae**) is a family of very common plants worldwide. As the old family name implies, a composite flower is one that is made up of many parts. In this family there are many flowers that make up the typical daisy. There are ray flowers (the rays of the daisy) and disk flowers (the center of the daisy). In the case of 'dandelions' the composite flower is made up of the ray flowers only. And in the case of 'brass buttons' or Senecio ballyi there are disk flowers only. Othonna has both typical daisy and disk type inflorescences.

This plant family is one of the largest, perhaps second only to the Orchidaceae. Unlike the orchids though, the number of succulent genera is very limited. There are only about three or four succulent genera recognized in the **Asteraceae**. The recent work on the succulent members of this family is incomplete, though new works have been done (Halliday, 1988). And, new species are always being described (Van Jaarsveld, 1989). Below are some of the genera in cultivation.

Senecio is a very common genus in the old and new world. Most of the 40 species in California are not considered succulent, but there are some succulent arborescent species in Mexico (Randel & Randel, 1980). In southern Africa almost all the members of this genus are succulent. About 1000 species occur world wide, and there are about 120 succulent members. Cultivation of these plants is relatively easy, they do not seem to need a definite rest, as long as they are showing signs of growth. In the broadest terms, Senecio, has flowers of both typical daisy and disk type (discoid capitula - to be technical). In the strict sense succulent stemmed Senecios with discoid capitula only are Kleinia.

This definition of Kleinia is somewhat new (Halliday, 1988 and related papers) and has taken most of the succulent Senecio's and grouped them into Kleinia: thus S. deflersii would become K. obesa. This concept is nothing new though, this species has worn several other names since its description in 1894. The changes by Halliday and others will need to be studied further for a complete evaluation to be made.

Othonna is a large genus with herbaceous perennial, geophytic, caudiciform and succulent members. This genus has the most variety of forms; with members that look like Euphorbias (O. euphorbioides, O. herrei) to species that resemble seaweed (O. cakilefolia). There are flowers of both types in this group also (daisy and disk). These plants grow in some of the most arid regions of the world. Jacobsen recognizes about 40 succulent species, 145 species occur in the Cape Province (not all are succulent).

To grow Othonnas well you must let them rest in the hot dry months and when they start to grow in the winter water may be increased. Do not force these plants to grow in the summer. If forced to grow they will not live very long. For more interesting reading about this group and one of the greatest succulent plant explorers read; Gordon Rowley's article about Harry Hall.

There is one other group worth mentioning here and that is Coreopsis. Coreopsis maritima, a species with very succulent leaves and a somewhat succulent stem, is interesting, but its sister species, C. gigantea, is a very large succulent. Both of these species are native to California and are adapted to winter rainfall. They have a similar growth pattern to Othonna i.e. it is deciduous in the summer and at the first sign of winter rains the leaves appear. Soon after the leaves, typical yellow daisy's are borne and displayed prominently on long pediceles.

Pests are few: mealy bugs can be a problem but this is rare. Actually this is a relatively pest free group of plants. They can lose roots if the soil is kept too moist. So a loose growing medium is important to grow these plants well.

Even though there are not many genera of succulent daisies the species that are in cultivation are quite successful. **Please bring in your plants to share with others and help make a wonderful presentation of this group.**



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Halliday P., 1988. Note worthy species of Kleinia.

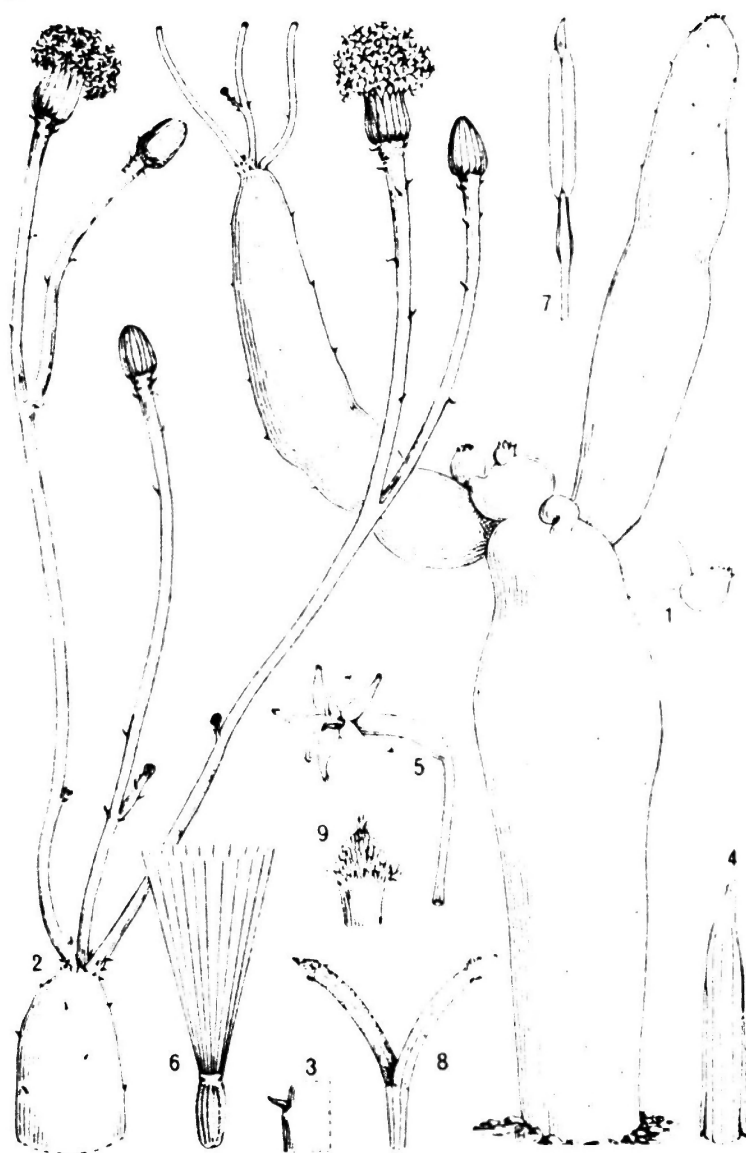
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Randel, J.A. & P.W. Randel, 1980. Succulent arborescent Senecios from Central Mexico. CSSA Journ. 52: 233-235.

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TAB. 3892 *Kleinia obesa*. FIG. 1. habit.  $\times 1$ . 2. stem-up & inflorescence.  $\times 1$ . 3. leaf & internodal pattern.  $\times 2$ . 4. phyllary.  $\times 4$ . 5. floret.  $\times 3$ . 6. achene with pappus.  $\times 4$ . 7. anther & collar.  $\times 8$ . 8. style-arms.  $\times 8$ . 9. stigmatic appendage.  $\times 16$ . All drawn from *Livistonia* s.n., Yemen

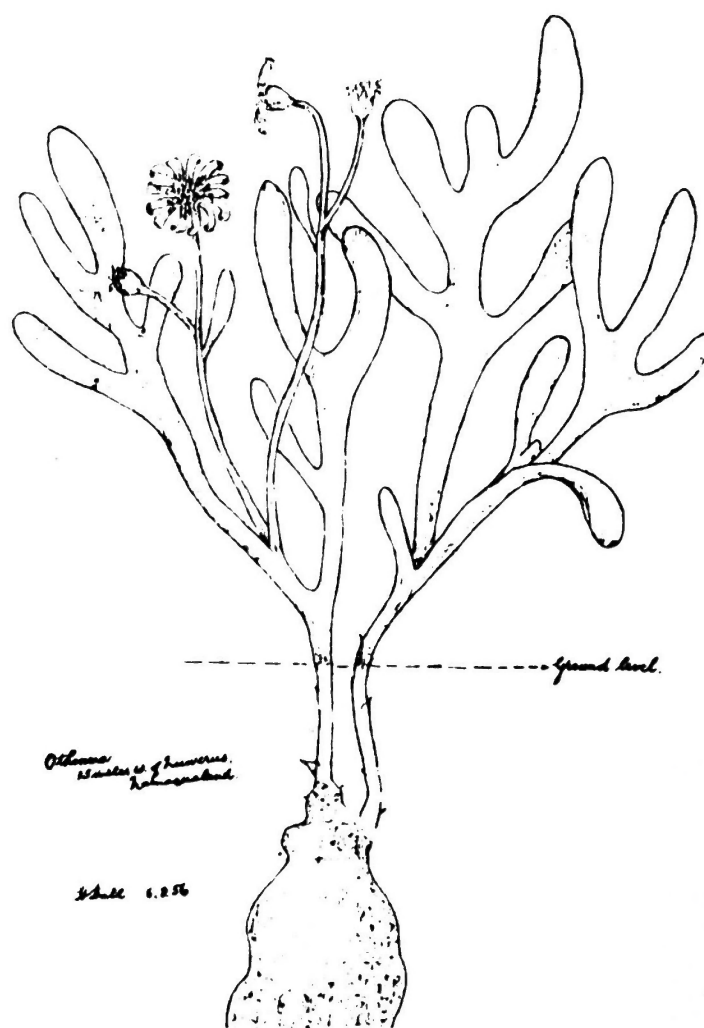


Fig. 9. Harry Hall's own pencil sketch of *Othonna cakilifolia*, as collected near Nuwerus in 1956.



## CHRISTMAS PARTY PREFERED TICKET DRAWING

To show appreciation to members who use their own time, money and/or transportation to do work for the benefit of the San Diego Cactus and Succulent Society, preferred ticket holders will have first choice of plants at the annual Christmas plant drawing.

To earn this preference you must perform a task approved by the President of the society or a Chairman of a committee. It is your responsibility to see that your name is placed on the list of workers and turned in by the President or Chairman. All credits must be turned in by the November meeting. You must be at the meeting to receive your plant. Verify your credit in advance! There will be no arguments or changes at the Christmas meeting.

The only way to qualify for two preferred tickets is to win a first place at the Bragging Table. ( Only one extra ticket can be earned per person.)

EXAMPLES: During regular meetings.

--All regular assigned duties. ie. plant sales, library, newsletter, kitchen, drawing table, etc.

--If you do not have an assigned project.

-Give a program or write an article for the newsletter.

-Speak about or write an article for Plant of the Month.

-Be responsible for sound system and slide equipment for a year. (Storage, setup, etc.)

-Assist on a regularly monthly basis in the Library, Plant Sales, Kitchen, or after meeting cleanup.

-Greet and make welcome new members for a year.

-Sign up and bring a plate of refreshments three times during the year. (You are responsible for signing the list in the kitchen for credit.)

-Represent this society at another botanical society.

-Set up a special VIP display table. (See Pres. in advance.)

-Provide transportation for or host a speaker.

--In all examples, see President or Chairman of committee first!

EXAMPLES: During annual show.

-Perform tasks as assigned by Show Chairman. ie: Host or hostess for oneday, set up show, clean up after show, clerk, etc. Work for one day on Plant Sales, set up and cleanup. (See Plant Sales Chairman.)

-Enter five or more plants in the show.

-Check in with Chairman before activity and be sure your name is listed for credit.

EXEMPTIONS: NO credit will be given for;

-Holding an elected office.

-Selling or donating plants to the sales or drawing table.

-Any activity not approved in advance by President of the Society or Chairman of an activity.

If you have any questions see Madelyn Lee.



## Cacti-of-the-Month

### STENOCEREINAE

by Rick Latimer

In 1753 Linnaeus gave scientific names to 22 species of cacti, which were assigned to the genus Cactus. Over the years more species were discovered, and these plants were later divided into three subfamilies and numerous genera as true relationships became clearer. In 1754 the English horticulturist removed all the columnar into the then new genus Cereus. This name remained in use through the 1800s by most authors. However, Lyman Benson is one of the few that still uses it to include both North and South columnar cacti (and such things as Wilcoxia, Heliocereus, and Hylocereus). Arthur Gibson stated that the diversity in this wide definition of the genus Cereus is found in entire plant families of other flowering plants. In general, the generally accepted narrow definition of the genus Cereus includes a small group of species from South America. The cacti of the month include those species (about 30 mostly from Mexico) that would belong to the wide definition of Cereus, but in the narrow sense, would belong to the subtribe Stenocereinae (which belongs to the tribe Pachycereeae of the subfamily Cactoideae).

This subtribe includes plant species that are linked by commonly held attributes, some of which are not found in other cactus species. Some of these attributes are not obvious as they include microscopically visible structures and chemicals. The genera included in this subtribe are Stenocereus (including the subgenera Rathbunia and Machaerocereus), Polaskia (including the subgenus Heliabravoa), Escontria, and Myrtillocactus.

Three closely related genera are Polaskia, Myrtillocactus, and Escontria. The plants resemble each other having a V-shaped canopy on a short trunk. Escontria is named in honor of Don Blas Escontria a Mexican government official who died in 1906. This is the only genus named by Rose without Britton's collaboration. The only species E. chiotilla has fruits with bracts that remind one of Hylocereus, Pterocereus, or the Colima clones of Neobuxbaumia mezcalaensis. Unlike all other species in this subtribe, the fruits are spineless. They are yellow and dayblooming. Another odd feature of this species is that the stems blacken when cut, a feature found in most of members of the closely related subtribe such as Pachycereus marginatus, but no other of the Stenocereinae. Plants may be found in the states of Puebla, Oaxaca, Guerrero, and Michoacan.

Polaskia is named in honor of an Oklahoma cactophile and the subgenus is named in honor of the famous Mexican cactologist Helia Bravo-Hollis. The two species are P. chichipe and P.(H.) chende. They both are native to the Mexican state of Puebla. The fruits are spiny and the flowers are greenish and night-blooming on the former species and are day-blooming and white in the case of the latter species.

More familiar to cactophiles is the genus Myrtillocactus. The flowers and fruits are the smallest in the tribe. The two lesser known

species M. schenckii and M. eichlamii have slightly larger flowers than the well known M. cochal and M. geometrizzans, but they bloom less often with each flower producing areole blooming only one or two flowers per year while the other two have multiple blooms and fruits per areole (similar in appearance to the not closely related species of Disocactus and Rhipsalis that do this as well). The genus name derives from the fruit (which are classified as lacking visible spines - they are there, just highly inconspicuous) "myrtillo" or myrtle-like. They ripen to a purplish-red color but are bluish on the way from green to the ripe color. Sometimes they are called "blueberry" cacti. The first species is from Oaxaca, the second blue-stemmed species is from Guatemala, the third of course is from Baja, and the fourth has a similar range as E. chiotilla and is often used in grafting.

There are a number of Stenocereus species. Originally some of them were in the defunct genus Lemaireocereus, but it was divided up with some of them going into Pachycereus, including the type species P. (L.) hollianus. S. hystrix from the Dominican Republic was one of the original 22 plants named by Linnaeus. Some of these plants are hard to find in Backeberg as they are listed in other genera such as S. (Hertrichocereus) beneckeii or S. (Marshallocereus) thurberi. This last one has its own Organ Pipe National Monument south of Ajo, Arizona named in its honor. One has to go quite a way further down into Baja to see this species, but they are more numerous in mainland Mexico and range down into W. Costa Rica per Backeberg. Although the "organ pipes" are impressive plants, the flowers that I have seen in person or pictures of are not exciting. They are semitubular, night-blooming, medium-sized, and whitish with red or red-violet touched.

The subgenus Rathbunia is actually three months older than Stenocereus, and has caused a controversy. The plants are generally erect, but are thinner than the "organ pipes". The flowers are even more tubular (to the max?) than the "organ pipes" and may bloom away from the stem tip, but areoles are said to produce only one flower. S. (R.) alamosensis has reddish day blooming flowers which are hummingbird pollinated. This species is native to the state of Sonora, while S. (R.) kerberi comes from Sinaloa and south to Colima. A similar looking plant with white night blooming flowers from Sinaloa south to Guerrero is S. standleyi, a link to the other Stenocereus species.

The subgenus Machaerocereus also includes two species, but they are native to Baja. More widespread is S. (M.) gummosus which starts at Ensenada and runs down all the way to the tip. Plants are mostly erect, like the Rathbunias, but some stems sprawl, making the plants more chaotic looking. S. (M.) eruca is limited to the Magdalena Plains, although some have reported seeing plants south of El Rosario! Plants are prostrate and creep (one would need time lapse photography - one picture a year to see this) along the ground like giant caterpillars. The older ends die back. The spines remind me of those of Opuntia invicta and Echinocereus brandegeei (silver form). The flowers of both are wide open and night blooming and are of the more classical 'cereus' look. The fruits are said to be quite tasteful. The common name for the first species is 'pitaya agria' and the second is 'chirinole' or 'creeping devil'.



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## NEW BOOKS IN THE LIBRARY

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Euphorbia Journal V. 6 (2)

Daniel McAlpine, The Botanical Atlas

Margaret Mee, In Search of Flowers of the Amazon Forests

Nippon Bonsai Association of Japan, Classic Bonsai of Japan

Martyn Rix, Growing Bulbs

also

various CSSA Journals 1987-88 donated by Florence Sakely

---Rick Latimer, Librarian

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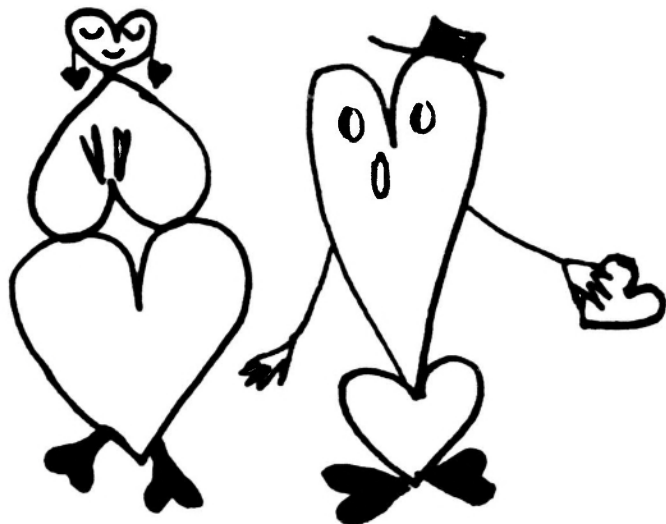
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The San Diego Cactus & Succulent Society is open to all persons interested in growing cacti or other succulents and exotic plants. Meetings are held the second Saturday of each month at 1:30 p.m. in Room 101, Casa del Prado, Balboa Park. Board of Directors meetings are held after the general meetings. Annual dues are \$8.00 per single member per year, and \$2.00 for each additional member of a household within the family. Single copies of Espinas y Flores are 60¢.

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