



MAMILLARIA TUDORAE

Volume XXIII, Number 7

# Espinas y Flores

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

July 9, 1988



JULY MEETING

Saturday July 9, 1987

Casa Del Prado, Room 101, Balboa Park

PROGRAM

BOTANICAL EXPOSITION TO NORTHWEST MEXICO  
with Jim Dice

Our program this month will feature slides of Northwestern region mainland MEXICO including portions of the states of Senora, Sinaloa, Nayarit, Jalisco and Michoacan. The focus will be on the xerophytic vegetation of that area and, of course, the succulent flora. However, other aspects - including the history - of the region will be touched upon as well. This program is a composite of two separate botanical expeditions, one in 1982, sponsored by the Huntington Botanical Gardens and another from 1988 sponsored by the San Diego Natural History Museum.

---

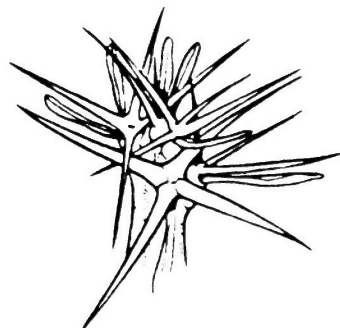
---

IN THIS ISSUE	Page
News. . . . .	2
Results of the 1988 Show. . . . .	3
Frailea and Blossfeldia by Phyllis Flechsig . . . . .	7
The Didereaceae by Dorothy Dunn . . . . .	9
New Members. . . . .	11

---

---

Plants bearing both spines or prickles and leaves (at least during the growing season).



*Didierea madagascariensis*

NEWS NEWS NEWS

PLEASE REMEMBER TO SEND ARTICLES FOR THE AUGUST ESPINAS y FLORES TO:  
DANA ADAMS

7305 ROCK CANYON DRIVE  
SAN DIEGO, CA 92126

The deadline for that issue is JULY 28, 1988. I do thank Dana for taking over for me. Please help her as much as possible.

Those who have signed up to bring refreshments to the July Meeting are:

Mark St. Clair	Dana Adams	Beverly Kirkegaard
Chloe Bajwa	Mary E. Holman	Millie Richter
Mr. Frank Gallick	Anna Cornett	David K. Cheng
Tom DeMerritt	Marylyn Harms	Tom Hannig

Thanks very much in advance

# Show Schedule

July 10	San Diego Dahlia Society Specimen Show		Sun: 1pm-4:30pm
July 17	Convair Garden Club 37th Summer Show		Sun: 1pm-4:30pm
July 23 & 24	San Diego Co. Orchid Soc. 3rd Summer Show	Sat: Noon-4:30pm	Sun: 10am-4:30pm
July 30 & 31	San Diego Gesneriad 12th Annual Show	Sat: Noon-5:00pm	Sun: 10am-5:00pm
Aug. 6 & 7	San Diego Co. Dahlia Society Show	Sat: 2pm-5:00pm	Sun: 10am-4:30pm
Aug. 20 & 21	San Diego Fern Society 10th Show	Sat: 1pm-5:00pm	Sun: 10am-5:00pm
Aug. 27 & 28	San Diego Turtle & Tortoise Soc. 14th Show	Sat: 10am-5:00pm	Sun: 10am-5:00pm
Sept. 3 & 4	San Diego Prof. Horticulturists 5th Show	Sat: 10am-5:00pm	Sun: 10am-4:30pm
Sept. 17 & 18	San Diego Bromeliad Society 14th Show	Sat: 1pm-4:30pm	Sun: 11am-4:30pm
Sept. 24 & 25	San Diego Bonsai Club Fall Show	Sat: 10am-5:00pm	Sun: 10am-5:00pm
Oct. 1 & 2	Balboa Park African Violet Soc. Fall Show	Sat: 10am-4:00pm	Sun: 10am-4:00pm



THE 1988 SDCSS SHOW

Cover Pictures: (top left) a portion of Class 7; (top right) a portion of Class 59; (middle left) a portion of Classes 32 and 33 (picture by Sandy Frost); (middle right) the trophy winners (individual plants - from left to right) [K], [Q], [A], [P], [E], [X], [B], [O], [F], [Q], [Y], [I]; (bottom left) a portion of Class 19; (bottom right) a portion of Classes 29 and 30 with Class 50 immediately behind and Rudy Lime in the background left and a portion of Class 54 in the background right.

TROPHY WINNERS

Best Cactus(Phillip Corliss)[SDCSS][K]-----Shirley Berry  
 Best Succulent(Ruby Falk)[SDCSS][Q]-----Mike & Joyce Buckner  
 Best Exhibit(Reuben Vaughan(II))[F. & M. Thrombley][E]----M & J Buckner  
 Best Artistic Display(Walter & Hazel Scott)[SDCSS][P]-----R & F Lime  
 Best Educational Display(CSSA)[CSSA][A]-----  
 Best Mexican Plant(Dudley B. Gold)[Paul & Joan Johnson][E]-Martin Mooney  
 Best Euphorbia(Lydia Evans)[Russel Evans][Y]-----Beverly Kirkegaard  
 Best Graft(Bob & Suzanne Taylor)[Dr. L. N. Phelps][F]-----Shirley Berry  
 Best Aloe(Barbara Jeppe)[Martin & Pat Mooney][A]-----Shirley Berry  
 Best Echeveria(Oliver & Sophie Loyland)[R. Latimer][X]--Phyllis Flechsig  
 Best Epiphytic Cactus(Bill & Ruth Nelson)[Rick Latimer][T]-----  
 Best San Diego County Native(Julianne Rice)[R. Latimer][I]--F. Thrombley  
 Best Succulent Bonsai(Rudy & Teresita Lime)[R. & T. Lime][B]-M/J Buckner  
 Best Pachycaul or Caudiciform(H. W. & V. Buckner)[M/J Buck.][Q]-R/T Lime  
 Best Pelargonium or Sarcocaulon(Wilna Johnson)[P]---Rudy & Teresita Lime  
 Best Opuntiaae[Jim & Shirley Berry][O]-----Dorothy Dunn  
 High Points for 50 entries or less[Jim & Shirley Berry][H]-Shirley Berry  
 Sweepstakes[Dr. Ronald & Marcia Monroe][E]-----Shirley Berry

EXHIBITOR KEY

(CA)=Chuck Adams	(PF)=Phyllis Flechsig
(GA)=Gloria Alexanderson	(EF)=Evelyn Fried
(MA)=Mary Ann Alexanderson	(SF)=Sandy Frost
(WA)=Warren Alexanderson	(MH)=Marylyn Harms
(BA)=Bud Aubuchon	(Mhd)=Margaret Hilliard
(MB)=Mitch Bahr	(FJ)=Frances Johnson
(ShB)=Shirley Bahr	(BKt)=Beverly Kent
(SB)=Shirley Berry	(CKRM)=Clairette Keogh & Roger Moore
(JBz)=Joey Betzler	(BK)=Beverly Kirkegaard
(JB)=Jerry Brattmiller	(DL)=Dorothy Larberg
(MJB)=Mike & Joyce Buckner	(RL)=Rick Latimer
(AC)=Amna Cornett	(DNL)=Dr. & Mrs. Lemrow
(BC)=Bill Crowley	(RTL)=Rudy & Teresita Lime
(DC)=Diane Crowley	(EM)=Elibet Marshall
(TD)=Tom De Merritt	(SM)=Sean Minogue
(DD)=Dorothy Dunn	(MM)=Martin Mooney
(JD)=Jeanette Dutton	(JP)=John Pasek
(CD)=Carl Dykema	(MP)=Marie Pearce

(MS)=Mark ST. Clair  
 (SS)=Sarah Shepherd  
 (FT)=Frank Thrombley  
 (MT)=Marianne Thrombley

(JW)=John Williams  
 (JWd)=Joseph Wood  
 (LZ)=Lois Zaranka  
 (WZ)=Wayne Zaranka

RIBBON & TROPHY WINNERS

1A:Uebelmannia pectinifera(SB)[F], U. pectinifera(JP), Frailea schilinz-  
 1B:U. pectinifera(PF), U. pectinifera(BKt), --- kyana(FT)  
 2A:---, Parodia sp.(MP), P. laui(SB)  
 2B:P. penicillata(DD), P. maxima(BA), ---  
 3A:Notocactus neobueneckeri(CA), N. scopa v. murelli(SB), N. lening-  
 hausii(MA) and Malacocarpus hennisii(SB)  
 3B:N. warasii(DD), N. magnificus(DD) and N. neobueneckeri(DD), N. mag-  
 nificus(DL) and N. scopa v. murelli(WZ)  
 4A:Gymnocalycium pungens(WZ), G. cardenasianum(WZ), G. spagazzini(SB)  
 and Discocactus horstii(SB)  
 4B:G. eurypleurum(SB), G. albispinosum(FT) and G. sp.(MH), G. pflanzii  
 v. albolupula(DD)  
 5A:Rebutia heliosa(DL), R. heliosa v. condorensis(SB), R. heliosa(WZ)  
 5B:Sulcorebutia rauschii(FT), R. marsoneri(SB), R. heliosa v. heliosa(SB),  
 R. 'Lemon Queen'(DL)  
 6A:---, ---, ---  
 6B:Weingartia pulquensis(WZ), Acanthocalycium kumepelian(BKt), Echinop-  
 sis 'villes de Montes'(SB)  
 7A:Melocactus melocactoides(MM), ---, ---  
 7B:Buiningia brevicylindrica(BKt), M. disciformis(SB), M. disciformis(MM)  
 8A:---, ---, ---  
 8B:Copiapoa krainziana(DD), C. humilis(BKt), C. humilis(DL)  
 9A:Neoporteria nidus-senilis(DL), Neochilenia aerocarpa v. fulva(PF),  
 Nc. napina(PF)  
 9B:Nc. nuda(PF), ---, ---  
 10A:---, Eomatucana oreodoxa(SB), ---  
 10B:Bozicactus icosagonus(DD), Denmoza erythrocephala(JB), Oroya peruvi-  
 ana(PF) and Matucana celendinensis(SB)  
 11A:Austrocephalocereus estevesii(WZ), Thrixanthocereus senilis(SB), Or-  
 eocereus neocelsianus(EM)  
 11B:Austrocephalocereus estevesii(DD), Espostoa melanostele v. samnensis  
 (PF) and Oreocereus trollii(SB), Austrocephalocereus dybowskyi(DD)  
 12A:---, ---, ---  
 12B:Cephalocereus palmeri(ShB), Stetsonia coryne(CD) and C. palmeri(SB),  
 ---  
 13A:Echinocereus viridiflorus v. davisii(FT), E. nivosus(SB), E. palmeri  
 (PF)  
 13B:E. delaetii(DD), E. baileyi v. caespiticus(SB) and E. nivosus(DD),  
 E. pacificus(FT) and E. laui(WZ)  
 14A:Ancistrocactus uncinatus v. wrightii(PF), Turbinicarpus laui(JB), ---  
 14B:---, ---, ---

- 15A: *Ortegocactus macdougallii*(JP), ---, *Coryphantha elephantidens*(SB)  
 15B: *C. calipensis*(DD), *C. elephantidens*(SB), ---
- 16A: ---, ---, *Mammillaria viescens*(Bkt) and *M. dixanthcentron*(LZ)  
 16B: ---, *M. sp.* (MH) and *M. mystax*(FT), ---
- 17A: *M. microthele*(SB), *M. lenta*(MT), *M. anniana*(AC)  
 17B: *M. humboldtii*(BK), *M. eichlamii*(Bkt) and *M. canelensis*(DD), *M. rhodantha rubra*(WZ) and *M. schidiana*(Bkt)
- 18A: ---, ---, ---  
 18B: *Cochemia setispina*(DD), ---, ---
- 19A: *Epithelantha micromeris v. unguispina*(MM), *Obregonia denegrii*(SB), *O. denegrii*(TD) and *Ariocarpus retusus*(CD)  
 19B: *A. retusus*(BK), *A. furfuraceus*(BK) and *A. lloydii*(BK), *A. fissuratus v. lloydii*(TD)
- 20A: *Astrophytum capricorne*(BK), *A. asterias*(PF), ---  
 20B: *Leuchtenbergia principis*(MM)[Ξ], *A. ornatum v. mirabellii*(DD), *A. myriostigma*(SB) and *X Ferobergia 'Gil Tegelberg'*(DD)
- 21A: ---, *Ferocactus johnstonianus*(WZ), ---  
 21B: *F. chrysacanthus*(DD), *F. glaucescens*(WZ), *F. peninsulae*(JP) and *F. herrerae*(DD) and *F. covillei*(DD) and *F. diguetii*(DD) and *F. viridescens*(FT)[I]
- 22A: ---, *Echinofossulocactus hastatus*(DL), ---  
 22B: ---, ---, *E. sp.*(MH)
- 23A: ---, *Rhipsalidopsis 'Flash Pink'*(JW), ---  
 23B: ---, *Rhipsalis horrida*(JW), *Rhipsalis clavata*(PF)
- 24A: ---, *Opuntia subulata monstrose*(JW), *O. sp.*(MH)  
 24B: *O. pachypus*(DD)[O], *O. chaffeyi*(DD) and *O. basilaris monstrose*(JW), *Pterocactus tuberosus*(PF)
- 25A: ---, *Monvillea phatnosperma crest*(DD), *Lobivia leucomalla crest*(DC) and *Mammillaria perbella monstrose*(SB) and *Lemaireocereus hollianus crest*(DD)  
 25B: *Astrophytum myriostigma monstrose*(SB)[K], *Espostoa ritteri crest*(DD) and *Espostoa nana crest*(DD), ---
- 26A: ---, ---, ---  
 26B: ---, ---, ---
- 27A: *Alluaudia montagnacii*(JW), ---, ---  
 27B: *Didierea madagascariensis*(JP), *D. trollii*(JP), *D. trollii*(NB)
- 28A: ---, *Argyoderma congregatum*(JB), ---  
 28B: ---, ---, ---
- 29A: *Trichodiadema bulbosum*(DC), ---, ---  
 29B: *Nestoklema tuberosum*(RTL), *T. bulbosum*(RTL), ---
- 30A: *Nitrophyllum latibracteatum*(CA), *M. compactum*(CA) and *Aloinopsis rosulata*(DC), *A. jamesii*(DC)  
 30B: *Nitrophyllum grande*(JBz), *Herreroa sp.*(SF), *Faucaria sp.*(MH)
- 31A: *Anacampseros alstonii*(MS), *Portulacaria afra variegata*(SF), ---  
 31B: *Ceraria pygmaea*(DD), --- ---
- 32A: *Kalanchoe prolifera*(DL), ---, ---  
 32B: *K. thyrisiflora*(RL), *K. 'Fang'*(JW), *K. tomentosa*(MM)
- 33A: *Cotyledon buchholziana*(JP), *Adromischus cooperi*(SB), *C. ladismithiensis variegata*(MH)  
 33B: *C. orbiculata v. oophylla*(SB), ---, ---
- 34A: *Crassula sericea v. hottentotta*(JBz), *C. ausensis v. giessii*(SF), *C. 'Flame'*(EM)  
 34B: *C. corymbulosa*(JWd), *C. portulaca 'Gollum'*(RL), *C. portulaca 'Gollum'*(MM) and *C. portulaca 'Sunset'*(RL)
- 35A: ---, ---, *Aeonium decorum*(MH)  
 35B: *Monanthes muralis*(JWd), *A. holochrysum*(EM), *A. arboreum atropurpureum 'Zwartkop'*(MHd)
- 36A: *Sedum furfuraceum*(MT), *S. rigidum crest*(MH), *S. lineare*(MP)  
 36B: *S. frutescens*(MM), *S. oxypetalum*(PF), ---
- 37A: *Pachyphytum compactum crest*(JW), ---, ---  
 37B: *P. viride*(SB), *Graptopetalum amethystinum*(JWd), *Pachyveria hybrid*(MH)
- 38A: *Echeveria minima*(PF)[X], *E. purpusorum*(SB), *E. shaviana*(EM)  
 38B: *E. laui*(MH), *E. agavoides 'red tip'*(SB), *E. 'Black Prince'*(JWd)
- 39A: *D. pulverulenta*(EM), ---, ---  
 39B: *D. caespitosa*(SB), *D. edulis*(JWd), *D. traskiae*(GA)
- 40A: *Euphorbia didierioides*(SBh), *E. milli v. bosseri*(JBz), *E. baioensis*(FJ)  
 40B: *E. horrida v. striata*(MM), *E. schoenlandii*(DD), *E. horrida v. nova*(MM) and *E. horrida v. major 'Blue Form'*(MH)
- 41A: *E. obesa*(BK), *E. capsaintemariensis*(JP), *E. cylindrifolia*(JP)  
 41B: *E. obesa*(MS), *E. fusca*(JWd) and *E. decaryi v. nova*(JP), *E. polygona*(MM)
- 42A: *E. bupleurifolia*(BK)[Y], *E. cylindrifolia ssp. tuberifera*(MS), *E. silemifolia*(BC)  
 42B: *E. bupleurifolia*(MM), *E. balsamifera*(RTL), *E. bupleurifolia*(AC)
- 43A: ---, ---, *Monadenium stellatum*(JBz)  
 43B: *M. magnificum X arborescens*(DD), *Jatropha podagrica*(DD), *J. cathartica*(BC) and *M. lugardae*(JB)
- 44A: *Senecio haworthii*(FJ), ---, ---  
 44B: *S. deflersii*(DD), *S. deflersii*(GA), ---
- 45A: *Sarcocaulon vanderietiae*(RTL)[F], ---, ---  
 45B: *Pelargonium alternans*(RTL), ---, ---
- 46A: *Pseudolithos migiurtinus*(SB), *Lavrania haagnerae*(JBz), *Tridentia baylissii*(JBz)  
 46B: *Hoodia bainii*(BK), *Caralluma rogersii*(DC), ---
- 47A: *Ceropegia rendalii*(MH), *C. conrathii*(NS), *Cynanchum rossii*(JBz), ---  
 47B: *Ceropegia dichotoma*(PF), *C. ampliata*(PF), *C. radicans v. smithii*(MH)
- 48A: *Raphionacme zeyheri*(BC), ---, ---  
 48B: *Fockea edulis*(JW), *F. edulis*(BC), ---
- 49A: *Pachypodium brevicaule*(MT), *P. rosulatum v. gracilis*(BC), *P. succulentum v. griquese*(MS)  
 49B: *P. succulentum*(NJB)[R], *P. leilii v. saundersii*(BC), *Adenium somalense*(BC) and *P. namaquanum*(MM)
- 50A: *Dorstenia crispa*(JP), *Ficus palmeri*(DC), *Cissus tuberosus*(DC)  
 50B: *Ficus socotrana*(NJB)[B], *Cyphostemma juttiae*(SB), *F. palmeri*(BC)

51A:---, ---, ---  
 51B:Fouquieria fasciculata(RTL), F. fasciculata(MT), F. splendens(DC)  
 52A:Kedrostis africana(MS), ---, ---  
 52B:Ibervillea sp.(MS), ---, ---  
 53A:Bursera sp. (Oaxaca)(MS), B. sp.(SBh), ---  
 53B:B. fagaroides(RTL)[ $\phi$ ], Operculicarya decaryi(RTL) and Pachycormus  
 discolor(RTL), Adenia glauca(JP)  
 54A:Dioscorea elephantipes(LZ), ---, ---  
 54B:Bowiea volubilis(RTL), D. elephantipes(PF), D. elephantipes(NH)  
 55A:Aloe dinteri(SB)[A], A. suprafoliata(JW), A. descoingsii X haworthi-  
 oides(PF) and A. descoingsii X (DML)  
 55B:A. plicatilis(JB), A. vanbalenii(RL) and A. ramosissima(DC), A. "Te-  
 gelberg's Triumph"(DD) and A. hemningii(SB)  
 56A:Gasteria verrucosa(JW), ---, ---  
 56B:G. nigricans(SB), G. armstrongii(PF), G. liliputana(DL)  
 57A:Haworthia parksiana(DD), H. maughanii(BK), Astroloba foliosa(SB)  
 57B:H. comptoniana(DD), H. luteo-rosea(DD) and H. mutica(BK), H. herrei(DD)  
 58A:---, ---, ---  
 58B:Sansevieria pinguicula(DD), S. sp. 'Mason-Congo'(JW), S. schweinfurth-  
 ii(DML)  
 59A:Agave horrida(AC), ---, ---  
 59B:A. pelona(DD), Yucca endlichiana(JP), A. striata 'nana'(DD) and A. -  
 stricta(JWd)  
 60A:---, ---, ---  
 60B:Calibanus hookeri(BA), Beaucarnea stricta(DC), Dracaena ompet(AC)  
 61A:---, ---, ---  
 61B:Tillandsia ionantha(PF), Abromeitiella brevifolia(DD), Dyckia rari-  
 flora(JW)  
 62A:Peperomia graveolens(NH), ---, ---  
 62B:Welwitschia mirabilis(MN), Haemanthus albiflos(JW), Cussonia panicu-  
 lata(MB)  
 63A:---, ---, ---  
 63B:Euphorbia grandicornus crest(DD), E. lactea crest(DC), Pachypodium  
 lamerei crest(MN)  
 64A:Aloe brevifolia variegata(DML), ---, ---  
 64B:A. brevifolia variegata(DC), Euphorbia amnak variegata(JW), ---  
 65:---, ---, ---  
 66:Sempervivums(SB), Lithops(MN), ---  
 67:---, ---, ---  
 68:---, "Blue Heaven"(RL), "Fuzzy Blue-Green"(JWd)  
 69:"Succulents as Bonsai"(NJB)[E] and "Succulents Trained as Bonsai"(RTL)  
 [P], ---, "Oaxaca Pottery"(CKRM)  
 also (SB)[H] and [E]

THANK YOU!

I wish to thank again all of those who made this last SDCSS Show and Sale another successful one. I wish to thank especially Mary Aubuchon for the Program, Helen Barkdoll for the drawing on the cover, the publicists Sandy and Cathy Frost, Betty Newton for her article in the San Diego Union featuring Martin Mooney and his baobab(Adansonia digitata), those who helped set up including Frank Thrombly, Tom Parks, Bob Herbst, and the Balboa Park Staff, those who brought the sales plants such as John Pasek, Sean Minogue, and Phillis Flechsig and those who carried them in like Curt Hammel and Ed Lackman, those who brought plants for the Show such as Shirley Berry, Dorothy Dunn, John Williams, Joseph Wood, Marylyn Harms and Mike & Joyce Buckner and Rudy & Teresita Lime, the Judges Ellen Low, Joe Clements, Fred Hutflesz, Dave Grigsby, Jim Kampwirth, and Carl Volker, the Clerks Shirley Berry(Chairman), Stan Winters, Susan Shepherd, Beverly Kirkegaard, Beverly Kent, Wayne Zaranka, and Mitch Bahr and our Talliers Elizabeth Glover and Cathy Frost, the Judges' Host & Hostess Ernest Angus & Elinor Latimer, the Hostesses Perlso Lewis, Verna Pasek, Elinor Latimer, and Kathie van Arum, the Park-a-Plant People Wilbur & Elizabeth Glover, the plant sales people John Pasek(Chairman) and sales people such as Sean Minogue, John Noble and the Alexandersons, Rainbow Gardens, the net hangers and removers, and finally those who helped clean up (such as rolling up the covers) such as the DeMerritts, Kathie van Arum, and Frank Thrombly, and the delicious meal hosted by the Nooneys.

---Rick Latimer, Show Chairman



## CACTUS OF THE MONTH

### FRAILEA AND BLOSSFELDIA

by Phyllis Flechsig

Blossfeldia is generally said to be the smallest of all the cacti, and Frailea is the second smallest; it is fitting that these two miniatures from South America should be considered together. These are ideal plants for those short of space, for a very large plant of either genus might fill a 4-inch pot.

Frailea is named for Manuel Fraile, who some decades ago worked with the U.S. Dept. of Agriculture's cactus collection. Fraileas are thought to be closely related to Notocactus and Parodia, and are small, buttonlike plants, single or clustering, with shallow ribs, very short spines or no spines at all. The plant apex has a depression in the center. The yellow flowers are large for the plant and are borne at the top, but are often not seen, as this genus is notable for its ability to set seed without ever opening a flower at all. This condition, being self-fertile within a closed flower, is called cleistogamy.

Fraileas are native to Southern Brazil, Paraguay, Uruguay, Argentina, and possibly Colombia. One of the prettiest, looking like a little brown button, is F. asterioides (possibly identical to F. castanea), a really charming plant; it is named for its resemblance to Astrophytum asterias. F. grahliana is one often seen; it has a shiny brownish-green body and minute yellow spines. F. chiquitana has a grey-green body, tuberculate ribs, and short black spines. F. cataphracta is a very pretty globular plant, nearly spineless, with a maroon crescent marking just below each tubercle.

Some people have found Fraileas hard to keep going for very long; it may be that they are naturally short-lived plants; but other people seem to have no trouble with them. They are very easily grown from seed, and may bloom (or set seed) in their first year. They are said to bloom best in a very warm, bright location, short of full sun. Like other cacti, they need very good drainage.

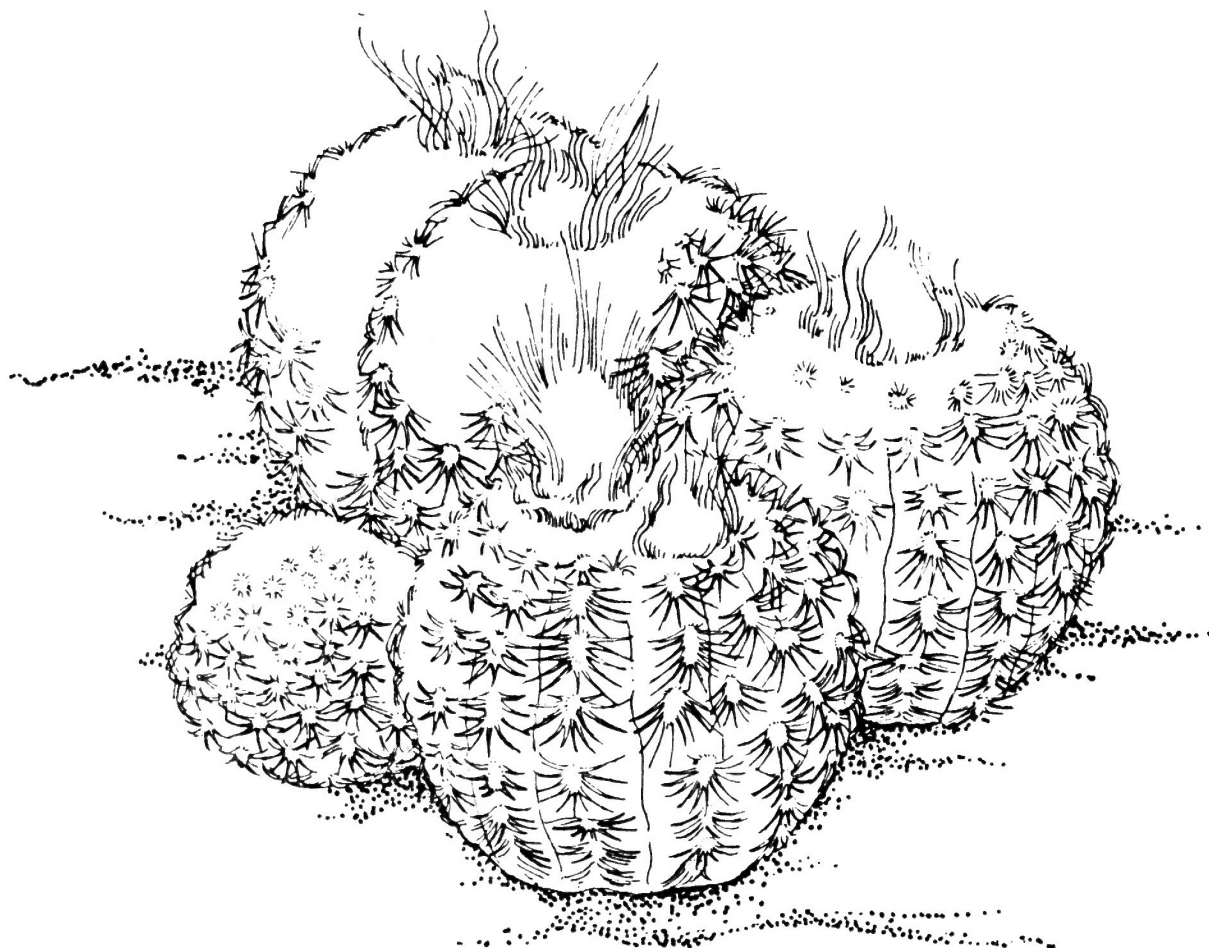
Blossfeldia has the honor of being the smallest cactus. It was named for its discoverer, H. Blossfeld, Jr., of Brazil. The tiny bodies have no ribs or spines but do offset freely. The small flowers are yellowish white and are followed by minute seed. Backeberg lists six species, but it is doubtful that they are anything but slight variants on the principal species, B. liliputana. They are native to Bolivia and northern Argentina, where they grow on steep slopes covered with bits of rock. An adult plant is about 3/4 of an inch wide! In cultivation it is generally grafted, but of course grafting enlarges the plant. Propagation of Frailea is usually from seed, which should be sown promptly, as it is short-lived. Blossfeldia is best propagated

from offsets that are then grafted; it can be grown from seed only with great difficulty.

#### LITERATURE CONSULTED

- Backeberg, C. 1977. Cactus Lexicon. London: Blandford Press.
- Cullmann, W., E. Goetz, & G. Groener. 1986. The Encyclopedia of Cacti. Dorset, England: Alphabooks.
- Glass, C. 1971. "Cacti and succulents for the amateur." Cactus & Succulent Journal, vol. 43, p. 24.
- Bleck, M. 1972. "Frailea B. & R." Cactus & Succulent Journal, vol. 44, p. 36-37.

Please, somebody, help! Bring your Fraileas to the meeting!



**FRAILEA PYGMAEA.** Uruguay and Argentina. An easily grown dwarf species scarcely more than an inch in diameter. All Frailea species require partial shade and a rich soil. Water generously in summer. Unless the weather is

very hot, flowers may set seed without ever opening. When the yellow flowers do open, they are almost as large as the plant bodies.



## THE DIDIEREACEAE

(Alluaudia, Alluaudiopsis, Decarya, Didierea)

The island of Madagascar, encompassing 227,760 square miles, is the 5th largest island in the world. Although it is only separated from the African continent by the 250-mile-wide Strait of Mozambique, it is home to an astonishing number of endemic plants. It has been estimated that approximately 80% of the total flora - about 6,000 species - occur naturally nowhere else on earth. It contains eight whole families of flowering plants which are totally endemic. According to Werner Rauh "Even though the original vegetation of Madagascar has been nearly totally wiped out in many places, especially on the Central Plateau, the vegetation of southwest Madagascar has been saved by its adverse climatic conditions (little precipitation, high temperatures, dryness, and wind) and has, in wide expanses, kept its primary condition. Here, in a small space, is concentrated a wealth of remarkable and curious life and growth forms which, altogether, form a vegetation that is unique in this world".

Madagascar has about 12 distinct climate zones which are distinguished by temperature and humidity, with the southern and southwestern coastal districts being botanically the most interesting. Surprisingly enough, this semi-desert area is subject to high humidity, heavy dew, and dense fogs, and supports a drought-resistant flora with a remarkably high proportion of succulents. It is here, in this rather limited and inhospitable environment, that the endemic family Didiereaceae makes its home.

The family is named after the French colonel and explorer of the vegetation of Madagascar, A. Grandidier, and contains 4 genera with a total of 11 species. It is restricted in its distribution to the outermost southwest region of the island, where the plants form a deciduous shrubby thorn-forest, often growing in association with several different arborescent Euphorbias. Because of the heavy dew and fog, many multi-colored lichens encrust the stems of some of the plants. However, during the long dry periods the cloud cover is almost non-existent and it is not unusual for ground temperatures to reach 122-158 degrees F. on the bare rock and sand.

Although it was originally thought that the Didiereaceae family was botanically isolated and had no close relatives in the plant world, it is now generally accepted as being systematically close to the Portulacaceae as well as the Cactaceae. In fact, Werner Rauh has referred to them as the "cacti of the Old World". The plants are usually more woody than succulent, although all parts of the plants - the stems, leaves, and roots - can serve as basic water storage organs. They are very spiny and the leaves are deciduous and often very short-lived. As in Fouquieria, the first leaves become persistent spines; the subsequent leaves of the areoles are normal, deciduous ones. In most species the juvenile form is quite different from the mature form; as the plants slowly complete the transition into trees, the prostrate basal branches gradually

die off. The flowers are relatively small and insignificant, and only a few plants have ever bloomed in cultivation.

The genus Alluaudia, with 6 species, was named after another French colonel, Alluaud. Probably the most common one in cultivation is A. procera and it also has the widest distribution in habitat. Although it starts out as a scrubby juvenile, with age it becomes a big tree, eventually reaching a height of 30 feet. The flowers are small and white. Because of its superficial resemblance to Fouquieria splendens of our southwestern deserts, it is often called the "Madagascan Ocotillo". A. ascendens, which can reach a height of 45 feet, is the largest member of the Didiereaceae and is probably still the rarest in cultivation. In habitat it occupies a very small area, and it consists of a long, single unbranched stem and a narrow crown of a few ascending branches. Young plants are unbranched. In the wild they grow with numerous Euphorbias of the milii group. A. montagnacii is restricted to the extreme south-west of Madagascar, and looks like a possible natural hybrid between A. procera and A. ascendens. The growth form resembles that of A. ascendens while the inflorescences are similar to those of A. procera. It is also still relatively rare. A. comosa is a smaller, more shrubby plant, rarely reaching its maximum height of about 25 feet. It has a short V-shaped divided stem and a cushion-like crown of very thin, spiny branches. Its growth form is very characteristic of the deciduous thorn-forest in which it grows. Specimens growing above the cliffs at Cap-Sainte Marie are wind-blown into fantastic bonsai shapes. These cliffs overlook the 3,000-mile ocean expanse southwards to Antarctica and are home to a number of fascinating plant species. A. humbertii is probably the least attractive species. Its juvenile form is scrub-like; with age it forms a small tree which may reach 20 feet in height. The branches are thin and whip-like, and the spines are very long and thin. The last species, A. dumosa, is totally different from all other Alluaudias or any member of the Didiereaceae. Seen from a distance it is faintly reminiscent of one of the "broom" Euphorbias. The stems are round, brownish, and virtually spineless, and it almost never has any leaves. When they do appear, they are extremely small and short-lived.

The genus Alluaudiopsis has only two species. They are both spiny shrubs with thin woody branches, and can reach a height of 6 feet. A. fiherenensis grows only in the valley of the Fiherenana River near Tulear, where it occurs in lime soil. The flowers are whitish. A. marnieriana is the only member of the Didiereaceae with large brilliant red flowers. It is known only from the type locality north of Tulear, near the coast.

Decaryia madagascariensis is the most primitive member of the family, and probably also the most bizarre. This is a monotypic genus; only one species is known. The most typical characteristics are the flexible branches with a very noticeable "zig-zag" pattern, and the two short, hard areole-spines. The plants are leafless most of the year and the flowers are small and whitish. It grows on limestone on the Mahafaly Plateau, where it forms bushes or small trees.

Only two species of Didierea are currently known. D. madagascariensis is fairly wide-spread in its distribution, reaching from Morondava southwards down to Tulear. It is limited to the coastal region, usually growing in sandy or salty soil on the edge of dried-up lagoons. It may reach 20 feet at maturity, when it has a tree-like habit, but the juvenile form is unbranched and somewhat Cereus-like. The flowers are creamy-white to pink in color and they all open at the same time. D. trollii has a more southern distribution, and although at one point their habitats do overlap, the two species do not hybridize. It grows in large stands on the rim of salt deposits and on loose sand dunes. Its juvenile form is a branched shrub with creeping basal branches; as it approaches maturity one of these branches begins to rise and forms the main stem, while the others slowly die off.

Cultivation of these plants is not difficult. They do need warmth, and some species seem to retain their leaves most of the year if they don't get too cold. They like generous watering during warm weather. They do not seem to be very susceptible to most of the pests or diseases which may attack succulent plants - especially leafy ones. Propagation is from seed, or cuttings of some species. Since seed seems to be virtually unobtainable and cuttings of some of the species are almost impossible to root, most of these plants will probably remain somewhat rare.

Literature consulted:

- Everard, B. and Morley, B.D. Wildflowers of the World  
Rauh, Werner: The Xerophytic Vegetation of Southwestern Madagascar,  
Parts I - IX (CSSA Journal, May-June, 1977  
through Sept.-Oct. 1978. vols. 49-50)  
Rowley, Gordon: The Illustrated Encyclopedia of Succulents

By Dorothy Dunn  
January, 1987

---

WELCOME TO NEW MEMBERS:

Jim & Roberta Hanna - Lakewood, CA 90712

Charles Erdei & Karan Hardy - La Jolla

Kent & Kathleen Hill - San Diego

Robert & Frances Herbst - San Diego

Dorothy Pierce - San Diego

John & Erna Skupen - San Diego

# SAN DIEGO CACTUS & SUCCULENT SOCIETY

## OFFICERS

President - Martin Mooney 97 K Street, Chula Vista, 92011	427-6796
Vice President - Bud Aubuchon 1058 5th Avenue, Chula Vista, 92011	427-3388
Secretary - Beverly Kirkegaard 10009 Bonnie Vista, La Mesa, 92041	463-2801
Treasurer - Susan Shepherd 4537 Cochise Way, San Diego, 92117	274-4291
Immediate Past President - Dr. Leroy Phelps 4094 36th Street, San Diego, 92104	280-9690

## BOARD OF DIRECTORS

Shirley Berry, Dorothy Dunn, Cathy Frost  
John Pasek, Rudy Lime, Chuck Adams

## COMMITTEES

Auditor: James Berry  
Bragging Table: Madelyn Lee  
CSSA Affiliate Rep.: Cathy & Sandy Frost  
Education: Cacti - Phyllis Flechsig  
Succulents - Dorothy Dunn  
Historian: Rick Latimer  
Library: Rick Latimer  
Membership: Susan Shepherd  
Picnic: Martin L. Mooney  
Plant Exchange Table: Mmes. Lemrow & Larberg  
Plants & Supplies Table: Joey Betzler  
Show: Rick Latimer

Publications: Mary Aubuchon / 427-3388  
Reception: Perlso Lewis and Ethel Standish  
Regalement: Diane and Bill Crowley  
Representatives:  
Balboa Park Desert Garden - John Pasek  
Quail Botanical Garden - Phyllis Flechsig  
S.D. Botanical Garden Foundation - Kathy Van Arum  
S.D. Floral Association - Verna Pasek  
Liaison & Publicity: Cathy & Sandy Frost  
Program: Joan Johnson  
Jim Dice  
Joe Clements

The San Diego Cactus & Succulent Society is open to all persons interested in growing cacti, 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, \$2.00 for each additional member of a household within a family. Single copies of Espinas y Flores are 60¢.

Editor  
Mary Aubuchon  
1058 5th Avenue  
Chula Vista, CA 92011



FIRST CLASS

FIRST CLASS

FIRST CLASS