



*Gates Cactus
and
Succulent Society*

AUGUST 2006

NEXT MEETING: " WEDNESDAY " AUGUST 2nd

AT THE SAN BERNARDINO COUNTY MUSEUM

I- 10 AT CALIFORNIA STREET IN REDLANDS, CA.

PROGRAM

Daryl Koutnik will talk on **Succulent's A to Z**. We had the pleasure of hearing his presentation on Cotyledons and Tylecodons last year. This one should be excellent.

PLANT OF THE MONTH FOR AUGUST

**Ficus, Dorstenia, Didieria, Alluardia
Echinocereus**

PRESIDENT'S MESSAGE

Is it HOT enough! If the predictions are true, by the time we all read this, the weather will have modified a little and we'll be out of the stifling heat. Most of our plants have done pretty well, lost a few plants in the full sun, but overall not too bad, so far.

The Lotus Land trip is planned and we are looking forward to it. There are details later in this Open Gates and we'll have maps for the meeting place available at our monthly meeting.

Don't miss the **Intercity Show and Sale** at the **LA Arboretum on October 19 and 20**. It is annually the World's largest Cacti and Succulent Show. The sale is excellent as well with several of the leading Arizona growers attending.

We heard a real shocker at the San Gabriel Club's meeting last week. Woody Minnich has sold his entire nursery to California Cactus Center in Pasadena. He and Kathy have bought property and will move to a spot near Santa Fe, NM. He is still on our schedule for our October meeting, so we can get more details then.

Take note that we have a new author in he club. Mike Green's first effort at a plant genus

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LEADERSHIP TEAM -- 2006

overview is in this month's Open Gates on Echinocereus. Thanks a lot Mike, I know all will enjoy it. Joe and Dennis are open to receive this kind of fresh new approach from any of our members. If you have a special interest plant genus, why not give a try at writing it up when it is the Plant of the Month.

Speaking of Plant of the Month, we could really use broader participation in our monthly mini-shows. Our new members can take the opportunity to get their "Show" feet wet in the mini shows. Remember, you only compete against like experienced members. I'm sure that you have great plants at home just wanting to be shown off.

Hope to see you all at the meeting. *Buck*



**MINI-SHOW RESULTS FOR JULY 2006
SUCCULENTS STAPELIADS AND RELATIVES
IN THE ASCLEPIADACEAE**

Ina O'Kane and Dennis Kucera judging

NOVICE small, 6" pot or less
1st Mary Alice McGrew Huernia species
3rd Mary Alice McGrew Stapelia variegata

INTERMEDIATE LARGE over 6" pot
1st Karen Roholt Stapelia hirsuta

ADVANCED small, 6" pot or less
1st Bob Laughlin Huernia X convalum
2nd Joella Olson Tavarisia barkleyii
3rd Buck, Yvonne Hemenway

 Stapelia scitula
H.M. Bob Laughlin Stapelia species
H.M. Joella Olson Ceropogia rendalli
H.M. Joella Olson Fockea edulis

ADVANCED LARGE, over 6" pot
1st Joella Olson Ceropogia fusca
2nd B and Y Hemenway Huernia pillansii
3rd Joella Olson Caralluma nebrownii
H. M. Barry, Kim Urman Huernia levyi
H.M. Dennis Kucera Huernia pillansii
H.M. Bob Laughlin Stapelia asterias
H.M. Joella Olson Raphionacme flanaganii

**MINI-SHOW RESULTS FOR JULY 2006
FEROCACTUS AND ECHINOCACTUS**

Ina O'Kane and Dennis Kucera judging

NOVICE LARGE over 6" pot
1st Karl Osborne Echinocactus grusonii
2nd Karl Osborne Echinocactus grusonii

ADVANCED small 6" pot or less
1st Bob Laughlin Ferocactus emoryi
2nd Joella Olson Echinocactus texensis

ADVANCED LARGE over 6" pot
1st Dennis Kucera Ferocactus hamatacanthus
2nd Bob Laughlin Ferocactus emoryi
2nd Bob Laughlin Ferocactus chrysacanthus
3rd Barry, Kim Urman Ferocactus species
3rd Joella Olson Echinocactus grusonii

LOTUS LAND

For those who are going, here's the plan.

We will meet in Ontario at Procali, Inc. at 4241 E. Brickell St., Ontario, CA at 6:30 AM on Saturday August 5. The vans will leave promptly at 7:00 AM, which leaves us just enough time to arrive at Lotus Land before they close their gates for the morning tour. A map follows, but here's the directions. Going west on I-10 from the I-15 interchange, exit to Milliken Ave. southbound. Through two main intersections, turn right on Brickell St and then right again into the small street at the address. Procali is on the right.

We will travel to Lotus Land, do the tour, and then find a place to have our box lunch. After lunch we will proceed to Seaside Gardens, and then to Bill Baker's house. Be prepared to buy wonderful plants. We'll find a place for dinner on the way home and should be back in Ontario at around 9:00 or earlier.

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**CACTUS and SUCCULENTS
OF THE MONTH FOR YR 2006**

AUGUST Ficus, Dorstenia, Didieria,
Alluardia

Echinocereus

SEPTEMBER Pachypodium, AdeniumPlumeria
Rebutia

OCTOBER Portulacaria, Anacamperos
Copiapoa, Thelocactus, Coryphantha,
DEAD cactus

OTHER TABLES

Plant Sales, Discussion, and Refreshment
Tables will be open for the August 2006 Meeting.
If you can, bring some 'Goodies' to support the
Refreshment Table. They will be appreciated.

And a special thank you to those who frequently
bring the goodies we enjoy so much.

If you have a plant or two that you wish was not
there taking up valuable space on your
bench(es), it will look great on our raffle table!



Calendar of Garden Events - 2006

August 19th-20th 21st Annual Intercity Cactus and
Succulent Show and Sale, LA County Arboretum, 301 N.
Baldwin Ave, Arcadia, CA .

Info Call Tom Glavich
(626) 798-2430 or Gene Oster (818) 998-9306.

September 2nd Huntington Botanical Gardens
Succulent Symposium All Day at the Huntington.

September 24th Long Beach C&SS Annual Auction,
Dominguez Adobe, 18127 So.
Alameda St., Compton (Dominguez Hills), CA.

October 14th-15th SGVC&SS Winter Show and Sale,
LA County Arboretum, 301 N. Baldwin Ave, Arcadia CA.

AUGUST BIRTHDAYS

Our Very Best Birthday Wishes to these
members:

- 8/01 Bill Sanabria (73)
- 8/07 Queenie Myers (84)
- 8/10 Karl Lauck (56)
- 8/17 John Zasadzinski (85)
- 8/17 Neal Landrum (62)
- 8/20 Betty Caldarelli (73)
- 8/27 Ric Newcomer (71)
- 8/29 William Dwyer (56)

How about those Birthdays??? Carl and Bill
are our junior seniors this August at 56!!
And this tells us that we need to recruit
some younger members. Be alert for
prospective new new recruits.
We are especially proud of all our seniors,
many of whom still attend the meetings.

AUGUST ANNIVERSARIES.

- 8/03 Mike Maggai & Mike Nicholas (8)
- 8/13 Helen & Bernie Teunissen (63)
- 8/24 Valesca & Bill Dwyer (6)
- 8/28 Susan & Gary Sims (36)
- 8/30 Ann & John Reynolds (46)

Our congratulations to all and Best Wishes
for your Future.



SUCCULENTS OF THE MONTH
AUGUST 2006
FICUS, DORSTENIA
ALLUAUDIA, DIDIERIA, FOUQUIERIA

By Dennis Kucera

The **Ficus** and **Dorstenia** genera are members of the mulberry family, Moraceae. This family contains over 70 genera and over 2000 species. Some better known members are Maclura pomifera, Osage orange, of the southeastern U.S.A., the tropical jackfruit, Artocarpus, Morus nigra, black mulberry and Broussonetia papyrifera the paper mulberry.

Ficus is a genus of over 800 species of usually evergreen trees, shrubs and woody climbers in tropical and sub tropical areas throughout the world. Some species are known as strangler figs when birds eating the figs deposit seed on a host tree. Sprouting seed eventually sends areal roots to the ground, that rapidly out grow the host eventually killing it.

F. palmeri, called Zalate or desert fig grows in Baja California Sur usually in moister canyons, where it can become a large spreading tree with large surface roots. As a pot plant it develops a large caudex with light yellow bark. The small ½ inch fruit are sweet and edible.

F. petiolaris, from north western Mexico is even more handsome with large triangular green leaves with red veins. It can grow as a small 6 foot tree but confined to a pot it forms a swollen caudex.

Dorstenia is a genus of 180 species of herbs and shrubs native to Africa, Madagascar, Arabia and America. There are about 20 succulent species. The saucer shaped receptacle on a long stalk has hundreds of very small male and female flowers. Several slender fingers radiate outward from the edge of the receptacle.

D. crispa from Kenya and Somalia have 1½ inch thick stems to about 16 inches tall with lance shaped leaves like oleander.

D. foetida from Kenya, Tanzania and Yemen form a small basal caudex with short branchlets. **D. gigas** is the largest growing species. It is found on the island of Socotra south of Yemen. It forms a small tree to 8 feet high and up to 5 feet at the base, a giant caudex.

D. hildebrandiana from tropical eastern Africa has succulent upright branching stems on a fleshy caudex

Didieriaceae has 2 genera from Madagascar and are distant relatives of cactus.

Alluaudia has only 6 species which have succulent trunks. They come from Madagascar also. Their spiny stems resemble ocotillo.

A. ascendens is the tallest, growing to 50 feet tall. These tall stems are covered with one inch spines and heart shaped leaves ¾ inch long.

A. procera is a more common species a smaller branchy shrub.

Didieria madagascariensis grows to 15 feet, densely covered with long spines and linear leaves 1 ½ inches long.

Fouquieria of the candlewood or torchwood family, Fouquieriaceae, has similar growth characteristics as the plants from Madagascar, with thick spiny stems and simple drought deciduous leaves. There are 11 species of Fouquieria native to the deserts of the southwestern U.S., Baja California, and mainland Mexico. These 2 families are completely unrelated from opposite sides of the world but show convergent or parallel evolution, adapting to similar hot dry environments with similar growth habits. The Fouquieriaceae have rather small simple alternate leaves that are soon drought deciduous. The primary leaves on new stems have leaf stems that become spines as the leaf blades drop. The secondary leaves form clusters in the axils, leaf nodes, of the primary leaves.

F. splendens is the well known ocotillo of the deserts of California, Baja and Arizona. The many upright, whip like spiny branches ascend from a common base reaching up to 20 feet. In late spring after good rains these plants are topped with showy panicles of shiny red flowers that attract hummingbirds and bees.

F. diguetii previously called F. peninsularis, is native to Baja California. It grows well in

cultivation in our warmer frost free areas of California and grows twice as fast as our native ocotillo, and blooms more often. It is much more branchy from a well developed caudex making a handsome large pot plant.

F. columnaris, syn. *Idria columnaris* is th bizarre looking boojum tree or cirio. It has a single thick upright trunk up to 2 feet thick later branching sparingly. It is the tallest of all the Fouquierias reaching as much as 76 feet in height. At this time, it can be crowned with large bouquets of creamy white flowers suggesting a giant candle flame, thus the Mexican name cirio. It makes a large curious pot plant.

F. Purpusii from the states of Puebla and Oaxaca, Mexico has large thickened upright trunks, that are green in color with white triangular leaf scars. They can grow 30 feet tall. The slender side branches are covered with clusters of shiny mid-green leaves, 1/8 wide and 3/4 inch long. It keeps it s bright green foliage much longer than *F. columnaris* as seem at the U. C. Riverside Botanic Gardens. Small clusters of white flowers develop in mid summer. It can be a very handsome large pot plant.

F. fasciculata, called arbol de baril, comes from the state of Hidalgo, Mexico. It is a more shrubby plant with several upright branches from a large caudex. It has rounded shiny spatulate leaves, green with red edges. The new branches are shiny red later turning green.

ECHINOCEREUS, an ignored genus

Echinocereus was first described by George Engleman in 1848 with the discovery of *Echinocereus viridiflorus*. He separated the genera from *Cereus* proper and it has maintained the genus status ever since. There has been much confusion over which plants belong as separate, distinct species and which are actually sub species or varieties. In 1886, Ruempler listed 60 species and subspecies. In 1902 Schuman recognized only 39 species. Britton and Rose, in their 1922 classic *The Cactaceae*, recognized 60 and Brackeberg quoted as many as 73 in 1963. Nigel Taylor published the first definitive book, *The Genus Echinocereus*, and several papers in 1985 to 89 accepting only 53 species and that was after incorporating 3 *Wilcoxia* species into the genus. Blum et al published *Echinocereus* in 1998 in a split page German/English book that is typically accepted as the best *Echinocereus* treatment to date. They accepted 70 species. Edward Anderson's, *The Cactus Family*, published in 2001 accepts 60 distinct species and an additional 40 subspecies. He first reported *Echinocereus mapimeimsis* in 1998 in the *CSSA Journal*. It is unknown what the long delayed *New Cactus Lexicon* will do with the genus. In April 2006, M.A. Baker from Arizona State University, Tempe reported *Echinocereus yavapaiensis* as a new specie based on DNA / chromosome studies published in *Plant Systematics and Evolution*.

Commonly called Hedgehog Cactus, from the Greek "echinos", *Echinocereus* has several species listed in CITES catagory 1 (*E. schmollii* and *E. ferreirianus* ssp *lindsayi*) or CITES catagory 2 (*E. chisoensis*, *E.fendleri* ssp. *kuenzleri*, *E. reichenbachii* ssp. *Fitchii*, *E. x lloydii*, *E. triglochidiatus* ssp. *arizonicus*, *E. triglochidiatus* ssp. *mojavensis* forma *inermis*, and *E. viridiflorus* ssp. *davisii*) and, like nearly all cactus, it is illegal to collect from public lands.

The botanically accepted identifying characteristics are small, often clustering cacti with tuberous roots, glabrous epidermis, brightly colored flowers open during the day, bursting thru the epidermis, green stigma lobes, small tuberculate seeds. They flower in the spring thru summer.

As a collector of Echinocereus, I have made several artificial groupings of the species:

(a) The pectinate (comb-like) series including the 5 *reichenbachii* subspecies (*reichenbachii*, *armatus*, *baileyi*, *fitchii* and *perbellus*), the two *pectinatus* ssp. (*pectinatus* and *wenigeri*), *pseudopectinatus*, *bristolii*, and two *rigidissimus* ssp. (*rigidissimus* and *rubrispinus*).



Echinocereus rigidissimus

(b) The long, spindly ones including the former *Wilcoxia* (now *E. schmollii*, *E. poselgeri*, and *E. leucanthus*) and *E. pensilis*.



Echinocereus pectinatus



Echinocereus schmollii



Echinocereus poselgeri

(c) The small, globular, short spined cactus including *E. knippelianus*, the two *E. subinermis* ssp (*subinermis* and *ochoteranae*), and the four *E. pulchellus* ssp (*pulchellus*, *acanthosettus*, *sharpii* and *weinbergii*).



Echinocereus pulchellus
Ssp. Weinbergii and ssp sharpii



Echinocereus knippelianus

(d) The cylindrical forms include most of the genus. *E. bonkerae*, *E. barthelowanus*, *E. berlandieri*, *E. boyce-thompsonii*, *E. brandegeei*, *E. chisoensis*, and *E. cinerascens*. *Echinocereus triglochidiatus* and *E. englemanni* are the only California natives, although there are a total of 10 subspecies. *Echinocereus mapimeinsis* was only discovered in 1998.



Echinocereus englemanni



Echinocereus mapimeinsis

Flowers are usually very showy purple or red or orange or yellow with green stamens. Some, like *E. viridiflorus*, are green, *E. russanthus* is brown, *E. mapimensis* is brownish magenta with cream margins, *E. laui* and a few others are more open with typically white margins.

Spines range from none (or nearly so), to a "few" to heavily covered with spines in short, comb-like (pectinate) patterns or long, wildly, variable ones guarding against unprotected (human) flesh. Fortunately, all are straight, smooth tipped with no hooks or barbs.



References:

Anderson, E. The Cactus Family

Blum, et al Echinocereus

Orr, Martina and Andreas, Eine Reise zu mexikanischen Standorten von Echinocereus pectinatus

Taylor, Nigel The Genus Echinocereus

www.echinocereus.de

Michael J. Green

7/18/2006

THIS and THAT

Leo Pickoff



Sign on Store: MR. TOSKANA HAS HAD AN EXPENSIVE DIVORCE AND NOW NEEDS THE MONEY, so SALE NOW ON!!!

Let me, you can't stop me, write about the weather. When your brain is running on empty and you have nothing to say, weather seems like a good topic. Yesterday, it was hot and humid. Today, it was hot and humid. Tomorrow, it will be hot and humid. Temperatures run 95°F and up to a 103°F. We also have winds. Potted plants get blown over. Chicago is known as the Windy City. Austin should also be known as the Windy City?

What makes Austin unique? Well, it is the State Capital. It prides itself on wanting to be known as weird. At least twice, there has been something in the paper about keeping Austin weird. It is a big music town. When the Music Festival is on, musicians from all over the U.S. and some foreign countries come to play and listen. We have a big motorcycle event. Men and women of all ages come here on their expensive motorcycles and fancy motorcycle togs for whatever. It is a big event. We have bats. Someone says millions. They spend the day under the Congress Ave. bridge. When night falls, the bats leave their nesting place and do whatever bats do at night. Tourists and others gather on the bridge and along the shores of the Colorado River beneath the bridge to watch this event.



It's a Morning Glory which is in the Genus *Ipomea* along with sweet potatoes. The botanists have been very busy with this genus. Now there are only 500 species in it. We have several vines in our flower bed. Lillian raised them from seed and that makes them especially nice. They are a darker blue than shows up in the photograph. I don't know why my camera didn't record the true color. Even with my poor eyesight, I can tell the difference between light and dark. I can tell when the sun has set.